

#### **COMPLETE METALWORKING SOLUTIONS**

(800) 991-4225 www.ahbinc.com ISO Certified customerservice@ahbinc.com







Ninth Edition

Solutions for Cutting, Grinding, Cleaning and Finishing.





As an industry leader and global manufacturer of surface conditioning solutions, Weiler Abrasives is eager to create a collaborative partnership to overcome your toughest cleaning, grinding, cutting, de-burring, and finishing challenges.

Weiler Abrasives Group's heritage dates to 1879. Today, the tradition of excellence continues under the fourth generation of family ownership. "While the company has grown and expanded significantly since those humble beginnings, our commitment to developing long-term partnerships with customers, co-workers, and community hasn't changed." Chris Weiler, Executive Chairman, Weiler Abrasives Group.

#### **OUR PURPOSE**

To make a difference every day by Leading the Weiler Way, improving the lives of our customers, co-workers, and communities.

#### **OUR VISION & MISSION**

To be the global market leader in abrasives by being the best partner our end-users and distributors have, period.



Today Weiler Abrasives Group is a global manufacturer of surface conditioning solutions with customers in over 80 countries.



Whether you are looking to improve your surface conditioning processes, optimize your abrasives consumable spend, or train your team on the safe and proper use of abrasives and brushes Weiler Abrasives has a program to help you achieve your goals.





# WEILER CONSUMABLE PRODUCTIVITY

The WCP program helps facilities find cost and time savings in their fabrication operations when they don't have the resources or process to quantify results. WCP is a proven process that effectively and efficiently measures real-world data. This program takes minimal effort to deploy in your facility because abrasives experts implement it.

Through a simple, yet effective approach the WCP program identifies improvements by evaluating your operations and how abrasives are used in your facility.

- On-site assessment
- Test abrasives
- Quantify impact
- Present documented cost & time savings





# WEILER SPOT SAFETY TRAINING

The SPOT safety training program is designed to educate operators on how to use abrasives and brushes safely and effectively. The program covers information on proper usage, potential hazards, and safety tips.

By completing the SPOT Safety Training Program, participants will be able to:

- Understand the basic principles of abrasive and brush safety
- Identify potential hazards before an incident occurs
- Implement safe work practices to avoid accidents and injuries





# WEILER PROCESS SOLUTIONS

WPS is a structured application engineering program designed to provide Weiler customers with engineering support to identify value-added cost savings opportunities in their respective processes. You explain your current situation and process and let our experts take care of the rest.

- **▶** Reduce cycle times
- **▶** Eliminate bottlenecks
- Reduce consumable and tooling cost
- **▶** Eliminate rejections and rework
- Reduce energy consumption
- ▶ Reduce WIP
- ► Eliminate process variability
- Documented cost savings
- Documented best practices

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# **LEARN MORE:** WEILERABRASIVES.COM

# **HOW CAN WE HELP YOU?**

# **CONTACT US TODAY!**

To place an order or locate a distributor in your area, contact our Customer Experience Team at 800-835-9999 or orders@weilerabrasives.com.

For more information and to schedule a consultation with a Weiler Process Solutions expert visit: weilerabrasives.com/wps.

To discuss specific requirements with a specialist call: 800-835.9999.



# **SAFETY INFORMATION**

All of Weiler's products are made to the strictest quality standards and specifications and are designed to provide superior work performance and safe operation when used properly.



# WARNING: Failure to observe safety precautions may result in injury.

Many manufacturers mark some safety warnings, recommendations and usage restrictions directly on the product. However, it is not always practical to include even the most limited safety information on the product itself. Therefore, the operator MUST READ and FOLLOW all instructions supplied in or on the product container as well as those marked on the product.

# SAFETY STANDARDS - ESTABLISHED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE

Weiler power brushes and abrasives conform to the ANSI standards listed below. All operators of power brushes and abrasives must comply with these safety standards.

- ANSI B165.1 "Power Tools Power Driven Brushing Tools - Safety Requirements for Design, Care and Use"
- ANSI B7.1 "Safety Requirements For the Use, Care and Protection of Abrasive Wheels"

#### **AVAILABILITY OF ANSI STANDARDS**

Based on the collective experience of the American Brush Manufacturers Association Industrial Division members (ANSI B165.1) and the United Abrasives Manufacturers Association's Bonded Division (ANSI B7.1), both ANSI Standards are referenced and provided solely as a public service for the guidance of the users of the members' products. All Brush and Abrasive recommendations are not necessarily complete with respect to any particular application and common sense safety considerations should generally be followed. Any applicable federal, state, local law or regulation must be strictly adhered to and is controlling over any recommendation contained herein.

#### TOOL/WORK REST

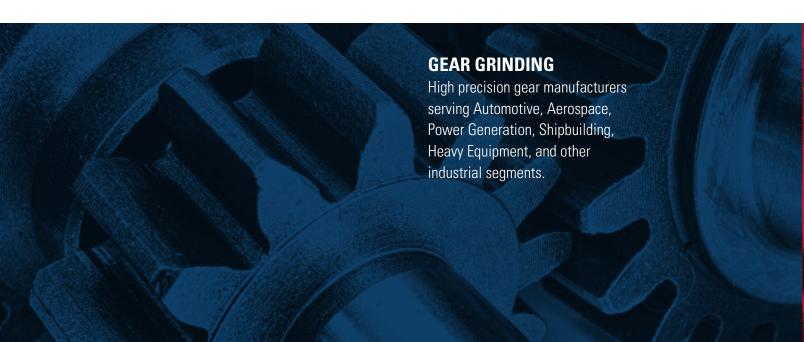
On bench grinders, tool/work rests should be used to support the work-piece during use. It should have a maximum opening of 1/8" to the product face. Only adjust the rest when the product is not in motion.





# DELIVERING VALUE TO GLOBAL MARKETS

Weiler Abrasives works in various industrial settings across the globe to solve tough challenges, enabling businesses like yours to get more done, more efficiently.



# FOUNDRY Delivering productivity and safety-enhancing solutions for foundry cleaning rooms specializing in cast iron, gray and ductile iron, cast steel, stainless, aluminum, nonferrous, and titanium.

**General Fabrication** Aerospace

Transportation Automotive

Pipeline Construction Foundry

Ship Building Gear

Power Generation Primary Metals

**Building & Construction** Facility Maintenance

Food & Pharma Manufacturing

#### **PRIMARY METALS**

Producers of titanium, specialty alloys, stainless steel, and rail car wheel producers.

# WHAT'S NEW?



#### TIGER 2.0

An evolution in abrasives technology — designed to be more than just a better product. It was created to help you do your best work.



#### **FOUNDRY PORTABLE PRODUCTS**

Weiler manufactures a full line of portable grinding products specially designed for cleaning sand castings, investment castings, and iron.



#### **CUPS, CONES & PLUGS FOR METAL FABRICATION**

These abrasives deliver the right combination of performance and value. Aluminum oxide grains in combination with a strong bond deliver long product life and a consistent cut-rate for grinding metal.

# **INDUSTRIAL GRINDING WHEELS**

# DRIVING PRODUCTIVITY

People who take work seriously partner with Weiler Abrasives. We work collaboratively to help solve our customers' biggest challenges.

We understand that every production operation is different, so is every production challenge. One solution does not fit all. Weiler experts can examine your specific production and product challenges and develop customized solutions that optimize your operation.

Together we will maximize productivity enabling your business to be more efficient and ultimately more profitable.

# **WORLD-CLASS CAPABILITIES**

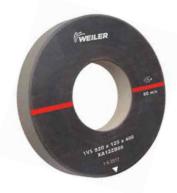
- Best-in-class lead-times
- CNC finishing
- On-site technical support
- Precision tolerances
- Extensive R&D capabilities
- Green manufacturing footprint
- Unrivaled safety inspection
- Global distribution network
- Custom wheel shapes
- Newest abrasive and bond technologies



# PRECISION VITRIFIED

Weiler's precision vitrified products use high performance bonding components paired with advanced abrasives to provide the most competitive products in the market. These products are designed to maximize cut rate, reduce cycles times, increase depth of cut, reduce dressing cost and improve surface finish.

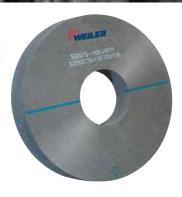
**Products:** Standard and custom profiles that are all CNC finished to tight tolerances with the ability to produce up to 50" diameter wheels



# HOT PRESSED CONDITIONING

Weiler specializes in designing high performance conditioning wheels for stainless steel, specialty alloy, carbon steel and titanium applications. These wheels remove hard oxide scale formed in the process of casting slabs, ingots and bars in primary metals facilities.

**Products:** 24", 25", and 36" diameter hot press metal conditioning wheels



# HIGH PERFORMANCE ROLL GRINDING

Weiler produces high performance roll grinding technology for both cold mill and hot mill applications. These wheels are designed to work on rolls ranging from iron roll to specialty tool steel rolls. Our unique technology will maximize your process efficiency and provide substantial cost savings.

**Products:** Resin and vitrified bonded wheels 30"-42" in diameter



# GEAR GRINDING

Utilize Weiler's full line of Gear Grinding Solutions to maximize machine efficiency with high performance products that fit all gear grinding applications.

**Products:** Single profile, bevel, continuous, honing, and hob sharpening products that are designed to pair with any gear grinding machine.



# CUT THROUGH BARRIERS BETWEEN YOU AND YOUR BEST WORK

Introducing Tiger 2.0 — An evolution in abrasives technology. It was designed to be more than just a better product. It was created to help you do your best work.

# **CUT THROUGH INEFFICIENCY**

Tiger 2.0's unique formulation provides the same fast cutting speed, while lasting up to 40% longer. And it's industry first, patent pending optimal use line ensures you get more done with less.

# CUT THROUGH SAFETY ISSUES

Tiger 2.0 delivers predictable, smooth cutting and grinding, making the work safer. And it now has a QR code so operators can access crucial safety information right where — and when — they need it.

# **CUT THROUGH LABOR SHORTAGES**

Tiger 2.0 makes cutting and grinding easier, which means operators aren't as worn out at the end of each shift. The unique formulation also produces more consistent work from user to user, reducing training time and even re-work.



Tiger 2.0 cuts through the barriers holding you back from realizing gains while reducing costs. In some cases, users are seeing **3 times more efficiency** over their previous abrasives.





# **LONGER LIFE**

Up to 40% longer wheel life reduces change-overs and delivers more cuts.





Tiger 2.0

Industry Standard

wear and chipping, improving user experience and extending wheel life.

**WEILER WHEEL** 

**INDUSTRY STANDARD** 

# **SELECTING THE RIGHT WHEEL**

**Weiler's bonded abrasive wheels** help Metal Fabrication professionals get the most demanding jobs done right, and done fast. Our high quality line helps you select the best solution for your toughest jobs. Whether you're looking for serious stock removal, beveling, grinding, notching, cutting or edge softening, Weiler will get it done for you.









TIGER® CERAMIC Self-sharpening and cool – grinds at lower temperatures with less friction and less effort, reducing heat discoloration of the work piece.

#### **GRAIN TYPE**

Ceramic alumina

#### **BEST ON** STEEL / METAL

**CONTAMINANT FREE** CONTAIN LESS THAN 0.1% IRON, SULFUR & CHLORINE

Hard-to-Grind metals include

tool steel, inconel, high nickel alloy, titanium and armored steel

#### TIGER® PIPELINE

Designed for bead and angle grinding applications on the pipeline.

#### **GRAIN TYPE**

Zirconia alumina + ceramic alumina infusion

#### **BEST ON** STEEL / METAL

**HIGH PERFORMANCE FAST CUT & LONG LIFE** 



## **TIGER ZIRC**

Self-sharpening grains retain a high cut rate throughout the life of the wheel for exceptional performance.

#### **GRAIN TYPE**

Cutting/Combo: Zirconia alumina Grinding: Zirconia alumina + ceramic alumina infusion

**CONTAMINANT FREE** 

CONTAIN LESS THAN U.1% IRON, SULFUR & CHLORINE

#### **BEST ON**

#### STEEL / METAL

includes structural steel and cast iron

#### **TIGER INOX**

Tiger INOX wheels deliver a worry-free solution for stainless steel applications.

#### **GRAIN TYPE**

White aluminum oxide

#### **BEST ON**

#### STAINLESS

and harder grade steel



Weiler's non-loading formula delivers a fast and consistent cut rate on aluminum and soft alloys.

#### **GRAIN TYPE**

Silicon carbide / aluminum oxide blend

#### **CONTAMINANT FREE** CONTAIN LESS THAN 0.1% IRON, SULFUR & CHLORINE

#### **BEST ON**

ALUMINUM



TIGER



#### TIGER AO

Tiger wheels provide an even, sharp, clean cut and a hard bond extends wheel life.

#### **GRAIN TYPE**

Aluminum oxide

#### **BEST ON**

STEEL / METAL



## **FAST CUT**



LIFE: • • • • •

#### **WOLVERINE**®

Fast cut rate and consistent performance at a good value.

#### **GRAIN TYPE**

Aluminum oxide

**BEST ON** STEEL / METAL



# TYPE

#### Cutting Type 1 (Flat) Type 27 (Depressed Center)

Flat profile allows for deep cuts

Added clearance when working at a constrained angle

#### Grinding

#### Type 28 (Depressed Center)

Product code

Manufacturer

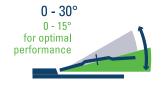
Barcode

Type 27 (Depressed Center)

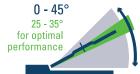
0 - 45°

Elet profile with

13,300



Designed for increased aggression at lower working angles and increased access



Flat profile with depressed center allows for a wide range of grinding angles (0-45)

Maximum

Maximum

rotation speed

peripheral speed

Safety QR code

#### Type 11 Cup



Type 16 Cone
Grinding Face



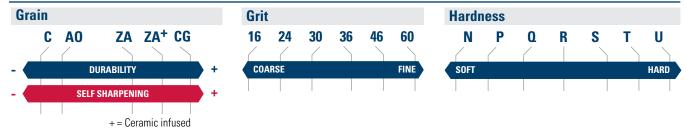
WEILER



Type 18R Plug Grinding Face

# **GRAIN / GRIT / GRADE**

Selecting the best grain, grit and grade combination for your application can increase wheel effectiveness and user productivity. Use the charts below to help pick the right wheel for the job.



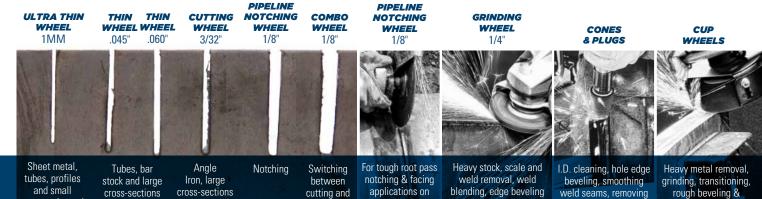
#### APPLICATION

cross-section rods

When selecting a wheel, always choose the thinnest wheel that will perform the cut while maintaining desired product life.

and torch-cut softening

gates & parting lines



the pipeline

grinding

BONDED ABRASIVES COA

ABKASIVES NUN

WOVEN ABRASIVES

WER BRUSHES

NYLOX BRUSHES

removing crack & flaws



UltraCut wheel making precision cuts a steel tube stock.

# TIGER

Weiler's diverse line of cutting wheels provides consistent, well-balanced, high quality solutions. From our 1-millimeter cutting wheels that slice through metal to our large diameter wheels for the biggest cuts, professionals get the most demanding jobs done right and done fast.



#### **FEATURES**:

- Additional fiberglass reinforcement provides added strength for aggressive cutting
- Smooth outer layer reduces friction for an **effortless cut and less kickback** during operation
- 20 Optimum Use Line helps maximize wheel life, improving productivity and sustainability
- Longer wheel life reduces change-overs and delivers more cuts

# 1MM CUTTING WHEELS



#### HIGH PERFORMANCE THIN CUTTING

TYPE 1
7/8" Arbor

TEEL/METAL TIGER* ZIRC ULTRACUT 1MM / Fast Cut & Long Life										
Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #					
4-1/2"	1 mm	Z60T	13,300	50	58005					
5"	1 mm	Z60T	12,200	50	58006					
STAINLESS TIGER INOX ULTRACUT 1MM / Contaminant-free*										
4-1/2"	1 mm	INOX60T	13,300	50	58130					

12,200



<sup>5&</sup>quot; 1 mm INOX60T

\*Contaminant-free (Contains less than 0.1% Fe, S, CI)

# CUTTING WHEELS



#### **MAX PERFORMANCE CUTTING**

STEEL / METAL STAINLESS HARD-TO-CUT  TIGER® CERAMIC Superior Life & Cut Contaminant-free*			7/8" <i>/</i>	PE 1 Arbor	7/8" Arbor		TYPE 27 5/8"-11 Hub		
Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #	Std. Pack	Item #
4-1/2"	.045"	CER60S	13,300	25	58300	25	58305	10	58306
5"	.045"	CER60S	12,200	25	58301	25	58307	10	58308
6"	.045"	CER60S	10,200	25	58302	25	58309	10	58310
7"	.060"	CER60S	8,500	25	58303	25	58311	10	58312

WEILER 58300

NEW 2.0 BOLD items only.

HIGH PE	RFORMA	ANCE CU	ITTING		PE 1 <b>Arbor</b>	TYPE 27 <b>7/8" Arbor</b>		TYPE 27 <b>5/8"-11 Hub</b>	
STEEL / META	TIGER ZI	RC / Fast Ci	ut & Long Life						_
Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #	Std. Pack	Item #
4-1/2"	.045"	Z60T	13,300	25	58000	25	58020	10	58030
5"	.045"	Z60T	12,200	25	58001	25	58021	10	58031
6"	.045"	Z60T	10,200	25	58002	25	58022	10	58032
7"	.060"	Z60T	8,500	25	58003	25	58023	10	58033
STAINLESS	TIGER IN	OX / Conta	aminant-fre	e*					
4-1/2"	.045"	INOX60S	13,300	25	58100	25	58110	10	58109
5"	.045"	INOX60S	12,200	25	58101	25	58111	_	_
6"	.045"	INOX60S	10,200	25	58102	25	58112	10	58113
7"	.060"	INOX60S	8,500	25	58103	25	58107	_	_
ALUMINUM	TIGER AI	UMINUM	/ Non-loadin	g / <b>Contan</b>	ninant-free*	*			
4-1/2"	.045"	ALU60S	13,300	25	58200	25	58205	10	58206
5"	.045"	ALU60S	12,200	25	58201	25	58207	10	58208
6"	.045"	ALU60S	10,200	25	58202	25	58209	10	58210
7"	.060"	ALU60S	8,500	25	58203	25	58211	10	58212



**NEW 2.0** 

**BOLD** items only.

P	PERFOR	MANCE	CUTTIN	G					E 27 TYPE 2 <b>Arbor 5/8"-11 I</b>	
	STEEL / META	TIGER A	<b>0</b> / Long Lif	е						
	Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #	Std. Pack	Item #
	4-1/2"	.045"	A60T	13,300	25	57020	25	57041	10	57040
		1/16"	A36T		25	57061	_	_	_	_
		3/32"	A36S		_	_	25	57081	10	57080
	5"	.045"	A60T	12,200	25	57021	25	57043	10	57042
		3/32"	A36S		_	_	25	57083	10	57082
	6"	.045"	A60T	10,200	25	57022	25	57045	10	57044
	7"	.060"	A60T	8,500	25	57023	25	57046	10	57048
	9"	1/16"	A60T	6,600	_	_	25	57047	10	57049



V CUTTING

CUTTING					PE 1	TYPE 27		
STEEL / METAL	WOLVERINE*	<b>40 /</b> Fast Cuttir	ng	5/8"	Arbor	5/8" Arbor		
Dia.	Thickness	Grade	Max. RPM	Pack	Item #	Pack	Item #	
4"	.035"	A60T	15,300	25	56271	_	_	
4"	3/32"	A24T	15,200	_	_	25	56474	
5"	.035"	A60T	12,200	25	56108	_	_	

WOLVERINE

CUTTIN	G				TYPE 1 TYPE 7/8" Arbor 7/8"			TYPE 27 <b>5/8"-11 Hub</b>	
STEEL / META	WOLVER WOLVER	INE AO / F	ast Cutting		<del></del>			_ <del>_</del>	
Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #	Std. Pack	Item #
4-1/2"	.045"	A60T	13,300	25	56281	_	_	_	_
	.045"	A60S		_	_	25	56393	_	_
	1/16"	A60T		25	56103	_	_	_	_
	3/32"	A24T		_	_	25	56475	10	56385
5"	.045"	A60S	12,200	_		25	56392	_	_
	1/16"	A36T		25	56118		_	_	_
	3/32"	A24T		_	_	25	56476	10	56384
6"	.040"	A60T	10,200	25	56282	_	_	_	_
	.045"	A60T		25	56273	_	_	_	_
	.045"	A60S		_	_	25	56283	_	_
	3/32"	A24R		_	_	25	56277	10	56278
7"	.045"	A60T	8,500	25	56275	_	_	_	_
	.060"	A60S		_	_	25	56391	_	_
	3/32"	A24R		_	_	25	56383	10	56477
9"	1/8"	A24T	6,600	_	_	_	_	10	56423



# **SMALL DIAMETER CUTTING WHEELS**



Grade

7601

A36T

A36T



#### **MAX PERFORMANCE CUTTING**

STAINLESS	TIGER® CERAM Superior Life & Contaminant-f	Cut			PE 1 Arbor	TYPE 1 <b>3/8" Arbor</b>		
Dia.	Thickness	Grade	Max. RPM	Pack	Item #	Pack	Item #	
3"	1/16"	CER36T	25,000	100	58345	100	58342	
4"	1/16"	CER36T	19,000	25	58351	25	58348	

100

25

TYPE 1

Max. RPM

25.000

19,000

HIGH PERFORMANCE CUTTING STEEL/METAL TIGER ZIRC / Fast Cut & Long Life

Thickness

1/16

1/8"

TYPF 1 TYPF 1 3/8" Arbor 1/4" Arbor **Pack** Item# **Pack** Item #

100

25

TYPE 1

58012

58014

57076

57077

58011

58013

57071

57072



#### PERFORMANCE CUTTING P

3/8" Arbor 1/4" Arbor STEEL / METAL TIGER AO / Long Life Dia. Thickness Grade Max. RPM Pack Item # **Pack** Item # .035 A60T 30,000 100 57014 100 57010 1/16" A36T 57015 57011 1/8" A36T 57012 57016 3" .035 A60T 25,000 100 57065 100 57001 1/16" A36T 57060 57066 1/8" A36T 57068 57063 A60T 25 .035 25



#### **VALUE CUTTING** V

TYPE 1 TYPE 1 1/4" Arbor 3/8" Arbor



STEEL/ WIETAL	WOLVERINE" A	<b>10 /</b> Fast Cut			<del></del>	_	
Dia.	Thickness	Grade	Max. RPM	Pack	Item #	Pack	Item #
2"	.035"	A60T	30,000	100	56013	100	56128
	1/16"	A36T		100	56015	100	56129
	1/8"	A36S		100	56022	100	56130
3"	.035"	A60T	25,000	100	56061	100	56062
	1/16"	A36T		100	56065	100	56068
	1/16"	A60T		_	_	100	56070
	1/8"	A36T		100	56270	100	56076
	1/8"	A36S		50	56060	_	_
4"	.035"	A60T	19,000	25	56165	25	56080
	1/16"	A36T		25	56166	25	56086
	1/8"	A36T		_	_	25	56099
	1/8"	A36S		25	56167	_	_







#### P PERFORMANCE SNAGGING

TYPE 1 1/4" Arbor

TYPE 1 3/8" Arbor

TYPE 27 3/8" Arbor

STEEL / METAL TIGER AO / Long Life Diameter Thickness Grade Max. RPM Std. Pack Item # Std. Pack Item # Std. Pack Item # 1/4" 25.000 A24T 57069 40 57064 40 15,300 57074 A24T 10 57078 57073



#### **VALUE SNAGGING**

STEEL / METAL WOLVERINE® AO / Fast Cutting

TYPF 1 3/8" Arbor

*****	TEITHE AO / Tust	outting			
Dia.	Thickness	Grade	Max. RPM	Pack	Item #
2"	1/4"	A36R	30,000	40	56131
3"	1/4"	A24T	25,000	40	56064
4"	1/4"	A36T	15,300	10	56163



#### **PERFORMANCE CUTTING**

STEEL / META	STEEL/METAL TIGER AO / Long Life											
Diameter	Thickness	Arbor	Grade	Description	Max. RPM	Std. Pack	Item #					
12"	3/32"	1"	A36T	Long Life Cutting	5,100	25	57090					
14"	3/32"	1"	A36T	Long Life Cutting	4,400	10	57092					
14"	3/32"	1"	A36R	Smooth Cutting	4,400	10	57093 ◆					
14"	3/32"	1"	A36P	Single Center Reinforcement For + Speed	4,400	10	57084					
14"	3/32"	1"	A36P	Stud Cutting	4,400	10	57085					
14"	3/32"	1"	EA36T	Fast Cut & Long Life	4,400	10	57086					
16"	3/32"	1"	A36P	Long Life Cutting	3,850	10	57087					
	◆ Softer bond for smoother, faster cutting.											

TYPE 1

TYPE 1

TYPE 1

TYPE 1

TYPE 1

#### **CUTTING**

STEEL / METAL	WOLVERINE AO /	Fast Cutting
---------------	----------------	--------------

Diameter Thickness Arbor Grade		Description	Max. RPM	Std. Pack	Item #		
12"	3/32"	1"	A46T	Fast Cutting	5,100	25	56239
14"	3/32"	1"	A46T	Fast Cutting	4,400	10	56240
14"	3/32"	1"	A46T	Single Center Reinforcement For + Speed	4,400	10	56247

# FOR HIGH SPEED SAWS



#### **HIGH PERFORMANCE CUTTING**

STEEL / METAL	TICER 7IRC	/ Fact Cut	Q. Long Life	/ Rail Cutting

TIGER ZIRC / Fast Cut & Long Life / hall Cutting											
Diameter	Thickness	Arbor	Grade	Description	Max. RPM	Std. Pack	Item #				
14"	1/8"	1"	Z24U	Rail Cutting	5,500	10	58028				
16"	1/8"	1"	724U	Rail Cutting	4 800	10	58029				

#### PERFORMANCE CUTTING

STEEL/METAL TIGER AO / Long Life													
Diameter	Thickness	ss Arbor Grade		Description	Max. RPM	Std. Pack	Item #						
12"	1/8"	1"	A30T	Long Life Cutting	6,400	25	57030						
12"	1/8"	20 mm	A30T	Long Life Cutting	6,400	25	57031						
14"	1/8"	1"	A30T	Long Life Cutting	5,500	10	57032						
14"	1/8"	20 mm	A30T	Long Life Cutting	5,500	10	57094						
14"	1/8"	1"	A30T	Triple Reinforcement For + Support	5 500	10	57034						

Triple Reinforcement For + Support

# FOR STATIONARY SAWS



A30T

#### PERFORMANCE CUTTING

STEEL / META	STEEL/METAL TIGER AO / Long Life											
Diameter	Thickness	Arbor	Grade	Description	Max. RPM	Std. Pack	Item #					
14"	1/8"	1"	A30R	Long Life Cutting	4,400	10	57091					
16"	1/8"	1"	A30S	Long Life Cutting	3,850	10	57089					
20"	1/8"	1"	A30S	Long Life Cutting	3,100	10	57097					

#### **CUTTING**

•		TYP	TYPE 1								
	STEEL/METAL WOLVERINE AO / Fast Cutting										
	Diameter	Thickness	Arbor	Grade	Description	Max. RPM	Std. Pack	Item #			
	14"	1/8"	1"	A30R	Fast Cutting	4,400	10	56230			







Weld blending on a stainless pressure tank with a Tiger Ceramic grinding wheel.

# GRINDING WHEELS 0-45°

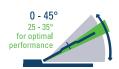


Whether you're looking for serious stock removal, beveling, grinding, or notching, Weiler's grinding will help get the most demanding jobs done right and done fast.

- Fiberglass cut back design provides aggressive grinding right out of the box (Tiger 27 grinding wheels only)
- Triple fiberglass reinforcement *increases user safety*
- 20 Optimum Use Line helps maximize wheel life, improving productivity and sustainability
- Longer wheel life reduces change-overs and removes more material
- 20 Advanced 2.0 bond formulation *reduces uneven edge wear and chipping*, improving operator experience and extending wheel life









Cut back provides instant aggressive ..... grinding on new wheels



#### **MAX PERFORMANCE GRINDING**

STEEL / N STAINL HARD-TO-		* CERAMIC ior Life & Cu minant-fre	ut	TYPE 27 5/8" Arbor 7/8" Arbor				TYPE 27 <b>5/8"-11 Hub</b>	
Dia.	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #	Std. Pack	Item #
4"	1/4"	CER24R	15,300	10	58335	_	_	_	_
4-1/2"	1/4"	CER24R	13,300	_	_	10	58325	10	58326
5"	1/4"	CER24R	12,200	_	_	10	58327	10	58328
6"	1/4"	CER24R	10,200	_	_	10	58329	10	58330
7"	1/4"	CER24R	8,500	_	_	10	58331	10	58332
9"	1/4"	CER24R	6,600	_	_	10	58333	10	58334



58225

BOLD items only.

#### HIGH PERFORMANCE

пібп	HIGH PERFORMANCE												
GRINI	DING			TYP	E 27	TYP	E 27	TYPE	27				
STEEL / N	METAL TIGER	TIRC / Co	ramic-infused	5/8" /	5/8" Arbor		\rbor	5/8"-11	l Hub				
	& Long Life	21110 7 00	rainic iniuscu										
Dia.	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #	Std. Pack	Item #				
4"	1/4"	Z24T	15,300	10	58069	_	_		_				
4-1/2"	1/4"	Z24T	13,300		_	10	58071	10	58070				
5"	1/4"	Z24T	12,200	_	_	10	58073	10	58072				
6"	1/4"	Z24T	10,200	_		10	58079	10	58078				
7"	1/4"	Z24T	8,500	_	_	10	58075	10	58074				
9"	1/4"	Z24T	6,600	_	_	10	68384	10	68385				
STAINL	ESS TIGER	R INOX / C	ontaminant-f	ree*									
4-1/2"	1/4"	INOX24R	13,300	_	_	10	58121	10	58120				
5"	1/4"	INOX24R	12,200	_	_	10	58123	10	58122				
6"	1/4"	INOX24R	10,200	_	_	10	58129	10	58128				
7"	1/4"	INOX24R	8,500	_	_	10	58125	10	58124				
9"	1/4"	INOX24R	6,600	_	_	10	58127	10	58126				
ALUMIN	IUM TIGER	R ALUMINU	JM / Non-load	ding / Conta	aminant-fre	e*							
4-1/2"	1/4"	ALU24R	13,300	_	_	10	58225	10	58226				
5"	1/4"	ALU24R	12,200	_	_	10	58227	10	58228				
6"	1/4"	ALU24R	10,200	_	_	10	58229	10	58230				
7"	1/4"	ALU24R	8,500	_	_	10	58231	10	58232				
9"	1/4"	ALU24R	6,600			10	58233	10	58234				

PERFORMANCE GRINDING

STEEL / METAL TIGER AO / Long Life

Thickness

1/4

1/4

1/4

1/4"

Grade

A24R

A24R

A24R

A24R

A24R

A24R

Max. RPM

15,300

13,300

12,200

8,500

6,600

57120

V	<b>GRINDING</b>

Dia.

4-1/2

6'

TYPE 27 5/8" Arbor

TYPE 27

5/8" Arbor

57119

Std. Pack

10

TYPE 27 7/8" Arbor

TYPE 27

7/8" Arbor

Item #

57121

57123

57129

57125

Std. Pack

TYPE 27 5/8"-11 Hub

TYPE 28

5/8"-11 Hub

TYPE 28

TYPE 27 **5/8"-11 Hub** 

Item #

57120

57122

57128

57124

68377

Std. Pack

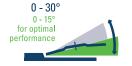
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STEEL / META	WOLVER	INE® AO / I	Fast Cutting		_					
Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #	Std. Pack	Item #	
4"	1/4"	A24R	15,200	10	56473	_	_	_	_	
4-1/2"	1/4"	A24R	13,300	_	_	10	56464	10	56454	
4-1/2"	1/4"	A24N	13,300	_	_	10	56457	10	56455	
5"	1/4"	A24R	12,200	_	_	10	56466	10	56449	
6"	1/4"	A24R	10,200	_	_	10	56280	10	56279	
7"	1/4"	A24R	8,500	_		10	56467	10	56468	
9"	1/4"	A24R	6,600	_	_	10	56469	10	56470	









TYPE 28

7/8" Arbor

TYPE 28

NEW 2.0 BOLD items only.

**HIGH PERFORMANCE GRINDING** 

STEEL / METAL TIGER\* ZIRC / Ceramic-infused

Fast Cut & Long		00.0	•				
Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #
7"	1/4"	Z24T	8,500	10	58081	10	58080
9"	1/4"	Z24T	6,600	10	58083	10	58082

**NEW 2.0 BOLD** items only.



PERFORMANCE GRINDING					Arbor	5/8"-11 Hub	
STEEL / METAL TIGER AO / Long Life					_		
Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #
7"	1/4"	A24R	8,500	10	57135	10	57134
9"	1/4"	A24R	6,600	10	57137	10	57136



# **ACCESSORIES**

#### ADAPTING NUTS & SPANNER WRENCH For 4" - 6" Angle Grinders.

Description	Adapts To	Min. Wheel Thickness	Standard Pack	Item Number	
Adapting Nuts	5/8" to 3/8"-24	.045"	1	56484	
Adapting Nuts	7/8" to 5/8"-11	.045"	1	56494	
Spanner Wrench	-	-	1	56495	



WEILER

57134

#### MOUNTING MANDRELS 1/4" Stem. For Type 1 Wheels Only.

Arbor Size	Wheel Thickness	Standard Pack	Item Number
1/4"	1/8" to 1/4"	10	56489
3/8"	1/8" to 1/4"	10	56490
1/4", 3/8" *	1/8" to 1/4"	10	56491*

<sup>\*</sup>Combination pack

**ADAPTER** for mounting Large Cutting Wheels onto a 20mm arbor.

For Arbor Hole Size	Adapted Arbor Hole Size	Standard Pack	Item Number
1"	20mm	10	04455





**BONDED ABRASIVES** 



Back gouging a steel plate with a Tiger combo wheel.

TIGER

TIGER

TIGER

58315

58114

58215

# COMBO WHEELS 0-45°

Weiler's combination wheels offer flexibility and efficiency when switching between cutting and grinding applications.

#### **FEATURES**:

- Optimum Use Line helps maximize wheel life, improving productivity and sustainability
- **2.0** Longer wheel life **reduces change-overs and removes more material**

# CUT & GRIND COMBO WHEELS



#### MAX PERFORMANCE CUT / GRIND COMBO

STAINLESS HARD-TO-GRIND Contaminant-free*  STEEL/METAL TIGER* CERAMIC Superior Life & Cut Contaminant-free*					PE 27 Arbor	TYPE 27 <b>5/8"-11 Hub</b>		
Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #	
4-1/2"	1/8"	CER30T	13,300	25	58315	10	58316	
5"	1/8"	CER30T	12,200	25	58317	10	58318	
6"	1/8"	CER30T	10,200	25	58319	10	58320	
7"	1/8"	CER30T	8,500	25	58321	10	58322	
9"	1/8"	CER30T	6,600	25	58323	10	58324	

NEW 2.0 **BOLD** items only.

HIGH PEK	FUKMANC	E CUI / GR	IND COME	30 14P 7/8" /	E 27 Arbor	5/8"-11 Hub		
STEEL / METAL	TIGER ZIRC / F	ast Cut & Long	Life					
Diameter	Thickness	kness Grade Max. RPM		Std. Pack	Item #	Std. Pack Item #		
4-1/2"	1/8"	Z30T	13,300	25	58051	10	58050	
5"	1/8"	Z30T	12,200	25	58053	10	58052	
6"	1/8"	Z30T	10,200	25	58064	10	58054	
7"	1/8"	Z30T	8,500	25	58056	10	58055	
9"	1/8"	Z30T	6,600	25	68382	10	68383	
STAINLESS	TIGER INOX /	Contaminant-	-free*					
4-1/2"	1/8"	INOX30T	13,300	25	58115	10	58114	
7"	1/8"	INOX30T	8,500	25	58117	10	58116	
9"	1/8"	INOX30T	6,600	25	58119	10	58118	
ALUMINUM	TIGER ALUMII	<b>NUM /</b> Non-loa	iding / <b>Contan</b>	ninant-free*				
4-1/2"	1/8"	ALU30T	13,300	25	58215	10	58216	
5"	1/8"	ALU30T	12,200	25	58217	10	58218	
6"	1/8"	ALU30T	10,200	25	58219	10	58220	

**NEW 2.0 BOLD** items only.

PERFORMANCE CUT / GRIND COMBO

PERFORMANCE CUT / GRIND COMBO STEEL/METAL TIGER AO / Long Life					E 27 Arbor	TYPE 27 5/8"-11 Hub	
Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #
4-1/2"	1/8"	A30S	13,300	25	57101	10	57100
5"	1/8"	A30S	12,200	25	57103	10	57102
6"	1/8"	A30S	10,200	25	57109	10	57108
7"	1/8"	A30S	8,500	25	57105	10	57104
9"	1/8"	A30S	6,600	25	68374	10	68375



TYPE 27 TYPE 27 **CUT / GRIND COMBO** 7/8" Arbor 5/8"-11 Hub **STEEL/METAL WOLVERINE**® **A0** / Fast Cutting

Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #
4-1/2"	1/8"	A24T	13,300	25	56430	10	56429
5"	1/8"	A24T	12,200	25	56428	10	56427
7"	1/8"	A24T	8,500	25	56426	10	56425
9"	1/8"	A24T	6,600	25	56424	10	56423

# **PIPELINE WHEELS**



Weiler's Pipeline Grinding Wheels are designed specifically for pipeline applications. Whether grinding a bead, facing the land, prepping transitions, or fabricating in the yard, this wheel is ready to work out of the box, delivering consistent, aggressive grinding throughout the life of the wheel, eliminating the need to chip it.

#### **FEATURES:**

- **Do Not Chip** Operators will no longer feel the need to chip the wheel to get it to bite.
- Reduced Chatter A unique bond formulation delivers reduced vibration for the entire life of the wheel for a better grinding experience.
- Superior Life & Cut A blend of zirconia alumina and ceramic grains bite into the bead and dig out the wagon tracks fast while the strong bond delivers long wheel life.

#### **HIGH PERFORMANCE PIPELINE GRINDING WHEELS**

STEEL/METAL TIGER\* ZIRC / Ceramic-infused / Fast Grinding & Long Life on Pipe

			_	-		
Ī	Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #
Ī	4-1/2"	1/8"	Z30T	13,300	10	58090
Ī	6"	1/8"	Z30T	10,200	10	58092
Ī	7"	1/8"	Z30T	8,500	10	58094
Ī	9"	1/8"	Z30T	6,600	10	58095

# TYPE 27 FOR MECHANIZED PIPE WELDING

Weiler's Tiger Mech Wheels are designed for notching applications on mechanical pipe welds. These highperformance wheels are thinner than standard pipe notching wheels, allowing the operator to grind the bead without widening or scarring the bevel.

#### **FEATURES:**

- Designed to Fit Tiger Mech reaches the bead without widening the bevel.
- **Optimized Performance** Designed specifically to grind starts and stops on J and K bevels.
- Superior Life & Cut A blend of Zirconia Alumina and Ceramic grains bite into the bead fast while the strong bond delivers long wheel life.

#### HIGH PERFORMANCE MECH NOTCHING WHEELS

STEEL / METAL TIGER ZIRC / Ceramic-infused / Notching Mechanized Pipe Welds

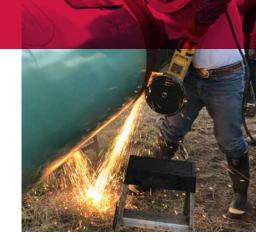
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Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #			
4-1/2"	3/32"+	Z30T	13,300	10	58066			
5"	3/32"+	Z30T	12,200	10	58067			
7"	3/32"+	Z30T	8,500	10	58068			

+ Specific size for mechanized pipe welds

TYPE 27

TYPE 27

5/8"-11 Nut



One Wheel for





GRINDING

NOTCHING







Type 11 Cup Rock for snagging and heavy stock removal.

# TYPE 11

BEST ON: Carbon steel, stainless steel, cast iron and ductile iron.



# **CUPS, CONES & PLUGS - FOR METAL FABRICATION**



Weiler Tiger cups, cones and plugs deliver the right combination of performance and value. Aluminum oxide grains in combination with a strong bond deliver long product life and a consistent cut-rate for grinding metal. Whether you are in a fab shop, foundry, or shipyard you can count on Tiger to get the job done fast and done

#### **CUP FEATURES:**

- **Precision balanced** to ensure smooth vibration free operation and reduced operator fatigue
- **Zinc plated nut** prevents oxidation, eliminating contamination and allowing for easy mounting
- Unique anchored safety nut locks the nut in place to increase safety and prevent product breakage

#### **APPLICATIONS:**

Ideal for heavy metal removal, grinding, transitioning, rough beveling and removing cracks/flaws



P

**NEW!** 

#### TYPE 11 FLARING CUP WHEELS

nigh Pei	GH PERFORMANCE GRINDING											
STEEL / METAL	TEEL/METAL TIGER ZIRC / Fast Cut & Long Life											
Diameter	Thickness	Arbor	Rim	Back		Max.	Std.					
(D / J)	(T)	(H)	(W)	(E)	Grade	RPM	Pack	Item #				
4" / 3"	2"	5/8"-11	3/4"	3/4"	ZA160	9,070	5	68352				
5" / 3-3/4"	2"	5/8"-11	1"	3/4"	ZA16Q	7,260	5	68355				
6" / 4-3/4"	2"	5/8"-11	1"	3/4"	ZA16Q	6,000	5	68358				
6" / 4-3/4"	2"	5/8"-11	1-1/2"	3/4"	ZAC16Q	6,000	5	68361+				
6" / 1-3/1"	2"	5/8"_11	1_1/2"	3///"	7A16B	6 000	5	68363				

ZA16Q

+ Includes silicon carbide for burnt-in sand and hard-to-grind metals.

6,000



68356



#### PERFORMANCE GRINDING

STEEL	/ METAL	TIGER AO	/ Long Life						
Diam	neter	Thickness	Arbor	Rim	Back		Max.	Std.	
(D)	/ <b>J</b> )	(T)	(H)	(W)	(E)	Grade	RPM	Pack	Item #
4" /	/ 3"	2"	5/8"-11	3/4"	3/4"	A160	9,070	5	68350
5" / 3	3-3/4"	2"	5/8"-11	1"	3/4"	A16Q	7,260	5	68353
6" / 4	-3/4"	2"	5/8"-11	1"	3/4"*	A16Q	6,000	5	68356
6" / 4	-3/4"	2"	5/8"-11	1-1/2"	3/4"*	A160	6,000	5	68359

\*Reinforced metal back

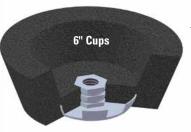
#### **CUP WHEEL MOUNTING FLANGE -** Fits over 5/8"-11 spindles

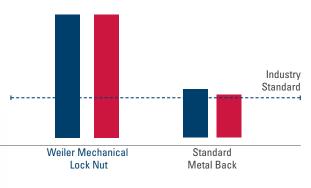
Diameter	Thickness	Std. Pack	Item #
2"	1/4"	1	73054

# **ANCHORED NUT INCREASES SAFETY**

Our testing shows that the Weiler anchored safety nut outperformed the industry standard metal back:







- Up to 3X higher torque holding strength
- **Double speed burst** testing ratings

#### **CONES AND PLUGS**

# FOR STRAIGHT & DIE GRINDERS



#### **CONE & PLUG FEATURES:**

- *Open face design* provides aggressive cut-rate right out of the box
- Anchored hexagon nut secures the abrasive to the tool to increase safety and prevent product breakage
- Precision balanced to ensure smooth, vibration free operation and reduced operator fatigue

APPLICATIONS: Ideal for ID cleaning, hole edge beveling, smoothing weld seams, removing gates and parting lines and cleaning castings in hard-to-reach places



and flatten surface on rail frog section.

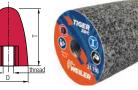
#### NEW!

#### TYPE 16 CONES

#### HIGH PERFORMANCE GRINDING

L/METAL TIGER ZIRC TYPE 16 CONES / Fast Cut & Long Life

	•							
Diameter (D)	Thickness (T)	Arbor (Thread)	Grade	Max. RPM	Std. Pack	Item #		
1"	3"	3/8"-24 Nut	ZA20S	36,290	12	68301		
1-1/2"	2-1/2"	5/8"-11 Nut	ZA20S	24,190	12	68304		
1-1/2"	2"	3/8"-24 Nut	ZA20S	24,190	12	68306		
1-1/2"	3"	5/8"-11 Nut	ZA20S	24,190	12	68308		
2"	3"	5/8"-11 Nut	ZA20S	18,145	12	68311		
2-3/4"	3-1/2"	5/8"-11 Nut	ZA20S	13,195	12	68313		



PERFORMANCE GRINDING STEEL/METAL TIGER AO / Long Life

Diameter (D)	Thickness (T)	Arbor (Thread)	Grade	Max. RPM	Std. Pack	Item #
1"	3"	3/8"-24 Nut	A24R	36,290	12	68300
1-1/2"	2-1/2"	3/8"-24 Nut	A24R	24,190	12	68302
1-1/2"	2-1/2"	5/8"-11 Nut	A24R	24,190	12	68303
1-1/2"	3"	3/8"-24 Nut	A24R	24,190	12	68305
1-1/2"	3"	5/8"-11 Nut	A24R	24,190	12	68307
2"	3"	3/8"-24 Nut	A24R	18,145	12	68309
2"	3"	5/8"-11 Nut	A24R	18,145	12	68310
2-3/4"	3"	5/8"-11 Nut	A24R	13,195	12	68312
3"	3"	5/8"-11 Nut	A24R	12,100	12	68314



#### NEW!

#### TYPE 17 CONES

**HIGH PERFORMANCE GRINDING** 

STEEL / METAL TIGER ZIRC TYPE 17 CONES / Fast Cut & Long Life

Diameter (D)	Thickness (T)	Arbor (Thread)	Grade	Max. RPM	Std. Pack	Item #
2"	3"	5/8"-11 Nut	ZA20S	18,145	12	68365





PERFORMANCE GRINDING STEEL/METAL TIGER AO / Long Life									
Diameter (D)	Thickness (T)	Arbor (Thread)	Grade	Max. RPM	Std. Pack	Item #			
1-1/2"	3"	3/8"-24 Nut	A24R	24,190	12	68315			
1-3/4"	3"	5/8"-11 Nut	A24R	20,740	12	68316			
2"	3"	5/8"-11 Nut	A24R	18,145	12	68317			

#### NEW! TYPE 18 PLUGS

#### **HIGH PERFORMANCE GRINDING**

STEEL / METAL TIGER ZIRC TYPE 18 PLUGS / Fast Cut & Long Life

Diameter (D)	Thickness (T)	Arbor (Thread)	Grade	Max. RPM	Std. Pack	Item #
1-1/2"	2-1/2"	5/8"-11 Nut	ZA20S	24,190	12	68320
1-1/2"	3"	5/8"-11 Nut	ZA20S	24,190	12	68322
2"	3"	5/8"-11 Nut	ZA20S	18,145	12	68324
DEDECRIA	ALICE OBLA	IDINIO OTCO	/ DATE AL			





PERFORMANCE GRINDING STEEL/METAL TIGER AO / Long Life

. <b>-</b> 111 011111/	THE GILL		HULH	AU / Long Line		
Diameter (D)	Thickness (T)	Arbor (Thread)	Grade	Max. RPM	Std. Pack	Item #
1-1/2"	2-1/2"	3/8"-24 Nut	A24R	24,190	12	68318
1-1/2"	2-1/2"	5/8"-11 Nut	A24R	24,190	12	68319
1-1/2"	3"	5/8"-11 Nut	A24R	24,190	12	68321
2"	3"	5/8"-11 Nut	A24R	18,145	12	68323

#### NEW! TYPE 18R PLUGS

#### **HIGH PERFORMANCE GRINDING**

STEEL / METAL TIGER ZIRC TYPE 18R PLUGS / Fast Cut & Long Life

Diameter (D)	Thickness (T)	Arbor (Thread)	Grade	Max. RPM	Std. Pack	Item #
1-1/2"	3"	3/8"-24 Nut	ZA20S	24,190	12	68326
1-1/2"	3"	5/8"-11 Nut	ZA20S	24,190	12	68328
2"	3"	5/8"-11 Nut	ZA20S	18,145	12	68330





PERFORMANCE GRINDING STEEL/METAL TIGER AO / Long Life

Diameter (D)	Thickness (T)	Arbor (Thread)	Grade	Max. RPM	Std. Pack	Item #
1-1/2"	3"	3/8"-24 Nut	A24R	24,190	12	68325
1-1/2"	3"	5/8"-11 Nut	A24R	24,190	12	68327
2"	3"	5/8"-11 Nut	A24R	18,145	12	68329
3"	3"	5/8"-11 Nut	A24R	12,100	12	68331

# JOIN THE NEXT REVOLUTION IN GRAND RANGE RANG

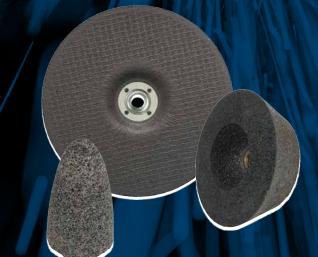
The finishing process in foundries is a tough job. For decades, abrasives technology for off-hand grinding has remained unchanged. It's time for improvement, faster grinding rates, decreased cycle times and an improved operator experience. It's time for a revolution.

As an industry leader and global manufacturer of surface conditioning solutions, Weiler Abrasives is driven to help you overcome the toughest cleaning, grinding, cutting, deburring and finishing challenges. That's why we created a line of abrasives specifically designed to deliver maximum performance in foundry applications. From gate removal to id-cleaning, Weiler offers the right product solutions and expertise to help you find production and process efficiencies in your cleaning room.

Weiler Foundry Products — A **REVOLUTION** in foundry grinding.

# **WE PROVIDE VALUE THROUGH:**

- Ground Breaking Abrasive Technology
   For Foundry Applications
- Enhanced Safety Features
- Improved Operator Experience
- Expert Abrasives On-Site Technical Support
- Product Available When You Need It
- Custom Engineered Solutions
- Maximum Productivity
- Lowest Cost Of Use



# PRODUCT SELECTION

# **MAX PERFORMANCE**

#### **SUPERIOR LIFE & CUT**



# CUT RATE:

#### TIGER® CERAMIC

Self-sharpening ceramic alumina grains provide ultrahigh metal removal rates and optimal productivity.

#### **GRAIN TYPE**

Ceramic alumina

#### **BEST ON**

CAST IRON DUCTILE IRON CAST STEEL HARD-TO-GRIND

white iron, gray iron, high nickel alloy and stainless steel

#### **HIGH PERFORMANCE FAST CUT & LONG LIFE**





#### TIGER ZIRC

Sharp and durable zirconia alumina grains provide fast and consistent metal removal rates throughout the life of the abrasive.

#### **GRAIN TYPE**

Zirconia alumina

#### **BEST ON**

CAST IRON DUCTILE IRON

#### CAST STEEL

white iron, gray iron, high nickel alloy and stainless steel

#### **PERFORMANCE LONG LIFE**





#### **TIGER SIC**

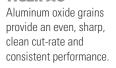
Silicon carbide grains provide a consistent, controlled cutrate on sand castings with burnt-in sand.

#### **GRAIN TYPE**

Silicon carbide

**BEST ON BURNT IN SAND** 

#### TIGER AO



#### **GRAIN TYPE**

Aluminum oxide

#### **BEST ON**

CAST IRON

ductile iron, carbon steel and stainless steel





Type 11 Cup Rock for snagging and heavy stock removal.

# **TYPE 11 CUP WHEELS**



Weiler Tiger® type 11 flaring cup grinding wheels deliver the next evolution in technology for portable foundry grinding. From Tiger Ceramic, which provides superior productivity, to Tiger SiC for castings with burnt-in sand, our line offers the performance you need to get the job done fast. Tiger Ceramic sets a new standard for performance, delivering up to 30% faster cut-rate compared to competitive zirconia cups. This faster material removal translates to better productivity in the cleaning room and less operator fatigue.

#### **CUP FEATURES:**

- Precision balanced to ensure smooth. vibration-free operation and reduced operator fatigue.
- Unique anchored safety nut locks the cup in place to *increase safety* and prevent product breakage.
- Zinc plated 5/8"-11 nut prevents oxidation, *eliminating contamination* and allows for easy spin-on, spin-off changeover.

#### **APPLICATIONS:**

Ideal for heavy metal removal, grinding, transitioning, rough beveling and removing cracks/flaws.



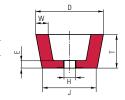
Type 11 Cup

 $0 - 15^{\circ}$ 



#### **RIM (W) WIDTH OPTIONS**

1-1/2" RIM	Large grinding zone to minimize grind time
1" RIM	Medium grinding zone for maximum material removal in targeted areas
3/4" RIM	Ideal for targeted material removal in small, hard-to-access areas





#### 68400





#### **NEW!** MAX PERFORMANCE GRINDING

D	CAST IRON DUCTILE IRON CAST STEEL HARD-TO-GRIND TIGER CERAMIC / Superior Life & Cut						e & Cut		
•	Diameter	Thickness	Arbor	Rim	Back		Max.	Std.	
	(D / J)	(T)	(H)	(W)	(E)	Grade	RPM	Pack	Item #
	6" / 4-3/4"	2"	5/8"-11	1-1/2"	3/4"	HZA16Q	6,000	5	68400

#### **NEW! HIGH PERFORMANCE GRINDING**







#### PERFORMANCE GRINDING

BURNT IN SAND	BURNT IN SAND TIGER SIC / Long Life									
Diameter	Thickness	Arbor	Rim	Back		Max.	Std.			
(D / J)	(T)	(H)	(W)	(E)	Grade	RPM	Pack	Item #		
4" / 3"	2"	5/8"-11	3/4"	3/4"	C16Q	9,070	5	68351		
5" / 3-3/4"	2"	5/8"-11	1"	3/4"	C16Q	7,260	5	68354		
6" / 4-3/4"	2"	5/8"-11	1"	3/4"	C16Q	6,000	5	68357		
6" / 4-3/4"	2"	5/8"-11	1-1/2"	3/4"	C16Q	6,000	5	68069		
CAST IRON	TIGER AO	/ Long Life								
4" / 3"	2"	5/8"-11	3/4"	3/4"	A160	9,070	5	68350		
5" / 3-3/4"	2"	5/8"-11	1"	3/4"	A16Q	7,260	5	68353		
6" / 4-3/4"	2"	5/8"-11	1"	3/4"	A16Q	6,000	5	68356		
6" / 4-3/4"	2"	5/8"-11	1-1/2"	3/4"	A16Q	6,000	5	68359		

<sup>+</sup> Includes silicon carbide for burnt-in sand and hard-to-grind metals.

6,000

AC16Q

#### FLARING CUP WHEEL MOUNTING FLANGE

5/8"-11

Fits over 5/8"-11 spindles

6" / 4-3/4"

Diameter	Thickness	Std. Pack	Item #
2"	1/4"	1	73054



SAFETY WARNING: Using a flaring cup wheel without the proper flange is a violation of ANSI code.

# TYPE 27 GRINDING WHEELS

Weiler Tiger type 27 grinding wheels deliver the next evolution in technology for portable foundry grinding. The line is available in three performance tiers, including Tiger Ceramic which sets a new standard for maximum performance. The ceramic grain leverages an engineered ultra-fine microstructure that self-sharpens for ultra-fast grinding. This technology allows Tiger Ceramic to remove up to 40% more material over the life of the wheel compared to competitive zirconia products. This translates to better productivity in the cleaning room and a reduction in abrasives usage.

#### **GRINDING WHEEL FEATURES:**

- Advanced anti-chipping technology *improves safety* through the reduction of high energy debris emitted during the grinding process.
- 5/8"-11 nutted metal hub allows for quick spin-on, spin-off changeover and eliminates cross-threading or sticking to spindle due to heat build-up.
- Triple fiberglass reinforcement for added strength.
- 1/8" combo wheels offer *flexibility and efficiency* when switching between cutting and grinding applications.

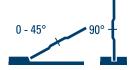


material from a casting.



#### 1/4" GRINDING WHEELS:

Ideal for heavy stock removal, removing cracks and surface imperfections, blending parting lines, removing flash, gate and riser removal.



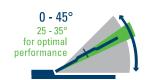
#### 1/8" COMBO WHEELS:

Ideal for light grinding, blending parting lines, removing flash and cutting gates and risers.

TYPE 27

5/8"-11 Hub

TYPE 27 5/8"-11 Hub



NEW!

#### **MAX PERFORMANCE**

TIGER CERAMIC / Superior Cut & Long Life

CAST IRON	DUCTILE IRON	CAST STEEL	HARD-TO-GRIN	<u> </u>			
Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #
		Type 27	Depressed Cen	ter 1/4" Grindin	g Wheels		
7"	1/4"	CER24T	8,500	10	68388	10	68389
9"	1/4"	CER24T	6,650	10	68392	10	68393
		Type 27 Depr	essed Center 1/	8" Cut & Grind	Combo Wheels		
7"	1/8"	CER30T	8,500	25	68386	10	68387
9"	1/8"	CER30T	6,650	25	68390	10	68391

TYPE 27

7/8" Arbor

TYPE 27

7/8" Arbor



68389



#### **HIGH PERFORMANCE**

TIGER ZIRC / Fast Cut & Long Life T IRON DUCTUE IRON CAST STEEL

- 1	CAST INUIV	DOCTILL INON	CASI SILLL			i —		
	Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #
			Type 27	Depressed Cer	ter 1/4" Grindir	ng Wheels		
	7"	1/4"	Z24T	8,500	10	68380	10	68381
	9"	1/4"	Z24T	6,650	10	68384	10	68385
			Type 27 Depre	essed Center 1/	8" Cut & Grind	Combo Wheels		
	7"	1/8"	Z30T	8,500	25	68378	10	68379
	9"	1/8"	Z30T	6,650	25	68382	10	68383
				•				



68380



#### **PERFORMANCE** TYPE 27 TYPE 27 TIGER AO / Long Life 7/8" Arbor 5/8"-11 Hub CAST IRON

Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #
		Type 27	<b>Depressed Cen</b>	iter 1/4" Grindin	g Wheels		
7"	1/4"	A24T	8,500	10	68372	10	68373
9"	1/4"	A24T	6,650	10	68376	10	68377
		Type 27 Depr	essed Center 1/	8" Cut & Grind	Combo Wheels		
7"	1/8"	A30T	8,500	25	68370	10	68371
9"	1/8"	A30T	6,650	25	68374	10	68375



Using a cone to clean surface imperfections.

# CONES & PLUGS - FOR FOUNDRY



Weiler Tiger cones and plugs offer performance grinding solutions for ID cleaning, hole edge beveling, smoothing weld seams, removing parting lines and cleaning castings in hard-to-reach places. Designed with the operator in mind, these abrasives provide smooth, vibration free operation and instant cutting action right out of the box.

#### **CONE & PLUG FEATURES:**

- Open face design provides aggressive cut-rate right out of the box.
- Anchored hexagon nut secures the abrasive to the tool to increase safety and prevent product breakage.
- Zinc plated nut prevents oxidation, eliminates contamination and allows for easy mounting.
- Precision balanced to ensure smooth, vibration free operation and reduced operator fatigue.

#### **APPLICATIONS:**

Ideal for ID cleaning, hole edge beveling, smoothing weld seams, removing parting lines and cleaning castings in hard-to-reach places.











Type 16

NEW!

**Type 17** 

**Type 18** 

Type 18R











#### **MAX PERFORMANCE GRINDING**

CAST IRON DUCTILE IRON CAST STEEL HARD-TO-GRIND TIGER CERAMIC TYPE 16 CONES / Superior Life & Cut

Diameter	Thickness	Arbor		Max.	Std.	
(D)	(T)	(Thread)	Grade	RPM	Pack	Item #
2"	3"	5/8"-11 Nut	HZA20S	18.145	12	68403

#### NEW!

#### **HIGH PERFORMANCE GRINDING**

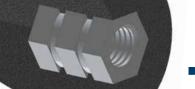
CAST IRON DUCTILE IRON CAST STEEL TIGER ZIRC TYPE 16 CONES / Fast Cut & Long Life Diameter Thickness Arbor Max. Std. **RPM** (D) (T) (Thread) Grade Pack Item # 3/8"-24 Nut 7A20S 36 290 68301 5/8"-11 Nut 2-1/2 24.190 68304 68306 1-1/2 3/8"-24 Nut 24,190 3" 5/8"-11 Nut 1-1/2 24 190 5/8"-11 Nut 18,145 12 2-3/4 3-1/2 5/8"-11 Nut 13.195 68313



#### PERFORMANCE GRINDING

CAST IRON TIGER AO TYPE 16 CONES / Long Life

37131 111311	Tiden AU TTPE 10 CONES / Long Line							
Diameter	Thickness	Arbor		Max.	Std.			
(D)	(T)	(Thread)	Grade	RPM	Pack	Item #		
1"	3"	3/8"-24 Nut	A24R	36,290	12	68300		
1-1/2"	2-1/2"	3/8"-24 Nut	A24R	24,190	12	68302		
1-1/2"	2-1/2"	5/8"-11 Nut	A24R	24,190	12	68303		
1-1/2"	3"	3/8"-24 Nut	A24R	24,190	12	68305		
1-1/2"	3"	5/8"-11 Nut	A24R	24,190	12	68307		
2"	3"	3/8"-24 Nut	A24R	18,145	12	68309		
2"	3"	5/8"-11 Nut	A24R	18,145	12	68310		
2-3/4"	3"	5/8"-11 Nut	A24R	13,195	12	68312		
3"	3"	5/8"-11 Nut	A24R	12,100	12	68314		



### **ANCHORED NUT INCREASES SAFETY**

Heavy-duty steel hex nut fully anchored into abrasive bond prevents separation and slippage during use.

#### **NEW!** MAX PERFORMANCE GRINDING

P CAST IRON DUCTILE IRON CAST STEEL HARD-TO-GRIND
TIGER CERAMIC TYPE 17 CONES / Superior Life & Cut

Diameter (D)	Thickness (T)	Arbor (Thread)	Grade	Max. RPM	Std. Pack	Item #
2"	3"	5/8"-11 Nut	HZA20S	18,145	12	68404



P	CAST IRON	DUCTILE IRON	CAST STEEL	TIGER ZIRC TYPE 1	17 CONES / Fas	t Cut & Long Life	
•	Diameter	Thickness	Arbor		Max.	Std.	
	(D)	(T)	(Thread)	Grade	RPM	Pack	Item #
	2"	3"	5/8"-11 Nu	ut ZA20S	18,145	12	68365



#### **NEW!** PERFORMANCE GRINDING

CAST IRON TIGER AO TYPE 17 CONES / Long Life Diameter Max. Std. Thickness Arbor (T) (Thread) Grade **RPM Pack** 3/8"-24 Nut A24R 24,190 68315 12 A24R 20,740 5/8"-11 Nut 12 68316 1 - 3/4A24R 18,145



#### **NEW!** MAX PERFORMANCE GRINDING

CAST IRON DUCTILE IRON CAST STEEL HARD-TO-GRIND
TIGER CERAMIC TYPE 18 PLUGS / Superior Life & Cut

		•				
Diameter	Thickness	Arbor		Max.	Std.	
(D)	(T)	(Thread)	Grade	RPM	Pack	Item #
2"	3"	5/8"-11 Nut	HZA20S	18 145	12	68405

#### **NEW!** HIGH PERFORMANCE GRINDING

CAST IRON DUCTILE IRON CAST STEEL TIGER ZIRC TYPE 18 PLUGS / Fast Cut & Long Life Diameter Thickness Arbor Max. Std. (D) (Thread) **RPM** Pack (T) Grade Item # 5/8"-11 Nut 7A20S 24 190 68320 24,190 5/8"-11 Nut 7A20S 68322 5/8"-11 Nut 18,145 12 68324



#### **NEW! PERFORMANCE GRINDING**

CAST IRON TIGER AO TYPE 18 PLUGS / Long Life Thickness Max. Std. (Thread) **RPM** (D) (T) Grade **Pack** Item # 1 - 1/23/8"-24 Nut A24R 24,190 68318 5/8"-11 Nut A24R 24,190 68319 5/8"-11 Nut A24R 24,190 68321 5/8"-11 Nut A24R 18.145 12 68323



#### **NEW!** MAX PERFORMANCE GRINDING

CAST IRON DUCTILE IRON CAST STEEL HARD-TO-GRIND
TIGER CERAMIC TYPE 18R PLUGS / Superior Life & Cut

Diameter	Thickness	Arbor		Max.	Std.	
(D)	(T)	(Thread)	Grade	RPM	Pack	Item #
2"	3"	5/8"-11 Nut	HZA20S	18 145	12	68406



#### **NEW!** HIGH PERFORMANCE GRINDING

CAST IRON	DUCTILE IRON	CAST STEEL T	<b>IGER ZIRC TYPE 1</b>	8R PLUGS / Fas	st Cut & Long Life	Э
Diameter	Thickness	Arbor		Max.	Std.	
(D)	(T)	(Thread)	Grade	RPM	Pack	Item #
1-1/2"	3"	3/8"-24 Nut	ZA20S	24,190	12	68326
1-1/2"	3"	5/8"-11 Nut	ZA20S	24,190	12	68328
2"	3"	5/8"-11 Nut	ZA20S	18,145	12	68330



#### **NEW! PERFORMANCE GRINDING**

P

TIGER AO TYPE 18R PLUGS / Long Life										
Diameter	Thickness	Arbor		Max.	Std.					
(D)	(T)	(Thread)	Grade	RPM	Pack	Item #				
1-1/2"	3"	3/8"-24 Nut	A24R	24,190	12	68325				
1-1/2"	3"	5/8"-11 Nut	A24R	24,190	12	68327				
2"	3"	5/8"-11 Nut	A24R	18,145	12	68329				
3"	3"	5/8"-11 Nut	A24R	12,100	12	68331				



Portable snagging wheels are ideal for targeted heavy stock removal applications.

# **SNAGGING WHEELS - FOR FOUNDRY**



Weiler Tiger type 1 portable snagging wheels feature a flat face with a narrow contact area, making them ideal for heavy grinding, transitioning, rough beveling, and removing cracks and flaws. The line is available in three performance tiers, including Tiger Zirc, which provides an excellent combination of long product life and a fast, consistent cut-rate when grinding.

Tiger 6 & 8 inch snagging wheels are designed for medium to high power pneumatic and high frequency electric straight grinders, while the 3 inch wheels are used on die grinders. The arbor hole is produced with a precision phenolic resin insert to ensure a tight fit on the tool, minimizing vibration and enhancing the operator experience.

#### **FEATURES**:

- Open face design provides aggressive cut-rate right out of the box.
- Precision balanced to ensure smooth, *vibration-free operation* and reduced operator fatigue.
- Double fiberglass internal reinforcement in 6 & 8 inch wheels provide added strength for consistent product wear and reduced edge chipping.

#### **APPLICATIONS:**

Ideal for snagging, grinding, heavy stock removal, transitioning, rough beveling, removing cracks and flaws, blending parting lines and deflashing.

Type 1 (Flat)



Features a flat face with narrow contact area



68402







NEW!	MAX PERFORMANCE SNAGGING  TYPE 1  5/8" Arbor							
P		D-TO-GRIND TIGER Superio	<b>CERAMIC</b> r Life & Cut		3/6 /			
	Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #		
	6"	1"	HZR16-R	8,000	5	68401		
	8"	1"	HZR16-R	6,000	5	68402		

NEW!	HIGH PER	FORMAN	CE SNAG	GING	TYPE 1		TYPE 1	
P	CAST IRON	T IRON DUCTILE IRON TIGER ZIRC			3/8" Arbor		5/8" Arbor	
r	CAST STEEL		Fast Cut & Lo	ong Life				
	Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #	Std. Pack	Item #
	3"	1/2"	ZA14S	18,080	10	68341	-	-
	6"	1"	ZA160	8,000	-	-	5	68342
	6"	1"	ZAC16Q	8,000	_	_	5	68343+
	6"	1"	ZA16R	8,000	_	_	5	68344
	8"	1"	ZA160	6,000	_	_	5	68345
	8"	1"	ZA16Q	6,000	_	_	5	68346
	8"	1"	ZAC16Q	6,000	_	_	5	68347+
	8"	1"	ZA16R	6,000	_	_	5	68348
	8"	1"	ZA16T	6,000	-	-	5	68349
					Individed diligen	aarbida far burnt	in acad and have	i ta aviad matala

+ Includes silicon carbide for burnt-in sand and hard-to-grind metals.





TYPF 1

Diameter	Thickness	Grade	Max. RPM	Std. Pack	Item #
3"	1/2"	A14P	18,080	10	68340

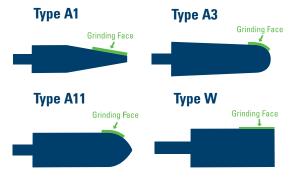
Weiler Tiger Zirc mounted points come in various ANSI point shapes including A1, A11, A3, and W. A zirconia abrasive grain in combination with a strong bond delivers long product life and a consistent cut rate when grinding metal. The unique shapes allow for precise cleaning and grinding of parts with complex geometries and in hard-to-reach areas. Designed for die grinders, mounted points have a standard 1/4" shank diameter and a 1-1/2" shank length.

#### **FEATURES**:

- Dressed working surface *eliminates break-in* and provides a consistent finish.
- Engineered stem bonding adds strength and stability to the point, improving safety.
- Tailored product geometry provides optimal control for precise grinding of critical parts.

#### **APPLICATIONS:**

Ideal for cleaning ID's, corners and hard-to-reach areas, edge chamfering, light grinding, stock removal and hole edge beveling.





#### **NEW!** HIGH PERFORMANCE GRINDING

CAST IRON	DUCTILE IRON	CAST STEEL

TIGER ZIRC / Fast Cut & Long Life							
Diameter	Length	Shape	Grade	Max. RPM	Std. Pack	Item #	
3/4"	1/2"	A1	RZA24U	19,800	10	68332	
7/8"	2"	A11	RZA24U	19,860	10	68333	
1"	2-3/4"	A3	RZA24U	16,100	10	68334	
1/2"	2"	W189	RZA24U	24,000	10	68335	
3/4"	1-1/2"	W207	RZA24U	24,000	10	68336	
3/4"	2"	W208	RZA24U	18,750	10	68337	
1"	1-1/2"	W221	RZA24U	19,120	10	68338	
1"	2"	W222	RZA24U	15,900	10	68339	
5/8"	2"	W197	RZA24U	21,000	10	68366	



Tiger mounted points are ideal for light grinding in hard-to-reach areas and removing cracks from castings.





68334



68338

68333





# **SOLUTIONS SHOWCASE**

#### **STEEL PIPING**

**Problem:** A clean bevel end free of any surface imperfections is critical to a strong joint when welding heavy-wall piping. Unfortunately, lengths of steel pipe can sit in yards for significant periods of time, and pitting of the bevel ends is usually the result.

Solution: Coated abrasive flap discs like Weiler's original Tiger Disc are ideal tools for quickly removing heavy corrosion and blending pitting from bevel ends. The chatter-free, compliant grinding action and smooth, consistent finish produced by these discs make them the preferred choice for this application.



#### **STEEL CHANNEL**

**Problem:** Burrs produced by cut-off operations are dangerous and can prevent parts from fitting together properly, which can cause potential structural weak points.

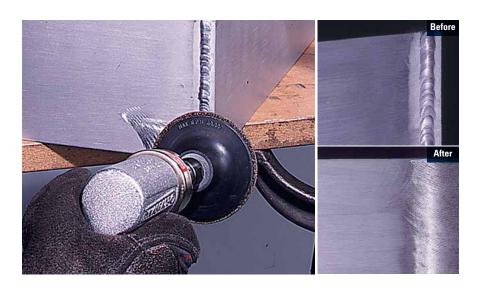
**Solution:** Weiler's coated abrasive flap wheels are flexible grinding products that are ideal for light stock removal applications. A 60 grit wheel can be used to remove a large burr and produce a smooth blended edge.



#### **ALUMINUM FRAMES**

Problem: Aluminum welds are particularly difficult to blend due to the tendency of the chips to become welded to the abrasive media. This causes the cut rate of the abrasive to fall rapidly and generates an expensive grinding operation.

**Solution:** Weiler's Tiger® Aluminum discs are specially formulated to prevent loading by lowering the grinding temperature. A 60 grit disc can blend an aluminum weld bead much faster than a conventional disc without loading.









#### STRUCTURAL STEEL BEAM

**Problem:** Grinding fillet welds is a difficult, time-consuming process that is often expensive to perform.

Solution: Tiger Angled flap discs are a great option for the metalworking professional looking for more versatility than a traditional flap disc can offer and ready to go to work right out of the box. They are ideal for applications that previously required either a carbide burr or trimmable flap disc in order to access welds. Tiger Angled also provides versatility in repair and re-work applications, where it is important to focus grinding in a small area while minimizing impact to the surrounding work piece(s).







#### **TANK AND PRESSURE VESSEL**

**Problem:** The welds inside tanks and pressure vessels must be blended smooth prior to x-ray and pressure testing.

**Solution:** Weiler's Big Cat\* High Density flap discs have the largest flap area in the industry – 22% more cloth. The result is enhanced conformability on curved or irregular surfaces and up to 40% longer life.







#### **STEEL RACK BRACES**

Problem: To prevent weldments used in the construction of offshore oil platforms from "racking" under load, lengths of steel bar stock are added as braces during the fabrication of these structural members. Beveling or chamfering the ends of the bars increases weld penetration and strengthens the joint.

Solution: The requirement for fast stock removal and long wheel life makes this an ideal application for a good quality Type 27 grinding wheel like those in Weiler's Wolverine\* line of general-purpose bonded abrasives.

# **SELECTING THE RIGHT FLAP DISC**

Weiler's abrasive flap discs grind and finish in one step, saving you time and money. There's no switching from a type 27 grinding wheel to a resin fiber disc.



#### MAX PERFORMANCE



#### TIGER® CERAMIC

- TOP COAT for cool grinding
- Protects from heat discoloration
- Prevents loading on soft alloys

#### **GRAIN TYPE**

Ceramic alumina

#### **CONTAMINANT FREE**

CONTAIN LESS THAN 0.1% IRON, SULFUR & CHLORINE

#### STYLES **BEST ON**



(Hard-to-grind metals include tool steel, inconel, high nickel alloy, titanium and armored steel)





#### TIGER X

- FLAT SURFACE GRINDING
- Less effort required
- · Fast grinding & long life

#### **GRAIN TYPE**

Ceramic & zirconia alumina

#### **CONTAMINANT FREE**

CONTAIN LESS THAN 0.1% IRON, SULFUR & CHLORINE

#### STYLES



\*Big Cat

#### **BEST ON**

STEEL / METAL STAINLESS

(Metal includes structural steel and cast iron)





#### TIGER PAW

- SUPERIOR EDGE GRINDING
- Aggressive stock removal

#### **GRAIN TYPE**

100% zirconia alumina

#### **CONTAMINANT FREE**

CONTAIN LESS THAN 0.1% IRON, SULFUR & CHLORINE

#### STYLES



#### **BEST ON**

STEEL / METAL STAINLESS

(Metal includes structural steel and cast iron)





#### **WOLVERINE®**

- · Fast stock removal
- Consistent performance

#### **GRAIN TYPE**

Zirconia alumina





**BEST ON** 

STEEL / METAL



#### **SPECIALTY** FLAP DISCS







TEAT BIGGS	MAX PERFORMANCE	HIGH PERFORMANCE	PERFORMANCE
ANGLED (Fillet Welds)	⊗	⊗	
TRIMMABLE (Non-Marking)	⊗	⊗	
ALUMINUM BACK (Rigid Support)		<b>⊗</b>	
ALUMINUM (Non-Loading)		⊗	
MINI (Tight Spaces)			(Bobcat)

# STYLE

### **CONICAL** (Type 29)

15° – 35°



Angled flaps maximize surface contact for aggressive stock removal on flat surfaces.

# **FLAT** (Type 27) 0° – 15°



Smooth grinding, blending and finishing on flat surfaces and slight contours.





Conformable to irregular surfaces. Smooth grinding, blending and finishing on flat surfaces.





Curved flaps for grinding fillet welds, T-joints and hard-to-reach areas.

# **GRIT**



# **GRAIN**



# **CERAMIC ALUMINA (CA)**

- Self-sharpening micro fracturing crystals expose sharp edges
- Maintains a high cut-rate for the life of the grain
- Longest cutting life under moderate to high pressure
- Exceptional performance on hard-to-grind metals



### **ZIRCONIA ALUMINA (ZA)**

- Self-sharpening crystals
- Holds up under high temperatures and extreme pressure
- · Sharp, fast cutting, long lasting grain



**MOUNTING DISCS** 

WITH OPEN ARBORS

### **ALUMINUM OXIDE (A0)**

- Single crystal that dulls during use
- Good initial cut rate
- · Hard, durable grain

# BACKING

### **PHENOLIC**



Prevents backing from scratching the workpiece.

### **ALUMINUM**



Rigid support for maximum aggression; recyclable.

### **COMPOSITE\***



Trimmable, non-marking backing; allows access to hard-to-reach areas.

\*BobCat™ Discs are not Trimmable.

# **ARBOR**

### 5/8" - 11 NUT

- Quick change over
- Eliminates cross-threading experienced with plastic backs
- Metal nut eliminates the disc from sticking to the grinder due to heat build up



# **OPEN ARBOR**

- Requires adapting nuts
- 5/8" option for 4" grinders
- 7/8" option for 4-1/2" and larger grinders



# MANDRELS & METAL HUB PADS

• For quick-change on tools with 1/4" collets





# STANDARD DENSITY FLAP DISCS





TYPE 29

Weiler offers standard density flap discs in four performance tiers, including Tiger X, which is a great choice if you're looking for high performance on relatively flat surfaces, and Tiger Paw for demanding edge grinding applications.

All Tiger flap discs are contaminant free, making them safe to use on stainless steel.

MAX PERFORMANCE / TIGER\* CERAMIC (SABER TOOTH)
Top Coated for Cool Grinding / Ceramic Alumina / Phenolic Back / Contaminant-free\* TYPE 29



STEEL / METAL ST	AINLESS HARD-TO-GRINI	ALUMINUM		7/8" Arbor	5/8"-11 Hub
Diameter	Grit	Max. RPM	Std. Pack	Item #	Item #
4-1/2"	36	13,000	10	50100	50104◆
	40			50101	50105♦
	60			50102	50106♦
	80			50103	50107◆
5"	40	12,000	10	50538 •	-
	60			50539	_
	80			50540	_
7"	36	8,600	10	50108	50112◆
	40			50109	50113♦
	60			50110	50114♦ •
	80			50111	50115♦ •

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

# **HIGH PERFORMANCE / TIGER X**

Fast Grinding & Long Life on Flat Surfaces / Ceramic & Zirconia Alumina / Phenolic Back / Contaminant-free\*



STEEL / MET.	AL ST	AINLESS		7/8" Arbor	TYPE 29 <b>5/8"-11 Hub</b>	TYPE 27 7/8" Arbor	TYPE 27 <b>5/8"-11 Hub</b>
Diameter	Grit	Max. RPM	Std. Pack	Item #	Item #	Item #	Item #
4-1/2"	36	13,000	10	51200	51204◆	-	-
	40			51201	51205♦	51223	51226♦
	60			51202	51206♦	51224	51227♦
	80			51203	51207◆	51225	51228♦
5"	36	12,000	10	51208	-	-	-
	40			51209	51212♦	_	_
	60			51210	51213♦	_	_
	80			51211 •	51214◆	_	_
6"	40	10,200	10	51237	51241♦	_	_
	60			51238	51242♦	_	_
	80			51239 •	51243♦	-	_
7"	36	8,600	10	51215	51219♦	-	-
	40			51216	51220♦	51229	51232♦
	60			51217	51221♦	51230	51233♦
	80			51218 •	51222♦	51231	51234♦

PERFORMANCE / ORIGINAL TIGER
High cut rate & long life / Zirconia Alumina / Phenolic Back / Contaminant-free\*



51205

				TYPE 29	TYPE 29	TYPE 29	TYPE 27	TYPE 27	TYPE 27
STEEL /	METAL	STAINL	FSS	5/8" Arbor	7/8" Arbor	5/8"- <u>11</u> Hub	5/8" Arbor	7/8" Arbor	5/8"- <u>11</u> Hub
OTELL/	WILLIAL								
		Max.	Std.						
Dia.	Grit	RPM	Pack	Item #	Item #	Item #	Item #	Item #	Item #
4"	36	15,000	10	50592	_	_	_	_	_
	40			50593	_	_	50693	_	-
	60			50594	_	_	50694	-	-
	80			50595	_	_	50695	_	-
	120			_	_	_	50696 •	-	-
4-1/2"	24	13,000	10	-	50601	-	-	-	-
	120			_	50606	_	_	50706	50699◆
5"	40	12,000	10	-	_	-	_	50713	_
	60			_	_	_	_	50714	-
	80			-	_	_	_	50715	-
	120			_	50616 •	_	_	_	-
6"	40	10,200	10	-	50649	50659♦	_	-	_
	60			-	50650	50660◆	_	_	_
	80			_	50651	50661♦	_	_	_
7"	120	8,600	10	-	_	-	_	_	50746♦ •

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

<sup>♦</sup> Patent # 6,945,863



Tiger Paw grinding the edge of a torch-cut steel plate.

PERFORMANCE / TIGER PAW™
Aggressive Stock Removal for Edge Grinding / 100% Zirconia Alumina / Phenolic Back / Contaminant-free\* TVPF 20

				TYPE 29 <b>5/8" Arbor</b>	TYPE 29 <b>7/8" Arbor</b>	TYPE 29 <b>5/8"-11 Hub</b>	TYPE 27 <b>5/8" Arbor</b>	TYPE 27 <b>7/8" Arbor</b>	TYPE 27 <b>5/8"-11 Hub</b>
STEEL /	METAL	STAINI	ESS		-				
		Max.	Std.						
Dia.	Grit	RPM	Pack	Item #	Item #	Item #	Item #	Item #	Item #
4"	40	15,000	10	51104	_	-	51101	_	_
	60			51105	_	-	51102	_	_
4-1/2"	36	13,000	10	_	51118	51123♦	_	51107	51112♦
	40			_	51119	51124♦	_	51108	51113♦
	60			_	51120	51125♦	_	51109	51114♦
	80			_	51121	51126♦	_	51110	51115♦
5"	36	12,000	10	_	51128 •	51153♦	_	51182 •	51155♦
	40			_	51129	51132♦	_	51134	51156♦
	60			_	51130	51133◆	-	51135	51157♦
	80			_	51131 •	51154♦	_	51183 •	51158
6"	40	10,200	10	_	51175	51179♦	_	_	- /
	60			_	51176	51180◆	-	_	- #
	80			_	51177	51181♦	-	_	
7"	36	8,600	10	_	_	51149♦	-	_	51139
	40			_	51145	51146♦	_	51137	51140♦ 🏢
	60			_	51150	51147♦	_	51138 •	51142♦ 🥤
	80			_	-	51148♦	_	_	51143♦



**WOLVERINE®** 

Consistent Performance / Zirconia Alumina / Phenolic Back

				TYPE 29	TYPE 29	TYPE 29	TYPE 27	TYPE 27
STEEL /	METAL			5/8" Arbor	7/8" Arbor	5/8"- <u>11</u> Hub	7/8" Arbor	5/8"-11 Hub
		Max.	Std.					
Dia.	Grit	RPM	Pack	Item #	Item #	Item #	Item #	Item #
4"	36	15,000	10	31337	_	-	-	
	40			31338	_	_	_	_
	60			31339	_	_	_	_
	80			31340 •	_	_	_	_
4-1/2"	36	13,000	10	-	31343	31349♦	31401	31407♦
	40			_	31344	31350♦	31402	31408♦
	60			_	31345	31351♦	31403	31409♦
	80			_	31346	31352♦	31404	31410♦
	120			-	31347	31353♦	-	_
5"	36	12,000	10	-	31355	-	_	-
	40			_	31356	_	_	_
	60			_	31357	_	_	_
	80			_	31358	_	_	_
6"	40	10,200	10	_	31447 •	31451♦	_	-
	60			_	31448 •	31452♦	_	-
	80			-	31449	31453♦	-	-
7"	36	8,600	10	-	31361	31367◆	_	31419♦
	40			_	31362	31368♦	31414	31420♦
	60			_	31363	31369♦	31415	31421♦
	80			_	31364 •	31370♦	_	31422♦



Key:





<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

♦ Patent # 6,945,863 \*Contaminant-free (Contains less than 0.1% Fe, S, CI)

Blending and finishing a weld with a Big Cat flap disc.

# HIGH DENSITY FLAP DISCS

High density discs have more flaps than standard density discs, giving them a thicker profile that increases flexibility and allows the disc to conform to curves and irregular surfaces more easily. The high-density design also reduces vibration, improving operator experience. These discs last up to 40% longer than a standard density disc.





30mm flaps on Big Cat and Tiger Paw Type 27 Style flap discs increases surface area grinding





# **HIGH PERFORMANCE / TIGER BIG CAT® HD**

Grinding & Long L taminant-free* EL/METAL STAIN	TYPE 27 <b>7/8" Arbor</b>	TYPE 27 <b>5/8"-11 Hub</b>			
Diameter	Grit	Max. RPM	Std. Pack	Item #	Item #
4-1/2"	40	12,000	10	50803	50808♦
	60			50804	50809♦
	80			50805	50810♦
	120			50806	_
7"	40	8,600	10	50823	50843♦
	60			50824	50844♦
	80			50825	50845♦
	120			_	50846♦

# PERFORMANCE / TIGER PAW™ HD

Aggressive Stock Removal on Irregular Surfaces 100% Zirconia Alumina / Phenolic Back /

Contaminal STEEL / META	nt-free*	AINLESS	ic back /	TYPE 29 7/8" Arbor	TYPE 29 <b>5/8"-11 Hub</b>	TYPE 27 <b>7/8" Arbor</b>	TYPE 27 <b>5/8"-11 Hub</b>
Diameter	Grit	Max. RPM	Std. Pack	Item #	Item #	Item #	Item #
4-1/2"	36	12,000	10	51060	51064◆	51160	51164♦
	40			51061	51065♦	51161	51165♦
	60			51062	51066♦	51162	51166♦
	80			51063	51067◆	51163	51167♦
5"	40	12,000	10	-	-	51195 •	-
	60			-	_	51196 •	-
	80			_	_	51197 •	_
6"	40	10,200	10	_	-	51191	51187 •
	60			_	_	51192	51188 •
	80			_	_	51185	51189 •
7"	40	8,600	10	_	-	51170	51168♦
	60			-	_	51171 •	51169♦

# **WOLVERINE® HD**

Consistent Performance on Irregular Surfaces / Zirconia Alumina / Phenolic Back

EL / METAL				7/8" Arbor	5/8"-11 Hub
Diameter	Grit	Max. RPM	Std. Pack	Item #	Item #
4-1/2"	40	12,000	10	31387	31390♦
	60			31388	31391◆
	80			31389	31392◆
6"	40	10,200	10	31439	31443
	60			31440	31444◆
	80			31441 •	31445♦

Non-stock product, contact Customer Service for lead times and minimum order quantities.

TYPE 27

<sup>◆</sup> Patent # 6,945,863



TYPF 27





WEILER



# **ALUMINUM BACK**

Tiger Aluminum Back flap discs are the benchmark for the pipeline industry, providing rigid support for maximum aggression. These discs are ideal for removing heavy pitting and resists rolling the bevel ends prior to welding. The aluminum backing also prevents the disc from catching on the bevel when grinding. The aluminum backing plate is 100% recyclable.

# HIGH PERFORMANCE / TIGER® ALUMINUM BACK

Fast Grinding & Long Life / Zirconia Alumina /
Backing Plate Provides Rigid Support / Contar

	g the 7 Zirconia des Rigid Support TAINLESS	/ Contaminant-	free*	TYPE 29  5/8" Arbor	TYPE 29 7/8" Arbor	TYPE 29 <b>5/8"-11 Hub</b>
Diameter	Grit	Max. RPM	Std. Pack	Item #	Item #	Item #
4"	36	15,000	10	50502	-	_
	40			50503	_	_
	60			50504	_	_
	80			50505	_	_
	120			50506 •	_	_
4-1/2"	24	13,000	10	-	50511	50510
	36			_	50512	50517
	40			_	50513	50518
	60			_	50514	50519
	80			_	50515	50520
	120			_	50516	50509
5"	36	12,000	10	-	50522	-
	40			_	50523	_
	60			_	50524 •	_
	80			_	50525	_
	120			_	50526 •	_
7"	24	8,600	10	_	-	50541
	36			_	50532	50542
	40			_	50533 •	50543
	60			_	50534 •	50544
	80			_	_	50545
	120			_	_	50546 •



Edge chamfering a section of pipe with a Tiger Aluminum Back flap disc.



# **FOR ALUMINUM**

Tiger Aluminum flap discs offer an innovative paired flap design that delivers high performance grinding on aluminum. The top flaps are coated to eliminate loading and allow the disc to maintain a high cut-rate, while the alternating flaps aggressively remove material with self-sharpening zirconia aluminum grains. This unique paired flap design delivers the ultimate combination of high performance grinding for aluminum at an exceptional value.

# **HIGH PERFORMANCE** / **TIGER ALUMINUM**Non-Loading / Contaminant-free / Zirconia Alumina / Phenolic Back

ALUMINUM				TYPE 27 7/8" Arbor	TYPE 27 <b>5/8"-11 Hub</b>	TYPE 29 7/8" Arbor	TYPE 29 <b>5/8"-11 Hub</b>
Diameter	Grit	Max. RPM	Std. Pack	Item #	Item #	Item #	Item #
4-1/2"	36	13,000	10	51252	51256	51250	51254
	60			51253	51257	51251	51255



WEILER

51250



Key:



41

# **ANGLED DISCS**

Weiler's Tiger Angled flap discs offer a curved flap design that is ideal for grinding fillet welds, T-joints and hard-to-reach places. The flaps wrap around the edge of the backing plate, optimizing metal contact and providing exceptional feel and control.

These discs are available in ceramic for maximum performance on hard-to-grind metals and zirc for high performance on steel and stainless.



Angled flaps are ideal for fillet welds and hard-to-reach places

E/01 11 U.-L



### MAX PERFORMANCE / TIGER® CERAMIC ANGLED

Top Coated for Cool Grinding on Fillet Welds / Ceramic Alumina / Phenolic Back / Contaminant-free\*

STEEL / METAL STAI	INLESS HARD-TO-GRIN	D ALUMINUM		7/8" Arbor	5/8"-11 Hub	
Diameter	Grit	Max. RPM	Std. Pack	Item #	Item #	
4-1/2"	40	13,000	10	51312	51315	
	60			51313	51316	
	80			51314	51317	
5"	40	12,000	10	51318	51321	
	60			51319	51322	
	80			51320	51323	





### I HIGH PERFORMANCE / TIGER ANGLED

Fast Grinding & Long Life on Fillet Welds / Zirconia Alumina / Phenolic Back /

	STEEL / METAL S	TAINLESS			7/8" Arbor	5/8"-11 Hub
-	Diameter	Grit	Max. RPM	Std. Pack	Item #	Item #
	4-1/2"	40	13,000	10	51300	51303
		60			51301	51304
		80			51302	51305
	5"	40	12,000	10	51306	51309
		60			51307	51310
		80			51308	51311 •

# TRIMMABLE DISCS

51303

Tiger Trimmable flap discs provide flexibility and versatility when grinding steel and stainless steel. A trimmable backing plate allows the operator to increase flap overhang. This feature provides the versatility to adjust for hard-to-reach areas such as fillet welds and irregular shapes.

- Composite backing that can be trimmed, exposing more abrasive material.
- · Composite backing will not mark the workpiece.

# P P Solid Go

# MAX PERFORMANCE / TIGER CERAMIC TRIM (SABER TOOTH)

Top Coated for Cool Grinding / Ceramic Alumina / Trimmable Composite Back for Versatility / **Contaminant-free\*** 

 STEEL / METAL
 STAINLESS
 HARD-TO-GRIND
 ALUMINUM

 Diameter
 Grit
 Max. RPM
 Std. Pack
 Item #
 Item #

 4-1/2"
 40
 13,000
 10
 50117
 50121 ◆

 60
 50118
 50122 ◆

50121



Long Grinding Life / Zirconia Alumina /
Trimmable Composite Back for Versatility / Contaminant-free\*

80

STEEL / METAL STAIL	NLESS	Contaminant 1100		7/8" Arbor	5/8"-11 Hub
Diameter	Grit	Max. RPM	Std. Pack	Item #	Item #
4-1/2"	40	13,000	10	50002	50006◆
	60			50003	50007◆
	80			50004	50008◆
	120			50005 •	50009◆
5"	40	12,000	10	50010	50014
	60			50011	50015
	80			50012 •	50016 •



50003

Key:





TYPE 29

50119

TYPE 29

TYPE 29

50123◆

TYPF 29

<sup>◆</sup> Patent # 6,945,863

Tiger Bobcat mini flap discs are ideal for use on air die grinders for smooth grinding and enhanced conformability in tight areas when working with steel and stainless steel. These mini discs leverage self-sharpening zirconia alumina (ZA) grains that hold up under high temperatures and extreme pressure.



R MOUNT+

Bobcat sheds cloth and exposes new grain, delivering a consistent, aggressive cut rate and removing 3 times more material over the life of the disc than a comparable blending disc.

Weiler BobCat Mini Flap Discs are designed and compatible for use on both industry standard hub pads.





R Mount

S MOUNT<sup>9</sup>

S MOUNT\*



Removing paint in tight spaces is easy with a BobCat disc.



# PERFORMANCE / TIGER® BOBCAT™

Grinding Hard-to-Reach Places / Zirconia Alumina /

Composite Back / Contaminant-free\*

STEEL / METAL	STAINLESS			TYPE 29	TYPE 27	TYPE 29	TYPE 27
Diameter	Grit	Max. RPM	Std. Pack	Item #	Item #	Item #	Item #
2"	36	30,000	10	50922	50932	50946	50956
	40			50923	50933	50947	50957
	60			50924	50934	50948	50958
	80			50925	50935	50949	50959
	120			50926 •	50936	50950	50960
3"	36	20,000	10	50902	50912	50951	50961
	40			50903	50913	50952	50962
	60			50904	50914	50953	50963
	80			50905	50915	50954	50964
	120			50906 •	50916	50955 •	50965

<sup>\*</sup> Back-up pad not required if used with S mount mandrel, 3" discs are back-up pads.

R MOUNT





# **ACCESSORIES**

# **BOBCAT DRIVE MANDRELS & METAL HUB PADS**

For quick-change on tools with 1/4" collets.

Description	Std. Pack	Item #
2" & 3" S mount mandrel	1	07766
3" S mount hub pad + mandrel	1	60509
3" R mount hub pad + mandrel	1	51552





# 56495

### **ADAPTING NUTS & SPANNER WRENCH**

For use with standard, HD and specialty flap discs.

Description	Thread Size	For Use With	Std. Pack	Item #
Adapting Nuts	3/8" - 24	4" flap disc with 5/8" arbor hole (can be used with an adjustable or combination wrench)	1 Pair	56484
Adapting Nuts	5/8" -11	4-1/2", 5" & 7" flap discs with 7/8" arbor hole	1 Pair	56494
Spanner Wrench	=	Item No. 56494 only	1	56495



<sup>+</sup> Back-up pad required. Also compatible with 3M Roloc™ back-up pads.

Smoothing the edges of rollercoaster track with a resin fiber disc.

# **RESIN FIBER DISCS**



**NEW!** Faced with the challenge of working on everything from pressure vessels to roller coasters, professionals need a solution they can count on. That's why we've expanded our line up to deliver the options needed to optimize grinding time on a wide variety of applications. With premium grain mixes that aggressively remove metal and a superior design that locks the grain in, Weiler Tiger and Wolverine resin fiber discs are designed to deliver serious grinding solutions.

CASE STUDY: Learn how Tiger Ceramic resin

fiber discs last longer and reduced cost for a

pressure vessel fabrication company.

- Advanced grain formulas designed to maximize cut rate on metals
- Superior design minimizes loading, glazing and grain stripping.
- Heavy-duty vulcanized fiber backing holds up to the toughest jobs.
- Quick change hub option reduces down time and eliminates interference from adapter rings.
- Spiral molded backing pad design runs cool by increasing airflow and fits on all right angle grinders.

# SELECTING THE RIGHT DISC





TIGER® CERAMIC
TOP COAT for cool, fast
grinding protects from heat
discoloration and prevents
loading on soft alloys

GRAIN TYPE
Ceramic alumina

CONTAMINANT FREE CONTAIN LESS THAN 0.1% IRON, SULFUR & CHLORINE BEST ON

STEEL / METAL STAINLESS HARD-TO-GRIND
(Hard-to-grind metals include tool steel, incore)

(Hard-to-grind metals include tool steel, inconel, high nickel alloy, titanium and armored steel)

P HIGH PERFORMANCE



**TIGER ALUMINUM TOP COATING** grinds cool and eliminates loading resulting in higher cut rates, long life and a superior finish

GRAIN TYPE
Aluminum oxide

CONTAMINANT FREE CONTAIN LESS THAN 0.1% IRON, SULFUR & CHLORINE BEST ON
ALUMINUM

(Aluminum and other non-ferrous metals)

P HIGH PERFORMANCE



INFUSED WITH CERAMIC for faster grinding and longer life. Disc design optimizes grain shedding and promotes cool grinding on stainless **GRAIN TYPE** 

Ceramic & zirconia alumina

CONTAMINANT FREE CONTAIN LESS THAN 0.1% IRON, SULFUR & CHLORINE **BEST ON** 

STEEL / METAL STAINLESS

(Metal includes structural steel and cast iron)

VALUE PERFORMANCE



**FAST CUT RATE** and consistent performance over the life of the disc, resulting in a great value

**GRAIN TYPE**Zirconia alumina

CONTAMINANT FREE CONTAIN LESS THAN 0.1% IRON, SULFUR & CHLORINE BEST ON
STEEL / METAL STAINLESS

(Metal includes structural steel and cast iron)

VALUE PERFORMANCE



**WOLVERINE AO PREMIUM GRAINS** provide an even, sharp, clean cut rate and consistent performance at a great value.

**GRAIN TYPE**White aluminum oxide

BEST ON STEEL / METAL





# TIGER® CERAMIC RESIN FIBER DISCS Ceramic Alumina / Superior Life & Cut Rate on Metal

Self-sharpening Ceramic Alumina grain delivers a superior combination of life and cut rate. Top coat grinds cool and eliminates loading.

STEEL / METAL	STAINLESS	ALUMINUM HARD-	TO-GRIND	
			7/8" Arbor	5/8"-11 Hub
Diameter	Grit Siz	ze Standard Pac	k Item Number	Item Number
4-1/2"	24	25	69850	69880
	36		69851	69881
	50		69852	69882
	60		69853	69883
	80		69854	69884
5"	24	25	69857	69887
	36		69858	69888
	50		69859	69889 •
	60		69860	69890
	80		69861	69891
7"	24	25	69864	69894
	36		69865	69895
	50		69866	69896 •
	60		69867	69897
	80		69868	69898
9"	24	25	69871	69901
	36		69872	69902 •
	50		69873	69903
	60		69874	69904 •
	80		69875	69905
		'	•	Do not exceed maximum RPM of back-up na

Do not exceed maximum RPM of back-up pad.



ADVANCED CERAMIC GRAIN

delivers greater stock removal with a finer scratch pattern

### **LESS PRESSURE**

for consistent material removal, reducing operator fatigue

### **TOP COAT**

grinds cool and eliminates loading, glazing & dulling

### **WIDE RANGE**

of grit options professionals need to get a desired finish



# TIGER ALUMINUM RESIN FIBER DISCS Aluminum Oxide / Non-Loading on Non-Ferrous Metals

A top coating grinds cool and eliminates loading, which results in higher cut rates, long life and a superior finish.

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			7/8" Arbor	5/8"-11 Hub
Diameter	Grit Size	Standard Pack	Item Number	Item Number
4-1/2"	24	25	60400	60600
	36		60401	60601
	50		60402	60602
	60		60403	60603
	80		60404	60604
	120		60406	60606
5"	24	25	60410	60610
	36		60411	60611
	50		60412	60612
	60		60413	60613
	80		60414	60614
	120		60416	60616 •
7"	24	25	60420	60620
	36		60421	60621 •
	50		60422	60622 •
	60		60423	60623 •
	80		60424	60624 •
	120		60426	60626 •

Do not exceed maximum RPM of back-up pad.



<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.



**TIGER® ZIRC RESIN FIBER DISCS** Zirconia Alumina / Ceramic Infused for Faster, Longer Grinding A unique blend of self-sharping Zirconia Alumina and Ceramic Alumina grains deliver a fast, consistent cut rate. A superior design extends disc life by minimizing grain shedding and promotes cool grinding.

STEEL / METAL STAINLESS



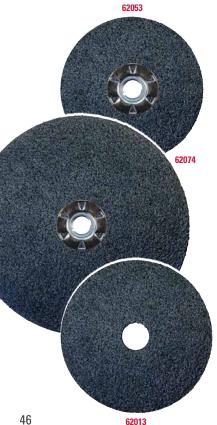
Item Number
59931
59932
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59902
59903 •
59904 •
59905 •
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59916 •
59917

Do not exceed maximum RPM of back-up pad.

# WOLVERINE® ZIRC RESIN FIBER DISCS Zirconia Alumina / Fast Grinding on Metal

Self-sharping Zirconia Alumina grain delivers a fast cut rate and consistent performance over the life of the disc, resulting in a great value.

STEEL / METAL STAINLESS



			7/8" Arbor	5/8"-11 Hub
Diameter	Grit Size	Standard Pack	Item Number	Item Number
4-1/2"	24	25	62002	62052
	36		62003	62053
	50		62004	62054
	60		62005	62055
	80		62006	62056
	100		62007	62057
	120		62008	62058
5"	24	25	62012	62062
	36		62013	62063
	50		62014	62064
	60		62015	62065
	80		62016	62066
	100		62017	62067
	120		62018	62068
7"	24	25	62022	62072
	36		62023	62073
	50		62024	62074
	60		62025	62075
	80		62026	62076
	100		62027	62077
	120		62028	62078
9"	24	25	62032	62082
	36		62033	62083 •
	50		62034	62084
	60		62035	62085
	80		62036	62086
	100		62037 •	62087
	120		62038	62088 •
Do not exceed maximu	ım RPM of back-up pad.			

61501

59543

# **WOLVERINE® AO RESIN FIBER DISCS** White Aluminum Oxide / Fast Grinding on Metal Premium Aluminum Oxide grains provide an even, sharp, clean cut rate and consistent performance at a great value.

### STEEL / METAL

			5/8" Arbor	
Diameter	Grit Size	Standard Pack	Item Number	
4"	24	25	59491	
	36		59492	
	50		59493	
	60		59494	
	80		59495	
	100		59496	
	120		59497	
			7/8" Arbor	5/8"-11 Hub
Diameter	Grit Size	Standard Pack	Item Number	Item Number



Diameter	Grit Size	Standard Pack	item Number	item Number
4-1/2"	24	25	59571	59971
	36		59573	59973
	50		59575	59975
	60		59576	59976
	80		59577	59977
	100		59578	59978 •
	120		59579	59979
5"	16	25	59500	=
	24		59501	61501
	36		59503	61503
	50		59505	61505
	60		59506	61506
	80		59507	61507
	100		59508	61508
	120		59509	61509
7"	16	25	59520	_
	24		59521	61521
	36		59523	61523
	50		59525	61525
	60		59526	61526
	80		59527	61527
	100		59528	61528 •
	120		59529	61529
9"	24	25	59541	61541
	36		59543	61543
	50		59545	61545
	60		59546	61546
	80		59547	61547 •
	100		59548	61548 •
	120		59549	61549
Do not exceed maximu	im RPM of back-up pad.			









# **ACCESSORIES FOR RESIN FIBER DISCS**

Description	Thread Size	Max. RPM	Standard Pack	Item Number
4" Back-up Pad	5/8"-11*	12,000	1	59605
4-1/2" Back-up Pad	5/8"-11*	11,000	1	59611
5" Back-up Pad	5/8"-11*	10,000	1	59600
7" Back-up Pad	5/8"-11	8,500	1	59601
9" Back-up Pad	5/8"-11	6,500	1	59602
Spanner Wrench	-	_	1	59603
Disc Nut	5/8"-11	-	1	59604

<sup>\*</sup> Other thread sizes available on special orders.



### Blending surface imperfections prior to painting.

# TIGER® CERAMIC ALUMINA BLENDING DISCS - Contaminant-free\*

For aluminum, stainless and other hard-to-grind metal applications.

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or aluminum, stamless and other hard-to-grind metal applications.					
	Grit	Standard	Item Number		
Diameter	Size	Pack	Type S Hub Style	Type R Hub Style	
2"	36	50	60150	60170	
	60		60151	60171	
	80		60152	60172	
3"	36	25	60155	60175	
	60		60156	60176	
	80		60157	60177	

Weiler's cloth backed coated abrasive discs are for use on right angle air tools. Available with either a metal hub or a plastic button fastening system, the flexible back-up pads give the discs a great deal of conformability. Weiler's blending discs are suitable for a wide range of light fabrication, repair and

\*Contaminant-free (Contains less than 0.1% Fe, S, CI)

# **TIGER BLENDING DISCS - Type S Hub Style** Compatible with Norton Speed-Lok® TS back-up pads.

**BLENDING DISCS** 

maintenance applications.



	10	89	8
1	80	0	80
	60395	80	80

	Grit	Standard	Item Number		
Diameter	Size	Pack	Zirconia Alumina	Aluminum Oxide	
2"	36	100	60378	60040	
	60		60381	60043	
	80		60382	60044	
	120		60384	60046 •	
3"	36	50	60391	60053	
	60		60394	60056	
	80		60395	60057	
	120		60397	60059	





Diameter	Grit Size	Standard Pack	Item Number - Aluminum Oxide
2"	36	100	60118
	60		60121
	80		60122
	120		60124
3"	36	50	60131
	60		60134
	80		60135
	120		60137



# TIGER ALUMINUM BLENDING DISCS - Aluminum Oxide





	Grit	Ctandand	Item Number		
Diameter	Size	Standard Pack	Type R Hub Style*	Type S Hub Style +	
2"	36	50	59806	59869	
	60		59807	59870	
	80		59808	59871	
	120		59809	-	
3"	36	25	59811	59874	
	60		59812	59875	
	80		59813	59876	
	120		59814	59877 •	





BACK-UP PADS - 1/4" Stem

			Item No.		
Diameter	Max. RPM	Std. Pack	Type R Hub Style*	Type S Hub Style <sup>+</sup>	
2"	25,000	1	51551	60508	
3"	20,000	1	51552	60509	

Do not exceed maximum RPM of back-up pad.

- \* Compatible with 3M Roloc™ back-up pads. (Roloc™ is a trademark of 3M.) Non-stock product, contact Customer Service for lead times and minimum order quantities.
- + Compatible with Norton Speed-Lok® TS back-up pads. (Speed-Lok® TS is a registered trademark of Norton Co.)

# TRIM-KUT® DISCS

Trim-Kuts are abrasive discs designed for light grinding and blending applications on a variety of materials. The abrasive grains are fused directly onto a wearable polymer backing, resulting in a disc that requires no back-up pad. The polymer backing trims during use to expose new grains to the work surface. 3" discs are designed for use on right angle air die grinders, and 4-1/2" discs are for use on right angle grinders.

### **APPLICATIONS**

- Edge blending
- Preparation for painting and surface finishing
- · Light weld and stock removal
- Deburring



Deburring and chamfering a section of pipe after cutting.



# P

# TRIM-KUT® DISCS - Aluminum Oxide

Diameter	Arbor Hole	Grit Size	Max. RPM	Standard Pack	Item Number
3"	5/16" - 18	36	21,000	25	59300
		60			59305
		120			59315

Do not use TRIM-KUT discs in temperatures lower than 48° fahrenheit. Store at 50% relative humidity.







### TRIM-KUT DISC - Aluminum Oxide

Diameter	Arbor Hole	Grit Size	Max. RPM	Standard Pack	Item Number
4-1/2"	7/8"	36	13,000	25	59403

Do not use TRIM-KUT discs in temperatures lower than 48° fahrenheit. Store at 50% relative humidity.





# **TRIM-KUT ADAPTERS**

Description	For Use With	Standard Pack	Item Number
1/4" Mandrel	3" TRIM-KUT Discs	25	59327
3/8"-24 UNF Adapter	3" TRIM-KUT Discs	25	59326 •
Adapting Nuts	4-1/2" TRIM-KUT Discs	1	56485
Spanner Wrench	Item No. 56485 only	1	56496 •

• Non-stock product, contact Customer Service for lead times and minimum order quantities.







### **NOTE**

If you are using a blending disc or TRIM-KUT Disc, ask our Application Engineering Department if Weiler's BobCat Abrasive Flap Discs can enhance your productivity. BobCats dramatically outperform blending and TRIM-KUT Discs by reducing changeovers and providing consistently high cut rates and extended life. See page 43 for more information.

### Key:





Removing burrs from the inside diameter of a cut tube.

# **COATED ABRASIVE FLAP WHEELS**



Weiler's abrasive flap wheels are designed with a solid hub construction that enables wheels to be rated at higher RPMs and provide more aggressive cutting action and increased productivity. They provide perfect balance leading to smooth, chatter-free finishing.

### **Applications**

- Internal diameter cleaning
- Finishing metal surfaces
- Deburring machined parts
- Cleaning and reconditioning pipe threads
- Polishing, blending & finishing
- Prepping surface for painting or plating
- Edge blending





# TIGER® MOUNTED FLAP WHEELS - 1/4" Stem - Aluminum Oxide

A premium line designed to provide long life. Ideal for medium to high production environments.

0	1 0		0 1		
Diameter	Width	Grit Size	Max. RPM	Standard Pack	Item Number
1"	1"	60	30,000	10	52003
		80			52004
		120			52005
1-1/2"	1"	60	25,000	10	52009
		80			52010
		120			52011
2"	1/2"	60	25,000	10	52366
		80			52367
2"	1"	60	25,000	10	52015
		80			52016
		120			52017
2-1/2"	1"	60	23,000	10	52486
		80			52487
3"	1/2"	60	23,000	10	52024
		80			52025
3"	1"	60	23,000	10	52027
		80			52028
		120			52029





# TIGER MOUNTED FLAP WHEELS - 1/4"-20 Threaded Stem - Aluminum Oxide

A premium line designed to provide long life. Ideal for medium to high production environments.

Diameter	Width	Grit Size	Max. RPM	Standard Pack	Item Number
1"	1"	60	30,000	10	52601
		80			52603
		120			52605
2"	1"	60	25,000	10	52611
		80			52613
3"	1"	60	20,000	10	52621
		80			52623





# TIGER UNMOUNTED FLAP WHEELS - Aluminum Oxide

Diameter	Width	Arbor Hole	Grit Size	Max. RPM	Standard Pack	Item Number
6"	1"	1"	60	6,000	5	53286
			80			53287
6"	2"	1"	60	5,700	3	53326 •
			80			53327

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

# **NOTE**

- Drive arbor is used individually and must be ordered individually.
  Drive arbor is to be used with Weiler flap wheels only.
  Stems must be fully chucked before using and should not be run above the maximum RPM listed.









### **GREAT VALUE AT THE RIGHT PRICE**

Wolverine Flap Wheels offer a high cut rate at a cost-effective price. The smart option for use in medium production environments.

### **APPLICATIONS**

- Internal diameter cleaning
- Finishing metal surfaces
- Deburring machined parts
- Cleaning and reconditioning pipe threads
- · Polishing, blending & finishing
- Prepping surface for painting or plating
- · Edge blending





### **WOLVERINE® 1/4" STEM MOUNTED FLAP WHEELS**

Provide fast cutting action at a value price. Ideal for low to medium production environments.

					Item Number
Diameter	Width	Grit Size	Max. RPM	Standard Pack	Aluminum Oxide
5/8"	5/8"	40	30,000	10	30711
		60			30712
		80			30713
3/4"	3/4"	40	30,000	10	30715
		60			30716
		80			30717
1"	1"	40	30,000	10	30719
		60			30720
		80			30721
		120			30722
1-1/2"	1"	40	25,000	10	30771
		60			30772
2"	1"	40	25,000	10	30732
		60			30723
		80			30724
		120			30725
2-1/2"	1"	40	23,000	10	30778
3"	1"	40	23,000	10	30729
		60			30726
		80			30727
		120			30728











# **WOLVERINE 1/4"-20 THREADED STEM MOUNTED FLAP WHEELS**

Provide fast cutting action at a value price. Ideal for low to medium production environments.

					Item Number
Diameter	Width	Grit Size	Max. RPM	Standard Pack	Aluminum Oxide
1"	1"	60	30,000	10	30745
		80			30746
2"	1"	60	25,000	10	30737
		80			30738
3"	1"	60	20,000	10	30735
		80			30736



**DRIVE ARBOR -** For 1/4"-20 Mounted Flap Wheels

Thread Size	Adapted Size	Standard Pack	Item Number
1/4"-20	1//!"	5	07756



**METAL ADAPTERS -** For Unmounted Flap Wheels. Used in pairs and priced per pair.

Wheel Arbor Hole Size	Adapted Arbor Hole Size	Standard Pack	Item Number
1"	1/2"	1	03833
	5/8"		03834
	3/4"		03835 •







Polishing the O.D. of a part turning in a lathe.

# **COATED ABRASIVE SHOP ROLLS**

Weiler's Shop Rolls are resin over resin bonded - providing a stronger, heat and moisture resistant bond that better utilizes the abrasive grains. The cotton cloth provides a tougher, durable backing for longer life. J-flex cloth provides a higher degree of flexibility to conform to contoured parts.

### **APPLICATIONS**

- Off-hand polishing of metal surfaces
- Off-hand deburring
- General purpose machine shop use

**Roll Width** 

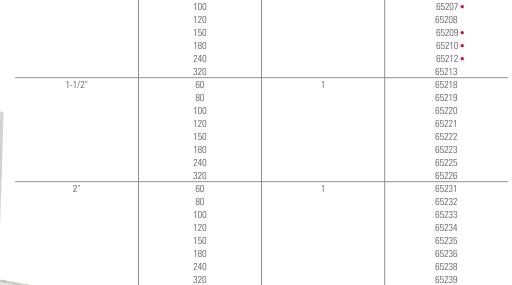
Cleaning stock that is being turned in a lathe

# TIGER® SHOP ROLLS - Aluminum Oxide - 50 Yards. One roll per box.

**Grit Size** 

60

80



**Standard Pack** 

Item Number

65205

65206

Non-stock product, contact Customer Service for lead times and minimum order quantities.



65204

Use light machine oil with shop rolls as a lubricant for finer finishes and quicker cut.



Performance line Industrial Grade

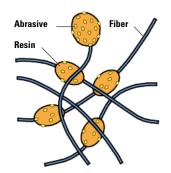




# ECTING THE RIGHT PR

The various grades of non-woven products produce scratch patterns that can be compared to those produced by coated abrasive products. However, their pliable nature results in a softer, less pronounced scratch-line pattern. The strength of these products is producing decorative finishes ranging from satin to near-mirror polish.

Denser non-woven products are suitable for applications requiring light stock removal such as removing large, well-attached burrs and blending minor tool marks and imperfections.



All non-woven products are fabricated from base materials that are composed of a random "web" of nylon fibers that have been bonded together with synthetic resins and impregnated with abrasive grains. Although these materials vary in fiber density, their three dimensional nature results in specialty abrasive products that are pliable, conformable to the work surface, and limited in their ability to remove base stock.

Non-woven products resist loading and perform consistently as new, fresh abrasive grains are exposed as the nylon fibers wear away from the product during use. Non-woven abrasives can be used either wet or dry on a range of materials including ferrous and non-ferrous metals, ceramics, plastics, composites, and wood. Non-woven products are designed for use where stock removal is not required. Non-wovens begin where coated abrasives leave off.

Grade	Grit Range
Ultra Fine	600
Very Fine	240-360
Fine	180-220
Medium	100-150
Coarse	50-80

# **UNITIZED WHEELS**









UNITIZED WHEELS - Designed for use on die grinders and are ideal for a variety of cleaning, finishing, deburring and edge blending applications.

Diameter	Face Width	Arbor Hole	Grain	Grade	Max. RPM	Standard Pack	ltem Number
		Seri	es 2 - Cleaning & Fi	nishing - Hardr	ness: Soft		
3"	1/4"	1/4"	Aluminum Oxide	Fine	12,000	10	55512
	1/4"		Silicon Carbide	Fine			55513
		Ser	ies 6 - Deburring - H	lardness: Medi	um/Hard		
3"	1/4"	1/4"	Aluminum Oxide	Fine	18,000		54492
		Series 8 - HD	Deburring & Polishi	ng - Hardness:	Hard (Heavy-D	uty)	
3"	1/8"	1/4"	Aluminum Oxide	Coarse	18,000	10	55546
	1/4"			Medium			55541
	1/2"			Medium			55542

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

### **MANDRELS**



Stem Diameter	For Wheel Diameter	For Wheel Thickness	Standard Pack	Item Number
1/4"	2" - 3"	1/2"	1	07761
	1"	1"	1	07764 •
	2" - 3"	1/8" - 1/4"	10	56489

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.



# INTERLEAF FLAP WHEELS

Interleaf Flap Wheels provide a combination of non-woven and coated abrasive material to produce a very conformable product compared to a standard coated abrasive flap wheel. They are designed to be a finishing and surface blending tool as compared to a material-removing coated abrasive flap wheel. They are ideal for producing satin or decorative finishes on irregular or contoured surfaces.

### **APPLICATIONS**

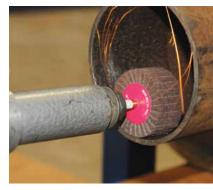
- General decorative finishing
- Applying satin finishes
- Producing antique finishes
- Final sandings
- Soft metal finishing
- Removing oxides from precious metals
- Fine burr removal







Diameter	Face Width	Grit Size	Stem Size	Max. RPM	Standard Pack	Item Number
2"	1"	120	1/4"	13,700	10	54500
		180				54501
		320				54502
3"	1"	120	1/4"	8,600	5	54506
		180				54507
		320				54508
3"	2"	120	1/4"	8,600	10	54509
		180				54510
		320				54511



Deburring the I.D. of a steel pipe with an interleaf flap wheel.





# HAND PADS

### **Industrial Grade:**

- Producing satin finishes on aluminum and stainless steel
- Light deburring
- Surface preparation
- Blending light scratches

### **Commercial Grade:**

- Cleaning and removing stains from stainless steel
- Removing rust, corrosion and oxidation

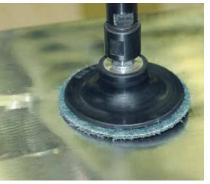


HAND PADS - For cleaning and conditioning surfaces by hand. Unlike steel wool, hand pads are non-metallic, and do not produce "after-rust" on work surfaces. Hand pads can be used in wet applications.

Size	Grain	Grade	Description	Standard Pack	Item Number
	'		Industrial Grade		
6" x 9"	Silicon Carbide	Ultra Fine	Finishing (Grey)	60	51434
6" x 9"	Aluminum Oxide	Medium	Economy General Purpose (Maroon)	60	51460
6" x 9"	Aluminum Oxide	Med/ Coarse	General Purpose (Maroon)	60	51444
6" x 9"	Aluminum Oxide	Heavy-Duty	Heavy-Duty (Tan)	40	51454
			Commercial Grade		
6" x 9"	Aluminum Oxide	Fine	Economy (Green)	400	51456
6" x 9"	Aluminum Oxide	Medium	Standard-Duty (Green)	60	51457
6" x 9"	Aluminum Oxide	Heavy-Duty	Heavy-Duty (Green)	60	51458
			20% thicker than Standard Duty		



Polishing a rail axle journal with a



Finishing the surface for a stainless steel part for the food service industry.

# **SURFACE CONDITIONING DISCS**

Surface Conditioning Discs have an open construction, scrim reinforcement and a superior resin system. These features minimize loading, heat build-up, fraying of disc edges, grain shedding and extend disc life, providing superior performance.

# **APPLICATIONS**

- Light deburring
- Surface preparation
- Blending light scratches
- Removing rust, corrosion and oxidation
- Cleaning and removing stains from stainless steel
- · Producing satin finishes on aluminum and stainless steel







# **TYPE R HUB STYLE DISCS** - General Purpose Compatible with 3M Roloc<sup>™</sup> back-up pads.



51532
51533

Diameter	Grade	Standard Pack	Item Number
2"	2" Very Fine (Blue)		51530
	Medium (Maroon)		51531
	Coarse (Brown)		51532
3"	Very Fine (Blue)	25	51533
	Medium (Maroon)		51534
	Coarse (Brown)		51535



# TYPE R HUB STYLE BACK-UP PADS - 1/4" Stem

Diameter	Max. RPM	Standard Pack	Item Number
2"	30,000	1	51551
3"	20,000	1	51552

Do not exceed maximum RPM of back-up pad.







# **HOOK & LOOP STYLE DISCS**





Diameter	Grade	Standard Pack	Item Number
3"	Very Fine (Blue)	25	51506 •
	Medium (Maroon)		51507 •
	Coarse (Brown)		51508 •
4-1/2"	Very Fine (Blue)	10	51512
	Medium (Maroon)		51513
	Coarse (Brown)		51514
5"	Very Fine (Blue)	10	51515
	Medium (Maroon)		51516
	Coarse (Brown)		51517
7"	Very Fine (Blue)	10	51521
	Medium (Maroon)		51522
	Coarse (Brown)		51523

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.



# **HOOK & LOOP STYLE BACK-UP PADS**

Diameter	Arbor Hole or Stem Size	Max. RPM	Standard Pack	ltem Number
3"	1/4" Stem	18,000	1	51562
4-1/2"	5/8" -11 Arbor	13,000	1	51569
5"	5/8" -11 Arbor	10,000	1	51575
7"	5/8" -11 Arbor	6,000	1	51578



# **SOLUTIONS SHOWCASE**

### **TUBE END DEBURRING**

**Problem:** Structural tubing is fabricated into an abundance of different forms. In order to facilitate safer handling and proper fit, the ends of the tubing must frequently be deburred.

Solution: Wide face crimped wire wheel brushes are an extremely effective solution for tube end deburring. Brushes can deburr the OD and ID of tubing at an extremely high rate and produce a media-cost-per-part of considerably less than \$0.01 per part.



### **GEAR DEBURRING**

**Problem:** Power transmission components like gears cannot function properly when burrs prevent correct engagement. Further, burrs that become detached from gears can become lodged in critical transmission components causing premature wear and potential failure.

Solution: Knot wire wheel brushes with surface speed in excess of 6,000 SFPM are an excellent solution for deburring gears prior to heat treatment. The high energy filament tips are able to separate burrs from base material and produce a uniform edge break, which protects the edge of the gear.





Photos courtesy of On-Line Services.

### **REMOVAL OF MILL SCALE**

**Problem:** Mill processing of steel often involves heat treating and oil quenching operations that produce an adherent scale, which must be removed prior to joining or finishing operations.

Solution: Wire brushes are capable of quickly cleaning material to white metal and producing varying degrees of surface roughening to promote adhesion. Brushing operations are often preferred over blasting and chemical processes that generate an expensive waste stream and can be costly to operate and maintain.













# INTER-PASS PIPELINE WELD CLEANING

Problem: To prevent voids and inclusions when welding multi-pass joints, the surface of each bead must be completely cleaned of slag and other residuals. Performing inter-pass weld cleaning as quickly and as thoroughly as possible is critical to avoiding costly repair work and delays.

Solution: Weiler's Roughneck\* and Dually\* stringer bead wheels have been engineered to maximize efficiency and minimize costs and are the preferred choice of welders' helpers on the pipeline. From hot pass to cap pass, these premium weld cleaning brushes excel at quickly and thoroughly removing slag, spatter, and oxidation without damaging the filler material.







# CLEANING THREADED CONNECTIONS

**Problem:** The box ends of drill string and other oilfield tubular goods are examples of connections that must be periodically cleaned without altering the geometry of the threads. Abrasive products all remove base material to some extent and are capable of damaging threads, resulting in unreliable connections and the risk of potential failures.

Solution: The conformability and impact action of small diameter crimped wire wheels make them ideal tools for cleaning threads without fear of damage. When used on a high-speed die grinder, these radial wheel brushes quickly remove residual dope as well as rust, corrosion and scale from male or female thread ends.







# REMOVAL OF EXCESS MOLDED RUBBER

Problem: Mechanical rubber components such as motor mounts are produced through a process that commonly leaves flash and excess rubber on critical surfaces. In order for the component to function properly, this unwanted material must be removed.

Solution: The non-loading nature of wire brushes makes them the best available solution in the marketplace for removal of rubber from targeted surfaces. This solution can be implemented off-hand or using automated equipment.

# **SELECTING THE RIGHT BRUSH**

SELECTION BY TOOL	Crimped Wheels	Knot Wheels	Crimped Cups	Knot Cups	Crimped Stem-Mtd. Wheels	Knot Stem-Mtd. Wheels	Crimped Stem-Mtd. End	Knot Stem-Mtd. End	Encap- sulated Brushes	Power & Hand Tube Brushes	Mini Brushes
Right Angle Grinder	<b>V</b>	<b>~</b>	<b>V</b>	V					<b>V</b>		
Straight Grinder	<b>V</b>	<b>V</b>			<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>		
Die Grinder	<b>V</b>	<b>V</b>			<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>		
Corded/Cordless Hand Drill					<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>		<b>~</b>	
High Speed Pencil Grinder											<b>V</b>
Bench/Pedestal Grinder	<b>~</b>	<b>V</b>							$\checkmark$		
Drill Press					<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>		<b>V</b>	
CNC/Milling/ Automatic Machine	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	~	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	

WIRE SIZE To maximize brush life and reduce costs, always use the finest wire that will accomplish the job without requiring excessive applied pressure or engagement with the brush face.

Wire	Coarse		<b>Medium to Coarse</b>		Medium		Fine		Very Fine	
Gauge #	20	24	25	30	33	34	35	38	43	47
Dia. in Inches	.035	.023	.020	.014	.0118	.0104	.0095	.008	.006	.005
Dia. in Millimeters	0,89	0,58	0,51	0,36	0,30	0,26	0,24	0,20	0,15	0,13

Wire sizes in decimals of an inch are shown in all tables throughout this catalog. American Steel Wire Equivalent Gauge (Formerly Washburn & Moen)

# **LARGE DIAMETER WIRE**

- Aggressive brushing action
- Fatigues and breaks more quickly

### **SMALL DIAMETER WIRE**

- Resists fatigue and breakage
- Less aggressive
- Flexible brushing action

# **CRIMPED VS. KNOT WIRE**

### **CRIMPED WIRE BRUSHES:**



- Greater flexibility for light/medium duty applications.
- Use on parts that could be damaged by the impact of a knot brush.
- Use for a broad range of applications.

# **KNOT WIRE BRUSHES:**



- Straight wire filaments that are twisted as a single unit like a piece of cable or wire rope.
- Provide less flexibility and more aggressive brushing action in heavy-duty applications.
- Use on parts requiring high-impact action.
- Use to remove large burrs and heavy contamination, such as multiple layers of rust, scale, paint or oxides.

# **KNOT TWIST CONFIGURATIONS**



### **STANDARD**

Provides some flexibility for use on irregular surfaces. Sharp wire tips make this knot aggressive right from the start.



Provides smoother operation but sacrifices much of the cleaning action.



### CABLE

Provides very aggressive brushing action. Sharp wire tips make this knot aggressive right from the start.



# **STRINGER BEAD**

High-impact action, primarily for weld cleaning. Sharp wire tips make this knot aggressive right from the start.

# TRIM LENGTH & FILL DENSITY

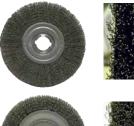
To maximize brush life and reduce costs, always use the shortest trim, highest density brush that will adequately conform to the surface or part edges.

### **LONG TRIM, LOW DENSITY BRUSHES**

- Flexibility that is ideal for applications such as cleaning surfaces that are somewhat irregular
- Lower fill density can result in shorter brush life and less consistent performance in production environments.

### SHORT TRIM, HIGH DENSITY BRUSHES

- Less flexible and faster action requires less applied pressure
- Consistent performance and longer life







# **POLYFLEX® ENCAPSULATED**

These brushes are suitable for extremely demanding applications that do not require a high degree of conformability. They are especially well-suited for users with the following types of requirements:

Extreme brushing pressure - Encapsulation protects wires from over-flexing and extends brush life relative to conventional knot and crimped wire brushes.

Severe cleaning operations - Encapsulation holds the wire tips rigidly in place and creates the most aggressive brushing action that can be achieved with a wire brush.

### **BURGUNDY** (STANDARD)



General purpose elastomer; suitable for most manufacturing applications.

### ORANGE (HEAVY-DUTY)



A more heavy-duty elastomer than burgundy; used for more demanding applications.

### **BLACK** (EXTRA HEAVY-DUTY)



A heat stabilized elastomer that does not wear easily; used primarily for cleaning welds.

# **ARBOR HOLE VARIATIONS**

FOR WEILER PERFORMANCE LINE WHEELS

If an arbor hole size other than the size listed in the product table is required, change the last digit of the Item Number as indicated in the Table.

<b>Arbor Hole Diameter</b>	Arbor Hole Features	Change Last Digit of Item # To:
1/2"-3/8"	Plastic Snap-Out Adapter	4
5/8"-1/2"	Plastic Snap-Out Adapter	5
5/8"-11 UNC	Threaded Nut (6", 7" & 8" Wheels Only)	6
5/8"	3", 4" & 6" Wheels Only	7
3/4"	_	8
7/8"	_	0 - 11
1"	1/4"*x 1/8"+ double keyway	0 - 12
1-1/4"	5/16"*x 5/32"+ double keyway	9
1-1/2"	3/8"*x 3/16"+ double keyway	0 - 13
1-3/4"	3/8"*x 3/16"+ double keyway	0 - 16
2"	1/2"*x 1/4"+ double keyway	0 - 14
2-1/4"	3/4"*x 3/8"+ double keyway	0 - 17
2-1/2"	1/2"*x 1/4"+ double keyway	0 - 15

<sup>\*</sup> Width of keyway + Depth of keyway



**Example:** Item Number 01228 has a listed, standard size arbor hole of 3/4". If an 1-1/4" arbor hole is desired, drop the 8 from 0122<u>8</u> and add 9. The Item Number becomes 0122<u>9</u>. If a 2" arbor hole is desired, drop the 8 from 01228 and add 0-14. The Item Number becomes 01220-14.

# **PRODUCT ADVANTAGES**

# PRODUCT LINE STRUCTURE

# P PERFORMANCE LINE (INDUSTRIAL GRADE)

Engineered and manufactured to maximize performance and minimize operating costs in the most demanding surface conditioning applications. The use of superior construction, the highest quality materials and the most stringent manufacturing processes deliver the lowest cost-of-use and most consistent performance in heavy production environments.

# **VALUE LINE (PROFESSIONAL GRADE)**

Weiler's value line is manufactured using similar product construction and the same exacting standards as other Weiler power brushes, but engineered to provide cost-effective use in less demanding environments. Wolverine™ brushes (Formerly Vortec Pro\*) are an economical choice for the construction trades, low volume production shops and light duty industrial MRO use.

# **OPERATIONAL ADVANTAGES**

### POWER BRUSHES DO NOT REMOVE BASE MATERIAL

- The impact action of the wire tips of a rotating brush behave in the same manner as the media in a blasting operation and they have the same ability to separate surface contaminants without damaging the substrate.
- Due to its compliant nature, a power brush is the ideal tool for removing burrs and blending sharp edges without changing overall part dimensions after sawing, cutting, grinding and machining operations.

**Grinding Wheel** 



Wire Wheel



### **POWER BRUSHES DO NOT LOAD**

Unlike bonded, coated and non-woven abrasive products, power brushes will not load when used on softer materials or when removing paint or similar coatings from a harder surface. Because a power brush consists of a collection of individual wire filaments, there is no place for debris to accumulate and prevent the sharp wire tips from striking the work.

**Resin Fiber Disc** 



Wheel Brush



### **POWER BRUSHES ARE SELF-SHARPENING**

As a power brush is used, the wire tips will naturally tend to wear to a point due to contact with the working surface. It is possible to take advantage of this self-sharpening action by periodically switching the mounting position of wheel brushes to maintain their speed and effectiveness.

# **WEILER SUPERIOR CONSTRUCTION**





# WEILER'S SOLID RING CONSTRUCTION

Our crimped wire brushes are constructed using solid rings to retain the fill material and our manufacturing process results in an even, consistent distribution of wire strands around the entire brush diameter. This ensures that our crimped wire products run smoother and last longer than the competition – even in the toughest applications.



# WEILER'S INDIVIDUAL KNOT HOLE CONSTRUCTION

Weiler's knot wheels are constructed with an internal steel plate that has equally spaced individual holes around the perimeter. Wire is inserted through each hole and twisted into a knot. Each hole has precisely the same wire count, thereby assuring perfect balance. This eliminates vibration, reduces operator fatigue and increases brush life.



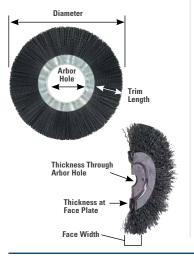


# WEILER'S ROUGHNECK® WELD CLEANING BRUSH CONSTRUCTION

Each knot is twisted through its own hole and locked into an individual sprocket tooth. This prevents the knots from moving, providing a stronger striking action on the work surface, longer brush life and less operator fatigue. This results in the most aggressive weld cleaning in the market with the lowest cost-per-piece brushed.

# **PRODUCT CHARACTERISTICS**

# WHEEL BRUSH



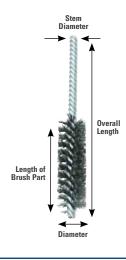
# **CUP BRUSH**



# **END BRUSH**



# **TUBE BRUSH**



# **FILL MATERIALS**



Steel Wire - Carbon steel wire is the most durable power brush fill material for metalworking and heavy-duty cleaning applications. Weiler industrial grade brushes utilize heat treated, high tensile steel wire that has been drawn to the most exacting industry standards for superior fatigue resistance and aggressive brushing action. Wolverine\* brushes utilize more cost-effective grades of steel wire to deliver reliable performance in less demanding applications.



Stainless Steel Wire - Stainless steel wire is only recommended when brushing corrosion-resistant or non-ferrous metals such as stainless or aluminum or when the brush is being used in a wet environment. Stainless steel wire is not any more durable or aggressive than the highest grades of steel wire. All Weiler stainless steel brushes are manufactured with Type 302 stainless wire, but select items are also available with Type 316 wire by special order.



Non-Ferrous Wire - Brass, bronze and aluminum wire are available in assorted Weiler industrial grade power brush items. These non-ferrous materials will not generate a spark in use, but they lack the durability of carbon steel and stainless steel wire. Due to their soft brushing action, these materials may also be used in special applications such as decorative finishing.



Animal Hair - Natural hair bristle is used primarily in miniature power brushes for scratch-free cleaning and polishing. Depending on the animal species and type of hair, this fill material can range from relatively stiff to relatively soft, making it suitable for a variety of applications from removing dust from optical lenses to buffing precious metals using abrasive compounds.



Vegetable Fiber - Tampico, a natural fiber produced from the Mexican agave plant, is a common natural fill material used in wet scrubbing and cleaning applications as well as buffing and polishing metals. It is heat, alkali and acid resistant. Its natural color is offwhite but it may be dyed or bleached.



**Synthetic** - Nylon is typically the most durable synthetic bristle material for use in power brushes and can be used in a variety of applications due to its flexibility, high fatigue strength and resistance to abrasion, heat, acids and alkali. Polypropylene is less durable and used primarily in strip brushes.

# STAINLESS STEEL BRUSHES

Weiler's stainless steel wire brushes are manufactured using wire drawn from Type 302 stainless steel. Although 302 stainless is typically a non-magnetic material, it is important to remember that the amount of cold-working that it experiences during the wire-drawing process causes it to become magnetic. For this reason, proper storage and handling of stainless steel brushes is critical to prevent crosscontamination and "after rust" issues. Type 302 is widely used in the manufacture of power brushes for its relative durability

and aggressive action as well as for its austenitic properties that insure the corrosion resistance of the materials on which it is applied. The use of a different grade of stainless steel wire is typically required in critical weld preparation and cleaning applications, but it will not address "after rust" and other cross-contamination issues. To insure the corrosion resistance of any stainless steel surface after brushing, passivating it with a 10-20% solution of nitric acid is recommended.

# **WORK SAFER WITH PROPER BRUSH USAGE**

Weiler products are designed and manufactured to the strictest standards to ensure the highest level of quality and safety. But safety doesn't stop there; raising awareness of basic safety practices and thinking about safety before the job starts — and after the job is complete — can help curb accidents and injuries in the shop. That's why Weiler offers customers a Safety Training Program based on the **SPOT (Speed & Size, Pressure, Orientation, Time)** methodology to help promote safe and proper product usage.

Deploying our **SPOT Safety Training Program** in your facility helps improve safety, regardless of vour application or work environment.

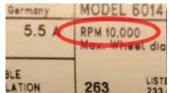


For **SPOT Safety Training** contact your Weiler representative.

# **SPEED & SIZE**

- Power brushes, operate most effectively when the speed and pressure of the operation are properly matched to the demands of the application. In most operations, the highest speed and lightest pressure will ensure the fastest brushing action and longest brush life.
- Increasing brush speed increases the face hardness and brushing action; therefore, a fine wire brush rotating at a higher speed will often produce the same results as a coarser wire brush rotating at a slower speed. Finer wire operating at a higher speed is generally preferred and will provide a longer brush life.
- MSFS Maximum Safe Free Speed (RPM) is the maximum speed at which the brushes may be used safely but is not necessarily the optimum speed for a given application. Operating speed should be determined by the application. When running a wire

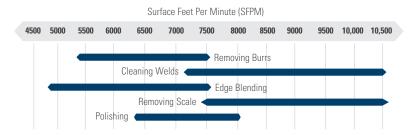
- brush, a rule of thumb is to run it a "mile a minute" or a minimum of 5,000 Surface Feet Per Minute (SFPM). However, never exceed the Maximum Safe Free Speed of the brush.
- Make sure spindle size and motor of machine are large enough to accommodate the diameter of brush to be used (see table on pg. 55).





Match the RPM rating of the power brush to the tool being used. The RPM of the tool should never exceed the RPM of the power brush.

### RECOMMENDED SURFACE SPEEDS FOR BRUSHING APPLICATIONS



 $\frac{\text{SFPM} = \pi \text{ Dia. (Inches)} \times \text{RPM}}{12}$ 

# **SURFACE SPEEDS (PERIPHERAL SPEED IN FT./MIN.)**

	Diameter (Inches)									
RPM	2	3	4	6	8	10	12	15		
1000 1500 1750 2500 3000 3450 4000 6000 10,000 15,000 20,000	525 785 915 1,300 1,575 1,800 2,100 3,125 5,250 7,850 10,450	785 1,175 1,375 1,950 2,350 2,700 3,150 4,700 7,850 11,775 15,700	1,050 1,575 1,850 2,625 3,125 3,600 4,175 6,275 10,500 15,750 20,950	1,575 2,350 2,750 3,925 4,725 5,400 6,275 9,425	2,100 3,150 3,650 5,250 6,275 7,200 8,375 — —	2,625 3,925 4,550 6,550 7,850 9,000 10,475 — —	3,150 4,725 5,500 7,850 9,425 11,000 — — — —	3,925 5,900 6,800 9,825 11,775 13,500   		

**Example:** A 6" diameter wheel running at 3,450 RPM has a surface speed of 5,400 SFPM.

# MINIMUM RECOMMENDED SPINDLE DIAMETER (From ANSI Standard B165.1)

Outside Dia. of Wheel Brush	Maximum Face Width of Wheel Brush	Minimum Outside Dia. of Spindle (Shaft)
2"	1/4"	1/4"
3"	3/4"	1/4"
3" (heavy-duty)	1"	3/8"
4"	1"	3/8"
6"	1-1/4"	1/2"
8"	1-1/4"	5/8"
10"	2"	3/4"
12"	3"	1"
14"	3"	1-1/4"
15"	3"	2"
16"	3"	2"

Note: These diameters are based on the wheel brush being mounted next to the supported end of the shaft rather than the unsupported end in order to minimize overhang.

# RECOMMENDED MOTOR SIZES

(Based on 1" Brush Face)

Brush Diameter	<b>Motor Size</b>	RPM
4"	1/4 HP	3,450
6"	1/2 HP	3,450
8"	3/4 HP	3,450
10"	1 HP	1,750
12"	1 HP	1,750
15"	1-1/2 HP	1,750

# **PRESSURE**

Avoid excessive pressure when using a wire brush. Excessive pressure causes over-bending of the filaments and heat build-up resulting in filament breakage, rapid dulling and reduced brush life.

# **INSTEAD OF GREATER PRESSURE, TRY:**

- A brush with more aggressive action (increase filament diameter, decrease trim length, different brush type, i.e.; knot type instead of crimped type.
- Higher surface speed (increase RPM or brush diameter)

Never exceed the recommended Maximum Safe Free Speed or RPM rating of the brush.



**Correct**Wire Tips Doing the Work

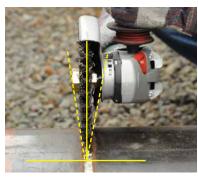


Incorrect
Excessive Pressure Causes Wire
Breakage

# **ORIENTATION**

### **WORKING ANGLE BY BRUSH TYPE**

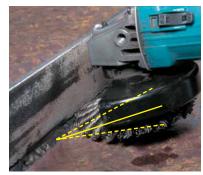
Never stray more than 15° from the suggested working angles of the brush configurations below.



**WHEEL** +/- 15°



**CUP** +/- 15°



**BEVEL** +/- 15°

# TIME

Reduce the time it takes to get the job done by choosing the most appropriate product configuration. (See page 53 for product selection information.)

### **SELF-SHARPENING OF WIRE WHEEL BRUSHES**

When using wire wheel brushes without nuts, periodically reverse the direction of rotation to take advantage of the self-sharpening action that will result. Remove the brush from the spindle, flip the wire brush 180° and remount the brush securely.



Remount Securely

# POWER BRUSH TROUBLESHOOTING GUIDE

There are many variables in power brush applications. If the power brush you are using does not accomplish the desired results, select a solution from the suggestions below for your specific application or call Weiler's Application Engineering Hotline at 888-299-2777.

Problem	Recommended Solutions
Brush works too fast	Select a brush with longer filaments and/or lower fill density
	Select a brush with a smaller diameter wire
	<ul> <li>Select a brush with a narrower face and/or lower fill density</li> </ul>
	Select a brush with a smaller outside diameter
	Operate the brush at a slower RPM
Brush works too slowly	Select a brush with shorter filaments and/or higher fill density
	Select a brush with a larger diameter wire
	<ul> <li>Select a brush with a wider face and/or higher fill density</li> </ul>
	Select a brush with a larger outside diameter
	Operate the brush at a faster RPM
Brushing action rolls or peens the burr over	Select a brush with a larger diameter wire
instead of removing burr	<ul> <li>Select a brush with shorter filaments and/or higher fill density</li> </ul>
	Operate the brush at a faster RPM
	<ul> <li>Replace the crimped wire brush with a knot wire brush</li> </ul>
Finer final finish required	Select a brush with longer filaments
	Select a brush with a smaller diameter wire
	Operate the brush at a higher RPM
	<ul> <li>Replace the wire brush with a nylon abrasive brush (Nylox-)</li> </ul>
Coarser final finish required	Select a brush with shorter filaments
	Select a brush with a larger diameter wire
	Operate the brush at a slower RPM
Non-uniform brushing action	Select a brush with longer filaments
	Select a brush with a larger diameter wire
	Automate the operation to reduce human variables
Filaments break off	Reduce applied pressure or engagement
	Select a brush with a smaller diameter wire
	Select a brush with a lower fill density
Short brush life	Reduce applied pressure or engagement
	Select a brush with a smaller diameter wire
	<ul> <li>Select a brush with a higher fill density</li> </ul>

# **NEED HELP?**

For more information and to schedule a consultation with a Weiler Process Solutions expert visit: weilerabrasives.com/wps.

To discuss specific requirements with a specialist call: 800-835.9999.





# KNOT WIRE WHEELS WITH ARBOR HOLE

Knot wire wheels with arbor holes are intended for use on straight grinders and stationary machines such as bench or pedestal grinders and buffing lathes. Featuring Weiler's individual knot hole construction, these radial brushes are available in heat-treated steel, Type 302 stainless steel, and bronze wire for use in a wide variety of applications.

### **APPLICATIONS**

- Removing rust, scale and heavy corrosion
- Surface roughening and preparation
- Coating removal
- Removing excess molded rubber or plastic
- Heavy deburring





STANDARD TWIST WHEELS provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on somewhat irregular surfaces.

	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		N	F	T.:	Max.	Thickness		0.1	Item I	Number
Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	AH Avail.	at Face Plates	Max. RPM	Std. Pack	Steel	Stainless
3"	.0118	1/2"-3/8"	20	3/8"	5/8"	1/2"	7/16"	25,000	10	08004	08254
	.014									08014 ■	08264 ■
	.020									08024 🔺	08274
4"	.0118	1/2"-3/8"	24	1/2"	7/8"	1/2"	7/16"	20,000	10	08034	08284
	.014									08044 ■	08294
	.020									08064	08314
4"	.014	5/8"-1/2"	24	1/2"	7/8"	7/8"	7/16"	20,000	10	08045	
6"	.0118	5/8"-1/2"	24	1/2"	1-3/8"	1-1/4"	9/16"	9,000	10	08075	08325
	.014									08085 ■	-
	.016									08095	08345
	.023									08105	_
6"	.016	5/8"-1/2"	30	5/8"	1-1/4"	1-1/4"	5/8"	9,000	5	08975	_
7"	.014	5/8"	24	5/8"	1-7/8"	1-1/4"	9/16"	9,000	2	08835	_
8"	.0118	5/8"	38	5/8"	1-5/8"	2"	1/2"	6,000	2	08125	08375
	.014									08135	-
	.016									08145	08395
	.023									08155	<u> </u>
8"	.014	3/4"	38	5/8"	1-5/8"	2"	1/2"	6,000	2	08138	- /
10"	.014	3/4"	52	3/4"	1-3/4"	2-1/2"	3/4"	4,500	2	08178	- 4
10"	.014	1-1/4"★	52	3/4"	1-3/4"	2-1/2"	3/4"	4,500	2	08179	- 4
	.016									08189	- 6
12"	.014	1-1/4"★	52	3/4"	2-3/4"	2-1/2"	11/16"	3,600	1	08209	- 2
	.016									08219	- 7%
12"	.014	2"◆	52	3/4"	2-3/4"	2-1/2"	11/16"	3,600	1	08200-14	- 3
12"	.020	1-1/4"★	56	5/8"	2-3/4"	3"	13/16"	4,500	2	09719	7
12"	.023	2"◆	66	3/4"	2-1/4"	3"	13/16"	5,000	2	09870	-

- ★ 5/16" x 5/32" Double Keyway
- ◆ 1/2" x 1/4" Double Keyway
- ▲ Available in non-sparking bronze wire, see page 102-103 for details.
- Packaged product available. See pages 141-142 for details.

**BOLD BLACK ITEM** numbers indicate color-coded brushes for easy identification.

### **WOLVERINE® STANDARD TWIST WHEELS** provide aggressive brushing action for general-purpose surface cleaning applications.

					_   _	Max. Thickness				Item Number	
Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	AH Avail.	at Face Plates	Max. RPM	Std. Pack	Steel	Stainless
3"	.014	1/2"-3/8"	20	3/8"	3/8"	1/2"	7/16"	25,000	10	36290	-
4"	.014	1/2"-3/8"	20	5/8"	7/8"	1/2"	9/16"	20,000	10	36226 •	-
	.014		24							_	36293 •
6"	.014	5/8"-1/2"	24	1/2"	1-1/4"	5/8"	9/16"	9,000	10	36227	-
8"	.014	5/8"	34	9/16"	1-5/8"	5/8"	1/2"	6,000	2	36228 •	-
	.023		38							36279	_

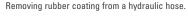
<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

### **NOTE**

If a different arbor hole is required (than listed in the tables) refer to Arbor Hole Table shown on Pg. 61.





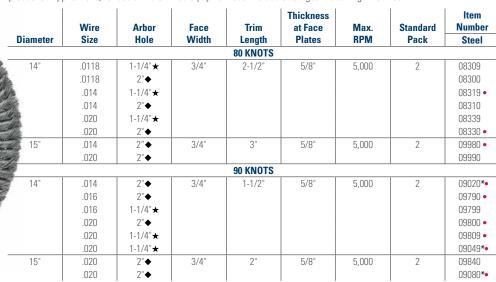








STANDARD TWIST WHEELS - High Density & Extra High Density - Engineered for maximum performance in production applications; for use on automated equipment such as dedicated gear deburring machines.



★ 5/16" x 5/32" Double Keyway ◆ 1/2" x 1/4" Double Keyway \* Economy

• Non-stock product, contact Customer Service for lead times and minimum order quantities.





STANDARD TWIST WHEELS - Two Section - Provide heavy-duty brushing action with some flexibility; feature a double row of knotted wire for a wider brush face.

	Wire	Arbor	No. of	Face	Trim	Thickness at Face	Max.	Standard	ltem Number
Diameter	Size	Hole	Knots	Width	Length	Plates	RPM	Pack	Steel
3"	.0118	1/2"-3/8"	40	3/4"	5/8"	3/4"	22,000	5	09104
4"	.0118	1/2"-3/8"	48	3/4"	7/8"	3/4"	20,000	5	09134
6"	.0118	2"	60	7/8"	1-3/8"	7/8"	8,000	5	09160
	.016								09180
8"	.0118	2"	76	1"	1-5/8"	1"	6,000	1	09410
	.016								09430
	.023								09440
10"	.0118	2"	104	1-1/4"	1-3/4"	1-1/4"	4,500	1	09460
	.016								09480
	.023								09490
12"	.0118	2"	104	1-1/4"	2-3/4"	1-1/4"	3,600	1	09510
	.016								09530
	.023								09540

See Metal Adapters on page 76 for brushes with 2" arbor holes.



STANDARD TWIST WHEEL - Four Section - Featuring four rows of knotted wire; for use in automated cleaning processes such as removing light mill scale from metal rod and wire.

						Thickness			Item
	Wire	Arbor	No. of	Face	Trim	at Face	Max.	Standard	Number
Diameter	Size	Hole	Knots	Width	Length	Plates	RPM	Pack	Steel
12"	.014	2"	208	2"	2-3/4"	1-3/4"	3,600	1	94000

See Metal Adapters on page 76 for brushes with 2" arbor holes.



**CABLE TWIST WHEELS** provide maximum brushing action with minimal flexibility; ideal for demanding cleaning and coating removal applications on relatively smooth surfaces.

	Wire	Arbor	No. of	Face	Trim	Max. AH	Thickness at Face	May	May	Max.	Std.	Item N	lumber
Dia.	Size	Hole	Knots	Width	Length	Avail.	Plates	RPM	Pack	Steel	Stainless		
4"	.020	1/2"-3/8"	24	1/4"	7/8"	1/2"	7/16"	20,000	10	08534 ■	_		
6"	.023	5/8"-1/2"	24	3/8"	1-3/8"	1-1/4"	9/16"	9,000	10	08565 ■	08695*		
8"	.023	5/8"	38	1/2"	1-5/8"	2"	1/2"	6,000	2	08615	_		
10"	.023	3/4"	52	1/2"	1-3/4"	2-1/2"	3/4"	4,500	2	08878	_		
		1-1/4"★								08879	_		
12"	.023	1-1/4"★	52	7/16"	2-3/4"	3"	3/4"	3,600	2	09379 •	_		

If a different arbor hole is required (than listed) refer to the Arbor Hole Variations Table on page 61.

★ 5/16" x 5/32" Double Keyway

\*Standard Pack 2

■ Packaged product available. See pages 141-142 for details.

• Non-stock product, contact Customer Service for lead times and minimum order quantities.



CABLE TWIST WHEEL - Four Section - Featuring four rows of tightly knotted wire; for use in demanding automated applications such as cleaning the OD of drill pipe and other oilfield tubular goods.

	Wire	Arbor	No. of	Face	Trim	Max. AH	Thickness at Face	Max.	Std.	Item Number
Dia.	Size	Hole	Knots	Width	Length	Avail.	Plates	RPM	Pack	Steel
10"	.023	2"	208	1-3/4"	1-3/4"	2"	1-7/8"	4,500	1	94008



JOINT & CRACK CLEANING WHEELS feature heavy-duty construction and an extra long trim length for cleaning expansion joints and cracks in concrete and asphalt.

Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number Steel	-
10"	.035	1" with two drive holes*	38	3/8"	2-5/8"	1/2"	5,000	2	94199 •	9
12"	.035	1" with two drive holes*	38	3/8"	3-5/8"	1/2"	5,000	2	94224	1090
12"	.035	1" with two drive holes*	52	3/8"	2-3/4"	3/4"	6,000	2	94026	

<sup>\*</sup>Drive holes are 3/8" diameter with 1/4" x 1/8" double keyway.

ADAPTER for mounting Joint & Crack Cleaning Wheels onto a 20mm arbor.

For Brush Arbor Hole Size	Adapted Arbor Hole Size	Standard Pack	Item Number
1"	20mm	10	04455



Cleaning a crack on an airport runway with a joint & crack cleaning brush prior to filling.

Key:







If a different arbor hole is required (than listed in the tables) refer to Arbor Hole Table shown on Pg. 61.





<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.



Cleaning a corner weld with a bevel brush.

# KNOT WIRE WHEELS WITH NUT

Knot wire wheels with a threaded nut are intended for use primarily on small and large right angle grinders. Featuring Weiler's individual knot hole construction, these radial brushes are available in heat-treated steel, Type 302 stainless steel and bronze wire for use in a wide variety of applications.





### **APPLICATIONS**

- Removing powder-coating, epoxy-based paints, and rubberized coatings
- Weld preparation and cleaning
- Cleaning scale and heavy corrosion
- Removing heavy burrs from large pieces after cutting



**STANDARD TWIST WHEELS** provide heavy-duty brushing action with some flexibility; ideal for deburring and demanding cleaning applications on somewhat irregular surfaces.

	Wire	Arbor	No. of	Face	Trim	Max.	Std.	Item N	lumber
Dia.	Size	Hole	Knots	Width	Length	RPM	Pack	Steel	Stainless
3"	.014	3/8"-24 UNF	20	3/8"	5/8"	25,000	5	13201	13208 •
4"	.014	M10 x 1.25	24	1/2"	7/8"	20,000	5	-	13107 •
		M10 x 1.50						_	13108 •
		M14 x 2.0						13102	13109 •
		3/8"-24 UNF						13103	13110
		1/2"-13 UNC						13105	_
		5/8"-11 UNC						13106 ■	13113 ■
4"	.020	M10 x 1.25	24	1/2"	7/8"	20,000	5	13114 •	-
		M10 x 1.50						13115 •	_
		M14 x 2.0						13116 •	_
		3/8"-24 UNF						13117	_
		1/2"-13 UNC						13119 •	_
		5/8"-11 UNC						13120 ▲	_
6"	.016	5/8"-11 UNC	24	1/2"	1-3/8"	9,000	5	_	08346
	.023							08106	-

- Packaged product available. See pages 141-142 for details.
- ▲ Available in non-sparking bronze wire, see page 102-103 for details.
- Non-stock product, contact Customer Service for lead times and minimum order quantities.
   BOLD BLACK ITEM numbers indicate color-coded brushes for easy identification.



36224

# **WOLVERINE® STANDARD TWIST WHEELS** provide an aggressive brushing action for general purpose deburring, cleaning, and surface preparation applications.

	Wire	Arbor	No. of	Face	Trim	Max.	Std.	Item N	lumber
Dia.	Size	Hole	Knots	Width	Length	RPM	Pack	Steel	Stainless
4"	.014	5/8"-11 UNC	20	1/2"	7/8"	20,000	5	36212	36213
		M10 x 1.25						36215 •	_
		M10 x 1.50						36216 •	_
		M14 x 2.0						36217 •	-
6"	.025	5/8"-11 UNC	24	3/4"	1-1/4"	11,000	10	36224	_

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantitie





# **CABLE TWIST WHEELS** provide maximum brushing action with minimal flexibility; ideal for demanding cleaning and surface preparation applications on relatively smooth surfaces.

	Wire	Arbor	No. of				Max.	Std.	Item N	lumber
Dia.	Size	Hole	Knots	Width	Length	RPM	Pack	Steel	Stainless	
4"	.020	M10 x 1.25	24	1/4"	7/8"	20,000	5	13261 •	-	
		M10 x 1.50						_	13272 •	
		5/8"-11 UNC						13266 ■	13276	

- Packaged product available. See pages 141-142 for details.
- Non-stock product, contact Customer Service for lead times and minimum order quantities.



# **WOLVERINE CABLE TWIST WHEELS** provide the most aggressive brushing action for general purpose cleaning and surface preparation applications.

Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Max. RPM	Std. Pack	Steel
4"	.020	5/8"-11 UNC M10 x 1.50 M10 x 1.25	20	1/4"	7/8"	20,000	5	36255 36257 • 36258 •

**STANDARD TWIST BEVEL BRUSHES** are saucer-shaped radial wheels that provide a heavy-duty brushing action with some flexibility; ideal for cleaning fillet welds and into corners.



	Wire	Arbor	No. of	Face	Trim	Max.	Std.	Item N	lumber
Diameter	Size	Hole	Knots	Width	Length	RPM	Pack	Steel	Stainless
4"	.014	M10 x 1.25	20	3/8"	3/4"	12,500	1	13401 •	_
		M10 x 1.50						13402 •	_
		5/8"-11 UNC						13406	13416
4"	.020	M14 x 2.0	20	3/8"	3/4"	12,500	1	13423 •	_
		5/8"-11 UNC						13426	13436
4-1/2"	.014	5/8"-11 UNC	20	3/8"	1"	12,500	1	13456	13466
4-1/2"	.020	5/8"-11 UNC	20	3/8"	1"	12,500	1	13476	13486





# THREADED ADAPTERS for mounting brushes with a 5/8"-11 UNC nut to other threaded spindles.

Fixed Thread Size	Adapted Thread Size	Standard Pack	Item Number
5/8"-11 UNC	M10 x 1.25	10	07771 ■
5/8"-11 UNC	M10 x 1.50	10	07772 ■
5/8"-11 UNC	3/8"-16 UNC	10	07769
5/8"-11 UNC	3/8"-24 UNF	10	07746

■ Packaged product available. See pages 141-142 for details.



# **KNOT WIRE WHEELS WITH STEM**

Knot wire wheels with a permanently attached 1/4" stem or shank are primarily intended for use on highspeed die grinders. Although they can also be mounted onto a drill, the speed and power of that tool will limit the effectiveness of the brush. Featuring Weiler's individual knot hole construction, these radial wheels are available in heat-treated steel and Type 302 stainless steel wire.

### **APPLICATIONS**

- Removing powder-coating, epoxy-based paints, and rubberized coatings
- Weld preparation and cleaning
- Cleaning scale and heavy corrosion
- · Removing heavy burrs from large pieces after cutting



# STANDARD TWIST WHEELS 1/4" Stem - Provide heavy-duty brushing action with some flexibility; ideal for deburring and demanding cleaning applications on somewhat irregular surfaces.

Diameter	Wire Size	No. of Knots	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number	
							Steel	Stainless
3-1/4"	.0118	20	3/8"	5/8"	25,000	5	17680	-
	.014						17681 ■	17684
	.020						17682	_
4"	.0118	24	1/2"	7/8"	20,000	5	17686	-
	.014						17687 ■	17691
	.020						17689	_

■ Packaged product available. See pages 141-142 for details.





- Jim Martin, Vice President, Karnel Incorporated



Key:





# **WELD CLEANING BRUSHES**

Weiler's stringer bead wheels are the most effective weld cleaning tools for the most demanding users. Our premium weld cleaning brushes are manufactured to the most stringent quality standards, utilizing the highest quality wire available. The twist puts all the sharp tips at the end of the knots, making them the fastest, most aggressive weld cleaning tools on the market.







# ROUGHNECK. MAX



Roughneck Max wheels have been re-engineered to MAXimize life, efficiency and consistency. But that is only a small part of what makes this brush better...

- Smooth & Responsive Improved feel and comfort during use makes brush operation effortless
- **No Long Wire Breakage** Stronger, sharper wire delivers consistency and performance you can count on
- Cleans 40% Faster Unmatched cleaning power compared to competitors
- Less Force Required The operator can apply less pressure to clean, letting the wire do the work



ROUGHNECK® MAX STRINGER BEAD WHEELS deliver unmatched weld cleaning performance by maximizing life, efficiency and consistency. The 4" brushes are recommended for cleaning root pass welds, surface prep and other cleaning applications.

	Wire	Arbor	No. of	Face	Trim	Thickness	Max.	Std.	Item Number	
Diameter	Size	Hole	Knots	Width	Length	at Face Plates	RPM	Pack	Steel	Stainless
4"	.020	5/8"-11 UNC	32	3/16"	7/8"	7/16"	20,000	5	13131 ■	13138 ■

■ Packaged product available. See pages 141-142 for details.

BOLD BLACK ITEM numbers indicate color-coded brushes for easy identification.



# ROUGHNECK.









If a different arbor hole is required (than listed in the tables) refer to Threaded Adapter Chart shown on Pg. 71.





- Maximum Cleaning Action Featuring a knot twist with the most aggressive cutting action, the new dual-hex nut makes it easier for the user to regularly switch mounting position and keep the brush running at peak performance.
- Long Wheel Life Utilizing the highest quality heat-treated Steel wire and construction that virtually eliminates knot movement, the Dually delivers smooth operation and long life for the lowest cleaning costs in demanding multi-pass welding applications such as pipeline construction.
- Improved User Safety The one-piece, dual-hex nut is designed to provide adequate tool clearance so there is no need to remove the guard from the grinder in order to change the position of the wheel.



Removing weld slag before the next weld pass.

**DUALLY® STRINGER BEAD WHEELS** feature a dual-hex nut design that simplifies periodic flipping of the wheel for maximum cleaning action, long life, and safer use.

	M/*	Arbor I	No. of Fac		<b>T</b>	Thickness at Face Ma		0	Item I	Number	
Diameter	Wire Size	Hole	Knots	Width	Trim Length	Plates	RPM	Standard Pack	Steel	Stainless	
	Root Pass Brushes										
4-1/2"	.020	5/8"-11 UNC	38	3/16"	13/16"	3/8"	15,000	5	79801	79811	
5"	.020	5/8"-11 UNC	38	3/16"	7/8"	3/8"	12,500	5	79802	79812 •	
6"	.020	5/8"-11 UNC	56	3/16"	1-1/8"	7/16"	12,500	5	79805	79815	
7"	.020	5/8"-11 UNC	56	3/16"	1-1/8"	7/16"	9,000	5	79800	79810 •	
	Filler Pass Brushes										
5"	.023	5/8"-11 UNC	24	1/2"	7/8"	3/8"	12,500	5	79803	79813 •	
6"	.023	5/8"-11 UNC	30	1/2"	1-1/4"	5/8"	12,500	5	79804	79814	

Non-stock product, contact Customer Service for lead times and minimum order quantities.

### POLYFLEX™ ENCAPSULATED WELD CLEANING WHEELS Black Elastomer\*

Feature a heat-stabilized encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life; suitable for cleaning hot welds.

	Wire	Arbor	No. of	Face	Trim	Thickness at Face	Max.	Standard	Item Number
Diameter	Size	Hole	Knots	Width	Length	Plates	RPM	Pack	Steel
4"	.020	5/8"-11 UNC	32	3/16"	7/8"	7/16"	20,000	5	35800 ▲
6"	.014	5/8"-11 UNC	-	3/16"	1-7/16"	3/8"	9,000	5	35206 ◆
7"	.020	5/8"-11 UNC	56	3/16"	1-1/8"	7/16"	9,000	10	35600 ▲
	.014		-		1-15/16"	3/8"		5	35216 ♦ 🔏

<sup>\*</sup> See Elastomer Color Code Chart on page 61 for more information. ▲ Stringer Bead Wheels ♦ Crimped wire





Wolverine wheels offer professional grade quality and performance at a great value. Re-engineered, these 32 knot wheels deliver 20% MORE life while maintaining aggressive cleaning power for weld cleaning applications.

WOLVERINE® STRINGER BEAD WHEELS have upgraded to 32 knots to deliver 20% longer life. The 4" wheels are manufactured using similar product construction and to the same exacting standards as other Weiler weld cleaning brushes; they have been engineered for cost-effective use in less demanding cleaning applications.

	Wire	Arbor	No. of	Face	Trim	Thickness at Face	Max.	Standard	ltem l	Number
Diameter	Size	Hole	Knots	Width	Length	Plates	RPM	Pack	Steel	Stainless
4"	.020	5/8"-11 UNC	32	3/16"	7/8"	7/16"	20.000	5	36218	36219

BOLD BLACK ITEM numbers indicate color-coded brushes for easy identification.

**WOLVERINE STRINGER BEAD WHEELS** are manufactured using similar product construction and to the same exacting standards as other Weiler weld cleaning brushes; they have been engineered for costeffective use in less demanding applications.

	Wire	Arbor	No. of	Face	Trim	Max.	Standard	Item N	lumber
Dia.	Size	Hole	Knots	Width	Length	RPM	Pack	Steel	Stainless
5"	.020	5/8"-11 UNC	38	3/16"	7/8"	12,500	5	36295	36296
6"	.020	5/8"-11 UNC	48	1/4"	1-1/4"	12,500	10	36225	_
			38	3/16"	1-3/8"			36307 <b>†</b>	_
7"	.020	5/8"-11 UNC	56	3/16"	1-1/8"	9,000	10	36297	_

† Light Duty









Removing heat discoloration from a stainless steel canister.

## **CRIMPED WIRE WHEELS WITH ARBOR HOLE**

Crimped Wire Wheels with Arbor Hole are intended for use on straight grinders and stationary machines such as bench or pedestal grinders and buffing lathes. Featuring Weiler's solid ring construction, these radial brushes are available in heat-treated steel, Type 302 stainless steel and brass wire for use in a wide variety of applications.

### **APPLICATIONS**

- Removing rust and light corrosion
- · Paint removal and surface cleaning
- Decorative finishing
- Removing heat discoloration
- Light deburring





	NAC Astronomy		Face Trim A			Thickness at Face	Max. Std.	Item N	umber	
Dia.	Wire Size	Arbor Hole	Width	Length	AH Avail.	Plates	RPM	Pack	Steel	Stainless
3"	.006	1/2"-3/8"	7/16"	1/2"	3/4"	7/16"	12,500	2	00204	00244 •
	.008								00214	_
	.0118								00234	00264 •
	.014								00274	_
4"	.006	1/2"-3/8"	1/2"	7/8"	3/4"	7/16"	12,500	2	00104	00154
	.006	5/8"-1/2"							00105	-
	.008	1/2"-3/8"							00114	-
	.0095								00124	_
	.0118								00134	00184
	.0118	5/8"-1/2"							00135	_
	.014	1/2"-3/8"							00144	_
6"	.006	5/8"-1/2"	3/4"	1-7/16"	1-1/4"	7/16"	6,000	10	01035 🔺	01675*
	.008								01045	_
	.008	1-1/4"★							01049	_
	.0104	5/8"-1/2"							01055	01695*
	.0118								01065 🔺	01705*
	.014								01075 ■	_
6"	.0118	3/4"	3/4"	1-7/16"	1-1/4"	7/16"	6,000	10	01068	_
8"	.006	5/8"	3/4"	2-1/16"	1-1/4"	1/2"	6,000	2	01135	01775
	.008								01145	_
	.0104								01155	01795
	.0118								01165	01805
	.014								01175 ■	_
8"	.006	3/4"	3/4"	2-1/16"	1-1/4"	1/2"	6,000	2	01138	_
	.008								01148	_
	.0104								01158	_
	.0118								01168	_
	.014								01178	_
8"	.0118	1-1/4"★	3/4"	2-1/16"	1-1/4"	1/2"	6,000	2	-	01809
	.014	2.420	- / - "			- 151			01179	-
10"	.006	3/4"	3/4"	2-1/2"	2"	5/8"	4,000	2	01228 •	_
	.0104								01238	_
	.0118								01248	-
	.014	4.11							01258	01898
	.014	1" •	- /					-	01250-12	-
10"	.014	1-1/4"★	3/4"	2-1/2"	2"	5/8"	4,000	2	01259	_
12"	.006	1-1/4"★	3/4"	2-15/16"	2-1/2"	1/2"	3,000	2	01299	01939
	.0104								01309 •	01949 •
	.0118								01319	_
	.014								01329	_
12"	.014	2"◆	3/4"	2-15/16"	2-1/2"	1/2"	3,000	2	01320-14 •	-
15"	.0118	1-1/4"★	3/4"	4-7/16"	2-1/2"	1/2"	3,000	2	01339 •	_
	.014								01349	-

### **NOTE**

If a different arbor hole is required (than listed in the tables) refer to Arbor Hole Table shown on Pg. 61.

◆ 1/2" x 1/4" Double Keyway

★ 5/16" x 5/32" Double Keyway

• 1/4" x 1/8" Double Keyway

▲ Available in non-sparking brass wire, see page 102-103 for details.

\* Standard Pack 2 Packaged product available. See pages 141-142 for details.





WOLVERINE® CRIMPED WIRE WHEELS - Narrow Face - provide a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications.

	Wire Size	Arbor	Face	Trim	Max. AH	Max.RPM	Std.	Item N	lumber
Dia.	wire Size	Hole	Width	Length	Avail.	IVIAX.NEIVI	Pack	Steel	Stainless
4"	.014	1/2"-3/8"	1/2"	3/4"	1/2"	6,000	2	36262	_
6"	.014	5/8"-1/2"	3/4"	1-1/4"	5/8"	6,000	10	36200	36201 •
8"	.014	5/8"	3/4"	2"	5/8"	6,000	2	36205	_

• Non-stock product, contact Customer Service for lead times and minimum order quantities.





Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Max. AH Avail.	Thickness at Face Plates	Max. RPM	Standard Pack	Number Steel	
			Bur	gundy Elasto	mer* - Stan	dard				
4"	.0095	1/2"-3/8"	3/8"	7/8"	3/4"	7/16"	6,000	2	35084	
6"	.0104	5/8"-1/2"	1/2"	1-7/16"	1-1/4"	7/16"	6,000	2	35105	
	.014								35117 •	
8"	.014	5/8"	1/2"	2-1/16"	1-1/2"	1/2"	6,000	2	35135	
	Orange Elastomer* - Heavy-Duty									
6"	.0104	5/8"-1/2"	1/2"	1-7/16"	1-1/4"	7/16"	6,000	2	35520 •	

<sup>\*</sup> See Elastomer Color Code chart on page 61 for more information.





Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Max. AH Avail.	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number Steel
6"	.006	5/8"-1/2"	1/2"	1-1/16"	1-1/4"	7/16"	6,000	10	01085
	.008								01095
	.0118								01115
	.014								01125



CRIMPED WIRE WHEELS - High Density - Feature an increased fill density for greater brushing action, more consistent performance, and longer life in the most demanding applications requiring the flexibility of a crimped wire wheel.

	Wire	Arbor	Face	Trim	Max. AH	Thickness at Face	Max.	Std.	Item N	lumber
Dia.	Size	Hole	Width	Length	Avail.	Plates	RPM	Pack	Steel	Stainless
4-1/4"	.0118	5/8"-1/2"	3/4"	5/8"	3/4"	9/16"	6,000	1	01501 •	_
	.014								01502 •	_
6"	.008	5/8"-1/2"	3/4"	1-1/8"	1"	9/16"	6,000	1	01503 •	-
	.0118								01504 •	01508 •
	.014								01505 •	01509 •
	.020								01506 •	_
7"	.014	5/8"	7/8"	1-5/8"	1"	9/16"	6,000	1	01511	-
8"	.006	5/8"	7/8"	1-1/2"	1-1/4"	11/16"	4,500	1	01512 •	-
	.0104								01513 •	_
	.0118								01514	_
	.014								01515	_
10"	.0118	3/4"	1"	2-1/2"	1-1/4"	11/16"	4,500	2	01517 •	-
	.014								01518 •	_

Non-stock product, contact Customer Service for lead times and minimum order quantities.





01515

Non-stock product, contact Customer Service for lead times and minimum order quantities.





06020

06040

**CRIMPED WIRE WHEELS - Medium Face** - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications; feature a wider face width to

	Wire	Arbor	Face	Trim	Thickness at Face	Max.	Ctandand	Item N	lumber
Dia.	Size	Hole	Width	Length	Plates	RPM	Standard Pack	Steel	Stainless
4-1/2"	.0118	2"	15/16"	3/4"	7/8"	6,000	1	06020	-
6"	.006	2"	1"	1-1/8"	15/16"	6,000	1	06040	-
	.008							06050	_
	.0104							06060	06440
	.0118							06070	06450
	.014							06080	_
8"	.006	2"	1"	1-3/8"	1"	4,500	1	06090	-
	.0104							06100	_
	.0118							06110	06490
	.014							06120	_
	.020							06620	_
10"	.0118	2"◆	1-1/8"	2"	1"	3,600	1	06150	06530
	.014							06160	_
	.020							06170	_
12"	.0118	2"◆	1-1/4"	3"	1"	3,600	1	06180	_
	.014							06190	_
	.020							06200	_



For arbor hole reducing adapters, see Metal Adapter Table below.



## **WOLVERINE® CRIMPED WIRE WHEELS - Medium Face** - Provide a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications;

feature a wider face width to cover more area.

	Wire	Arbor	Face	Trim	Thickness	Max.	Standard	Item Number
Dia.	Size	Hole	Width	Length	at Face Plates	RPM	Pack	Steel
6"	.014	5/8"-1/2"	5/8"	1-1/16"	1/2"	6,000	1	02325
			3/4"	1-7/16"	7/16"			36203
7"	.014	5/8"	3/4"	1-9/16"	1/2"	6,000	1	02335



**METAL ADAPTERS** for Medium & Wide Face Brushes. Used in pairs & priced per pair.

For Brush Arbor Hole Size	Adapted Arbor Hole Size	Item Number
2"	1/2"	03809
	5/8"	03810
	3/4"	03811
	7/8"	03824
	1"	03812
	1-1/4"	03813
	1-1/2"	03814







**PLATER'S WIRE WHEELS** feature a longer trim length and very small diameter fill material for producing fine satin and antique finishes on non-ferrous and precious metals.

	Wire	Arbor	Face	Trim	Number	Max.	Std.	Item Number
Dia.	Size	Hole	Width	Length	of Rows	RPM	Pack	Brass*
3"	.003	1/4"	1/2"	1"	2	6,000	12	22021 •
4"	.004	1/4"	1"	1-1/4"	4	4,000	5	22061 •
6"	.005	1/4"	1"	1-7/8"	4	3,600	1	22241

<sup>\*</sup> Also available in carbon steel, stainless steel and nickel silver wire.



Non-stock product, contact Customer Service for lead times and minimum order quantities.



### CRIMPED WIRE WHEELS - Wide Face - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications; feature a wider face width to cover more area.

	Wire	Arbor	Face	Trim	Thickness at Face	Max.	Standard	Item N	lumber
Dia.	Size	Hole	Width	Length	Plates	RPM	Standard Pack	Steel	Stainless
4-1/2"	.006	2"	1-1/4"	3/4"	7/8"	6,000	1	03000 •	-
	.0118							03010 •	_
	.014							03020 •	_
6"	.006	2"	1-1/4"	1-1/8"	1"	6,000	1	03030	03480
	.008							03040	_
	.0104							03050	_
	.0118							03060	03510
	.014							03070	03520
7"	.0118	2"	1-1/4"	1-5/8"	1"	6,000	1	03090	-
	.014							03100	- 4
8"	.006	2"	1-1/2"	1-3/8"	1-3/8"	4,500	1	03110	- 8
	.0095							03130 •	- 9
	.0118							03140	03590 • 🗿
	.014							03150	- 1
	.020							03160	-
10"	.0104	2"	2"	1-7/8"	1-5/8"	4,000	1	03180	_
	.0118							03190	_
	.014							03200	_
	.020							03210	_
12"	.0118	2"	2"	2-7/8"	1-9/16"	3,000	1	03220	_
	.014							03230	03680
	.020				1-11/16"			03240	_



03000

For arbor hole reducing adapters, see Metal Adapter Table on page 76.

• Non-stock product, contact Customer Service for lead times and minimum order quantities.



### WOLVERINE® CRIMPED WIRE WHEELS - Wide Face - Provide a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications; feature a wider face width to cover more area.

	Wire	Arbor	Face	Trim	Thickness	Max.	Standard	Item Number
Dia.	Size	Hole	Width	Length	at Face Plates	RPM	Pack	Steel
6"	.014	2"-5/8"-1/2"	7/8"	1-1/8"	7/8"	6,000	1	06645
								36204
7"	.014	2"-5/8"-1/2"	7/8"	1-5/8"	7/8"	6,000	1	06655
8"	.014	2"-5/8"	1"	1-3/8"	1"	4,000	1	36206
10"	.014	2"-3/4"	1-1/8"	2"	1"	3,600	1	36265 •

• Non-stock product, contact Customer Service for lead times and minimum order quantities.







### POLYFLEX™ ENCAPSULATED CRIMPED WIRE WHEEL - Wide Face - Burgundy\*

Elastomer\* - Features an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life. Wider face width covers more area.

	Wire	Arbor	Face	Trim	Thickness at Face	Max. Std.	Item Number	
Dia.	Size	Hole	Width	Length	Plates	RPM	Pack	Steel
6"	.0118	2"	1"	1-1/8"	1"	6,000	1	35160

\* See Elastomer Color Code Chart on page 61 for more information. For arbor hole reducing adapters, see Metal Adapter Table on page 76.



35160



Removing casting flash from ductile-iron housing with an encapsulated brush.

## SMALL DIAMETER "COPPER CENTER" WHEELS

Weiler's small diameter crimped wire wheels feature a plain arbor hole for use on a variety of portable tools and stationary machines. Featuring Weiler's solid ring construction for high-speed use, these radial brushes are available in heat-treated steel, Type 302 stainless steel, and brass wire.



### **APPLICATIONS**

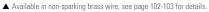
- Removing carbon build-up and deposits
- Removing rust and light corrosion
- Cleaning and finishing ID's and recessed areas
- Cleaning boiler tubes and internal passages
- Cleaning threads
- Wire stripping
- Light deburring





**SMALL DIAMETER WHEELS** provide a flexible brushing action and consistent performance for light-duty cleaning and deburring applications requiring a small wheel.

	Wire	Arbor	Face	Trim	Max.	Standard	ltem l	Number
Dia.	Size	Hole	Width	Length	RPM	Pack	Steel	Stainless
1"	.003	1/4"	3/16"	1/4"	20,000	10	-	16461
	.005						_	16471
	.006						15071	_
1-1/4"	.003	1/4"	1/4"	3/8"	20,000	10	15101 •	-
	.006						15111	16511 •
	.008						-	16521
	.008	3/8"		5/16"			15732	_
1-3/8"	.006	1/4"	1/4"	3/8"	20,000	10	15131	_
	.008						15141	_
	.0104						15151	_
1-1/2"	.006	3/8"	1/4"	7/16"	20,000	10	15302 ▲	_
	.008	3/8"		7/16"			15312	16712
	.008	1/2"		1/4"			15753 •	_
	.0104	3/8"		7/16"			15322	_
	.0118	3/8"		7/16"			15332	_
	.014	3/8"		7/16"			15762	_
2"	.003	1/4"	3/8"	3/4"	20,000	10	99307	-
	.003	1/2"		1/2"			15863 •	_
	.006	1/2"-3/8"					_	16833
	.006	1/2"					15433 ▲	_
	.008	1/2"					15443	16843
	.0104	1/2"					15453	16853
	.0118	1/2"-3/8"					15463 ▲	_
	.014	1/2"-3/8"					15473	16873
2-1/2"	.0118	1/2"-3/8"	1/2"	3/4"	20,000	10	15513	_
	.014						15523	_
3"	.003	1/2"	5/8"	1"	20,000	10	99551	_
	.006	1/2"-3/8"		1"			15533	16933
	.006	5/8"		15/16"			15637	_
	.008	1/2"-3/8"		1"			15543	16943
	.008	5/8"		15/16"			15647 •	_
	.0104	1/2"		1"			15553	_
	.0118	1/2"-3/8"		1"			15563	16963
	.0118	5/8"		15/16"			15667 •	_
	.014	1/2"-3/8"		1"			15573 ▲	16973
	.014	5/8"		15/16"			15677	_
4"	.006	1/2"	1/2"	1-1/2"	20,000	10	99553	_











16712



15433



15563



78

### POLYFLEX™ ENCAPSULATED SMALL DIAMETER WHEELS -

**Burgundy Elastomer\*** - Feature an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life.

	Wire	Arbor	Face	Trim	Max.	Standard	Item Number
Diameter	Size	Hole	Width	Length	RPM	Pack	Steel
1-1/4"	.008	3/8"	3/16"	5/16"	20,000	10	35293
	.014						35294 •
2"	.0104	1/2"	1/4"	1/2"	20,000	10	35240
	.014						35070
3"	.008	1/2"	1/4"	1"	20,000	10	35808 •
	.0118						35250
	.014						35260

<sup>\*</sup> See Elastomer Color Code chart on page 61 for more information.

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.



### WIRE STRIPPING BRUSHES

Used for removing insulation from electrical wire. These brushes are made to order according to the specifications needed for the specific application.

When ordering, please specify:

- Brush diameter
  - Arbor hole size
- Brush face width
- Wire size

For application assistance, call our Application Engineering Hotline toll-free at: 888-299-APPS (2777)



### NOTE

- The adapters and drive arbors listed on this page are for use with small diameter wheel brushes only; do not attempt to
  use them with cutting or grinding wheels, buffing wheels, or any type of abrasive wheel or disc.
- Do not adapt a wheel brush for use on a shaft diameter less than that specified by ANSI B165.1 (see page 55) or exceed
  the maximum wheel diameter specified for a drive arbor.
- Never mount a drive arbor onto a tool that operates above the maximum RPM rating of either the arbor or the brush (whichever may be lower) and be sure that the stem of the arbor is properly secured in the collet or chuck before use.

















Arbor Dia.	Stem Dia.	Stem Length	Length of Shaft	For Brushes with a Max. Dia. of	Overall Length	Max. RPM	Standard Pack	Item Number				
	Unthreaded Shaft											
1/4"	1/4"	1-1/8"	3/16"	2"	2-1/16"	20,000	5	07723				
3/8"	1/4"	1-1/8"	3/16"	4"	1-15/16"	20,000	5	07722				
	Threaded Shaft											
1/4"	1/4"	1-1/16"	1-1/8"	2"	2-9/16"	20,000	5	07725				
3/8"	1/4"	3/4"	3/4"	3"	1-9/16"	25,000	5	07727				
3/8"	1/4"	1"	1-1/8"	3"	2-9/16"	20,000	5	07726				
1/2"	1/4"	3/4"	3/4"	3"	1-3/4"	25,000	5	07724				
1/2"	1/4"	7/8"	3/4"	3"	1-11/16"	20,000	5	07721				
5/8"	1/4"	3/4"	3/4"	3"	1-13/16"	25,000	5	07729				



### **PLASTIC ADAPTERS** for mounting small diameter wheels onto various arbor sizes.

<b>Fixed Arbor Hole Size</b>	Adapted Arbor Hole Size	Standard Pack	Item Number
1/2"	1/4"	10	04400
1/2"	3/8"	10	04401
5/8"	1/2"	10	04402







Removing flash from a sand-cast iron engine block.

## CRIMPED WIRE WHEELS WITH NUT OR STEM

Crimped wire wheels with a threaded nut are intended for use primarily on small angle grinders. Featuring Weiler's solid ring construction, these radial brushes are available in heat-treated steel and Type 302 stainless steel wire.



### **APPLICATIONS**

- Removing rust and light corrosion
- Surface prep prior to welding
- Removing heat discoloration and welding residuals



CRIMPED WIRE WHEELS provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications.



	Wire	Arbor	Face	Trim	Max.	Std.	Item N	lumber
Dia.	Size	Hole	Width	Length	RPM	Pack	Steel	Stainless
4"	.006	5/8"-11 UNC	1/2"	7/8"	14,000	5	_	00156
4"	.014	M14 x 2.0	1/2"	7/8"	14,000	5	13077 •	_
		3/8"-24 UNF					13078 •	_
		5/8"-11 UNC					13081	13085
4"	.014	5/8"-11 UNC	1/2"	7/8"	14,000	5	35416*	_

\* Polyflex™ encapsulated - Burgundy elastomer. See Elastomer Color Code Chart on page 61 for more information.













	Wire	Arbor	Face	Trim	Max.	Std.	Item IV	lumber
Dia.	Size	Hole	Width	Length	RPM	Pack	Steel	Stainless
4"	.006	5/8"-11 UNC	1/2"	7/8"	14,000	5	_	00156
4"	.014	M14 x 2.0	1/2"	7/8"	14,000	5	13077 •	_
		3/8"-24 UNF					13078 •	_
		5/8"-11 UNC					13081	13085
4"	.014	5/8"-11 UNC	1/2"	7/8"	14,000	5	35416*	_
				•				

Non-stock product, contact Customer Service for lead times and minimum order quantities.



	Wire	Arbor	Face	Trim	Max.	Standard	Item Number
Diameter	Size	Hole	Width	Length	RPM	Pack	Steel
4"	.014	5/8"-11 UNC	1/2"	3/4"	14,000	5	36207 •

Non-stock product, contact Customer Service for lead times and minimum order quantities.

Crimped wire wheels with a permanently attached 1/4" stem or shank are primarily intended for use on highspeed die grinders. Although they can also be mounted onto a drill, the speed and power of that tool will limit the effectiveness of the brush. Featuring Weiler's solid ring construction, these radial wheels are available in heat-treated steel, Type 302 stainless steel, and brass wire.

### **APPLICATIONS**

- Cleaning and finishing ID's and recessed areas
- Paint removal and surface cleaning
- Cleaning threads
- Light deburring

### CONFLEX BRUSHES Narrow Face - 1/4" Stem - Provide a very flexible brushing action.

		Wire	Face	Trim	Max.	Standard	Item N	lumber
Dia	meter	Size	Width	Length	RPM	Pack	Steel	Stainless
	2"	.006	3/8"	1/2"	20,000	10	17609	-
		.0118					17610 ■	17611 ■
2-	1/2"	.006	3/8"	3/4"	20,000	10	17612	_
		.014					17614	_
	3"	.008	1/2"	1"	20,000	10	17615 ■	-
		.0118					17616 ▲ ■	_
		.014					17617	17618 ■

<sup>■</sup> Packaged product available. See pages 141-142 for details.



### POLYFLEX™ ENCAPSULATED CONFLEX BRUSHES - Burgundy Elastomer\* -

1/4" Stem - Feature an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life.

Diameter	Wire Size	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number Steel
2"	.0118	1/4"	1/2"	20,000	10	35305
3"	.008	1/4"	1"	20,000	10	35310
	.0118					35315

<sup>\*</sup> See Elastomer Color Code Chart on page 61 for more information.



<sup>▲</sup> Available in non-sparking brass wire, see page 102-103 for details.

**CONFLEX BRUSHES - Wide Face - 1/4" Stem -** Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications; feature a wider face width to cover more area.



	Wire	Face	Trim	Max.	Standard	ltem l	Number
Diameter	Size	Width	Length	RPM	Pack	Steel	Stainless
1-1/4"	.006	1/2"	3/8"	20,000	10	17600	_
	.008					17601	_
1-1/2"	.006	1/2"	1/2"	20,000	10	17602	_
	.008					17603	_
	.0118					17604	_
1-3/4"	.006	1/2"	5/8"	20,000	10	17605	_
	.008					_	17608
2"	.0118	3/4"	7/16"	20,000	10	17619	_
2-1/2"	.014	3/4"	11/16"	20,000	10	17620	_
3"	.008	1"	15/16"	20,000	10	17621	17637
	.0118					17622	_
	.014					17623	_



P CRIMPED WIRE RADIAL WHEELS 1/4" Stem - Feature side plates for a shorter trim length and more controlled brushing action in a stem-mounted crimped wire wheel.

-		i _					
D: .	Wire	Face	Trim	Max.	Standard		umber
Diameter	Size	Width	Length	RPM	Pack	Steel	Stainless
1-1/2"	.006	1/4"	3/8"	20,000	10	17950	17971
	.008					17951	17972 •
	.0118					17952 •	17973
	.014					17953	_
2"	.006	3/8"	7/16"	20,000	10	17954	-
	.008					17955	17974
	.0118					17956	_
	.014					17957	17975
	.020					17958 •	_
2-1/2"	.008	7/16"	9/16"	20,000	10	17959	17976 •
	.0118					17961	-
	.014					17962	17977 •
	.020					17963 •	_
3"	.008	1/2"	13/16"	20,000	10	17964	17978
	.0118					17965	-
	.014					17966	17979
	.020					17967	_
4"	.008	9/16"	1-5/16"	15,000	10	17968	17981
	.014					17969	17982





<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

WOLVERINE® CRIMPED WIRE RADIAL WHEELS 1/4" Stem - Designed to be a flexible and economic small diameter brushing tool for a broad range of general purpose applications.



Diameter	Wire Size	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number Steel
1-1/2"	.0118	1/4"	3/8"	20,000	10	36208*
2"	.014	3/8"	7/16"	20,000	10	36209*
3"	.008	7/16"	13/16"	20,000	10	36259*
	014					36211*



<sup>\*</sup> Globally sourced products





	Wire	Face	Trim	Max.	Standard	Item N	lumber
Diameter	Size	Width	Length	RPM	Pack	Steel	Stainless
1-1/2"	.006	1/4"	3/8"	20,000	10	17901	17930
	.008					17902	_
	.0118					17903	17931 •
2"	.008	3/8"	1/2"	20,000	10	17906	_
	.014					17907	17933
2-1/2"	.006	7/16"	5/8"	20,000	10	17909	_
	.014					17912	17935
3"	.006	1/2"	15/16"	20,000	10	17914	17936
	.008					17915	_
	.014					17917	17937
4"	.008	9/16"	1-1/4"	20,000	10	17922	_
	.014					17923	_



Deburring a plastic part using a nylon brush.

## **NYLON AND TAMPICO WHEELS**

## **NYLON WHEELS**

Wheel brushes filled with non-metallic filaments are primarily intended for light-duty surface cleaning and scrubbing applications as well as scratch-free finishing and polishing. Synthetic filaments such as nylon are durable and provide a very flexible brushing action in applications requiring less aggression than a wire brush. The softer fill material allows them to be used on materials that a wire brush would scratch or gouge.

### **APPLICATIONS**

- Wet or dry cleaning and scrubbing
- Removing burrs and die flash from plastic parts
- Sweeping loose chips and debris







Diameter	Fill Diameter	Arbor Hole	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number
2"	.010	1/2"	3/8"	1/2"	20,000	10	17223
	.014						17233
2-1/2"	.022	5/8"	3/8"	11/16"	20,000	10	99346
3"	.010	1/2"	3/8"	1"	20,000	10	29070
	.016						17263
6"	.016	2"	3/4"	1-1/2"	6,000	2	20490
8"	.020	2"	3/4"	2-1/2"	5,000	2	20510 •

For arbor hole reducing adapters, see Metal Adapter Table below and plastic adapters on page 79.

## **TAMPICO WHEELS**

Wheel brushes filled with non-metallic filaments are primarily intended for light-duty surface cleaning and scrubbing applications as well as scratch-free finishing and polishing. Natural vegetable fibers such as Tampico hold abrasive compounds well and can be used for deburring, edge blending, and polishing applications.

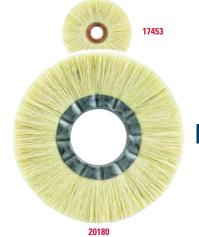


- Wet or dry cleaning and scrubbing
- Buffing and polishing non-ferrous and precious metals
- Removing burrs and blending edges with abrasive compounds

## **TAMPICO WHEELS** feature a durable vegetable fiber fill material that is chemical and heat resistant and also holds abrasive compounds well.

Diameter	Arbor Hole	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number
2-1/2"	1/2"	1/2"	3/4"	20,000	10	17443
3"	1/2"	1/2"	1"	20,000	10	17453
6"	2"	5/8"	1-1/2"	6,000	10	20180
8"	2"	5/8"	2-1/2"	5,000	2	20190

For arbor hole reducing adapters, see Metal Adapter Table below and plastic adapters on page 79.





P

### METAL ADAPTERS for 6" & 8" Brushes. Used in pairs & priced per pair.

For Brush Arbor Hole Size	Adapted Arbor Hole Size	Standard Pack	Item Number
2"	1/2"	1 pair	03809
	5/8"	1 pair	03810
	3/4"	1 pair	03811
	7/8"	1 pair	03824
	1"	1 pair	03812
	1-1/4"	1 pair	03813
	1-1/2"	1 pair	03814



Non-stock product, contact Customer Service for lead times and minimum order quantities

Cup brushes are for use on portable power tools for addressing larger surface areas more efficiently than a wheel brush. Cup brushes featuring a threaded nut are designed for smooth, efficient operation on angle grinders to make quick work of large jobs. Utility cup brushes featuring a permanently-attached 1/4" stem are more suitable for smaller jobs and are recommended for use on high-speed air tools for the most effective brushing action and longest life. Cup brushes are manufactured with individual knot hole and solid ring construction for high performance and long life.

### **APPLICATIONS**

•	Removal of slag from the edges of
	plasma or flame-cut plates

- Removing paint and coatings
- Cleaning rust, scale, and corrosion
- Deburring
- Weld prep and cleaning

### **CUP BRUSH SIZE SELECTION GUIDE**

Angle Grinder S
4"
4-1/2"
5"
6"
7"
9"





Knot wire cup brush removing heat discoloration.









KNOT WIRE CUP BRUSHES - Single Row - Provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on relatively flat surfaces.

	Wire	Arbor	Trim	Max.	Standard	ltem l	Number
Diameter	Size	Hole	Length	RPM	Pack	Steel	Stainless
2-3/4"	.014	M10 x 1.25	1"	14,000	1	13015	-
		M10 x 1.50				13016 •	_
		M14 x 2.0				13020	_
		3/8"-24 UNF				13021	_
		5/8"-11 UNC				13025 ■	13009
2-3/4"	.020	M10 x 1.25	1"	14,000	1	13281 ■	13253
		M10 x 1.50				13282	13254
		M14 x 2.0				13283	13255
		3/8"-24 UNF				13284	13256
		1/2"-13 UNC				13285	13257
		5/8"-11 UNC				13286 ▲ ■	13258
3-1/2"	.023	M10 x 1.25	7/8"	13,300	1	13150	_
		M10 x 1.50				13151	_
		M14 x 2.0				13152	13159
		3/8"-24 UNF				13153	13160
		1/2"-13 UNC				13155	_
		5/8"-11 UNC				13156 ■	13163
3-1/2"	.014	5/8"-11 UNC	1-1/4"	9,000	1	12736	_
	.020					12746	_
4"	.014	5/8"-11 UNC	1-1/4"	10,200	1	12306 ▲	12406
	.023					12316 ■	12416
	.035					12326	_
4"	.023	5/8"-11 UNC	1-1/4"	10,200	1	12206 �	_
4"	.023	5/8"-11 UNC	1-1/4"	10,200	1	12826*	_
5"	.014	5/8"-11 UNC	1-3/8"	7,000	1	12256*	_
	.023					12276 ■*	_
6"	.014	5/8"-11 UNC	1-3/8"	6,600	1	12356 ■	12456
	.023					12376 ■	12476
	.035					12396	_
6"	.023	5/8"-11 UNC	1-3/8"	6,600	1	12816*	_
6"	.014	5/8"-11 UNC	1-5/8"	6,000	1	12846	_
	.023					12856	12886
	.035					12866	_

- Packaged product available. See pages 141-142 for details.

BOLD BLACK ITEM numbers indicate color-coded brushes for easy identification.

▲ Available in non-sparking bronze wire, see page 102-103 for details.

• Non-stock product, contact Customer Service for lead times and minimum order quantities.



 $\textbf{KNOT WIRE CUP BRUSHES - Hurricane Twist} \cdot \textit{Very smooth brushing action and extended}$ life with reduced cleaning action.

	Wire	Arbor	Trim	Max.	Standard	Item Number
Diameter	Size	Hole	Length	RPM	Pack	Steel
2-3/4"	.014	M10 x 1.25	3/4"	14,000	1	13715 •
		M10 x 1.50				13716 •
		M14 x 2.0				13717 •
		5/8"-11 UNC				13718
2-3/4"	.020	M10 x 1.25	3/4"	14,000	1	13709 •
		M10 x 1.50				13710 •
		M14 x 2.0				13711 •
		5/8"-11 UNC				13712

• Non-stock product, contact Customer Service for lead times and minimum order quantities.



NOTE

If a different arbor hole is required (than listed in the tables) refer to Threaded Adapter Chart shown on Pg. 71.



### **WOLVERINE® KNOT WIRE CUP BRUSHES - Single Row**

Provide an aggressive brushing action for general-purpose surface cleaning applications.



	Wire	Arbor	Trim	Max.	Standard	Item N	umber
Dia.	Size	Hole	Length	RPM	Pack	Steel	Stainless
3"	.020	5/8"-11 UNC	1"	14,000	1	36238	36239
4"	.025	5/8"-11 UNC	1-1/4"	10,200	1	36244	-
6"	.025	5/8"-11 UNC	1-3/8"	6,600	1	36245	-

KNOT WIRE CUP BRUSHES - Banded - Single Row - Feature a removable metal band around fill material to reduce the exposed trim length and limit brush flaring at operating speed to provide a very aggressive, controlled brushing action.

	Wire	Arbor	Trim	Max.	Standard	Item N	lumber
Diameter	Size	Hole	Length	RPM	Pack	Steel	Stainless
2-3/4"	.014	5/8"-11 UNC	5/8"	12,500	1	13300	-
	.020					13301	13302
4"	.023	5/8"-11 UNC	7/8"	10,200	1	12301	_
5"	.023	5/8"-11 UNC	7/8"	6,600	1	12120	_



KNOT WIRE CUP BRUSH - 1-1/2 Rows - Features an internal nut for use on dedicated equipment such as line traveling machines that clean and prep OD of pipe prior to coating.

	Wire	Arbor	Trim	Max.	Standard	Item Number
Diameter	Size	Hole	Length	RPM	Pack	Steel
4"	.023	5/8"-11 UNC	1-1/4"	7,000	1	94012



KNOT WIRE CUP BRUSHES - Double Row - Provide very aggressive brushing while still maintaining some flexibility; ideal for severe cleaning applications.

	Wire	Arbor	Trim	Max.	Standard	Item N	umber
Diameter	Size	Hole	Length	RPM	Pack	Steel	Stainless
4"	.014	5/8"-11 UNC	1-1/4"	9,000	1	12756	-
	.020					12766	12726
6"	.014	5/8"-11 UNC	1-3/8"	6,600	1	12536	-
	.023					12556	12636
	.035					12576	_
6"	.014	5/8"-11 UNC	1-1/2"	6,000	1	12906 •	_
	.023					12916	_
	.035					12926	_

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

• Non-stock product, contact Customer Service for lead times and minimum order quantities.



KNOT WIRE CUP BRUSHES - Banded - Double Row - Feature a removable metal band around fill material to reduce the exposed trim length and limit brush flaring to provide an extremely aggressive, controlled brushing action for the most severe applications.

	Wire	Arbor	Trim	Max.	Standard	Item Number
Diameter	Size	Hole	Length	RPM	Pack	Steel
4"	.020	5/8"-11 UNC	7/8"	9,000	1	12796
6"	.023	5/8"-11 UNC	7/8"	6,600	1	12676
	.035					12686



## POLYFLEX™ ENCAPSULATED CRIMPED WIRE CUP BRUSHES feature fill material

that has been encapsulated in an elastomer that gradually wears away to keep only the wire tips exposed; ideal for applications on flat surfaces that require maximum aggression but no flexibility in the brushing action.

	Arbor	Trim	Max.	Standard	Item Number				
Size	Hole	Length	RPM	Pack	Steel				
	Burgun	dy Elastomer* - S	tandard						
.014	5/8"-11 UNC	7/8"	12,000	1	35406				
.020	5/8"-11 UNC	1-1/8"	9,000	1	35186				
.020	5/8"-11 UNC	1-1/4"	6,000	1	35006				
	Orange	Elastomer* - Hea	vy-Duty						
.020	5/8"-11 UNC	1-1/4"	6,000	1	35530 ▲				
Black Elastomer* - Heavy-Duty - Heat-Resistant									
.020	5/8"-11 UNC	1-1/4"	6,000	1	35760 ▲ •				
	.014 .020 .020	Burgun  .014 5/8"-11 UNC  .020 5/8"-11 UNC  .020 5/8"-11 UNC  Orange  .020 5/8"-11 UNC  Black Elastome	Burgundy Elastomer* - S   .014	Burgundy Elastomer* - Standard	Burgundy Elastomer* - Standard				

<sup>\*</sup> See Elastomer Color Code Chart on page 61 for more information.

<sup>▲</sup> With internal nut

**CRIMPED WIRE CUP BRUSHES** provide very flexible brushing action and the most consistent performance for demanding light-duty cleaning applications; feature a threaded nut for use on angle grinders.

	Wire	Arbor	Trim		Standard	Item N	lumber
Diameter	Size	Hole	Length	RPM	Pack	Steel	Stainless
3"	.014	M10 x 1.25	1"	14,000	1	13240 ■ ▲	_
		M10 x 1.50				13241	_
		M14 x 2.0				13242	_
		3/8"-24 UNF				13243	_
		1/2"-13 UNC				13244	_
		5/8"-11 UNC				13245 ■	_
3-1/2"	.014	M10 x 1.25	7/8"	13,300	1	13175	13182
		M10 x 1.50				13176 •	_
		M14 x 2.0				13177 •	13184 •
		3/8"-24 UNF				13178	13185
		1/2"-13 UNC				_	13187 •
		5/8"-11 UNC				13181 ■	13188
4"	.0118	5/8"-11 UNC	1-3/8"	10,200	1	14016	_
	.014					14026 ■	_
	.020					14036 ■ ▲	14126
5"	.014	5/8"-11 UNC	1-1/4"	9,000	1	14206 ■ ▲	_
	.020					14216	14256
6"	.014	5/8"-11 UNC	1-1/4"	6,600	1	14066 ■*	_
	.020					14076 ■ ▲*	14166*

Crimped wire cup brush removing rust from a steel rail part.



- \* With internal nut 📗 Available in non-sparking brass & bronze wire, see page 102-103 for details. 👚 Packaged product available. See pages 141-142 for details.

  - Non-stock product, contact Customer Service for lead times and minimum order quantities.



WOLVERINE® CRIMPED WIRE CUP BRUSHES provide flexible brushing action and cost-effective performance in general purpose cleaning applications.

	Wire	Arbor	Trim	Max.	Standard	Item Number	
Diameter	Size	Hole	Length	RPM	Pack	Steel	
3"	.014	5/8"-11 UNC	1"	14,000	1	36231	
		1/2"-13 UNC				36232 •	
4"	.020	5/8"-11 UNC	1-1/8"	9,000	1	36236	
6"	020	5/8"-11 LINC	1-1/2"	6 600	1	36237 *	

<sup>\*</sup> With internal nut

### **NOTE**

If a different arbor hole is required (than listed in the tables) refer to Threaded Adapter Chart shown on Pg. 71.

featuring a 1/4" stem for use on air tools.

Designed primarily for use on high speed die grinders, cup brushes with permanently attached stems can also be used on drills.



UTILITY CRIMPED WIRE CUP BRUSHES are smaller diameter cup brushes which provide flexible brushing action and consistent performance for more demanding light-duty cleaning applications;



	Wire	Trim	Overall	Max.	Standard	Item N	lumber
Diameter	Size	Length	Length	RPM	Pack	Steel	Stainless
1-3/4"	.006	3/4"	2-5/16"	13,000	10	14300 ▲	14303 •
	.0118					14301 ▲ ■	14304
2"	.008	5/8"	2-7/8"	13,000	10	14313 •	14318 •
	.0118					14306	14319 •
2-1/2"	.008	7/8"	3-1/8"	13,000	10	14315 •	14320 •
	.014					14317	14321 •
2-3/4"	0118	7/8"	2-1/2"	6,000	1	14302 ▲ ■	_



• Non-stock product, contact Customer Service for lead times and minimum order quantities.



14301



### WOLVERINE UTILITY CRIMPED WIRE CUP BRUSH is a flexible and economic small diameter brushing tool for a broad range of general purpose applications using air tools or drills.

1/4" Stem.						
	Wire	Trim	Overall	Max.	Standard	Item Number
Diameter	Size	Length	Length	RPM	Pack	Steel
3"	.014	1"	3-1/4"	13,000	1	36230



4
Carrie was March
20220

36230

85

Non-stock product, contact Customer Service for lead times and minimum order quantities.



Cleaning hard-to-reach fillet welds on a gusseted base plate.

## STEM-MOUNTED END BRUSHES

Wire end brushes are for use on high-speed portable power tools for addressing smaller surfaces and recessed areas. End brushes feature an integral 1/4" steel stem for safe operation at high speed and quick mounting into the collet or chuck of either electric or pneumatic die grinders.

End brushes are available in a variety of knot wire and crimped wire configurations for use in a broad range of applications, and they are manufactured with the highest quality construction for smooth, efficient performance and long life. Weiler's end brushes are available in heat-treated steel, Type 302 stainless steel, and bronze or brass wire.

### **APPLICATIONS**

- Cleaning ID's, internal passages and recessed areas
- Removal of die flash and excess molded material
- Deburring internal edges and crosshole intersections
- Spot facing





**KNOT WIRE END BRUSHES** feature a hollow end and heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications in recessed areas.







	Wire	Trim	Overall	Max.	Standard	Item N	umber
Diameter	Size	Length	Length	RPM	Pack	Steel	Stainless
1/2"	.006	1-1/8"	2-7/8"	20,000	10	-	10215 *
	.0104					10208	10216
	.014					10217	10218
3/4"	.006	1-1/8"	2-7/8"	20,000	10	_	10220 *
	.0104					10210	10211
	.014	7/8"	2-5/8"	25,000		10025 ■	10029 ■
	.020					10026 ■	10030
1-1/8"	.006	1-1/8"	2-9/16"	20,000	10	10141 ■ *	10142 • *
	.0104		2-7/8"			10212	10213
	.0118					10187	_
	.014	7/8"	2-5/8"	22,000		10027 ■	10031 =
	.020					10028 ▲ ■	10032

- Coated cup 
   Packaged product available. See pages 141-142 for details.
- \* Globally sourced product

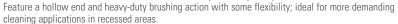
  \* Globally sourced product
- ▲ Available in non-sparking bronze wire, see page 102-103 for details.

BOLD BLACK ITEM numbers indicate color-coded brushes for easy identification.



### KNOT WIRE END BRUSHES - Nickel-plated Cup compliant with DOD MIL STD 2041D(SH)







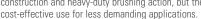
		Wire	Trim	Overall	Max.	Standard	Item Number
Diam	eter	Size	Length	Length	RPM	Pack	Stainless
3/4	ļ"	.014	7/8"	2-5/8"	22,000	10	10387 •
		.020					10388 •
1-1/	8"	.014	7/8"	2-5/8"	22,000	10	10392
		.020					10393 •

Non-stock product, contact Customer Service for lead times and minimum order quantities



## **WOLVERINE**\* **KNOT WIRE END BRUSHES** feature similar hollow-end construction and heavy-duty brushing action, but they have been engineered to provide







Non-stock product, contact Customer Service for lead times and minimum order quantities.





P

**KNOT WIRE END BRUSHES - Banded** - Feature a pair of bands around the fill to reduce the exposed trim length and limit brush flaring to provide a very aggressive, controlled brushing action.



Diameter	Wire	Trim*	Overall	Max.	Standard	Item Number
	Size	Length	Length	RPM	Pack	Steel
1-1/8"	.014 .020	3/8"	2-5/8"	18,000	10	11140 11141

**CRIMPED WIRE END BRUSHES** feature a solid end construction and very flexible brushing action ideal for more demanding light-duty cleaning applications in corners and hard-to-reach areas.



	Wire	Trim	Overall	Max.	Standard	Item N	umber
Diameter	Size	Length	Length	gth RPM	Pack	Steel	Stainless
3/8"	.0118	7/8"	2-1/2"	20,000	10	10188	-
1/2"	.006	7/8"	2-9/16"	25,000	10	10001 ▲ ■	10013 =
	.0104					10002	10014
	.014					10003	10015
	.020					10004	10016
3/4"	.006	7/8"	2-9/16"	22,000	10	10005 ■	10017 =
	.0104					10006	10018
	.014					10007	10019
	.020					10008 ■	10020
1"	.006	1"	2-3/16"	22,000	10	10009 ▲ ■	10021 =
	.0104					10010 ■	10022 ■
	.014					10011 🛦	10023
	.020	1-1/8"	2-15/16"			10012 ■	10024



▲ Available in non-sparking brass wire, see page 102-103 for details. **BOLD BLACK ITEM** numbers indicate color-coded brushes for easy identification.



Cleaning the exhaust port of a gasoline engine.







10010

	Wire	Trim	Overall	Max.	Standard	Item N	lumber
Diameter	Size	Length	Length	RPM	Pack	Steel	Stainless
1/2"	.006	7/8"	2-9/16"	25,000	10	11000	11010
	.0104					11001	11011
3/4"	.006	7/8"	2-9/16"	22,000	10	11003	11013
	.0104					11004	11014
1"	.006	7/8"	2-3/4"	22,000	10	11006	11016
	.0104	1"				11007	11017





**CRIMPED WIRE END BRUSHES - Nickel-plated Cup** - Feature a solid end construction and very flexible brushing action ideal for more demanding light-duty cleaning applications in corners and hard-to-reach areas. **The nickel-plated cup is compliant with DOD MIL STD 2041D(SH).** 

	Wire	Trim	Overall	Max.	Standard	Item Number
Diameter	Size	Length	Length	RPM	Pack	Stainless
1/2"	.006	7/8"	2-9/16"	25,000	10	10370 •
	.0104					10371 •
	.014					10372 •
	.020					10373 •
3/4"	.006	7/8"	2-9/16"	22,000	10	10374 •
	.0104					10375 •
	.014					10376 •
	.020					10377 •
1"	.006	1"	2-7/8"	22,000	10	10378
	.0104					10379
	.014					10380 •
	.020	1-1/8"	2-15/16"			10381

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.



### WOLVERINE® CRIMPED WIRE END BRUSHES feature similar solid end

construction and flexible brushing action, but they have been engineered to provide cost-effective use for less demanding applications.

	Wire	Trim	Overall	Max.	Standard	Item Number	
Diameter	Size	Length	Length	RPM	Pack	Steel	Stainless
1/2"	.0104	7/8"	2-9/16"	25,000	10	36282	-
3/4"	.006	7/8"	2-9/16"	22,000	10	-	36283
	.0104					36247	_
	.014					36246	_
1"	.006	7/8"	2-3/4"	22,000	10	36284	36285
	.0104					36249	_
	.014					36248	-









### \*CONTROLLED FLARE END BRUSHES feature uniquely trimmed crimped wire fill for more effective brushing action and greatly enhanced durability when cleaning corners and fillet welds.

CRIMPED WIRE END BRUSHES - Banded - Feature bands around the fill to reduce the exposed trim length and limit brush flaring at operating speed to provide an aggressive, controlled brushing action.

**Overall** 

Length

2-9/16"

2-11/16"

2-5/8"

Max.

**RPM** 

20.000

22,000

20,000

**Standard** 

**Pack** 

10

10

10

	0 0	,	,	0				
	Wire	Trim Overall	Overall	Max. RPM	Standard Pack	Item I	Item Number	
Diameter	Size	Length	Length			Steel	Stainless	
1/2"	.0104	7/8"	2-9/16"	25,000	10	10301	10313	
	.014					10302	10314	
	.020					10303	10315	
3/4"	.0104	7/8"	2-9/16"	22,000	10	10305	10317	
	.014					10306	_	
	.020					10307	10319	
1"	.0104	1"	2-7/8"	22,000	10	10309	10321	
	.014					10310	10322	
1"	.020	1-1/8"	2-15/16"	22,000	10	10311	10323	

<sup>\*</sup>Patent #8,186,000 B2

Wire

Size

.006

.0104

.006

.0104

.006

.0104

Diameter

1/2

3/4'

\* Trim length from bands

Trim

Length\*

9/16"

7/16"

3/8"

3/8"



The unique trim of a controlled flare end brush is designed specifically to address hard-to-reach areas, reducing filament fatigue and breakage typically associated with a standard end brush when cleaning corners and fillet welds.



Standard Crimped Wire End Brush



Item Number

**Stainless** 

11110

11112

11113

11114

11115

Steel

11100

11101

11102

11103

11105

Controlled Flare End Brush







CRIMPED WIRE PILOT BONDING BRUSHES - Banded - Solid end.

Originally designed to clean around rivet holes in aluminum aircraft panels but may be used in other similar applications.

	Wire	Trim	Overall	Pilot	Max.	Standard	Item Number
Diameter	Size	Length	Length	Diameter	RPM	Pack	Stainless
1/2"	.005	3/8"	2-1/4"	3/32"	20,000	10	10056*
				1/8"			10057*
				5/32"			10058*
				3/16"			10059*

<sup>\*</sup> Globally sourced product



35350

### POLYFLEX® ENCAPSULATED CRIMPED WIRE END BRUSHES

Burgundy Elastomer\* - Feature fill material that has been encapsulated in an elastomer that gradually wears away to keep only the wire tips exposed; ideal for applications such as spot facing that may require maximum aggression and no flaring.

	Wire	Trim	Overall	Max.	Standard	Item N	lumber				
Diameter	Size	Length	Length	RPM	Pack	Steel	Stainless				
Burgundy Elastomer* - Standard											
1/2"	.0104	7/8"	2-9/16"	18,000	10	35340	35500				
3/4"	.0104	7/8"	2-9/16"	16,000	10	35345	35505 •				
1"	.0104	7/8"	2-3/4"	14,000	10	35350	-				
			Orange Elastom	er* - Heavy-Dut	у						
1/2"	.0104	7/8"	2-9/16"	18,000	10	35535	_				
3/4"	.0104	7/8"	2-9/16"	16,000	10	35540	-				
1"	.0104	7/8"	2-3/4"	14,000	10	35545	_				

<sup>\*</sup> See Elastomer Color Code Chart on page 61 for more information.

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

P CIRCULAR FLARED END BRUSHES feature crimped wire fill that has been "pre-flared" to match the working angle of the brush at operating speed; suited for addressing broad and slightly contoured surfaces.

	Wire	Max.	Standard	item number	
Diameter	Size	RPM	Pack	Steel	Stainless
1"	.006	25,000	1	10033	10042
	.008			10034	10043
	.020			10099	_
1-1/4"	.006	20,000	1	10076	_
	.008			10035	_
1-1/2"	.006	20,000	1	10044	10045
	.008			10037	10046
	.020			10038	10047
2"	.014	25,000	2	11142	_
2-3/4"	.008	16,000	2	10039	10048
	.020			10040	_
3"	.006	16,000	2	10150	10151
	.008			10041 ■	10050
	.014			10134	_
	.020			10073	10074
4"	.008	15,000	1	_	96705

<sup>10041</sup> 

### P

### POLYFLEX® ENCAPSULATED CIRCULAR FLARED END BRUSHES

**Black Elastomer\*** - Crimped wire fill that has been encapsulated in a heavy-duty elastomer that gradually wears away to keep only the wire tips exposed. Their saucer-shape, narrow face, and aggressive brushing action make them suitable for addressing edges, corners, and confined areas.



0.D.	Wire	Cup	Overall	Max.	Standard	Item N	Number	
Diameter	Size	Size	Length	RPM	Pack	Steel	Stainless	
1-3/4"	.006	3/4"	2"	25,000	2	35222	_	
	.0104					35223	35226	
	.020					35224	_	
2"	.0104	3/4"	1-1/8"	20,000	2	35233	-	
	.020					35234	_	







**PENCIL END BRUSHES** contain straight wire fill material retained in a small diameter steel tube. They provide a light-duty brushing action suitable for very small recessed areas.

Tube	Wire	Trim	Overall	Max.	Standard	Item N	Item Number	
Diameter	Size	Length	Length	RPM	Pack	Steel	Stainless	
1/4"	0104	3/4"	3-3/4"	8 000	10	99825	99823	

99825

When brushing a recessed area or the inside diameter of a tube, use an End Brush in the following manner: Insert the brush, start the brush rotating. Turn off the power before removing the brush. This will prevent the brush from flaring out and enable it to fit into the recessed area again.



1. Insert Brush



2. Apply Power



3. Shut-Off Power



4. Remove Brush



## MOUNT END BRUSHES SAFELY

When mounting end brushes, the amount of overhang from the tool should be minimized by clamping on as much of the straight portion of the stem as possible. However, the collet or chuck should NOT clamp on the radius at the base of the stem to insure a secure hold before use. See photo above for the correct brush orientation.

<sup>■</sup> Packaged product available. See pages 141-142 for details.



Deburring intersecting oil passages in an engine block.



## **BORE-RX™ CROSSHOLE DEBURRING BRUSHES**

Designed for automated use in CNC machining centers and dedicated equipment. They are densely filled for high aggression and long tool life and feature a 3/8" diameter steel stem with a flat for use in a collet or endmill holder.

Bore-Rx brushes are ideal tools for removing burrs from internal edges. Since they can eliminate manual deburring operations, these internal brushing tools help to improve part-to-part consistency and reduce direct labor costs. Bore-Rx brushes are available in sizes ranging from 3/4" to 4" in diameter, and they are designed to be interpolated within bore sizes that are larger than the brush diameter.

### **Operating Parameters For Wire Bore-Rx Brushes**

Brush	Recommended	Recommended
Diameter	RPM	Feed Rate
5/8" - 7/8"	8,000	20"/min
1" - 1-1/2"	8,000	20"/min
2" - 2-1/2"	6,000	20"/min
3" - 4"	3,000	20"/min

### **Tool Paths for Crosshole Deburring**

An effective tool path for most crosshole deburring jobs is circular interpolation using the following guidelines to determine diameter of interpolation. The interpolation should be performed at a depth where the center of the brush face is at the center of the intersecting hole.

Diameter of Interpolation = Hole Diameter - Brush Diameter



17218



### BORE-RX<sup>™</sup> BRUSHING TOOLS - Crimped wire fill - Feature dense wire fill for aggressive

deburring action on ductile metals and other hard-to-deburr materials.

	Wire	Face	Overall	Max.	Standard	Item Number
Diameter	Size	Width	Length	RPM	Pack	Steel*
3/4"	.005	3/8"	4-3/8"	8,000	1	17202
		3/4"	4-3/4"			17203
7/8"	.006	3/4"	4-3/4"	8,000	1	17205
1"	.006	3/4"	5"	8,000	1	17207 •
1-1/4"	.006	3/4"	4-3/4"	8,000	1	17209 •
1-1/2"	.006	1"	5"	8,000	1	17211 •
2"	.006	1"	4-1/4"	6,000	1	17214 •
2-1/2"	.008	1"	4-3/4"	6,000	1	17216 •
3"	.008	1"	5-1/4"	6,000	1	17218 •
4"	.0118	1"	6-1/4"	6,000	1	17219

<sup>\*</sup> Stainless Steel fill is available by special order.

Note: All Bore-Rx brush stems have a 2" long flat for use in end mill holders. Alternatively, they can be mounted in 3/8" collets. Bore-Rx extension holder is available. To discuss specific requirements with a specialist call: 800-835.9999.



## **CUSTOMIZABLE CROSSHOLE DEBURRING SOLUTIONS**

### Replacement Bore-Rx Brush Heads and Reusable Bore-Rx Arbors

In high production applications, reusable arbors reduce manufacturing costs by allowing the use of inexpensive brush head replacements. Brush heads are made-toorder in diameters ranging from 3/4" to 1-1/2" with face widths of 1/4" to 1". They are available on 3/16" and 1/4" pins. The pin diameter is based on the application and determines brush density. To discuss specific requirements with a specialist call: 800-835.9999.









Non-stock product, contact Customer Service for lead times and minimum order quantities

## **POWER AND HAND TUBE BRUSHES**

Weiler offers a comprehensive line of power and hand tube brushes for internal cleaning and deburring applications in tubing, pipe, drilled-and-tapped holes, and machined bores and passages. Due to their twistedin-wire construction, the use of power tube brushes is limited to low-speed power tools such as drills and drill presses and to CNC and manual machine tools in which the RPM can be precisely programmed or set. In addition, they should not be used in reverse rotation to prevent unraveling of the stem wire. Available in a wide variety of brush configurations and fill materials, Weiler can supply a tube brush for any application. If you do not see what you need in this catalog, see the Special Tube Brush Design Specification Sheet on page 85, or call 800-835.9999 for assistance.

### **APPLICATIONS**

- Deburring and cleaning drilled-and-tapped holes and other internal threads
- · Cleaning and finishing the ID of tubing and pipe
- Crosshole deburring
- Removing burrs and chips from internal keyways, slots, and grooves
- Removing paint, coatings, and build-up other foreign material from the surfaces of bores and passages

Removing zinc coating from holes in a brake bracket.

### POWER AND HAND TUBE BRUSH SELECTION TIPS

- A flat burrite style tube brush is most effectively used with a holder on blind, threaded holes.
- A round tube brush is most effectively used fully chucked on smooth or threaded blind holes.
- · A single stem, single spiral tube brush is most effectively used for manual or hand cleaning applications.
- A double stem, double spiral tube brush is most effectively used with power tools for heavy-duty cleaning and deburring.
- A polyflex encapsulated double stem, double spiral tube brush is most effectively used on power tools for very aggressive cleaning and deburring applications.









## DOUBLE STEM. DOUBLE SPIRAL feature four stem wires and a double spiral of straight

					0.001110
wire fill material	to provide	aggressive	cleaning a	and deburring	action.

	Wire	Brush	Stem	Overall	Max.	Standard	Item N	lumber
Diameter	Size	Part	Diameter	Length	RPM	Pack	Steel	Stainless
3/8"	.003	1-1/2"	1/8"	4"	2,000	10	21342	-
	.006	2-1/8"		6"			21232	_
1/2"	.004	2"	5/32"	5"	2,000	10	21106	21116
	.006						21107 ▲ ■	21117
	.0104						21252	_
5/8"	.005	2"	7/32"	5"	2,000	10	21108 =	21118
	.008						21109 🔺	21119
	.0104						21184	_
3/4"	.006	2-1/2"	1/4"	5-1/2"	2,000	10	21110 ▲ ■	21120
	.008						21247	_
	.0104						21111	21121
7/8"	.006	2-1/2"	1/4"	5-1/2"	2,000	10	21112	21122
	.0104						21113	21123
1"	.006	2-1/2"	1/4"	5-1/2"	2,000	10	21114 ▲ ■	21124
	.0104						21115	21125
1-1/4"	.006	2-1/2"	1/4"	5-1/2"	2,000	10	21164	21245
	.0104						21167 *	21236
1-1/2"	.014	2-1/2"	1/4"	5-1/2"	2,000	10	-	21413

■ Packaged product available. See pages 141-142 for details. ★ 5" Overall length ▲ Available in non-sparking brass wire, see page 102-103 for details.







### POLYFLEX™ ENCAPSULATED DOUBLE STEM, DOUBLE SPIRAL

Burgundy Elastomer\*- Encapsulated with an elastomer that leaves only the sharp wire tips exposed for maximum aggression and a very rigid brushing action.





	Wire	Brush	Stem	Overall	Max.	Standard	Item Number
Diameter	Size	Part	Diameter	Length	RPM	Pack	Steel
1/2"	.006	2"	5/32"	5"	2,000	10	35821
5/8"	.0104	2"	7/32"	5"	2,000	10	35822
3/4"	.0104	2-1/2"	1/4"	5-1/2"	2,000	10	35823
1"	.0104	2-1/2"	1/4"	5-1/2"	2,000	10	35825 •

 $<sup>\</sup>mbox{\bf *}$  See Elastomer Color Code Chart on page 61 for more information.



**ROUND** - Feature a single continuous length of stainless steel stem wire and a single spiral of crimped wire fill for a more flexible brushing action; for use on smooth or threaded blind holes.





· · · · I	100	B		0	Max.	0	l kam l	No on the second
Diameter	Wire Size	Brush Part	Stem Diameter	Overall Length	Max. RPM	Standard Pack		Number
							Steel	Stainless
1/4"	.004	1"	1/8"	3-1/2"	2,000	10	21072 🔺	21081 ■
5/16"	.005	1"	1/8"	3-1/2"	2,000	10	21175	_
3/8"	.004	1"	1/8"	3-1/2"	2,000	10	21073 ■	21082
	.006						21282	_
	.008						21264	21240
7/16"	.005	1"	1/8"	3-1/2"	2,000	10	21142	21181
1/2"	.005	1"	3/16"	3-1/2"	2,000	10	21074 ▲ ■	21083
9/16"	.005	1"	3/16"	3-1/2"	2,000	10	21143	_
	.0104						_	21404
5/8"	.005	1"	3/16"	3-1/2"	2,000	10	21075 ■	21084
	.008						21265	_
11/16"	.005	1"	3/16"	3-1/2"	2,000	10	21144	<u> </u>
3/4"	.006	1"	7/32"	3-1/2"	2,000	10	21076	21085
	.008						21266	_
13/16"	.005	1"	7/32"	3-1/2"	2,000	10	21146	_
7/8"	.006	1"	7/32"	3-1/2"	2,000	10	21077 ■	21086
	.008						21267	_
15/16"	.005	1"	7/32"	3-1/2"	2,000	10	21148 •	_
1"	.005	1"	1/4"	3-1/2"	2,000	10	21149	21340
	.008						21078 ■	21087
1-1/8"	.005	1"	1/4"	3-1/2"	2.000	10	21150	-
	.008						21079	21088
1-1/4"	.008	1"	1/4"	3-1/2"	2,000	10	21080	21089
1-1/2"	.008	1"	1/4"	3-1/2"	2.000	10	21203 🛦	-
-	.0104				,		21269	_
2-1/4"	.008	1"	1/4"	3-1/2"	2,000	10	21322	-

<sup>■</sup> Packaged product available. See pages 141-142 for details. ▲ Available in non-sparking brass wire, see page 102-103 for details.

### Correct Mounting in Chuck







### **TUBE BRUSH OPERATING RECOMMENDATIONS**

The stems in power tube brushes are not as strong as the stems in most other brushes. Therefore, it is very important to avoid any load conditions and brush speeds that can cause excessive stem deflections and destructive bending.

A suggested guideline to avoid this unsafe condition is minimizing the overhang of the stem to under an inch, and running the brush at speeds below 2,000 RPM.

Increasing overhang could decrease the safe speed at which the brush can operate. To reach into deeper holes, use drill extension rods instead of increasing stem overhang.

### **BEFORE STARTING THE BRUSH:**

- Secure brush in chuck.
- Ensure clockwise brush rotation (running the brush counter-clockwise could cause the brush to fall apart.)
- Clamp work securely.
- Position all guards in place.
- Align brush with the work so the brush rotates on its true centerline to prevent any stem deflections.
- Guide the brush into the hole before starting the brush rotation.
- Always wear eye protection.

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

BURRITE - Feature a single continuous length of stainless steel stem wire and filled with a tuft of crimped wire to provide an aggressive flat side action; ideal for cleaning and deburring internal threads.



	Wire	Brush	Stem	Overall	Max.	Standard	Item Number	
Diameter	Size	Part	Diameter	Length	RPM	Pack	Steel	Stainless
1/4"	.003	9/16"	3/32"	2-1/8"	2,000	10	21000	_
	.005						21001	21050
5/16"	.003	9/16"	3/32"	2-1/8"	2,000	10	21004	_
	.005						21005	_
3/8"	.003	9/16"	3/32"	2-1/8"	2,000	10	21008	_
	.005						21009	21051
	.005		1/8"				21023	-
7/16"	.003	9/16"	3/32"	2-1/8"	2,000	10	21014	_
	.005						21015 •	-
1/2"	.003	9/16"	3/32"	2-1/8"	2,000	10	21020	_
	.005						21021	21053
	.005		1/8"				21025 •	_
9/16"	.003	5/8"	1/8"	2-1/4"	2,000	10	21027	_
	.005						21028	-
5/8"	.003	5/8"	1/8"	2-1/4"	2,000	10	21030 •	_
	.005						21031	21055
3/4"	.005	5/8"	1/8"	2-1/4"	2,000	10	21034	21056
	.008						21035	-
7/8"	.005	5/8"	1/8"	2-1/4"	2,000	10	21036	21057
1"	.005	5/8"	1/8"	2-1/4"	2,000	10	21040	21058
	.008						21041	-
1-1/8"	.005	5/8"	1/8"	2-1/4"	2,000	10	21044 •	_
				Non atack n	raduat contact Co	atomor Conside for In	ad times and minis	num ordor quantitic



Deburring the threads of a tapped hole using a burrite brush in a holder.





• Non-stock product, contact Customer Service for lead times and minimum order quantities.

**BURRITE HOLDERS** - Feature a 1/4" stem for convenient mounting into the chuck of a drill or the collet of a machine tool and allow the brush to be used in either direction of rotation. They allow the brush to be used in a standard tapping cycle for deburring threaded holes in CNC machining centers.



For Brush Stem Dia.	Holder Diameter	Overall Length	Standard Pack	Item Number
3/32"	1/4"	3-1/8"	5	95202
1/8"	3/8"	3-3/8"	5	95203





**SINGLE STEM, SINGLE SPIRAL** - Feature a single continuous length of galvanized steel stem wire with a formed eye loop for convenient hand use. The single spiral of straight wire fill allows for easy manual insertion into the ID.

	Wire	Brush	Stem	Overall	Standard	Item N	lumber
Diameter	Size	Part	Diameter	Length	Pack	Steel	Stainless
1/8"	.003	1"	3/32"	6"	10	21246	21249
3/16"	.003	1-1/2"	3/32"	7"	10	21090 🔺	21098
	.005					21091	21099
1/4"	.003	1-1/2"	3/32"	7"	10	21092 🔺	21100
	.005					21093 🔺	21101
	.006					21161	_
3/8"	.004	2"	1/8"	8"	10	21094 🔺	21414
	.006					21095	21103
1/2"	.004	2"	1/8"	8"	10	21096 🔺	21104
	.006					21097	21105
	.008					21162	_
9/16"	.005	2-1/2"	5/32"	9"	10	21233	_

▲ Available in non-sparking brass wire, see page 102-103 for details.



P

**NYLON HAND TUBE BRUSHES** feature a single continuous length of galvanized steel stem wire with a formed eye loop for convenient hand use. The single spiral of straight nylon fill allows for easy manual insertion and scratch-free cleaning of the ID.



	Fill	Brush	Stem	Overall	Standard	Item Number
Diameter	Diameter	Part	Diameter	Length	Pack	Nylon
1/4"	.005	2"	3/32"	6-1/4"	36	44110*
3/8"	.005	2"	3/32"	6-1/4"	36	44213*
1/2"	.010	3"	1/8"	8-1/2"	36	44111*
3/4"	.012	3"	1/8"	8-1/2"	36	44112*
1"	.014	4"	5/32"	12-1/4"	36	44113*
1-1/4"	.014	4"	5/32"	13"	36	44114*
2"	.014	5"	3/16"	16-3/4"	36	44115*

<sup>\*</sup> Globally sourced product



**PERCOLATOR BRUSH** features single stem, single spiral construction with an eye loop and straight white nylon fill. Intended for cleaning the internal passages in coffee percolators, this brush can be also be used in other similar manual cleaning applications.

	Fill	Brush	Stem	Overall	Standard	Item Number
Diameter	Diameter	Part	Diameter	Length	Pack	Nylon
7/16"	.010	3-1/2"	5/32"	11-1/2"	10	44316



**VALVE GUIDE BRUSHES** are made with single stem, single spiral construction and have a permanently-attached 1/4" diameter long steel handle for convenient hand use or for mounting into a chuck. Intended for removing heavy deposits from valve guides in gas and diesel engines, these brushes can also be used in a range of other similar applications.





44316

	Fill Diameter	Brush	Overall	Max.	Standard	Item
Diameter	/ Material	Part	Length	RPM	Pack	Number
1/4"	.0104 Steel	2"	10"	2,000	10	95563 •
5/16"						95027
11/32"						95566 •
3/8"						95028
7/16"						95665 •
1/2"						95029
11/32"	.008 Nylon	2-1/2"	10"	2,000	10	95660 •
3/8"	.012 Nylon					95567 •

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.



**GUN CLEANING BRUSHES - Rifle Brushes** - Constructed using a continuous piece of stem wire and fine bronze wire fill for a scratch-free cleaning action in gun barrels, these flexible tube brushes are designed to be attached to extension rods using the 8-32 male coupling.



	Brush	Overall	Coupling	Standard	Item Number
Caliber	Part	Length	Size	Pack	Bronze
22	2-1/4"	3-1/4"	8-32	10	95301
30	2-1/4"	3-1/4"	8-32	10	99786 •
35	2-1/4"	3-1/4"	8-32	10	99788 •
45	2-1/4"	3-1/4"	8-32	10	99791 •

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.



**GUN CLEANING BRUSHES - Shotgun Brushes** - Constructed using a continuous piece of stem wire and fine bronze wire fill for a scratch-free cleaning action in gun barrels, these flexible tube brushes are designed to be attached to extension rods using the 5/16"-27 male coupling.



	Brush	Overall	Coupling	Standard	Item Number
Gauge	Part	Length	Size	Pack	Bronze
12	1-5/8"	2-7/8"	5/16-27	10	99714 •
16	1-5/8"	2-7/8"	5/16-27	10	99694 •
20	1-5/8"	2-7/8"	5/16-27	10	95084
410	1-5/8"	2-7/8"	5/16-27	10	95129 •

Non-stock product, contact Customer Service for lead times and minimum order quantities.

# MUL MEILEK

### **SPECIAL TUBE BRUSH SPECIFICATION SHEET:**

(Use the illustration on this page as a guide)

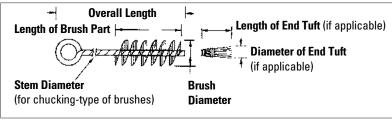
1.	Brush diameter
2.	Length of brush part
3.	Overall brush length
4.	Special stem diameter (if required)
5.	Stem material:
	☐ Galvanized Steel ☐ Stainless ☐ Other
ô.	Application

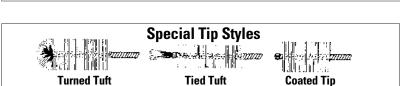
7.	Brush fill material:									
	☐ Steel wire ☐ Stainless wire									
	Nylon Abrasive Filament (Nylox*)									
	☐ Brass wire ☐ Other									
8.	Fill material diameter									
9.	Special tip style (if required)									
10.	☐ Single stem ☐ Double stem									

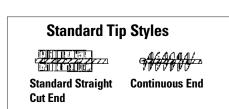
11. Order Quantity

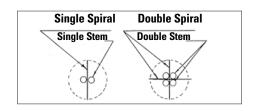
Name:
Company Name:
Address:
Phone: ()
Fax: ()
F-mail:

End-User Name:	
City:	
Stato:	7in:









## FOR ADDITIONAL INFORMATION CALL:

To discuss specific requirements with a specialist call: 800-835.9999

## FAX SPECIFICATION SHEET TO:

Customer Service Fax: 800-635-3615

## SUBMIT FORM ONLINE:

weilerabrasives.com/tube-brushes



<sup>\*</sup> Special tube brushes are not returnable, as they are manufactured to order.

## **CROSSFLEX™ HONING BRUSHES**

**CrossFlex offers machinists the right combination of performance and value for professional honing applications.** Flexible filaments provide the correct pressure to create an ideal hone; one bore after another. It's the ideal tool to create cross-hatch patterns for improved oil retention and increased part efficiency. The strong self-centering system leaves a smooth, even surface finish free of metal burrs whether used in a manual or automated application.



Deburring cross holes in a firearms component.

No matter what type or size cylinder, Weiler's CrossFlex brushes deliver the options you need to solve your toughest deburring and honing challenges.

### **FEATURES & BENEFITS:**

### Desired Finish

CrossFlex offers a wide range of grits and sizes allowing machinists to achieve the desired finish.

### Heavy Burr Removal

Increased brush to part contact ensures that the heaviest burrs will be removed, outperforming standard nylon tube brushes.

### Long Life

CrossFlex brushes have a long operational life, lowering total cost of use compared to other brush options.

### • Flexible Nylon Stems

Distribute pressure evenly and self centers within the part to create an ideal hone.

### Consistent Cross Hatch Pattern

Helps to seat piston rings and retains oil for lubrication in a combustion cylinder.

### • Collet Ready Brushes

Deliver a true center rotation and exceptional brush balance for automated applications or hand held use.

### **CROSSFLEX FOR COMMON ENGINE BORES**

Engine		Recommended
Туре	Bore	Brush
AMC 258	3.75	34272
AMC 304	3.75	34272
Buick 455	4.31	34280
Chevy 305	3.75	34272
Chevy 307	3.5	34268
Chevy 327	4.001	34276
Chevy 350	4	34276
Chevy 383	4	34276
Chevy 396	4.094	34276
Chevy 400	4.125	34280
Chevy 427	4.251	34280
Chevy 454	4.251	34280
Chevy LS1	3.898	34276
Dodge 318	3.91	34276
Dodge 340	4.04	34276
Dodge 426 Hemi	4.25	34280
Dodge 426 Wedge	4.25	34280
Dodge 440	4.32	34280
Dodge Chrysler Hemi 5.7L / 345	3.917	34276
Dodge Chrysler Hemi 5.7L / 345	4.055	34276
Dodge Chrysler Hemi 5.7L / 345	4.09	34276
Ford 289	4	34276
Ford 302	4	34276
Ford 351	4	34276
Ford 352	4	34276
Ford 390	4.05	34276
Ford 406	4.125	34280
Ford 410	4.05	34276
Ford 427	4.2328	34280
Ford 428	4.125	34280
Pontiac 389	4.062	34276



**POWER BRUSHES** 

CROSSFLEX ABRASIVE GRITS: Every individual brush end tip is colored to indicate the grit of that brush.





## **COLLET READY BENEFITS FOR SMALL DIAMETER BRUSHES:**

- Reduces brush run-out
- Strengthens and sturdies brush shaft for better stability and overall reach
- Strong positive engagement with tool holder



Collet ready CrossFlex brush in a CNC machine.



### **SMALL DIAMETER CROSSFLEX HONING BRUSHES**

Silicon carbide cross-honing brushes for standard use. Ideal for deburring small diameter cross hole intersections.

For Hole Sizes in Inches	For Hole Sizes in mm	Length of Brush Part	Overall Length	Shank Diameter	Max RPM	120 Grit Item No.	180 Grit Item No.	240 Grit Item No.	320 Grit Item No.
0.177"	4.5 mm	0.787"	6"	0.083"	1,000	_	34105	34106	34107
0.1857"	4.7625 mm					_	34108	34109	34110
0.197"	5 mm	1.575"	7.875"			34111	34112	34113	34114
0.217"	5.5 mm					34115	34116	34117	34118
0.236"	6 mm			0.098"		34119	34120	34121	34122
0.25"	6.35 mm					34123	34124	34125	34126
0.276"	7 mm	1.969"		0.13"	900	34127	34128	34129	34130
0.315"	8 mm			0.142"		34131	34133	34134	34135
0.354"	9 mm					34136	34137	34138	34139
0.375"	9.5 mm					34141	34142	34143	34144
0.394"	10 mm					34145	34146	34147	34148
0.433"	11 mm					34149	34150	34151	34152
0.472"	12 mm			0.157"		34153	34154	34155	34156
0.5"	12.7 mm	2.48"		0.173"		34158	34159	34160	34161
0.552"	14 mm			0.197"		34162	34163	34164	34165
0.625"	16 mm	]				34166	34167	34168	34169
0.709"	18 mm	1				34170	34171	34172	34173
0.75"	19mm	1				34174	34175	34176	34177
0.787"	20 mm	1				34178	34179	34180	34181
0.875"	22 mm	1		0.213"		34182	34183	34184	34185
0.9375"	23.8 mm	3"				34186	34187	34188	34189



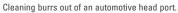
### **COLLET READY – SMALL DIAMETER CROSSFLEX HONING BRUSHES**

Silicon carbide cross-honing brushes for standard use within automated applications and to reduced brush run-out.



For Hole Sizes in Inches	For Hole Sizes in mm	Length of Brush Part	Overall Length	Shaft Diameter	Max RPM	120 Grit Item No.	180 Grit Item No.	240 Grit Item No.	320 Grit Item No.		
0.177"	4.5 mm	0.75"	6"	5/32"	1,000	_	34298	34299	34359		
0.188"	4.763 mm					_	34300	34301	34302		
0.197"	5 mm	1.5"	7.875"			34303	34304	34305	34306		
0.217"	5.5 mm	]				34307	34308	34309	34310		
0.236"	6 mm	]				34311	34312	34313	34314		
0.25"	6.35 mm	]				34315	34316	34317	34318		
0.276"	7 mm	2"		1/4"	900	34319	34320	34321	34322		
0.315"	8 mm							34323	34324	34325	34326
0.354"	9 mm					34327	34328	34329	34330		
0.375"	9.5 mm	1				34331	34332	34333	34334		
0.394"	10 mm	1				34335	34336	34337	34338		
0.433"	11 mm	1				34339	34340	34341	34342		
0.472	12 mm	1		8 mm		34343	34344	34345	34346		
0.5"	12.7 mm	2.5"				34347	34348	34349	34350		
0.552"	14 mm	1				34351	34352	34353	34354		
0.625"	16 mm	1				34355	34356	34357	34358		

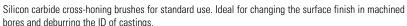








### **MEDIUM DIAMETER CROSSFLEX HONING BRUSHES**



For Hole	For Hole								
Sizes	Sizes	Length of	Overall	Shank	Max	120 Grit	180 Grit	240 Grit	320 Grit
in Inches	in mm	Brush Part	Length	Diameter	RPM	Item No.	Item No.	Item No.	Item No.
1"	25.4 mm	3"	7.875"	0.213"	900	34190	34191	34192	34193
1.125"	29 mm	1		0.224"	800	34194	34195	34196	34197
1.25"	31.8 mm	1 1		0.252"		34198	34199	34200	34201
1.375"	35 mm	1				34202	34203	34204	34205
1.5"	38 mm	1 1				34206	34207	34208	34209
1.625"	41 mm	1 1				34210	34211	34212	34213
1.75"	45 mm	1 1				34214	34215	34216	34217
1.875"	47.6 mm	]				34218	34219	34220	34221
2"	51 mm	]				34222	34223	34224	34225
2.125"	54 mm	1		0.283"	700	34226	34227	34228	34229
2.25"	57 mm	1 1				34230	34231	34232	34233
2.375"	60 mm	]				34234	34235	34236	34237
2.5"	64 mm	1				34238	34239	34240	34241
2.625"	67 mm	1				34242	34243	34244	34245
2.75"	70 mm	1				34246	34247	34248	34249
2.875"	73 mm	1				34250	34251	34252	34253
3"	76 mm	5.5"	7.875"	0.311"		34254	34255	34256	34257



### **HEAVY-DUTY MEDIUM DIAMETER CROSSFLEX HONING BRUSHES**

Silicon carbide cross-honing brushes for heavy-duty use. Ideal for changing the surface finish in machined bores and deburring the ID of castings.

below and departing the 15 of edelings.											
	For Hole Sizes in Inches	For Hole Sizes in mm	Length of Brush Part	Overall Length	Shank Diameter	Max RPM	120 Grit Item No.	180 Grit Item No.	240 Grit Item No.	320 Grit Item No.	
	3"	76 mm	5.5"	13.5"	0.311"	700	34258	34259	34260	34261	
	3.25"	83 mm					34262	34263	34264	34265	
	3.5"	89 mm					34266	34267	34268	34269	







Engine cylinder head honing.

### **HEAVY-DUTY LARGE DIAMETER CROSSFLEX HONING BRUSHES**

Silicon carbide cross-honing brushes for heavy-duty use. Ideal for cross hatching in combustion cylinders.

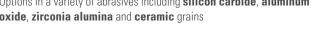


For Hole Sizes in Inches	For Hole Sizes in mm	Length of Brush Part	Overall Length	Shank Diameter	Max RPM	120 Grit Item No.	180 Grit Item No.	240 Grit Item No.	320 Grit Item No.
3.75"	95 mm	5.5"	13.5"	0.311"	700	34270	34271	34272	34273
4"	101 mm	6.5"		0.346	600	34274	34275	34276	34277
4.25"	108 mm	]				34278	34279	34280	34281
4.5"	114 mm					34282	34283	34284	34285
5"	127 mm	1	18"			34286	34287	34288	34289
5.5"	140 mm	]		0.402"		34290	34291	34292	34293
6"	152 mm	1				34294	34295	34296	34297

### **SPECIALTY BRUSHES**

Weiler understands that not all your finishing or deburring applications have a standard solution. For instances where applications require unique sizes, lengths or abrasives; Weiler Process Solutions (WPS) specialists work with you to provide custom CrossFlex brushes for your specific application.

- Custom sized for your specific bore diameters
- Brushes with shorter or longer stems for your particular application
- Collet ready or other connection methods
- Options in a variety of abrasives including silicon carbide, aluminum oxide, zirconia alumina and ceramic grains





An application engineering program designed to provide Weiler customers with engineering support to identify value added opportunities in their processes.

To learn more about Weiler's specialty solutions go to: weilerabrasives.com/wps



Custom large diameter ceramic CrossFlex brush.



Removing galled spots from a metal forming die.

## **MINIATURE BRUSHES**

**THE WEILER FAMILY** began producing miniature brushes for the jewelry industry in 1898, and their tradition of providing the highest quality, most cost-effective products continues to this day.

Weiler's line of miniature brushes are designed for precision cleaning, light deburring, and finishing applications in a variety of crafts, trades, and industries. In addition to use in jewelry production and in dental and optical labs, miniature brushes have many applications in modern industries such as electronics and instrumentation production, aerospace and aircraft manufacture, and precision tool and die shops. They are permanently mounted on 1/8" or 3/32" stems for quick mounting and efficient use on high-speed electric rotary tools and air-powered pencil die grinders.

### **APPLICATIONS**

- Decorative finishing
- · Light deburring and edge blending
- Buffing and polishing of small parts
- Light-duty cleaning





### **WIRE WHEEL BRUSHES -** Fine crimped wire fill for light-duty cleaning and deburring.

	Wire	Trim	Stem	Stem	Max.	Standard			er	
Diameter	Size	Length	Size	Length	RPM	Pack	Steel	Stainless	Brass	
5/8"	.005	1/8"	1/8"	1-1/2"	37,000	144	-	99554	_	
3/4"	.003	3/16"	1/8"	1-1/2"	37,000	144	26000	-	26001 •	
	.005						26003	26005	26004 •	
3/4"	.003	3/16"	3/32"	1-1/2"	37,000	144	26140 •	-	26141 •	
	.005						26143	-	26144	
1"	.003	5/16"	1/8"	1-1/2"	37,000	144	26012	26014	-	
	.005						26015	26017	26016	
	.005	5/16"	3/32"				26155 •	-	-	
1-1/4"	.005	3/8"	1/8"	1-1/2"	37,000	144	26021	-	-	
1-1/2"	.005	1/2"	1/8"	1-1/2"	25,000	144	26296	26294	-	

• Non-stock product, contact Customer Service for lead times and minimum order quantities.



**BRISTLE WHEEL BRUSHES** - Natural hair fill for scratch-free cleaning of small parts or for buffing and polishing of features such as slots and grooves using abrasive compounds.

	Fill	Trim	Stem	Stem	Max.	Standard	Item
Diameter	Туре	Length	Size	Length	RPM	Pack	Number
3/4"	Stiff Hair	3/16"	3/32"	1-1/2"	37,000	144	26041
	Soft Hair						26042
	Stiff Hair*						26043
	Stiff Hair		1/8"				26059

\* Double thick





	Wire	Trim	Stem	Stem	Overall	Max.	Standard	1	ltem Numbe	r
Dia.	Size	Length	Size	Length	Length	RPM	Pack	Steel	Stainless	Brass
5/8"	.003	1/4"	1/8"	1-1/2"	2"	37,000	144	26071	-	26072
	.005							26074	26076	26075



**P BRISTLE CUP BRUSHES** - Natural hair fill for scratch-free cleaning of confined areas or for buffing and polishing of small recessed surfaces using abrasive compounds.

Dia.	Fill Type	Trim Length	Stem Size	Stem Length	Overall Length	Max. RPM	Standard Pack	Item Number
1/2"	Stiff Hair	7/32"	3/32"	1-1/2"	2"	37,000	144	26091
9/16"	Stiff Hair	1/4"	1/8"	1-1/2"	2"	37,000	144	26093
	Soft Hair							26094 •
1"	Stiff Hair	7/16"	1/8"	1-1/2"	2-3/8"	25,000	144	26095
	Soft Hair							26096 •

**WIRE END BRUSHES** - Fine crimped wire fill for light-duty cleaning or deburring in very small recessed areas or ID's.

	Wire	Trim	Stem	Stem	Overall	Max.	Standard	- 1	tem Numbe	r
Dia.	Size	Length	Size	Length	Length	RPM	Pack	Steel	Stainless	Brass
3/16"	.003	1/4"	1/8"	1-1/4"	1-7/8"	37,000	144	26098	26099	26097
			3/32"					26101 •	_	
1/4"	.005	7/16"	1/8"	1-1/4"	2-1/8"	37,000	144	26107	26108	26106
5/16"	.005	9/16"	1/8"	1-1/4"	2-3/8"	25,000	144	26113	26114	-



<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

**P** BRISTLE END BRUSHES - Natural hair fill for scratch-free cleaning or for buffing and polishing of very small recesses using abrasive compounds.

Dia.	Fill Type	Trim Length	Stem Size	Stem Length	Overall Length	Max. RPM	Standard Pack	Item Number
3/16"	Stiff Hair	1/4"	1/8"	1-1/4"	1-7/8"	37,000	144	26115
	Soft Hair							26122
	Stiff Hair		3/32"					26116
1/4"	Stiff Hair	3/8"	1/8"	1-1/4"	2-1/8"	37,000	144	26119
5/16"	Stiff Hair	9/16"	1/8"	1-1/4"	2-3/8"	25,000	144	26121



### P BRISTLE END BRUSHES - Plastic Ferrule

Feature a plastic ferrule or cup to protect internal surfaces during use.

	Dia,	Fill Type	Trim Length	Stem Size	Stem Length	Overall Length	Max. RPM	Standard Pack	Item Number
	3/16"	Stiff Hair	1/4"	1/8"	1-1/4"	1-7/8"	37,000	144	26128
	1/4"	Stiff Hair	3/8"	1/8"	1-1/4"	2-1/8"	37,000	144	26131
-	5/16"	Stiff Hair	9/16"	1/8"	1-1/4"	2-3/8"	25,000	144	26133



**ABRASIVE NYLON END BRUSHES - Plastic Ferrule** - Nylox® abrasive nylon fill for buffing and polishing without compounds. They can also be used in automated applications for precision deburring and finishing of small part features.

Dia.	Filament Dia./Grit	Trim Length	Stem Size	Stem Length	Overall Length	Max. RPM	Standard Pack	Item Number
3/16"	.018/500	1/4"	1/8"	1-1/4"	1-7/8"	37,000	144	26136
1/4"	.018/500	3/8"	1/8"	1-1/4"	2-1/8"	37,000	144	26138
5/16"	.018/500	9/16"	1/8"	1-1/4"	2-3/8"	25,000	144	26146



Deburring the I.D. of a small machined part with miniature wire end brush.



Creating an antique finish on a brass plate.

## **NON-SPARKING BRUSHES**

Weiler offers an assortment of wire non-sparking brushes featuring high-quality bronze or brass wire that offer a very soft brushing action in comparison to steel and stainless steel and will not generate a spark when used on metal surfaces. These products are available in a variety of knot wire and crimped wire configurations for use in a broad range of surface cleaning applications, and they are manufactured with individual knot hole and solid ring construction for high performance and long life. Weiler's non-sparking power brushes are available with plain arbor holes, nuts, and permanently-attached stems for use on a variety of tools.

### **APPLICATIONS**

- Light to medium duty cleaning of surfaces, recesses, and ID's
- Deburring component parts machined from soft, non-ferrous metals
- Cleaning molds and dies in the injection-molding and extrusion of plastics
- Maintenance activities in areas where flammable or potentially explosive materials are present, such as refineries and petrochemical plants.







**STANDARD TWIST WHEELS** provide a heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications.



Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Max. AH Avail.	Thickness at Face Plates	Max. RPM	Std. Pack	Number Bronze
3"	.020	1/2"- 3/8"	20	3/8"	5/8"	1/2"	7/16"	25,000	10	08271
4"	.020	5/8" - 11	24	1/2"	7/8"	_	7/16"	20,000	5	13121

For threaded arbor hole adapters see page 71.





**CRIMPED WIRE WHEELS** provide a flexible brushing action and consistent performance for light-duty cleaning and deburring applications.



	Wire	Arbor	Face	Trim	Max. AH	Thickness at Face	Max.	Standard	Item Number
Diameter	Size	Hole	Width	Length	Avail.	Plates	RPM	Pack	Brass
6"	.005	5/8"-1/2"	1/2"	1-7/16"	1-1/4"	7/16"	6,000	2	01415
	.0118								01475

For arbor hole adapters see page 82. For other available arbor holes, see Arbor Hole Variations Table on page 61.





SMALL DIAMETER CRIMPED WIRE WHEELS provide a flexible brushing action and consistent performance for light-duty cleaning and deburring applications requiring a small wheel.



	Wire	Arbor	Face	Trim	Max.	Standard	Item Number
Diameter	Size	Hole	Width	Length	RPM	Pack	Brass
1-1/2"	.005	3/8"	1/4"	7/16"	20,000	10	29178
2"	.005	1/2"	3/8"	1/2"	20,000	10	29059
	.0118						29086
3"	.014	1/2"	5/8"	1"	20.000	10	29078



17641

CONFLEX BRUSH - Small diameter wheels permanently mounted onto a 1/4" stem to provide a very flexible brushing action.



	Wire	Face	Trim	Max.	Standard	Item Number
Diameter	Size	Width	Length	RPM	Pack	Brass
3"	.0118	1/2"	1"	20,000	10	17641 ■

■ Packaged product available. See pages 141-142 for details.



KNOT WIRE CUP BRUSHES provide heavy-duty brushing action with some flexibility for more demanding cleaning applications on relatively flat surfaces.



	Wire	Arbor	Trim	Max.	Standard	Item Number
Diameter	Size	Hole	Length	RPM	Pack	Bronze
2-3/4"	.020	5/8"-11 UNC	1"	14,000	1	13299
4"	.020	5/8"-11 UNC	1-1/4"	10,200	1	12776

For threaded arbor hole adapters see page 71.

**CRIMPED WIRE CUP BRUSHES** provide a very flexible brushing action for light-duty cleaning applications on somewhat irregular surfaces.



	Wire	Arbor	Trim	Max.	Standard	Item N	umber
Diameter	Size	Hole	Length	RPM	Pack	Bronze	Brass
3"	.020	5/8"-11 UNC	7/8"	14,000	1	13231	_
4"	.020	5/8"-11 UNC	1-3/8"	10,200	1	14616	-
5"	.014	5/8"-11 UNC	1-1/4"	9,000	1	_	14606
6"	.020	5/8"-11 UNC	1-1/4"	6,600	1	14316*	_





UTILITY CRIMPED WIRE CUP BRUSHES - Smaller diameter cup brushes that provide a flexible brushing action for light-duty cleaning applications.

**KNOT WIRE END BRUSH** features a hollow end and heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications in recessed areas.

_	

	Wire	Trim	Stem	Overall	Max.	Standard	Item Number
Diameter	Size	Length	Diameter	Length	RPM	Pack	Brass
1-3/4"	.006	3/4"	1/4"	2-5/16"	13,000	10	14310 •
	.0118						14314
2-3/4"	.0118	7/8"	1/4"	2-1/2"	6,000	1	14311

• Non-stock product, contact Customer Service for lead times and minimum order quantities.





	Wire	Trim	Stem	Overall	Max.	Standard	Item Number
Diameter	Size	Length	Diameter	Length	RPM	Pack	Bronze
1-1/8"	.020	7/8"	1/4"	2-5/8"	22,000	10	10067



**CRIMPED WIRE END BRUSHES** feature a solid end and very flexible brushing action ideal for light-duty cleaning applications in corners and hard-to-reach areas.



	Wire	Trim	Stem	Overall	Max.	Standard	Item Number
Diameter	Size	Length	Diameter	Length	RPM	Pack	Brass
1/2"	.005	7/8"	1/4"	2-9/16"	25,000	10	10158
1"	.005	7/8"	1/4"	2-5/8"	20,000	10	10128
1"	.0118	1"	1/4"	2-5/8"	22,000	10	10091



DOUBLE STEM, DOUBLE SPIRAL POWER TUBE BRUSHES - Constructed with four stem wires and a double spiral of straight wire fill material to provide a more aggressive internal cleaning action.



	Wire	Brush	Stem	Overall	Standard	Item Number
Diameter	Size	Part	Diameter	Length	Pack	Brass
1/2"	.006	2"	5/32"	5"	10	21178
5/8"	.008	2"	7/32"	5"	10	21219
3/4"	.006	2-1/2"	1/4"	5-1/2"	10	21179
1"	.006	2-1/2"	1/4"	5-1/2"	10	21218



**ROUND POWER TUBE BRUSHES** feature a single continuous length of stainless steel stem wire and a single spiral of crimped wire fill for a more flexible brushing action; suitable for use on smooth or threaded blind holes.



	Wire	Brush	Stem	Overall	Standard	Item Number
Diameter	Size	Part	Diameter	Length	Pack	Brass
1/4"	.004	1"	1/8"	3-1/2"	10	21332
1/2"	.005	1"	3/16"	3-1/2"	10	21182
1-1/2"	.008	1"	1/4"	3-1/2"	10	21152



SINGLE STEM, SINGLE SPIRAL HAND TUBE BRUSHES - Constructed using a single continuous length of galvanized steel stem wire and feature a formed eye loop for convenient hand use. The single spiral of straight wire fill allows for easy manual insertion into the ID.

	Wire	Brush	Stem	Overall	Standard	Item Number
Diameter	Size	Part	Diameter	Length	Pack	Brass
3/16"	.003	1-1/2"	3/32"	7"	10	21221
1/4"	.003	1-1/2"	3/32"	7"	10	21270
	.005					21139
3/8"	.004	2"	1/8"	8"	10	21191
1/2"	.004	2"	1/8"	8"	10	21165





Removing light corrosion and mill scale from coiled steel.





## **WIDE FACE BRUSHES**

Cylindrical brush assemblies have proven to be reliable and economical tools for a wide variety of industrial surface conditioning applications. In addition to gang-mounting a series of individual wheel brushes onto a shaft or reusable arbor, one-piece wide face brush units can be manufactured to cover broad surfaces or provide maximum brushing action in a minimum amount of space.

Cylindrical brushes can be manufactured using several different styles of construction, and the characteristics of each style of construction can significantly affect brush performance. Weiler will custom-design a wide face brush in the most appropriate type of construction for your specific application. For more information and to schedule a consultation with a Weiler Process Solutions expert visit: weilerabrasives.com/wps.

### **APPLICATIONS**

- Scrubbing debris from the surface of material during processing
- Removing corrosion, surface contamination, mill scale, or heat discoloration
- Roughening surfaces to promote adhesion or bonding
- Removing applied finishes and coatings
- Producing decorative surface finishes
- Deburring or finishing cylindrical parts
- Deburring the cut ends of tubing and extrusions

**DISPOSABLE BRUSH ASSEMBLIES** - Wide face assemblies for brushing flat surfaces can be manufactured as disposable units with a variety of available fill materials depending on the specific application. Available fills include; metallic filaments such as steel, stainless steel, or brass crimped wire; Nylox® nylon abrasive filaments; synthetic filaments such as nylon or heat-stabilized polypropylene; or natural fibers such as tampico.

Disposable mountings can be constructed of carbon steel or stainless steel components, and "flow-through" mountings which allow coolant to be circulated through the core and out the face of the brush are available for wet applications.

**REFILLABLE BRUSH ASSEMBLIES** - Wide face assemblies for brushing flat surfaces can also be manufactured as a replaceable brush unit wound onto a permanent and reusable arbor. Depending on the specific application and production environment, refilling reusable arbors may be a more economical option than using disposable units. Reusable mountings can be designed by Weiler or supplied by the customer.

In addition to the secondary operations such as nibbling and grinding of the brush face and dynamic balancing of the completed unit, Weiler also offers maintenance services on mounting hardware like collars and bearings.

**TUBE END DEBURRING BRUSHES** - Cylindrical rotary brushes are an ideal media for production applications involving the batch deburring of the ends of tubing that has been cut-to-length. Automated brushing systems are readily available and considerably less expensive to purchase and operate than chamfering machines.

Brush deburring machines can be integrated with cut-off operations to eliminate work-in-process and increase throughput, and they are flexible enough to be quickly adjusted for various shapes, sizes, and lengths of tubing. Unlike chamfering operations, brush deburring does not leave secondary burrs, brushing equipment is more tolerant of slight variations in machine set-up and tube length, and quality brushes last much longer than cutting inserts on double-end finishers.

Tube end deburring brushes are most commonly manufactured as disposable assemblies that are then mounted onto keyed shafts. High-tensile steel, hard-drawn steel, and Type 302 stainless steel wire are the most common fill materials used in tube end deburring brushes. Weiler offers high quality brushes with wire sizes from .006 to .020 and four available levels of fill density so that the brushing performance can be tailored to the material, burr condition, and budget of the end-user.

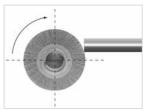
**CUSTOM TUBE END DEBURRING BRUSHES** - Please use the appropriate specification sheet on the next page when requesting a quotation on a custom tube end deburring brush.

### **NEED HELP?**

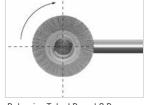
For more information and to schedule a consultation with a Weiler Process Solutions expert visit: weilerabrasives.com/wps.
To discuss specific requirements with a specialist call: 800-835.9999.

### **BRUSH-TUBE ORIENTATION**

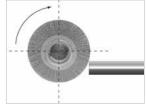
Brush-tube orientation determines which edges of the tube are deburred. The illustrations below show three orientations and the target edge.



Deburring Tube I.D.



Deburring Tube I.D. and O.D.



Deburring Tube O.D.

### **WIDE FACE BRUSH SPECIFICATION SHEET:**

To help us accurately quote a wide face brush for your application, please provide the following information:

Face W	idth		
Brush Diameter Adapter \ Roll-to-		Sideplate Diameter	Double Keyway  Arbor Hole Diameter
Distan			
Brush Diameter (Note: Tolerance Fill Material Fill Diame Fill Density: □ Economy □ Gen Face Width (Note: Tolerance is +/ Roll-to-Roll Distance - Through Ar Brush can be manufactured ho Sideplate Diameter Standard sizes: 6" brush = 3-3/4" 0.D. 8" brush = 5-1/4", 5-1/2" or 6-1/2 >8" brush = 5-1/2" or 6-1/2" 0.D. Maximum Operating RPM Adapter Width (Note: Adapters an Arbor Hole Diameter (Note: Cleara	eral Purpose  Heavy-Dut - 1/4") bor Dimension (Note: Toler olding the face width dimens " O.D.	ance is +/- 1/8") sion or the roll-to-roll dista	
☐ Keyway(s) Required ☐ Sin	gle 🗖 Double Keyway	Width Keyway	/ Depth
Intended Brush Use:			
Name:	ı	-nd-User Name	
Company Name:			
Address:		•	Zip:
Phone: ()			
Fax: ()			
E-mail:			

## FOR ADDITIONAL INFORMATION CALL:

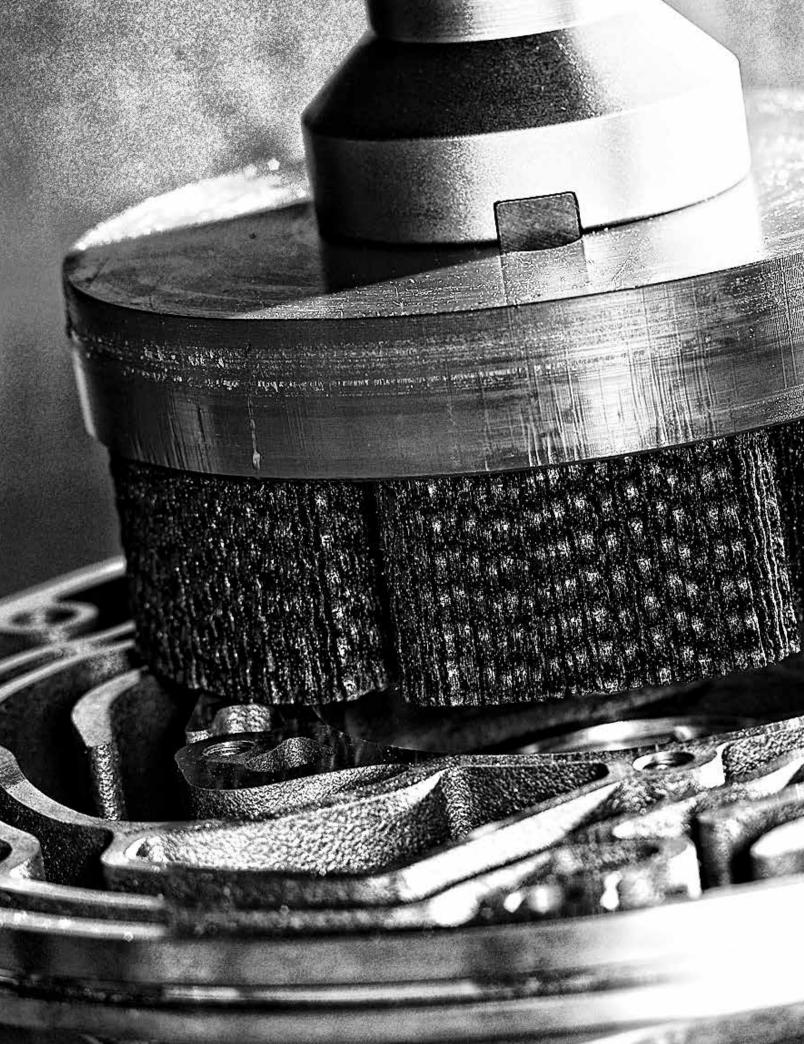
To discuss specific requirements with a specialist call: 800-835.9999

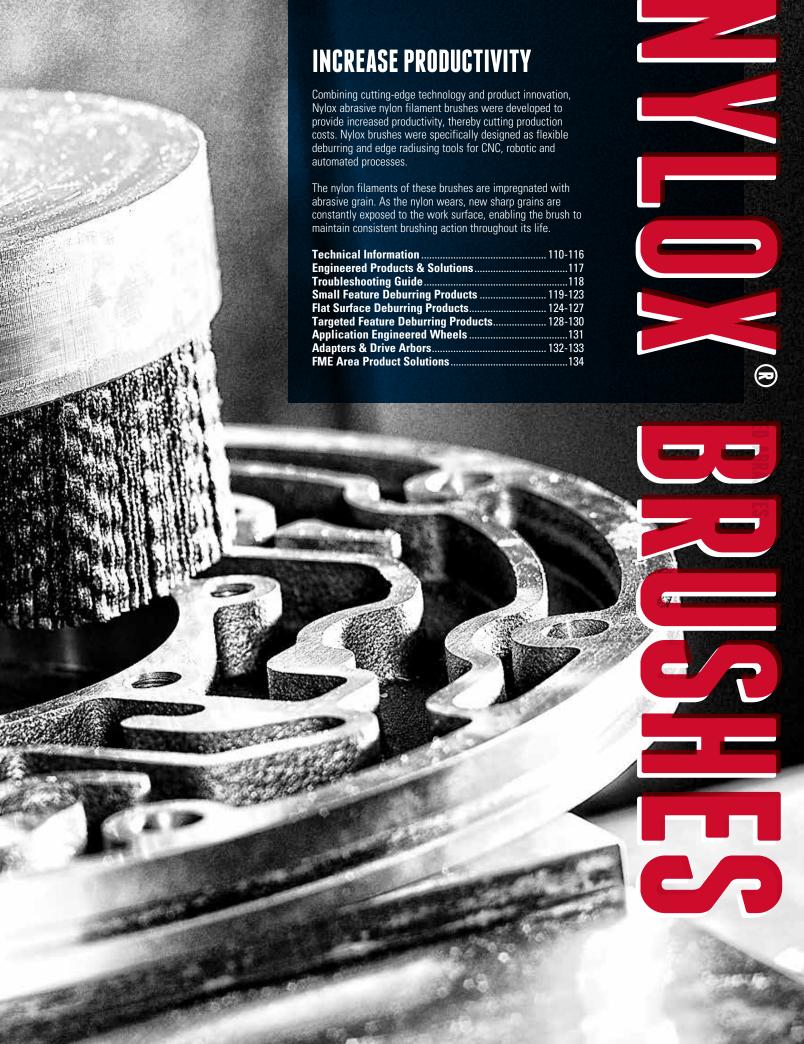
## FAX SPECIFICATION SHEET TO:

Customer Service Fax: 800-635-3615

## SUBMIT FORM ONLINE:

weilerabrasives.com/wide-face-brushes



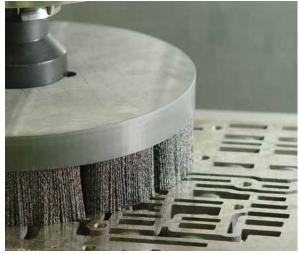


## **SOLUTIONS SHOWCASE**

### TRANSMISSION VALVE BODY

Problem: Burrs on transmission components can break away from parent components during use and cause transmission wear and eventual failure. Therefore, fluid passages must be completely burr-free.

**Solution:** A 10" Nylox® disc brush operating at 825 RPM in a vertical CNC machining center is an ideal solution for deburring this component. Since all of the burrs are on a single plane, the non-directional nature of a Nylox disc brush produces a part on which all edges have been uniformly deburred.



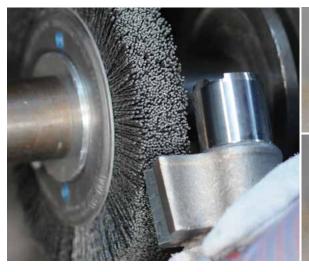




### STEERING COMPONENT

**Problem:** Manual deburring can be costly in many respects. Hard deburring tools and aggressive abrasive wheels do not allow much margin for operator error and the result is often high scrap rates.

Solution: Nylox brushes produce a flexible filing action that concentrates all of the abrasive cutting action on sharp edges, giving them the ability to remove burrs without altering overall part dimensions. For example, a 6" Burr-Rx\* wheel mounted onto a 1,725 RPM pedestal buffer is capable of deburring this steering component just as quickly as a convolute wheel but without the fear of over-radiusing the edges of the teeth or producing flat spots.



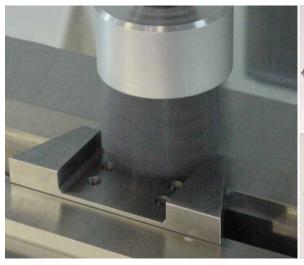


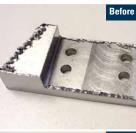


### **TOOL STEEL DEBURRING**

**Problem:** Traditional nylon abrasive brushes were not sufficiently aggressive to remove large burrs from materials like tool steels and stainless steels.

Solution: Weiler's next generation filament technology, embodied in the company's line of Burr-Rx brushes, creates sufficient aggression to handle the toughest deburring jobs. This enables more users to capture the benefits offered by in-machine deburring.

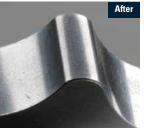












#### **PUMP GEAR**

Problem: Pumps are extremely susceptible to failure due to burrs. Due to the tight fit between components, all edges must be deburred and radiused to ensure proper function. Proper deburring of rotating pump gears is especially important.

Solution: A dedicated machine running 14" Nylox\* wheel brushes at 900 RPM was a low-cost solution for deburring these gears. By using dedicated equipment, cycle time was minimized and an acceptable edge condition was achieved.

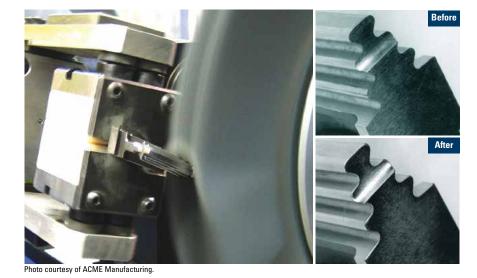




#### **CAST ALUMINUM HOUSING**

Problem: Although deburring the facemilled surfaces of castings is a very straight forward application for Nylox disc brushes, the limited availability of valuable machine time can be a perceived obstacle that prevents users from reaping the many benefits of implementing in-machine deburring operations.

Solution: The advanced ceramic grain technology of Weiler's Burr-Rx\* tools offer a deburring action that is up to 400% greater than traditional abrasive nylon brushes that contain silicon carbide or aluminum oxide filaments. This allows Burr-Rx deburring tools to be used at feed rates that dramatically reduce the amount of additional machine time required to perform a brushing operation.



#### **TURBINE BLADE**

**Problem:** Protecting turbine engine components against high-temperature fatigue is critical to ensure safe, reliable engine operation. Component edges must be burr-free and generally require an edge radius in the range of 0.005" to 0.060".

Solution: Robots are extremely wellsuited for this application because they can manipulate the component in many orientations in relation to the brush. Weiler works closely with users and robot integrators to develop products and process programs that maximize brush life while generating exceptional part quality and consistency.

# SELECTING THE RIGHT BRUSH

## **WHERE TO START?**

Sometimes it's necessary to design and manufacture a unique, custom-tailored product to meet your application requirements. Although Weiler offers such engineered solutions in all of our product lines, the innovative construction and value-added nature of the Nylox® line of nylon abrasive filament brushes showcases the creativity and expertise of our Application Engineering Team in designing products that have been tailored to the needs of the customer.



- Custom-engineered Nylox brushes can be designed and manufactured as variations on our standard products.
- Wide face brush assemblies for finishing flat surfaces or deburring cylindrical parts can also be designed and manufactured using Nylox nylon abrasive filaments. (See pages 100-101 for more information)

#### FOR SOLUTIONS TO DIFFICULT APPLICATIONS

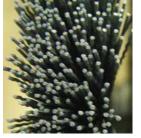
If the problem is too complex to be solved over the phone, we will determine if an evaluation should be conducted at our in-house lab or the user's facility.

For more information and to schedule a consultation with a Weiler Process Solutions expert visit: weilerabrasives.com/wps. To discuss specific requirements with a specialist call: 800-835.9999.

# TRIM LENGTH AND FILL DENSITY

To maximize brush life and reduce costs, always use the shortest trim, highest density brush that will adequately conform to the surface or part edges.

#### **LONG TRIM, LOW DENSITY**





These brushes offer a greater degree of flexibility that is ideal for applications requiring a high degree of brush conformability. However, the lower fill density can result in shorter brush life and less consistent performance.

#### **SHORT TRIM, HIGH DENSITY**





These brushes work with a faster action and less engagement with the brush face. This produces shorter cycle times, more consistent performance and longer life in applications that do not require a high degree of brush conformability.

# **GRIT SIZE COLORS**

Grit size is indicated by a dot on the product with the following colors:

Black 46 Grit

Green 120 Grit
Grey 180 Grit

White 320 Grit

Purple 600 Grit

Yellow 80 Grit

Red 60 Grit

Orange 240 Grit

Brown 500 Grit

Gold 200 Grit

Lt. Blue 800 Grit

Blue 1000 Grit

Pink 1200 Grit

# **PRODUCT ADVANTAGES**

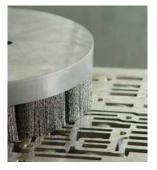
## PRODUCT ADVANTAGES

# AGGRESSIVE YET COMPLIANT



- Nylox® brushes do not alter the overall dimensions or geometry of a part.
- Filament compliance allows these brushes to conform to complex part shapes and reduces the need for ultraprecise programming and fixturing.

# IDEAL FOR DEBURRING



- Nylox filaments act like flexible files, deburring and radiusing edges as they wipe across them.
- Their limited aggression and flexible filing action also make them suitable for deburring a wider range of materials in comparison to wire-filled power brushes.

# IDEAL FOR AUTOMATION



- Abrasive grain is evenly distributed throughout the nylon filament.
- Extremely consistent performance throughout their product life.
- Ideal media for use in automated deburring and finishing processes.
- Ideal for dedicated production equipment or robotic cells.
- Can be directly integrated into the cycle of CNC machining centers.
- Improve part quality and consistency.
- Reduce direct labor cost.

# ENHANCED SURFACE FINISHES



- The compliant cutting action not only limits their ability to alter part dimensions, but it makes them an effective tool for refining surface texture characteristics without removing significant amounts of base material.
- Although they contain the same abrasive grain sizes, Nylox brushes will not generate the same prominent scratch pattern as a comparable coated abrasive product.

# **CONSTRUCTION ADVANTAGES**

#### **COMPETITOR'S METAL HUB**

- Metal hub components are assembled under high pressure, potentially damaging the filaments and causing premature breakage.
- Retaining ring displaces filament material, creating a void in the center of the brush face.
- Lower fill density can result in shorter life and less consistent performance.



#### WEILER'S COMPOSITE HUB

- Molded hub construction eliminates filament breakage.
- Uniform distribution of fill material and superior balance.
- Higher fill density provides more aggressive brushing and longer life.
- Consistent performance as the brush wears.



#### **WEILER'S COMPOSITE METAL HUB**

- Filaments retained using the latest polymer technology to prevent filament breakage.
- Metal components add impact resistance and dimensional stability.
- The highest filament density in the market ensures lowest cost-per-part.



#### WEILER'S PVC SHELL MILL

The PVC construction results in a very consistent, flat brush face. Their high dimensional precision makes them suitable for the most critical applications. They perform more consistently from the first part to the last.



#### **WEILER'S TUFTED FILAMENTS**

This construction style offers increased aggression due to added filament density. This enables processing of severe burrs or generating larger edge radii in shorter cycle times. The longer trim length allows for greater conformability and longer life.



#### WEILER'S MAXIMUM DENSITY

Maximum density brushes are uniquely suited for demanding applications characterized by large burrs and rapid feed rates.



# **PRODUCT CHARACTERISTICS**

# WHEEL BRUSHES



- Precision deburring of component parts after machining or grinding.
- Improving surface texture on machined or ground surfaces.
- Honing cutting tools and generating specific edge profiles and radii.
- Light duty cleaning and finishing of metals; light sanding of woods and composites.



# **DISC BRUSHES**



- Deburring flat surfaces on machined components.
- Improving texture on machined or ground surfaces.
- Deburring face-milled castings or forgings.
- · Blending tool marks after machining or grinding.



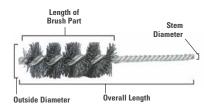
# **END BRUSHES**



- Deburring flat surfaces on machined components.
- Improving texture on machined or ground surfaces.
- Deburring face-milled castings or forgings.
- Blending tool marks after machining or grinding.



# **TUBE BRUSHES**



 Deburring and finishing applications in tubular component parts, drilled and tapered holes and machined bores and passages.



# **CROSSHOLE DEBURRING BRUSHES**



- · Deburring internal edges.
- Improving surface texture on internal bores.

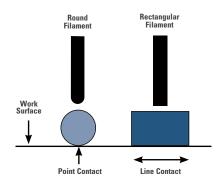


## FILAMENT CONFIGURATIONS

**ROUND FILAMENTS** - Due to their cross-sectional shape and the reduced contact with the work surface or part edges that result, round filaments provide a more compliant brushing action for less aggression and enhanced conformability.

**RECTANGULAR FILAMENTS** - Due to their shape, larger cross-sectional area and increased contact with the work, rectangular filaments provide a less compliant brushing action for much greater aggression and reduced conformability.

Crimping either type of filament along its length enhances conformability, allowing greater penetration of part edges into the brush face, often increases aggression. Crimped filaments are especially beneficial in maximum density disc brush designs.



# **ABRASIVE FILAMENTS**

Abrasive brush filaments are manufactured by extruding a mixture of liquefied polymer and abrasive grain. Unlike the filaments used in DIY grade abrasive brushes, industrial grade products like Weiler's Nylox\* and Burr-Rx\* brushes feature the highest grade of abrasive filament manufactured using a Type 6.12 nylon polymer. Industrial grade filaments also feature the highest quality abrasive materials that have been sifted and sorted to ensure that the grains are consistent in size. These grains may be one of four different types of abrasive:

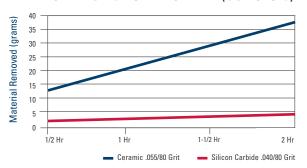
- ALUMINUM OXIDE (AO) is a duller, less aggressive grain typically used in finishing applications requiring a less pronounced scratch line pattern or deburring applications on materials where the use of SiC may be prohibited
- SILICON CARBIDE (SIC) is a sharp-edged grain that produces an effective cutting action. It is the most common grain used in industrial grade brushes.
- BURR-RX CERAMIC (CG) is an engineered abrasive grain that produces a superior cutting action and is compatible with the widest range of materials. It is the most effective grain available today!
- DIAMOND FILAMENT is a sharp-edged grain typically used for producing edge radii on hard materials like diamond, ceramic, CBN and glass.

# ADVANTAGES OF BURR®-RX CERAMIC

Nylox brushes containing the Burr-Rx black ceramic filament provide the following advantages over SiC and AO filaments.

- 400% greater cutting action
- Most cost-effective deburring brush
- Deburr tougher materials
- Minimize cycle time
- Maximize tool life
- Reduce finishing costs
- Eliminate hand deburring

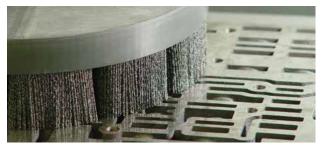
#### **DEBURRING ACTION - BURR-RX (CG VS. SIC)**



#### WHEEL VS. DISC BRUSH



Nylox wheel brushes are for applications where a targeted brushing action is required.



Disc brushes are for applications where the burrs lie along a single plane.

# OPERATING INFORMATION

# **OPERATING PARAMETERS**

Nylox\* abrasive brushes work with a wiping and filing action. Think of them as flexible files. The sides of the Nylox filament actually do the work. To achieve a maximum edge radius and complete burr removal, parts should be buried into a slow running brush face. They work best when operated at speeds that allow

WHEEL BRUSHES
PENETRATE 10% OF TRIM LENGTH



#### **OPERATING SPEEDS - WHEEL BRUSHES**

Diameter	RPM
2"	3,450 - 5,000
3"	2,500 - 3,450
4"	1,750 - 2,500
6"	1,350 - 1,750
8"	1,150 - 1,350
10"	950 - 1,150
12"	750 - 950
14"	650 - 850

fairly deep penetration of the work-piece into the brush filaments. Usually, faster speeds do not work as well as slower speeds. The maximum RPM marked on the brush is not the optimum working speed. A good rule of thumb is to stay under 2,500 SFPM in dry applications and 3,500 SFPM in wet applications.

# DISC BRUSHES 0.075" - 0.100" DEPTH OF INTERFERENCE



#### **OPERATING SPEEDS - DISC BRUSHES**

Diameter	RPM
1-3/4" & 2"	1,750 - 2,000
3"-4"	1,500 - 1,750
5" - 6"	1,250 - 1,500
8"	800 - 1,000
10"	700 - 800
12"	600 - 700
14"	500 - 600

**FEED RATE** is determined by the amount of deburring, edge radiusing or surface finishing required and the type of material that is being processed. It is generally application specific. Slower feeds result in a more aggressive brushing action. Based on the brushing action desired for a specific application, the feed rate can be increased or decreased.

Material	SiC and AO Grain Feed Rate	Burr-Rx Grain Feed Rate
Non-Ferrous	50 in./min.	80 in./min.
Cast Iron	30 in./min.	60 in./min.
Mild Steel and Ductile Iron	25 in./min.	50 in./min.
Stainless and Alloy Steels	15 in./min.	30 in./min.
Titanium and High Nickel Alloys	10 in /min	30 in /min

#### **RECOMMENDED MOTOR SIZES**

<b>Brush Diameter</b>	Motor Size	RPM*
3"-4"	1/4 HP	3,450
6"	1/2 HP	1,725
8"	3/4 HP	1,725
10"	1 HP	1,140
12"	1 HP	1,140
14"	1-1/2 HP	900

Note: This chart is based on 1" brush face.

# MINIMUM RECOMMENDED SPINDLE DIAMETER (from ANSI Standard B165.1)

Outside Dia. of Wheel Brush	Maximum Face Width of Wheel Brush	Minimum Outside Dia. of Spindle (Shaft)
2"	1/4"	1/4"
3"	3/4"	1/4"
3" (heavy-duty)	1"	3/8"
4"	1"	3/8"
6"	1-1/4"	1/2"
8"	1-1/4"	5/8"
10"	2"	3/4"
12"	3"	1"
14"	3"	1-1/4"
15"	3"	2"
16"	3"	2"

<sup>\*</sup> A variable-speed motor control may be required to achieve optimum operating RPM; see operating speed charts above.

## **COOLANT & WEAR COMPENSATION**

#### **COOLANTS**

Nylox® brushes can be run dry, without coolants. However, certain deburring conditions such as higher speeds, material properties and greater depth of penetration can create excessive heat buildup, causing the nylon filaments to melt and smear on the work surface. If the speed or depth of penetration cannot be changed, coolants are recommended to overcome heat smear. Coolants will also help produce finer finishes.

#### **WEAR COMPENSATION**

On dedicated equipment, it is possible to automate wear compensation by using electronic controls to monitor the load on drive motors and adjust the position of the brushing tool to maintain a relatively consistent amount of interference or pressure. Since this is typically not possible with standard CNC machine tools, there are three other possible methods of compensating for tool wear for "in-machine" implementations of Nylox brushes.

#### **AUTOMATIC INDEXING**

Most CNC controllers allow tool wear compensation to be accomplished by programming a "macro" - routine to periodically adjust the position of the tool based upon the number of parts produced. Some experimentation may be required to determine the frequency and amount of adjustment that will result for most consistent performance and maximum brush life.

#### **PROBING**

If the machining center has the capability to probe the face of the brush, this feature can be used to gauge the true position of the filament tips. Adjustments to the brush position can then be made to maintain a consistent amount of interference between the tool and the part.

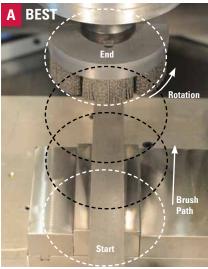
#### **MANUAL**

If the other methods cannot possibly be used, machine operators can adjust the brush position based on either statistical process control data or visual inspection of completed parts.

**THE IDEAL TOOL PATH** for a Nylox Disc brush is very similar to the path of the face mill that produced the burr. However, three differences exist:

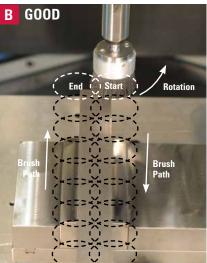
- The rotation direction of the brush should be opposite of the cutting tool that created the burr.
- The length of the path must be longer than the part. Unlike a cutter path that can stop when the leading edge of the cutter
  reaches the end of the part, the tool path of a brush should continue until the trailing edge of the brush reaches the end of
  the part.
- The centerline of the brush may need to be off-set from the center of the part in order to maximize the number of filaments
  that strike the part at a perpendicular angle. This is especially important when the diameter of the brush is similar to the
  width of the part.

The part is deburred in the shortest cycle time with the lowest consumable cost-per-part.



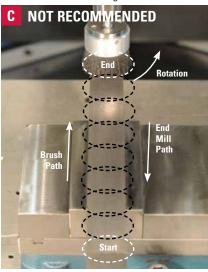
If a large diameter brush can be used, the centerline of the brush should be positioned on the center of the part. Ideally, the brush should be 3-4" wider than the part.

The part is deburred, but requires a longer cycle time. When a large brush will not fit in the tool changer, this method is recommended.



If a small diameter brush must be used, the centerline of the brush should be positioned on the edge of the part. This maximizes aggression by increasing the amount of perpendicular contact between the brush filaments and the burred edge.

Produces less deburring than A & B.



Positioning a small diameter brush with its centerline on the center of the part is not recommended. This configuration will not allow perpendicular contact of the filaments against the burred edge.



#### **NYLOX® BRUSHES IN AUTOMATED ENVIRONMENTS**

#### MYTH:

The abrasive grain in the Nylox brush will affect the accuracy of the equipment over time.

#### **FACT:**

The abrasive grain in the Nylox brushes will not result in accelerated machine wear over time when used with proper filtration (50-micron or finer).



#### **Automotive Case Study**

In the auto industry a five year study was conducted on the use of Weiler Nylox brushes with silicon carbide (SiC) grain in the manufacturing of aluminum intake and exhaust manifolds. Over the period of the study, there was no noticeable difference in way wear between machines that ran brushes and those that did not. A 50-micron coolant filter worked as specified to remove the residuals from the brushing process.

#### **Aerospace Case Study**

A three year study was conducted on the use of Weiler Nylox brushes with ceramic grain (CG) in the manufacture of jet engine components. Over the period of the study, there was no loss in accuracy in the aerospace manufacturer's machines. A 50-micron coolant filter worked as specified to remove the residuals from the brushing process.

# ENGINEERED PRODUCTS AND CUSTOMIZED SOLUTIONS



Two members of our Application Engineering Team discuss the results after testing an engineered product.

#### WE PROVIDE YOU WITH THE MOST COST-EFFECTIVE APPLICATION SOLUTIONS

Sometimes it is necessary to design and manufacture a unique, custom tailored product to meet your application requirements. Although Weiler offers such engineered solutions in all of our product lines, the innovative construction and value-added nature of the Nylox® line of nylon abrasive filament brushes showcases the creativity and expertise of our Application Engineering Team in designing products that have been tailored to the needs of the customer.

- Custom-engineered Nylox brushes can be designed and manufactured as variations on standard product configurations such as wheel, disc, cup, end, or tube brushes.
- Weiler's exclusive Burr-Rx<sup>®</sup> and Bore-Rx<sup>™</sup> brushing tools can be engineered to meet the demands of a specific application.
- Wide face brush assemblies for applications such as finishing flat surfaces or deburring cylindrical parts can also be designed and manufactured using Nylox nylon abrasive filaments. (See pages 94-95 for more information)

#### FOR SOLUTIONS TO DIFFICULT APPLICATIONS

If the problem is too complex to be solved over the phone, we will determine if an evaluation should be conducted at our in-house lab or the user's facility.

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# TROUBLESHOOTING GUIDE

There are many variables in Nylox® applications. If the Nylox brush you are using does not accomplish the desired results, select a solution from the suggestions below for your specific application.

Problem	Recommended Solutions
Brush not aggressive enough	Increase filament diameter and/or grit size
	• Increase filament density by using round straight rather than round crimped
	• Increase surface contact by using rectangular rather than round
	• Increase pressure/depth of interference
	• Increase surface speed by increasing spindle RPM
	Use a larger diameter brush
	Reduce trim length or feed rate
Brush too aggressive	Reduce filament diameter and/or grit size
	Reduce filament density by using round crimped rather than round straight
	Reduce surface contact by using round rather than rectangular
	Reduce pressure/depth of interference
	Reduce surface speed by reducing spindle RPM
	• Use a smaller diameter brush
	• Increase trim length or feed rate
Brush not conformable enough	• Increase trim length
	Reduce filament diameter
	• Reduce filament density by using round crimped rather than round straight or rectangular
	Reduce surface speed by reducing spindle RPM
	Reduce feed rate
Finer final finish required	• Increase surface speed by increasing spindle RPM
	Decrease grit size
	• Use brush with a coolant
Coarser final finish required	Reduce surface speed by reducing spindle RPM
	• Increase grit size
	Use brush without a coolant
Filaments melt/smear on workpiece	Reduce surface speed by reducing spindle RPM
	Use a smaller diameter brush
	• Use brush with a coolant
Short brush life	• Increase filament density
	Reduce pressure/depth of interference

#### **NEED HELP?**

For more information and to schedule a consultation with a Weiler Process Solutions expert visit: weilerabrasives.com/wps.

To discuss specific requirements with a specialist call: 800-835.9999.

# **SMALL FEATURE DEBURRING PRODUCTS**

# **SMALL DIAMETER WHEELS**

Ideal for recesses and internal features or delivering targeted brushing action to a specific area. Our Burr-Rx® black ceramic grain filament wheels deliver up to a 400% greater edgecutting action compared to traditional silicon carbide and aluminum oxide filaments for the fastest, most aggressive action for minimum cycle times and maximum life.

#### **APPLICATIONS**

- Deburring keyways, slots and crosshole intersections
- Honing and finishing of cylindrical bores

BURR-RX® SMALL DIAMETER WHEELS - Metal Hub - Crimped Round Black Ceramic Filament

Diameter	Filament Dia./Grit	Arbor Hole	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number
1-1/4"	.026/120	1/4"	5/16"	5/16"	10,000	10	17551
1-1/2"	.026/120	1/2"	3/8"	1/4"	10,000	10	17541
2"	.026/120	1/2"	3/8"	1/2"	10,000	10	17548
	.035/80						17555
	.055/80						17542
2-1/2"	.026/120	5/8"	1/2"	11/16"	10,000	10	17556
	.035/80						17557
3"	.026/120	1/2"	1/2"	1"	10,000	10	17565
	.035/80						17567
	.043/120						17568

Other diameters and grit sizes available upon request.



Deburring the edges of a machined aluminum component.



#### SMALL DIAMETER WHEELS - Metal Hub - Crimped Round Silicon Carbide Filament

	Filament	Arbor	Face	Trim	Max.	Standard	ltem
Diameter	Dia./Grit	Hole	Width	Length	RPM	Pack	Number
1-1/8"	.022/120	1/4"	5/16"	1/4"	10,000	10	17532 •
1-1/4"	.022/120	1/4"	5/16"	5/16"	10,000	10	17535
1-3/8"	.018/500	1/4"	5/16"	3/8"	10,000	10	16310*
1-1/2"	.022/120	1/2"	3/8"	1/4"	10,000	10	17628
	.035/180						29353
2"	.018/500	1/2"	3/8"	1/2"	10,000	10	17533
	.022/320						17543
	.040/120						17633
2"	.022/120	5/8"	7/16"	7/16"	10,000	10	17629
2-1/2"	.022/320	5/8"	1/2"	11/16"	10,000	10	29356
	.022/120						29123
	.035/180						29280 •
3"	.035/180	1/2"	1/2"	1"	10,000	10	29088
	.022/320						17563
	.022/120						16315
	.040/120						16263

Other diameters and grit sizes available upon request. Aluminum oxide\* • Non-stock product, contact Customer Service for lead times and minimum order quantities.

#### **DRIVE ARBORS** - For mounting small diameter wheels into a collet or chuck.

		0						
Arbor Diameter	Stem Diameter	Stem Length	Length of Shaft	For Brushes with Max. Dia. of	Overall Length	Max. RPM	Standard Pack	Item Number
			ι	Inthreaded Sha	ft			
1/4"	1/4"	1-1/8"	3/16"	2"	2-1/16"	20,000	5	07723
				Threaded Shaf	t			
1/2"	1/4"	3/4"	3/4"	3"	1-3/4"	25,000	5	07724
5/8"	1/4"	3/4"	3/4"	3"	1-13/16"	25,000	5	07729
1/2"	1/4"	7/8"	3/4"	3"	1-11/16"	20,000	5	07721
1/4"	1/4"	1-1/16"	1-1/8"	2"	2-9/16"	20 000	5	07725

#### **PLASTIC ADAPTERS** for mounting small diameter wheels onto various arbor sizes.

Fixed Arbor Hole Size	Adapted Arbor Hole Size	Standard Pack	Item Number
1/2"	1/4"	10	04400
1/2"	3/8"	10	04401
5/8"	1/2"	10	04402







07729











Deburring small features on a powdered metal part.

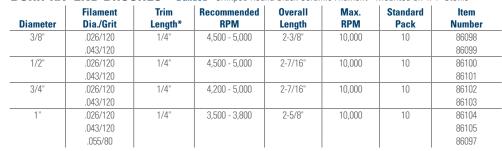
# **END BRUSHES**

Featuring an integral stem for convenient mounting into a tool holder or collet, Nylox® end brushes and miniature end brushes are suitable for addressing recesses and internal features, or delivering a targeted brushing action to a specific area on a part.

#### **APPLICATIONS**

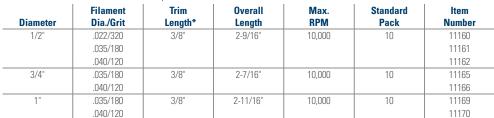
- Deburring small recessed areas and internal part features
- Finishing slots and recessed surfaces on machined parts





<sup>\*</sup> Trim length from bands





<sup>\*</sup> Trim length from bands

#### END BRUSHES - Crimped Round Silicon Carbide Filament - Mounted on 1/4" Stems

Diameter	Filament Dia./Grit	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number
1/2"	.022/320	7/8"	2-9/16"	10,000	10	10172
	.035/180					10173
	.040/120					10174
3/4"	.022/320	7/8"	1-1/2"	10,000	10	10152
	.035/180					10153
	.040/120					10154
1"	.022/320	7/8"	2-3/4"	10,000	10	10155
	.035/180					10156
	.040/120					10157





11166

# 26136

#### MINIATURE END BRUSHES - Plastic Ferrule - Crimped Round Silicon Carbide Filament

Mounted on 1/8" stems

Diameter	Filament Dia./Grit	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number
3/16"	.018/500	1/4"	1-7/8"	37,000	144	26136
1/4"	.018/500	3/8"	2-1/8"	37,000	144	26138
5/16"	.018/500	9/16"	2-11/32"	25,000	144	26146

# MINI DISC BRUSHES

Featuring a precision machined aluminum cup, Weiler's mini-disc brushes are designed to be the most cost-effective media for applications requiring a smaller brushing tool.

#### **APPLICATIONS**

- Deburring flat surfaces on machined components
- Improving texture characteristics on machined or ground surfaces
- Deburring face-milled castings or forgings
- Blending tool marks after machining or grinding

#### BURR-RX\* MINI DISC BRUSHES - Maximum Density - Crimped Black Ceramic Filament

Diameter	Filament Dia./Grit	Arbor Hole	Drive Arbor + Recommendation	Trim Length	Max. RPM	Standard Pack	ltem Number
			Round Fi	lament			
2"	.026/120	3/8"	89029 or 89033	1-1/4"	4,500	2	86106
	.035/80					1 1	85738
	.043/120					2	86107
	.055/80					2	85733
3"	.026/120	3/8"	89029 or 89033	1-1/4"	4,500	1	86109
	.035/80						86013
	.043/120						86110
	.055/80						86111
			Rectangula	r Filament			
2"	80	3/8"	89029 or 89033	1-1/4"	4,500	1	85736
3"	80	3/8"	89029 or 89033	1-1/4"	4,500	1	86014

<sup>+</sup> See page 133 for drive arbor specifications.

#### MINI DISC BRUSHES - Silicon Carbide Filament

Diameter	Filament Dia./Grit	Arbor Hole	Drive Arbor + Recommendation	Trim Length	Max. RPM	Standard Pack	Item Number
			Round Fi	lament			
1-3/4"	.035/180	5/8"	89023 or 89024	1-1/4"	6,000	2	85753
	.022/120						85751 •
	.040/80						85750
			Rectangular	r Filament			
1-3/4"	80	5/8"	89023 or 89024	1-1/4"	6,000	2	85752
2"	80	3/8"	89029 or 89033	1-1/4"	4,500	2	85773*
3"	80	3/8"	89029 or 89033	1-1/4"	4,500	1	85981*

<sup>+</sup> See page 133 for drive arbor specifications.

Deburring the machined face of an aluminum component.







85981

# **CUP BRUSHES**

Weiler also offers an assortment of Nylox® tools featuring traditional cup brush construction for deburring and finishing use in lighter duty applications. These brushing tools can be used on dedicated machines in automated processes or on low speed/high torque hand-held tools for manual applications.

#### **APPLICATIONS**

Deburring and finishing complex or contoured parts

#### **CUP BRUSHES - Crimped Round Silicon Carbide Filament**

Diameter	Filament Dia./Grit	Arbor Hole	Trim Length	Max. RPM	Standard Pack	ltem Number
2-3/4"	.022/320	1/4" Stem	1-1/4"	6,000	1	14401 •
	.035/180					14403 •
	.040/120					14404
3-1/2"	.035/180	5/8"-11	1-1/2"	12,000	1	14413
	.040/120					14414
5"	.040/120	5/8"-11	1-1/4"	9,000	1	14576
6"	.040/120	5/8"-11	1-1/4"	6,600	1	14516*
	.040/80					14506*

<sup>\*</sup> With internal nut



NOTE See adapters on pages 132-133

<sup>\*</sup> Maximum density

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.



Deburring internal bores of a cylinder head.

#### CUSTOMIZABLE CROSSHOLE DEBURRING SOLUTIONS

## Replacement Bore-Rx Brush Heads and Reusable Bore-Rx Arbors

In high production applications, reusable arbors reduce manufacturing costs by allowing the use of inexpensive brush head replacements. Brush heads are made-to-order in diameters ranging from 7/8" to 1-1/2" with face widths of 1/4" to 1". They are available on 3/16" and 1/4" pins. The pin diameter is based on the application and determines brush density. To discuss specific requirements with a specialist call: 800-835.9999.



Reusable Extension 03991 • 8" Overall Length

vecetitetetetete

# **BORE-RX™ CROSSHOLE DEBURRING BRUSHES**

These brushes are designed for automated applications in CNC machining centers and dedicated machines. They are ideal for removing burrs from internal edges and finishing bores. Since they eliminate off-hand deburring, they improve part-to-part consistency and reduce direct labor content. Bore-Rx brushes are available in sizes ranging from 7/8" to 4" and can be readily adapted into a machining center's tool changer using an end-mill holder or 3/8" collet.

#### **Operating Parameters For Bore-Rx Brushes**

Brush Diameter	Recommended RPM	Recommended Feed Rate
5/8" - 7/8"	3000	20"/min
1" - 1-1/2"	3000	20"/min
2" - 2-1/2"	2000	20"/min
3" - 4"	1500	20"/min

#### **Tool Paths for Crosshole Deburring**

An effective tool path for most crosshole deburring jobs is circular interpolation using the following guidelines to determine diameter of interpolation. The interpolation should be performed at a depth where the center of the brush face is at the center of the intersecting hole.

Diameter of Interpolation = Hole Dia. - 0.975 x Brush Dia.

#### **Tool Paths for Bore Finishing**

Nylox® brushes can be used to improve the surface finish of bores. The best tool path normally involves helically interpolating the bore. The above recommendations for speed, feed and diameter of interpolation are also valid for bore finishing. The use of coolant is highly recommended in order to achieve maximum surface finish improvement.



86155

#### BORE-RX® BRUSHES - 3/8" Stem - Crimped Round Black Ceramic Filament

Diameter	Filament Dia./Grit	Face Width	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number
7/8"	.026"/120	3/4"	.160"	4-3/4"	8,000	1	17206
1"	.026"/120	3/4"	.215"	4-3/4"	8,000	1	17208
1-1/4"	.026"/120	3/4"	.345"	4-3/4"	8,000	1	17210
1-1/2"	.026"/120	1"	.475"	5"	8,000	1	17212
2"	.026"/120	1"	.535"	3-1/4"	6,000	1	17215
2-1/2"	.055"/80	1"	.765"	3-1/4"	6,000	1	17217
3"	.026/120	1"	.560"	3-1/4"	6,000	1	86150
	.043/120						86151
	.055/80						86152
4"	.026/120	1"	1.040"	3-1/4"	6,000	1	86154
	.043/120						86155
	.055/80						86156

Note: All Bore-Rx brush stems have a 2" long flat for use in end mill holders. Alternatively, they can be mounted in 3/8" collets

# **TUBE BRUSHES**

Nylox\* power tube brushes are ideal for internal deburring and finishing applications in tubular component parts, drilled and tapered holes, and machined bores and passages. These brushes are suitable for use in drill presses, manual drills and CNC machine tools. See page 92 for operating guidelines.

TUBE BRUSHES - Micro Abrasive - For ultra-fine deburring and finishing of small internal holes.

	Length of	Stem	For Hole I	Diameters	Overall	Standard	Item
Diameter	Brush Part	Diameter	Decimal	Fraction	Length	Pack	Number
		2000	Grit Alumin	um Oxide Fi	lament		
.030"	1/2"	.015	.031"	1/32"	4"	10	26900
.050"	1/2"	.022	.047"	3/64"	4"		26901
.075"	3/4"	.033	.063"	1/16"	4"		26902
.090"	3/4"	.041	.078"	5/64"	4"		26903
.105"	1"	.041	.094"	3/32"	4"		26904
.125"	1"	.064	.109"	7/64"	4"		26905
.135"	1"	.075	.125"	1/8"	4"		26906
		600	Grit Aluminu	ım Oxide Fil	ament		
.165"	1"	.087	.156"	5/32"	5"	10	26907
.190"	1"	.087	.188"	3/16"	5"		26908
.260"	1"	.115	.250"	1/4"	5"		26909
.325"	1"	.115	.313"	5/16"	5"		26910
.385"	1"	.147	.375"	3/8"	5"		26911
.515"	1"	.194	.500"	1/2"	5"		26912
.640"	1"	.194	.625"	5/8"	5"		26913 •
.765"	1"	.212	.750"	3/4"	5"		26914 •
.890"	1"	.212	.875"	7/8"	5"		26915 •





BURR-RX® TUBE BRUSHES - Crimped Black Ceramic Filament - 1/4" Cadmium Plated Stems

Nominal Diameter	Traditional Diameter	Metric Diameter	Filament Dia./Grit	Length of Brush Part	Stem Diameter	Overall Length	Standard Pack	ltem Number
6mm	0.236"	6.00 mm	.026/120	1"	1/4"	3-1/2"	10	22602
1/4"	0.250"	6.35 mm	.026/120	1"	1/4"	3-1/2"	10	21757 •
7mm	0.276"	7.00 mm	.026/120	1"	1/4"	3-1/2"	10	22603
8mm	0.315"	8.00 mm	.026/120	1"	1/4"	3-1/2"	10	22604
9mm	0.354"	9.00 mm	.026/120	1"	1/4"	3-1/2"	10	22605
3/8"	0.375"	9.53 mm	.026/120	1"	1/4"	3-1/2"	10	21758
10mm	0.394"	10.00 mm	.026/120	1"	1/4"	3-1/2"	10	22606
11mm	0.433"	11.00 mm	.026/120	1"	1/4"	3-1/2"	10	22607
12mm	0.472"	12.00 mm	.026/120	1"	1/4"	3-1/2"	10	22608
1/2"	0.500"	12.70 mm	.026/120	1"	1/4"	3-1/2"	10	21759
14mm	0.551"	14.00 mm	.026/120	1"	1/4"	3-1/2"	10	22610
9/16"	0.563"	14.29 mm	.026/120	1"	1/4"	3-1/2"	10	21760 •
5/8"	0.625"	15.88 mm	.026/120	1"	1/4"	3-1/2"	10	21761
18mm	0.709"	18.00 mm	.026/120	1"	1/4"	3-1/2"	10	22614
3/4"	0.750"	19.05 mm	.026/120	1"	1/4"	3-1/2"	10	21762
20mm	0.787"	20.00 mm	.026/120	1"	1/4"	3-1/2"	10	22616
7/8"	0.875"	22.23 mm	.026/120	1"	1/4"	3-1/2"	10	21763
1"	1.000"	25.40 mm	.026/120	1"	1/4"	3-1/2"	10	21764
1-1/4"	1.250"	31.75 mm	.026/120	1"	1/4"	3-1/2"	10	21765 •





Crosshole deburring an aluminum manifold.



TUBE BRUSHES - Crimped Round Silicon Carbide Filament - Double Stem, Single Spiral

<b>D</b>	Filament	Length of	Stem	Overall	Standard	Item
Diameter	Dia./Grit	Brush Part	Diameter	Length	Pack	Number
1/4"	.022/320	2"	5/32"	5"	10	21126
3/8"	.022/320	2"	5/32"	5"	10	21128
1/2"	.022/320	2"	3/16"	5"	10	21130
	.040/80					21325
5/8"	.022/320	2"	7/32"	5"	10	21132
	.040/80					21326
11/16"	.022/320	2"	7/32"	5"	10	21133
3/4"	.022/320	2-1/2"	1/4"	5-1/2"	10	21134
	.040/80					21327
7/8"	.022/320	2-1/2"	1/4"	5-1/2"	10	21136
	.040/80					21976
1"	.022/320	2-1/2"	1/4"	5-1/2"	10	21138
	.040/80					21328
1-1/4"	.022/320	2-1/2"	1/4"	5-1/2"	10	21306
	.022/120					21304
	.035/180					21305
	.040/80					21329
1-1/2"	.022/320	2-1/2"	1/4"	5-1/2"	10	21309
	.035/180					21308
	.040/80					21330
1-3/4"	.040/80	2-1/2"	1/4"	5-1/2"	10	21311
	.035/180					21312
2"	.022/320	2-1/2"	1/4"	5-1/2"	10	21473
	.040/80					21345







21473



Deburring a bearing cage in a CNC machining center.

# **DISC BRUSHES**

Manufactured using a tufted filament configuration and longer trim length for increased aggression, greater conformability and longer product life in comparison to monofilament disc brushes, which feature a distribution of short individual bristles.

Burr-Rx® disc brushes feature Weiler's advanced black ceramic grain filament, which delivers up to a 400% greater edge cutting action in comparison to traditional silicon carbide and aluminum oxide filaments for the fastest, most aggressive deburring action for minimum cycle times and maximum life.

All Burr-Rx disc brushes are manufactured using a new process that results in a very consistent, flat brush face in comparison to traditional construction, which utilizes a molded backing. The high dimensional precision of these tools means that the brushes are suitable for the most critical applications and perform more consistently from first part to last. In addition, the machined polymer backings are designed to mount directly onto a standard shell mill holder for convenient use in CNC machining centers.

#### **APPLICATIONS**

- Deburring flat surfaces on machined components
- Improving texture characteristics on machined or ground surfaces
   Blending tool marks after machining or grinding

FLAT SURFACE DEBURRING PRODUCTS

- Deburring face-milled castings or forgings

**OPERATING SPEEDS - DISC BRUSHES** 



Disc brush shown with shell mill holder

#### **DISC BRUSHES** 0.075" - 0.100" DEPTH OF INTERFERENCE



Diameter	RPM
1-3/4" & 2"	1,750 - 2,000
3"-4"	1,500 - 1,750
5" - 6"	1,250 - 1,500
8"	800 - 1,000
10"	700 - 800
12"	600 - 700
14"	500 - 600

#### FEED RATE RECOMMENDATIONS

Feed rate is determined by the amount of deburring, edge radiusing or surface finishing required, and the type of material that is being processed. It is generally application specific. Slower feeds result in a more aggressive brushing action. Based on the brushing action desired for a specific application, the feed rate can be increased or decreased.

Material	SiC and AO Grain Feed Rate	<b>Burr-Rx Grain Feed Rate</b>
Non-Ferrous	50 in./min.	80 in./min.
Cast Iron	30 in./min.	60 in./min.
Mild Steel and Ductile Iron	25 in./min.	50 in./min.
Stainless and Alloy Steels	15 in./min.	30 in./min.
Titanium and High Nickel Alloys	10 in./min.	30 in./min.



Compatible with 3" shell mill holders.

BURR-RX® SHELL MILL HOLDER DISC BRUSHES - Crimped Black Ceramic Filament

Diameter	Filament Dia./Grit	Arbor Hole	Trim Length	Max. RPM	Standard Pack	Item Number
			Round Filament			
4"	.026/120	1-1/4"	1-1/2"	2,500	1	86112
	.043/120					86113
	.043/120					86204*•
	.055/80					86114*
6"	.026/120	1-1/4"	1-1/2"	2,500	1	86115
	.043/120					86116
	.055/80					86117*
8"	.026/120	1-1/4"	1-1/2"	2,000	1	86141 •
	.043/120					86142
	.055/80					86143*
10"	.026/120	1-1/4"	1-1/2"	2,000	1	86125 •
	.043/120					86121
	.055/80					86122*
			Rectangular Filame	nt		
4"	80	1-1/4"	1-1/2"	2,500	1	86167*
6"	80	1-1/4"	1-1/2"	2,500	1	86198*
8"	80	1-1/4"	1-1/2"	2,500	1	86199*





Non-stock product, contact Customer Service for lead times and minimum order quantities.

#### **COMPOSITE HUB DISC BRUSHES -** Silicon Carbide Filament

Diameter	Filament Dia./Grit	Arbor Hole	Drive Arbor Recommendation	Trim Length	Max. RPM	Standard Pack	ltem Number
			Crimped Roun				
3"	.035/180	7/8"	07700	1-1/2"	2,500	1	85776
	.040/120						85778
3-1/2"	.022/320	7/8"	07700	1-1/2"	2,500	1	85792
	.035/180						85794
	.040/80						85798
4"	.022/320	7/8"	07700	1-1/2"	2,500	1	85812
	.035/180						85814
	.040/120						85816
	.040/80						85818
5"	.035/180	7/8"	07700	1-1/2"	2,500	1	85832
	.040/80						85836 •
6"	.035/180	7/8"	07701	1-1/2"	2,000	1	85850
	.040/120						85852
	.040/80						85854
8"	.035/180	7/8"	07702	1-1/2"	2,000	1	85908
	.040/120						85912 •
	.040/80						85914 •
10"	.040/120	7/8"	07703	1-1/2"	1,750	1	85930
	.040/80						85932 •
12"	.035/180	7/8"	07703	1-1/2"	1,750	1	85946 •
	.040/120						85948 •
			Rectangular	Filament			
3"	120	7/8"	07700	1-1/2"	2,500	1	85786
	80						85788
3-1/2"	320	7/8"	07700	1-1/2"	2,500	1	85800 •
	80						85806
4"	180	7/8"	07700	1-1/2"	2,500	1	85822 •
	120						85824
	80						85826
	80						85995•
	80						85900 <b>*</b> •
5"	120	7/8"	07700	1-1/2"	2,500	1	85842 •
	80						85844
	80						85978•
6"	120	7/8"	07701	1-1/2"	2,000	1	85860
	80		07701				85862
	80		07715				85996•
	80		07715				85901 <b>*•</b>
8"	120	7/8"	07702	1-1/2"	2,000	1	85920 •
	80						85922
9"	80	7/8"	07702	1-1/2"	1,750	1	85997•
10"	120	7/8"	07703	1-1/2"	1,750	1	85938 •
	80						85940 •



Deburring the edges of an aluminum engine cover.



85852



85780



85978

## \* Banded for extra aggression

#### **Arbor & Drive Hole Specifications for Composite Hub Disc Brushes**

<b>Brush Diameter</b>	<b>Arbor Hole Diameter</b>	Drive Holes
3"-5", 6" Max. Density	7/8"	(2) 1/4" dia. on a 1-1/4" dia. bolt circle
6"	7/8"	(3) 1/4" dia. on a 3" dia. bolt circle
8"	7/8"	(4) 1/4" dia. on a 3" dia. bolt circle
10"	7/8"	(4) 1/4" dia. on a 1.625" dia. bolt circle
12"	7/8"	(4) 1/4" dia. on a 1.625" dia. bolt circle





Maximum density

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.



Removing burrs and breaking sharp edges on a transmission component.

# MINI DISC BRUSHES

Featuring a precision machined aluminum cup, Weiler's mini-disc brushes are designed to be the most cost-effective media for applications requiring a smaller brushing tool.

#### **APPLICATIONS**

- Deburring flat surfaces on machined components
- Improving texture characteristics on machined or ground surfaces
- Deburring face-milled castings or forgings
- Blending tool marks after machining or grinding



85733



85752

#### BURR-RX® MINI DISC BRUSHES - Maximum Density - Crimped Black Ceramic Filament

Diameter	Filament Dia./Grit	Arbor Hole	Drive Arbor + Recommendation	Trim Length	Max. RPM	Standard Pack	Item Number
			Round Fi	lament			
2"	.026/120	3/8"	89029 or 89033	1-1/4"	4,500	2	86106
	.035/80					1	85738
	.043/120					2	86107
	.055/80					2	85733
3"	.026/120	3/8"	89029 or 89033	1-1/4"	4,500	1	86109
	.035/80				,,,,,,		86013
	.043/120						86110
	.055/80						86111
			Rectangular	Filament			
2"	80	3/8"	89029 or 89033	1-1/4"	4,500	1	85736
3"	80	3/8"	89029 or 89033	1-1/4"	4,500	1	86014

+ See page 133 for drive arbor specifications.



MINI DISC BRUSHES - Silicon Carbide Filament

Diameter	Filament Dia./Grit	Arbor Hole	Drive Arbor + Recommendation	Trim Length	Max. RPM	Standard Pack	Item Number				
Round Filament											
1-3/4"	.035/180	5/8"	89023 or 89024	1-1/4"	6,000	2	85753				
	.022/120						85751 •				
	.040/80						85750				
			Rectangular	r Filament							
1-3/4"	80	5/8"	89023 or 89024	1-1/4"	6,000	2	85752				
2"	80	3/8"	89023 or 89024	1-1/4"	4,500	2	85773*				
3"	80	3/8"	89023 or 89024	1-1/4"	4,500	1	85981*				

<sup>+</sup> See page 133 for drive arbor specifications.



"I have had no issues with any Weiler products. They are reliable. They make a good product. I don't think you could ask for anything else."

- Richard Carpenter, Nuclear Industry Worker

<sup>\*</sup> Maximum density

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

# **END BRUSHES**

Featuring an integral stem for convenient mounting into a tool holder or collet, Nylox® end brushes and miniature end brushes are suitable for addressing recesses and internal features, or delivering a targeted brushing action to a specific area on a part.

#### **APPLICATIONS**

- Deburring small recessed areas and internal part features
- Finishing slots and recessed surfaces on machined parts



Blending tool marks on a hydraulic component.

BURR-RX® END BRUSHES - Banded - Crimped Round Black Ceramic Filament - Mounted on 1/4" Stems

Diameter	Filament Dia./Grit	Trim Length*	Recommended RPM	Overall Length	Max. RPM	Standard Pack	ltem Number
3/8"	.026/120	1/4"	4,500 - 5,000	2-3/8"	10,000	10	86098
	.043/120						86099
1/2"	.026/120	1/4"	4,500 - 5,000	2-7/16"	10,000	10	86100
	.043/120						86101
3/4"	.026/120	1/4"	4,200 - 4,500	2-7/16"	10,000	10	86102
	.043/120						86103
1"	.026/120	1/4"	3,500 - 3,800	2-5/8"	10,000	10	86104
	.043/120						86105
	.055/80						86097

<sup>\*</sup> Trim length from bands



END BRUSHES - Banded - Crimped Round Silicon Carbide Filament - Mounted on 1/4" Stems

	Filament	Trim	Overall	Max.	Standard	Item
Diameter	Dia./Grit	Length*	Length	RPM	Pack	Number
1/2"	.022/320	3/8"	2-9/16"	10,000	10	11160
	.035/180					11161
	.040/120					11162
3/4"	.035/180	3/8"	2-7/16"	10,000	10	11165
	.040/120					11166
1"	.035/180	3/8"	2-11/16"	10,000	10	11169
	.040/120					11170



\* Trim length from bands

END BRUSHES - Crimped Round Silicon Carbide Filament - Mounted on 1/4" Stems

Diameter	Filament Dia./Grit	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number
1/2"	.022/320	7/8"	2-9/16"	10,000	10	10172
	.035/180					10173
	.040/120					10174
3/4"	.022/320	7/8"	1-1/2"	10,000	10	10152
	.035/180					10153
	.040/120					10154
1"	.022/320	7/8"	2-3/4"	10,000	10	10155
	.035/180					10156
	.040/120					10157



MINIATURE END BRUSHES - Plastic Ferrule - Crimped Round Silicon Carbide Filament

Mounted on 1/8" stems

Diameter	Filament Dia./Grit	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number
3/16"	.018/500	1/4"	1-7/8"	37,000	144	26136
1/4"	.018/500	3/8"	2-1/8"	37,000	144	26138
5/16"	.018/500	9/16"	2-11/32"	25,000	144	26146



Deburring a vane section for a jet engine.

# TARGETED FEATURE DEBURRING PRODUCTS

# WHEEL BRUSHES

Weiler's Nylox® abrasive nylon wheel brushes featuring composite metal hub and composite hub construction are manufactured using a molded polymer material to retain the filaments. In comparison to traditional metal hub construction that folds the fill material around an internal retaining ring or wrap wire, these techniques result in a significant increase in fill density and elimination of filament breakage, offering the lowest cost-of-use and greatest consistency of performance in production applications.

Weiler's composite metal hub wheels marry the high density and superior filament retention of composite hub wheels with the dimensional stability and shock resistance of metal hub construction, and they feature 2" arbor holes, which allows for convenient mounting on many pieces of equipment.

Burr-Rx® wheels feature Weiler's advanced black ceramic grain filament, which delivers up to a 400% greater edge cutting action in comparison to traditional silicon carbide and aluminum oxide filaments for the fastest, most aggressive deburring action to minimize cycle times and maximize media life.

#### **APPLICATIONS**

- Precision deburring of component parts after machining or grinding
- Improving texture characteristics on machined or ground surfaces
- Honing cutting tools and generating specific edge profiles and radii
- Light duty cleaning and finishing of metals; light sanding of woods and composites

BURR-RX® CRIMPED FILAMENT WHEELS Composite Metal Hub\* - Crimped Round Black Ceramic Filament

					Thickness	S		
	Filam	ent Arb	or Face	e Trim	At Face	Max.	Standard	Item
Dian	neter Dia./	Grit Hol	e Widt	h Lengt	h Plates	RPM	Pack	Number
6	.026/	120 2"	3/4"	1"	15/16"	4,000	1	86123
	.035/	/80						86181
	.043/	120						86124
	.055	/80						86120
8	.026/	120 2"	7/8"	2"	15/16"	4,000	1	86126
	.043/	120						86127
	.055	/80						86128
1	0" .026/	120 2"	1-1/8	" 2"	7/8"	1,800	2	86129
	.035/	/80						86182 •
À	.043/	120						86130
	.055	/80						86131
<b>2</b> 1:	2" .026/	120 2"	1-1/4	." 3"	7/8"	1,800	2	86132
	.043/	120						86133
	.055	/80						86134
1-	4" .026/	120 2"	۱"	1-3/4	" 3/4"	1,800	2	86135
	.035/	/80						86108
	.043/	120						86136
	.055	/80						86137
1-	4" .026/	120 2"	1-1/4	" 4"	7/8"	1,800	2	86138 •
7	.043/	120						86139
•	.055	/80						86140
*Patent	Pending +	7 1/2" x 1/4" Doub	le Keyway	• Non-sto	ck product, contact Cu	stomer Service for lea	ad times and minimu	ım order quantities.

Thickness

#### **BURR-RX CRIMPED FILAMENT WHEELS**

Composite Hub - Crimped Round Black Ceramic Filament

0.D. x I.D.	Filament Dia./Grit	Face Width	Trim Length	Thickness At Face Plates	Max. RPM	Standard Pack	Item Number
8" x 3-1/4"	.043/120	1"	1-5/16"	13/16"	1,800	2	83394 •
14" x 7-1/4"	.026/120	1"	2-3/4"	15/16"	1,800	2	84926 •
	.043/120						84941 •
	.035/80						84925 •
	.055/80						83405

Non-stock product, contact Customer Service for lead times and minimum order quantities



#### **CRIMPED FILAMENT WHEELS - Composite Metal Hub\*** - Crimped Round Silicon Carbide Filament

Diameter	Filament Dia./Grit	Arbor Hole	Face Width	Trim Length	Thickness Through Arbor	Max. RPM	Standard Pack	Item Number
6"	.018/500	2"	1"	1-1/4"	1-1/16"	4,000	1	83000
	.022/320							83010
	.022/120							83011
	.035/180							83030
	.040/120							83040
	.040/80							83050
	.060/46							83070 •
8"	.018/500	2"	1"	2-1/4"	3/4"	4,000	2	83100
	.022/320							83110
	.022/120							83111
	.035/180							83130
	.040/120							83140
	.040/80							83150
10"	.022/320	2"★	1-1/8"	2"	7/8"	1,800	2	83513 •
	.035/180							83514 •
	.040/120							83515 •
	.040/80							83516
12"	.022/320	2"★	1-1/4"	3"	7/8"	1,800	2	83715 •
	.035/180							83716 •
	.040/120							83717
	.040/80							83718

Removing burrs from an aluminum heat sink.



\*Patent Pending

★ 1/2" x 1/4" Double Keyway

• Non-stock product, contact Customer Service for lead times and minimum order quantities.

#### RECTANGULAR FILAMENT WHEEL - Composite Metal Hub\* - Straight Silicon Carbide Filament

Diameter	Grit Size	Arbor Hole	Face Width	Trim Length	Thickness Through Arbor	Max. RPM	Standard Pack	Item Number
12"	80	2"★	1-1/4"	3"	7/8"	1,800	2	85014 •

<sup>\*</sup>Patent Pending

# **METAL HUB BASIC SECTIONS**

**CRIMPED FILAMENT BASIC SECTIONS - Metal Hub** - Crimped Round Silicon Carbide Filament For light-duty deburring and finishing in applications such as low-volume manual deburring or general use in a tool room or shop.

0.D. x I.D.	Filament Dia./Grit	Face Width	Trim Length	Thickness Through Arbor	Max. RPM	Standard Pack	ltem Number
6" x 2"	.022/320	5/8"	1-1/2"	9/16"	6,000	2	20600
	.035/180						20610
	.040/120						20620
8" x 2"	.022/320	5/8"	2-1/2"	9/16"	5,000	2	20630 •
	.040/120						20650
10" x 3-1/4"	.035/180	9/16"	2-7/8"	17/32"	4,500	2	20661 •
14" x 5-1/4"	.035/180	9/16"	3-7/8"	9/16"	3,000	2	20730 •



20610

<sup>★ 1/2&</sup>quot; x 1/4" Double Keyway

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.



Deburring the tip of a turbine blade.



# **NARROW FACE WHEELS**

BURR-RX® HEAVY-DUTY NARROW FACE WHEELS - Metal Hub - Crimped Round Black Ceramic Filament

Diameter	Filament Dia./Grit	Arbor Hole	Face Width	Trim Length	Thickness Through Arbor	Max. RPM	Standard Pack	ltem Number
3"	.026/120	5/8"-1/2"	9/16"	1/2"	7/16"	6,000	2	31240
	.035/80							31241
4"	.026/120	5/8"-1/2"	5/8"	1"	7/16"	6,000	2	31110
	.035/80							31270
	.043/120							31280
	.055/80							31290

#### BURR-RX NARROW FACE WHEELS - Metal Hub - Crimped Round Black Ceramic Filament

Diam	Filament eter Dia./Grit	Arbor Hole	Face Width	Trim Length	Thickness Through Arbor	Max. RPM	Standard Pack	Item Number
3	.035/80	1/2"-3/8"	3/8"	1/2"	7/16"	6,000	2	31102
	.043/120							31101
4	.026/120	1/2"-3/8"	1/2"	7/8"	7/16"	6,000	2	86165
	.035/80							31103
	.043/120							31100
	.055/80							31105
6	.026/120	5/8"-1/2"	5/8"	7/8"	11/16"	4,500	2	31134
	.043/120							31135
	.035/80							31136
	.055/80							31137



#### **HEAVY-DUTY NARROW FACE WHEELS - Metal Hub** - Crimped Round Silicon Carbide Filament

Diameter	Filament Dia./Grit	Arbor Hole	Face Width	Trim Length	Thickness Through Arbor	Max. RPM	Standard Pack	ltem Number
3"	.040/80	5/8"-1/2"	9/16"	1/2"	7/16"	6,000	2	31245 •
4"	.022/320	5/8"-1/2"	5/8"	1"	7/16"	6,000	2	31255 •
	.035/180							31265
	.040/120							31275
	.040/80							31285

Non-stock product, contact Customer Service for lead times and minimum order quantities.



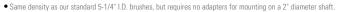
#### NARROW FACE WHEELS - Metal Hub - Crimped Round Silicon Carbide Filament

Diameter	Filament Dia./Grit	Arbor Hole	Face Width	Trim Length	Thickness Through Arbor	Max. RPM	Standard Pack	ltem Number
3"	.022/320	1/2"-3/8"	3/8"	1/2"	7/16"	6,000	2	31074
	.035/180							31084
	.040/120							31094
4"	.022/320	1/2"-3/8"	1/2"	7/8"	7/16"	6,000	2	31104
	.035/180							31114
	.040/120							31124
6"	.022/320	5/8"-1/2"	5/8"	7/8"	11/16"	4,500	1	31121
	.035/180							31122
	.040/120							31123

# **APPLICATION ENGINEERED WHEELS**

#### CRIMPED FILAMENT WHEELS - Composite Hub - Crimped Round Silicon Carbide Filament

O.D. x I.D.	Filament Dia./Grit	Face Width	Trim Length	Thickness Through Arbor	Max. RPM	Standard Pack	ltem Number
6" x 2"	.040/80	1/2"	1-1/4"	9/16"	3,600	1	83116 •
8" x 2"*	.040/120	7/8"	2-1/8"	13/16"	3,600	2	83190 •
	.040/80						83180 •
8" x 3-1/4"	.040/80	1"	1-5/16"	13/16"	1,800	2	83393 •
10" x 2"	.018/500	1"	3"	1-1/16"	3,600	2	83300
	.022/320						83310 •
	.035/180						83330
	.040/120						83340
	.040/80						83350
10" x 3-1/4"	.035/180	1"	2-5/16"	13/16"	1,800	2	83430 •
	.040/120						83440
	.040/80						83450
10" x 5-1/4"	.040/80	1"	1-5/8"	15/16"	1,800	2	83550
12" x 3-1/4"	.035/180	1-1/8"	3-5/16"	13/16"	1,800	2	83630 •
	.040/120						83640 •
12" x 4-1/4"	.022/320	1"	3-1/8"	15/16"	1,800	2	84710 •
	.035/180						84730 •
	.040/120						84740 •
	.040/80						84750 •
12" x 5-1/4"	.040/120	1-1/8"	2-3/4"	15/16"	1,800	2	83740 •
	.040/80						83750
12" x 5-1/4"-2"*	.022/320	1-1/8"	2-3/4"	1-1/16"	1,800	2	85156 ••
14" x 5-1/4"	.022/320	1-1/8"	3-3/4"	15/16"	1,800	2	83910
	.035/180						83930
	.040/120						83940
	.040/80						83950
14" x 5-1/4"-2"*	.022/320	1-1/8"	3-3/4"	1-1/16"	1,800	2	85150 ••
	.040/80						85153 ••
20" x 12"	.035/180	1-1/4"	3-1/4"	1-1/16"	1,000	1	85440 •



<sup>\* 1/2&</sup>quot; x 1/4" Double Keyway

#### RECTANGULAR FILAMENT WHEEL - Composite Hub - Straight Silicon Carbide Filament

0.D. x I.D.	Grit Size	Face Width	Trim Length	Thickness Through Arbor	Max. RPM	Standard Pack	ltem Number
14" x 5-1/4"	120	1-1/8"	3-3/4"	1-1/16"	1,800	2	84640

Other diameters and grit sizes available upon request.

# **DIAMOND FILAMENT WHEEL BRUSHES**

Weiler's diamond filament wheels are ideal for producing edge radii on hard materials such as diamond, CBN, ceramic and glass. Our wheel brushes are made-to-order in a wide range of diameters and thicknesses. Additional configurations are available such as; tube brushes, composite hub disc brushes and end brushes. Other sizes and pricing are available on request. Please contact Customer Service at 800-835-9999.

#### DIAMOND FILAMENT WHEELS - Composite Hub - Round Diamond Filament

0.D. x I.D.	Filament Dia./Grit	Face Width	Trim Length	Thickness Through Arbor	Max. RPM	Standard Pack	ltem Number
6" x 2"	.024/200	5/16"	1-1/4"	1/4"	3,600	1	83002 •
	.014/600						83003 •
	.012/1000						83004 •
8" x 2"	.024/200	5/16"	2-1/4"	1/4"	3,600	1	83005 •
	.014/600						83006 •
	.012/1000						83007 •

• Non-stock product, contact Customer Service for lead times and minimum order quantities.



Deburring a camshaft with a Nylox wheel.



NOTE See adapters on pages 132-133

Non-stock product, contact Customer Service for lead times and minimum order quantities.

# **ADAPTERS AND DRIVE ARBORS**

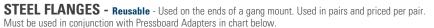




#### METAL ADAPTERS - Reusable - Used in pairs and priced per pair.

Diameter	Arbor Hole Size	Used With	Standard Pack	Item Number
2"	1/2"	All 2" I.D.	1	03809
	5/8"	Wheels		03810
	3/4"			03811
	7/8"			03824
	1"			03812
	1-1/4"			03813
	1-1/2"			03814
3-1/4"	3/4"	3-1/4" I.D.	1	03910 •
	7/8"	Wheels		03911 •
	1"	(When mounting		03912 •
	1-1/4"	only one wheel)		03913 •
	2"			03915 •
5-1/4"	3/4"	5-1/4" I.D.	1	03920 •
	7/8"	Wheels		03921 •
	1"	(When mounting		03922 •
	1-1/4"	only one wheel)		03923 •
	2"			03925

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.



Flange O.D.	Arbor Hole Size	Used With	Standard Pack	Item Number
5-5/8"	3/4"	3-1/4" & 4-1/4"	1	03931 •
	1"	I.D. Wheels		03933 •
	1-1/4"			03934 •
	2"			03936 •
6-1/2"	1-1/4"	5-1/4" I.D.	1	03944 •
	1-1/2"	Wheels		03945 •
	2"			03946 •
8-3/4"	1-1/4"	7-1/4" I.D.	1	03954 •
	1-1/2"	Wheels		03955 •
	2"			03956 •

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

# **PRESSBOARD ADAPTERS** - Used for centering 10", 12" and 14" Nylox® Wheels when gang mounting. Must be used in conjunction with Steel Flanges in chart above.

Brush I.D.	Arbor Hole Size	Standard Pack	Item Number
3-1/4"	3/4"	1	03890 •
	1"		03892 •
	1-1/4"		03893 •
	2"		03895 •
4-1/4"	3/4"	1	03960 •
	1-1/4"		03963 •
	2"		03965 •
5-1/4"	1-1/4"	1	03403 •
	1-1/2"		03404 •
	2"		03405 •
7-1/4"	1-1/4"	1	03973 •
	1-1/2"		03974 •
	2"		03975 •

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.





#### NOTE

The adapters and drive arbors listed on this page are for use with small diameter wheel brushes only; do not attempt to use them with cutting or grinding wheels, buffing wheels, or any type of abrasive wheel or disc.



**fubricut**Lubricant

Prevents Smearing. Improves the Finish. Lowers Costs.



1. Turn off machine.



2. Slowly rotate wheel by hand.



3. While rotating, direct a light spray of Lubricut into the wheel face.

Use with Nylox\* wheels operating above the recommended surface speed. Directing a light spray of Lubricut into the face of the wheel permits the wheel to be operated at higher surface speeds and up to twice the normal load without smearing - while improving the finish.

Description	Ounces	Standard Pack	Item Number
Lubricut Lubricant	8	1	83999

#### **PLASTIC ADAPTERS**

Fixed Arbor Hole Size	Adapted Arbor Hole Size	Used With	Standard Pack	ltem Number
1/2"	1/4"	Small Dia. Wheels	10	04400
1/2"	3/8"	Small Dia. Wheels	10	04401
5/8"	1/2"	Small Dia. Wheels	10	04402





#### MINIATURE & BURR-RX® DISC BRUSH DRIVE ARBORS - Includes drive arbor, set screw and hex key.

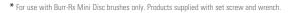
For Brush Diameter	Stem Diameter	Stem Length	Max. RPM	Standard Pack	ltem Number
1-3/4"	1/4"	1-3/4"	6,000	1	89023*
1-3/4"	3/8"	1-3/4"	6,000	1	89024*
2"-3"	1/2"	1-3/4"	6,000	1	89029*



<sup>\*</sup> For use with Burr-Rx Mini Disc brushes only. Products supplied with set screw and wrench.

# MINIATURE & BURR-RX DISC BRUSH DRIVE ARBORS - Includes drive arbor, set screw and hex key. Recommended for operations in which brush rotation alternates between forward and reverse.

For Brush	Stem	Stem	Max.	Standard	ltem
Diameter	Diameter	Length	RPM	Pack	Number
2"-3"	1/2"	1-3/4"	6,000	1	89033*





#### **DISC BRUSH FLOW-THROUGH DRIVE ARBORS**

Mounts Weiler disc brushes to any type of milling machine or CNC machine.

	Arbor	Drive	Bolt	Plate	Shaft	Stem	Std.	Item
Fits	Hole	Studs	Circle	0.D.	Dia.	Length	Pack	Number
3", 4" and 5" Disc Brushes	7/8"	2	1-1/4"	2-7/8"	3/4"	2-3/4"	1	07700
6" Std. Tuft Disc Brushes NOT Max. Density	7/8"	3	3"	5-7/8"	3/4"	2-1/2"	1	07701
6" Max. Density Disc Brushes, also 5" Std. Tuft	7/8"	2	1-1/4"	4-7/8"	3/4"	2-1/2"	1	07715
8" and 9" Disc Brushes	7/8"	4	3"	7-7/8"	3/4"	2-1/2"	1	07702
10" and 12" Disc Brushes 7/8" 4 1-5/8" 9-7/8" 3/4" 2-1/2"						1	07703 •	
Replacement kit includes: (1) 1/2"-13 locking flow-through bolt & (1) Belleville spring washer								07718 •

• Non-stock product, contact Customer Service for lead times and minimum order quantities.





#### **NOTE**

- Do not adapt a wheel brush for use on a shaft diameter less than that specified by ANSI B165.1 or exceed the maximum wheel diameter specified for a drive arbor.
- Never mount a drive arbor onto a tool that operates above the maximum RPM rating of either the arbor or the brush (whichever may be lower) and be sure that the stem of the arbor is properly secured in the collet or chuck before use.



Removing gasket material from a pipe flange.



86160









#### NOTE

Nylon abrasive filament brushes require a lower operating RPM than most other power tool accessories and they cannot be used effectively on standard grinders.

# FME AREA PRODUCT SOLUTIONS

In nuclear power plants, Foreign Material Exclusion (FME) programs may limit or even exclude the use of wire brushes in some areas during the performance of routine maintenance, repair or shut-down activities. Weiler has developed a FME-compliant tooling system to address the needs of plant operators and maintenance contractors working in these facilities as well as other industries where the potential introduction of broken wire filaments may be of concern. Weiler's FME Solutions program is a complete system consisting of nonwire brushing tools designed to perform a broad range of surface cleaning and preparation applications.

**BLACK NYLOX® CERAMIC BRUSHES** - The engineered ceramic grain in Weiler's Black Nylox filament is up to 400% more aggressive than the silicon carbide and aluminum oxide grain in other abrasive filaments, making it much more effective in surface cleaning applications. The efficient cutting action of the Black Nylox filament also generates less heat and makes it much more resistant to "smearing" than traditional nylon abrasive filaments.

#### NARROW FACE WHEELS - Crimped Ceramic Filament

Used on edge for weld prep and cold weld cleaning.



Non-stock product, contact Customer Service for lead times and minimum order quantities

#### **CUP BRUSH - Rectangular Ceramic Filament**

Used on its face for heavy-duty cleaning of broad surfaces.

Diameter	Filament	Arbor	Max.	Standard	ltem
	Dia./Grit	Hole	RPM	Pack	Number
4"	.049 x .098 - 80 Grit	5/8"-11 Nut	4,800	1	86160 •

• Non-stock product, contact Customer Service for lead times and minimum order quantities

### END BRUSH - Crimped Ceramic Filament - 1/4" Stem

For spot-facing or cleaning in tight areas.

Diameter	Filament	Trim	Overall	Max.	Standard	Item
	Dia./Grit	Length	Length	RPM	Pack	Number
1"	.055/80	1/4"	3-3/32"	4,800	10	86148 •

Non-stock product, contact Customer Service for lead times and minimum order quantities

#### CONTROLLED FLARE END BRUSH - Crimped Ceramic Filament - 1/4" Stem

For cleaning corners and tight areas.

Diameter	Filament Dia./Grit	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number
1"	.035/80	1-1/8"	2-1/2"	4,800	10	86159 •

Non-stock product, contact Customer Service for lead times and minimum order quantities

#### CONFLEX BRUSHES - Crimped Ceramic Filament - 1/4" Stem

For O.D. and I.D. cleaning in confined areas.

Diameter	Filament Dia./Grit	Face Width	Trim Length	Max. RPM	Standard Pack	ltem Number
3"	.043/120	1"	15/16"	4,800	10	86171 •
3"	.055/80	1"	15/16"	4,800	10	86172 •

• Non-stock product, contact Customer Service for lead times and minimum order quantities.

#### HAND SCRATCH BRUSHES - Crimped Ceramic Filament - For general purpose, light-duty cleaning.

Overall	Block	Brush	Grit	Trim	Standard	Item
Length	Type	Part	Size	Length	Pack	Number
8-3/4"	Wood	2 x 9 Rows	120	5/8"	36	95016 •

• Non-stock product, contact Customer Service for lead times and minimum order quantities





13106V







	Wire	Arbor	No. of	Face	Trim	Max.	Intermediate	Item N	umber
Dia.	Size	Hole	Knots	Width	Length	RPM	Pack	Steel	Stainless
3"	.014	1/2"-3/8"	20	3/8"	5/8"	25,000	5	08014V •	08264V •
4"	.014	5/8"-11 UNC	24	1/2"	7/8"	20,000	5	13106V •	_
	.020							13120V	_

Non-stock product, contact Customer Service for lead times and minimum order quantities.
 BOLD BLACK ITEM numbers indicate color-coded brushes for easy identification.

#### P

### $\textbf{CABLE TWIST WHEELS} \ \textbf{Provide heavy-duty brushing action on relatively smooth \underline{surfaces}.}$



Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Max. RPM	Intermediate Pack	Item Number Steel
4"	.020	5/8"-11 UNC	24	1/4"	7/8"	20,000	5	13266V
		1/2"-3/8"						08534V •

• Non-stock product, contact Customer Service for lead times and minimum order quantities.



#### ROUGHNECK\* STRINGER BEAD WHEELS - The go to for high-performance weld cleaning.

	Wire	Arbor	No. of	Face	Trim	Max.	Intermediate	Item Number	
Dia.	Size	Hole	Knots	Width	dth Length RPM Pack		Pack	Steel	Stainless
				Root P	ass Brushes				
4"	.020	5/8"-11 UNC	32	3/16"	7/8"	20,000	5	13131V •	13138V •
4-1/2"	.020	5/8"-11 UNC	38	3/16"	13/16"	12,500	5	13232V	-
5"	.020	5/8"-11 UNC	38	3/16"	7/8"	12,500	5	08756V •	08806V
6"	.020	5/8"-11 UNC	48	3/16"	1-1/8"	12,500	1	-	-
6"			56					09400V	_
7"	.020	5/8"-11 UNC	56	3/16"	1-1/8"	9,000	1	09000V	_

Non-stock product, contact Customer Service for lead times and minimum order quantities.
 BOLD BLACK ITEM numbers indicate color-coded brushes for easy identification.



#### **STEM MOUNTED KNOT WHEELS -** 1/4" stem - Ideal for somewhat irregular surfaces.



	Wire	No. of	Face	Trim	Max.	Intermediate	Item Number
Dia.	Size	Knots	Width	Length	RPM	Pack	Steel
3-1/4"	.014	20	3/8"	5/8"	25,000	1	17681V •
4"	.014	24	1/2"	7/8"	20,000	5	17687V •

• Non-stock product, contact Customer Service for lead times and minimum order quantities.



#### CONFLEX BRUSHES - Copper center wheels mounted onto a 1/4" stem provide very flexible brushing.



	Wire	Face	Trim	Max.	Intermediate	Item Number		
Dia.	Size	Width	Length	RPM	Pack	Steel	Stainless	Brass
2"	.0118	3/8"	1/2"	20,000	1	17610V •	17611V •	_
3"	.008	1/2"	1"	20,000	1	17615V •	_	_
	.0118					17616V •		17641V
	.014						17618V •	_

• Non-stock product, contact Customer Service for lead times and minimum order quantities.

Key



KNOT WIRE CUP BRUSHES Provide heavy-duty brushing action on relatively flat surfaces.

	Wire	Arbor	Trim	Max.	Intermediate	Item N	lumber
Diameter	Size	Hole	Length	RPM	Pack	Steel	Stainless
2-3/4"	.014	5/8"-11 UNC	1"	14,000	1	13025	-
	.020					13286	13258
3-1/2"	.023	5/8"-11 UNC	7/8"	13,000	1	13156	13163
4"	.023	5/8"-11 UNC	1-1/4"	10,200	1	12316	-
5"	.023	5/8"-11 UNC	1-3/8"	9,000	1	12276 *	- 1
6"	.014	5/8"-11 UNC	1-3/8"	6,600	1	12356	- 1
	.023					12376	- '

<sup>\*</sup> With internal nut

BOLD BLACK ITEM numbers indicate color-coded brushes for easy identification.



#### **CRIMPED CUP BRUSHES** Provide consistent performance on light-duty cleaning applications.

	Wire	Arbor	Trim	Max.	Intermediate	Item Number
Diameter	Size	Hole	Length	RPM	Pack	Steel
3"	.014	5/8"-11 UNC	1"	14,000	1	13245
3-1/2"	.014	5/8"-11 UNC	7/8"	12,000	1	13181
4"	.014	5/8"-11 UNC	1-3/8"	10,200	1	14026
5"	.014	5/8"-11 UNC	1-1/4"	9,000	1	14206
6"	.014	5/8"-11 UNC	1-1/4"	6,600	1	14066 *

\* With internal nut



UTILITY CRIMPED WIRE CUP BRUSHES - Small diameter cup brushes for use on air tools.

	Wire	Wire Trim		Max.	Intermediate	Item Number	
Diameter	Size	Length	Length	RPM	Pack	Steel	
1-3/4"	.0118	3/4"	2-5/16"	13,000	1	14301V	
2-3/4"	0118	7/8"	2-1/2"	6,000	1	14302	



CIRCULAR FLARED END BRUSH - Suited for broad and slightly contoured surfaces.

	D LITE BIIGOII	outled for broad and sligi	itiy contourca sarraces.		
	Wire	Max.	Intermediate	Item Number	
Diameter	Size	RPM	Pack	Steel	
3"	.008	16.000	1	10041V	

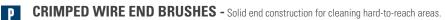
10041V

KNOT WIRE END BRUSHES Provide heavy-duty brushing action in recessed areas.

	Wire	Trim	Overall	Max.	Intermediate	Item Number	
Diameter	Size	Length	Length	RPM	Pack	Steel	Stainless
3/4"	.020	7/8"	2-5/8"	25,000	3	10026V •	_
	.014					-	10029V •
1-1/8"	.014	7/8"	2-5/8"	22,000	3	10027V •	10031V
	.020					10028V •	_
	006	1-1/8"	2-9/16"	20,000		10141V * •	_

<sup>\*</sup> Globally sourced product

Non-stock product, contact Customer Service for lead times and minimum order quantities. **BOLD BLACK ITEM** numbers indicate color-coded brushes for easy identification.



	Wire	Trim	Overall	Max.	Intermediate	Item N	lumber
Diameter	Size	Length	Length	RPM	Pack	Steel	Stainless
1/2"	.006	7/8"	2-9/16"	25,000	3	10001V •	10013V
3/4"	.006	7/8"		22,000	3	10005V •	10017V •
	.020					10008V •	_
1"	.006	1"	2-13/16"	22,000	3	10009V •	10021V
	.0104		2-5/8"			10010V •	10022V

Non-stock product, contact Customer Service for lead times and minimum order quantities. **BOLD BLACK ITEM** numbers indicate color-coded brushes for easy identification.







#### **ROUND TUBE BRUSHES -** Crimped wire fill provides flexible brushing action.







					U		
	Wire	Brush	Stem	Overall	Intermediate	Item N	umber
Diameter	Size	Part	Diameter	Length	Pack	Steel	Stainless
1/4"	.004	1"	1/8"	3-1/2"	3	_	21081V
3/8"	.004	1"	1/8"	3-1/2"	3	21073V •	_
1/2"	.005	1"	3/16"	3-1/2"	3	21074V	_
5/8"	.005	1"	3/16"	3-1/2"	3	21075V	_
7/8"	.006	1"	7/32"	3-1/2"	3	21077V	_
1"	.008	1"	1/4"	3-1/2"	3	21078V	_
			Double Stem,	Double Spiral			
1/2"	.006	2"	5/32"	5"	6	21107V •	_
5/8"	.005	2"	7/32"	5"	6	21108V	_
3/4"	.006	2-1/2"	1/4"	5-1/2"	6	21110V	_
1"	.006	2-1/2"	1/4"	5-1/2"	6	21114V	_

Non-stock product, contact Customer Service for lead times and minimum order quantities





#### **INTERNAL TUBE FITTING BRUSHES -** Wire Fill - For internal cleaning and deburring of copper tube fittings.

Tube	Actual	Brush	Overall	Handle	Intermediate	Item
Diameter	Diameter	Length	Length	Length	Pack	Number
3/8"	1/2"	1"	6-1/2"	3-1/4"	6	44080V



#### **ACID BRUSHES -** Horsehair - Tin ferrule (unit packs of 4)

	Trim	Overall	Intermediate	Item
Width	Length	Length	Pack	Number
5/16"	3/4"	5-3/4"	6	44088V
3/8"	3/4"	5-3/4"	6	44089V
1/2"	3/4"	5-3/4"	6	44090V





#### SCRATCH BRUSHES - Ideal for cleaning and prepping surfaces.

<b>Block Size</b>	Brush Length	No. of Rows	Trim Length	Overall Length	Intermediate Pack	Item Number				
Steel Wire										
10" x 1-1/8"	5"	4 x 16	1-3/16"	10"		44063				
14" x 7/8"	5-1/2"	3 x 19	1-3/16"	14"	1	44053				
			Stainless Steel	Wire						
10" x 1-1/8"	5"	4 x 16	1-3/16"	10"	1	44064				
14" x 7/8"	5-1/2"	3 x 19		14"		44054				





				0 1							
<b>Block Size</b>	Block	No. of Rows	Wire Size	Trim Length	Overall Length	Intermediate Pack	Item Number				
	Stainless Steel Wire										
7-1/2" x 1/2"	Plastic	3 x 7	.006	1/2"	7-1/2"	5	44075V •				
	Wood						44167V				
			St	raight Brass W	ire						
7-1/2" x 1/2"	Wood	3 x 7	.006	1/2"	7-1/2"	5	44189V •				
Straight Black Nylon											
7-1/2" x 1/2"	Wood	3 x 7	.012	1/2"	7-1/2"	5	44637V •				

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

# WHAT YOU NEED. WHEN YOU NEED IT.

Key:







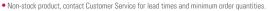
**SABER TOOTH™ FLAP DISC -** (Type 29) – Cool, fast cutting.

Diameter	Arbor Hole	Grit Size	Max. RPM	Intermediate Pack	Item Number					
Ceramic Alumina Grain, Phenolic Backing										
4-1/2"	5/8"-11 Nut	40	13,000	5	50105V					
		60			50106V					



TIGER® X FLAP DISC - (Type 29) - Maximum aggression & long life.

Diameter	Arbor Hole	Grit Size	Max. RPM	Intermediate Pack	Item Number
	7	Zirconia Alumina Gra	in, Phenolic Backin	g	
4-1/2"	7/8"	40	13,000	5	51201V •
		60			51202V •
4-1/2"	5/8"-11 Nut	40	13,000	5	51205V •
		60			51206V •





BIG CAT® FLAP DISC - High Density (Type 27) – Increased conformability and maximum life.

Diameter	Arbor Hole	Grit Size	Max. RPM	Intermediate Pack	Item Number					
Zirconia Alumina Grain, Phenolic Backing										
4-1/2"	7/8"	40	12,000	5	50803V					
		60			50804V					
4-1/2"	5/8"-11 Nut	40	12,000	5	50808V					
		60			50809V					



TIGER FLAP DISC - (Type 29) - Maximum aggression & long life.

Diameter	Arbor Hole	Grit Size	Max. RPM	Intermediate Pack	Item Number
	Z	irconia Alumina Gra	in, Aluminum Backir	ıg	
4-1/2"	7/8"	40	13,000	5	50513V
		60			50514V
4-1/2"	5/8"-11 Nut	40	13,000	5	50518V
		60			50519V



TRIMMABLE TIGER® FLAP DISC - (Type 29) – Trimmable backing for extended disc life.

Diameter	Arbor Hole	Grit Size	Max. RPM	Intermediate Pack	Item Number
4-1/2"	5/8"-11 Nut	40	13,000	5	50006V
		60			50007V



50007V

TIGER PAW™ FLAP DISC - (Type 29) — 100% Zirconia Alumina grain for performance & long life.

	Diameter	Arbor Hole	Grit Size	Max. RPM	Intermediate Pack	Item Number
	4-1/2"	7/8"	40	13,000	5	51119V
			60			51120V
_	4-1/2"	5/8"-11 Nut	40	13,000	5	51124V
			60			51125V

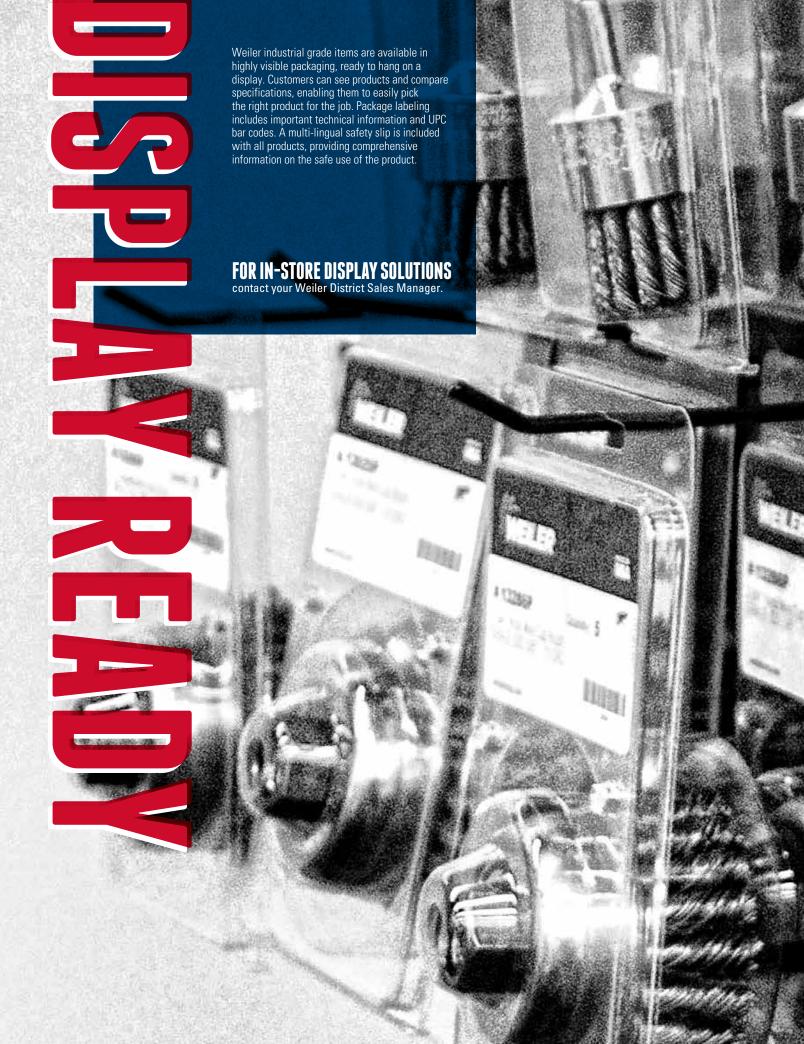


51120V

WOLVERINE\* MOUNTED FLAP WHEELS - 1/4" Stem – Provide fast action at a value price.

Diameter	Width	Grit Size	Max. RPM	Intermediate Pack	Item Number
1"	1"	60	30,000	3	30720V
		80			30721V
2"	1"	60	25,000	1	30723V
		80			30724V
3"	1"	60	23,000	1	30726V
		80			30727V





P

**STANDARD TWIST WHEELS** provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on somewhat irregular surfaces.



	Wire	Arbor	No. of	Face	Trim	Max. AH	Thickness at Face	Max.	Std. Pack	Item Number	
Dia.	Size	Hole	Knots	Width	Length	An Avail.	Plates	RPM		Steel	Stainless
3"	.014	1/2"-3/8"	20	3/8"	5/8"	1/2"	7/16"	25,000	1	08014P •	-
4"	.014	1/2"-3/8"	24	1/2"	7/8"	1/2"	7/16"	20,000	1	08044P •	-
4"	.014	5/8"-11	24	1/2"	7/8"	-	7/16"	20,000	1	13106P	13113P
6"	.014	5/8"-1/2"	24	1/2"	1-3/8"	1-1/4"	9/16"	9,000	1	08085P •	-

Non-stock product, contact Customer Service for lead times and minimum order quantities.
 BOLD BLACK ITEM numbers indicate color-coded brushes for easy identification.



13106P



**CABLE TWIST WHEEL** provides maximum brushing action with minimal flexibility; ideal for demanding cleaning and surface preparation applications on smooth surfaces.

	Wire	Arbor	No. of	Face	Trim	Max. AH	Thickness at Face	Max.	Std.	Item No.
Dia.	Size	Hole	Knots	Width	Length	Avail.	Plates	RPM	Pack	Steel
4"	.020	5/8"-11 UNC	24	1/4"	7/8"	1/2"	7/16"	20,000	1	13266P



13266



**ROUGHNECK® STRINGER BEAD WHEELS -** Maximum impact action for fast removal of slag, spatter, oxidation as well as other surface prep and cleaning applications.



	Wire	Autor	No of	F	Tuinn	Thickness	Man	Ctandand	Item Numbe	
Diameter	Size	Arbor Hole	No. of Knots	Face Width	Trim Length	at Face Plates	Max. RPM	Standard Pack	Steel	Stainless
4"	.020	M10 x 1.25	32	3/16"	7/8"	7/16"	20,000	1	13125P •	_
		5/8"-11 UNC							13131P	13138P
6"	.020	5/8"-11 UNC	56	3/16"	1-1/8"	7/16"	12,500	1	09400P	-
	.023	5/8"-11 UNC	24	1/2"	1-3/8"	9/16"			08776P	_
7"	.020	5/8"-11 UNC	56	3/16"	1-1/8"	7/16"	9,000	1	09000P	_

Non-stock product, contact Customer Service for lead times and minimum order quantities.
 BOLD BLACK ITEM numbers indicate color-coded brushes for easy identification.



13131P



**CRIMPED WIRE WHEELS** provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications.

							_		
Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Max. AH Avail.	Thickness at Face Plates	Max. RPM	Std. Pack	Item Number Steel
6"	.014	5/8"-1/2"	3/4"	1-7/16"	1-1/4"	7/16"	6,000	1	01075P
			5/8"	1-1/16"	_	1/2"	-,		02325P
			7/8"	1-1/8"	-	7/8"			06645P
7"	.014	5/8"-1/2"	3/4"	1-9/16"	-	1/2"	6,000	1	02335P •
8"	.014	5/8"	3/4"	2-1/16"	1-1/4"	1/2"	6,000	1	01175P •

• Non-stock product, contact Customer Service for lead times and minimum order quantities.



01075P



**CONFLEX BRUSHES -** Small diameter copper center wheels permanently mounted onto a 1/4" stem to provide a very flexible brushing action.

Diameter	Wire Size	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number Steel
3"	.008	1/2"	1"	20,000	1	17615P •
	.014					17617P •

Non-stock product, contact Customer Service for lead times and minimum order quantities.



17617F



Key:







12316P

# $\begin{tabular}{ll} KNOT WIRE CUP BRUSHES - single Row - Provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on relatively flat surfaces. \\ \end{tabular}$



	Wire	Arbor	Trim	Max.	Standard	Item Number
Diameter	Size	Hole	Length	RPM	Pack	Steel
2-3/4"	.014	5/8"-11 UNC	1"	14,000	1	13025P
2-3/4"	.020	M10 x 1.25	1"	14,000	1	13281P •
		5/8"-11 UNC				13286P
3-1/2"	.023	5/8"-11 UNC	7/8"	13,000	1	13156P
4"	.023	5/8"-11 UNC	1-1/4"	10,200	1	12316P
5"	.023	5/8"-11 UNC	1-3/8"	7,000	1	12276P* •
6"	.023	5/8"-11 UNC	1-3/8"	6,600	1	12376P

<sup>\*</sup> With internal nut



13245P

# **CRIMPED WIRE CUP BRUSHES** provide very flexible brushing action and the most consistent performance for demanding light-duty cleaning applications; feature a threaded nut for use on angle grinders.

	Wire	Arbor	Trim	Max.	Standard	Item Number
Diameter	Size	Hole	Length	RPM	Pack	Steel
3"	.014	M10 x 1.25	1"	14,000	1	13240P •
		5/8"-11 UNC				13245P
4"	.020	5/8"-11 UNC	1-3/8"	9,000	1	14036P
6"	.020	5/8"-11 UNC	1-1/4"	6,600	1	14076P* •

<sup>\*</sup> With internal nut



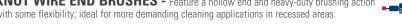
07771P

#### THREADED ADAPTERS - For mounting brushes with a 5/8"-11 UNC nut to other threaded spindles.

	Fixed Thread Size	Adapted Thread Size	Standard Pack	ltem Number
-	5/8" - 11 UNC	M10 x 1.25	1	07771P
	5/8" - 11 UNC	M10 x 1.50	1	07772P



P	KNOT WIRE END BRUSHES - Feature a hollow end and heavy-duty brushing action
	with some flevibility; ideal for more demanding cleaning applications in recessed grees



	Wire	Trim	Overall	Max.	Standard	Item Number
Diameter	Size	Length	Length	RPM	Pack	Steel
3/4"	.014	1-1/8"	2-5/8"	22,000	1	10025P •
	.020					10026P
1-1/8"	.014	7/8"	2-5/8"	22,000	1	10027P
	.020					10028P

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.



10012P

#### **CRIMPED WIRE END BRUSH -** Feature a solid end construction and very flexible brushing action ideal for more demanding light-duty cleaning applications in corners and hard-to-reach areas.

		Wire	Trim	Overall	Max.	Standard	Item Number
	Diameter	Size	Length	Length	RPM	Pack	Steel
	3/4"	.020	7/8"	2-9/16"	22,000	1	10008P •
_	1"		1-1/8"	2-5/8"	20,000		10012P •

Non-stock product, contact Customer Service for lead times and minimum order quantities.

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

P

#### MINI-GRINDER KIT - For use on small right angle grinders. All products have a 5/8"-11 Arbor Hole



KIT CONTAINS	item Number
4-1/2" Abrasive Flap Disc (Zirconium Grain, 60 Grit); Item #50519: For grinding and finishing in one step.	13001
2-3/4" Knot Wire Cup Brush (.020 Steel Wire); Item #13286: For cleaning large surface areas.	



13001



# **AIR TOOL/DRILL ACCESSORY KIT** -All products have a 1/4" Stem and are ideal for general purpose cleaning and deburring in recessed or confined areas.

4" Stringer Bead Knot Wire Wheel (.020 Steel Wire); Item #13131 For weld cleaning,

deburring and surface preparation.



Kit Contains

Item Number
13002

1-3/4" Crimped Wire Cup Brush (.0118 Steel Wire); Item #14301 3/4" Crimped Wire End Brush (.020 Steel Wire); Item #10008

3" Crimped Wire Wheel (.0118 Steel Wire); Item #17616

3" Abrasive Flap Wheel (Aluminum Oxide Grain, 80 Grit); Item #52028



13002



#### STAINLESS STEEL SCRATCH BRUSH COUNTERTOP DISPLAY

Ideal for removing rust, scale and paint from metal surfaces.

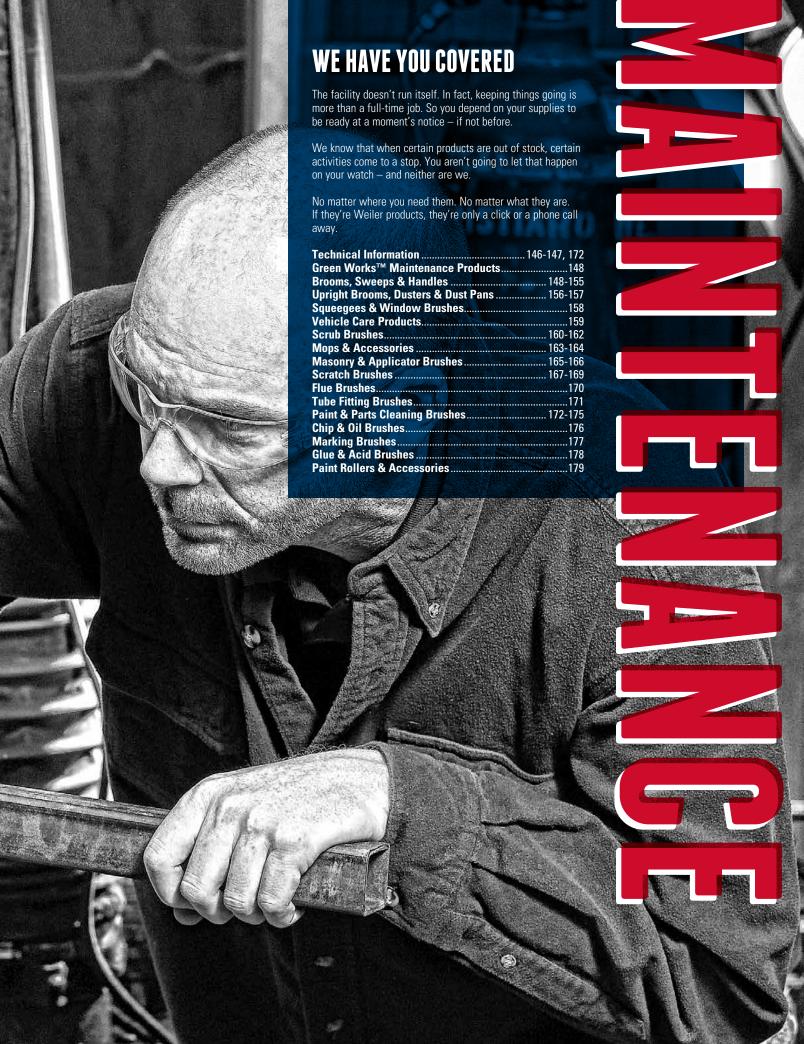
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(36) Stainless Steel Small Hand Scratch Brushes, 7-1/2" x 1/2" Block Wood Handle; Item #44167	61012











# **SELECTING THE RIGHT BRUSH**

## P PERFORMANCE LINE (INDUSTRIAL GRADE)

Engineered and manufactured to maximize performance and minimize operating costs in the most demanding surface conditioning applications. The use of superior construction, the highest quality materials and the most stringent manufacturing processes deliver the lowest cost-of-use and most consistent performance in heavy production environments.

## **VALUE LINE (PROFESSIONAL GRADE)**

Weiler's value line is manufactured using similar product construction and the same exacting standards as other Weiler maintenance products, but engineered to provide cost-effective use specifically designed for the professional, providing a cost-effective price. Vortec Pro® maintenance products are an economical choice for the construction trades, low volume production shops and light-duty industrial MRO use.

## **FILL MATERIALS GUIDE**

	Туре	Advantages	Applications	Notes
	Horsehair	<ul> <li>Very durable and resilient</li> </ul>	Fine particles	Not for use on oily
ANIMA		, 66 1	Ideal for polished and smooth surfaces     Scratch-free sweeping	or wet surfaces

Туре	Advantages	Applications	Notes
Tampico W Mary	Material holds water very well	Polishing, buffing and cleaning	Natural color is off white
	<ul> <li>Heat, alkali and acid resistant (to 283°F)</li> </ul>	Scrubbing and washing	Can be dyed or bleached
	Soft to medium texture	Ideal for wet and dry applications	
	Good durability		
Palmyra	Softer and finer texture than Bassine	Used in garage, scrub, deck	Brown in color
	<ul> <li>More economical than Bassine</li> </ul>	and patio brushes	
	<ul> <li>Medium to coarse texture</li> </ul>	Ideal for wet and dry applications	
	Good durability		
Bassine	Coarse, tough fibers	Heavy scrubbing and cleaning	Dark brown in color
	Excellent durability	Tasks requiring a tough,	
		long-lasting natural fiber	
Bass Name and American	Good flexibility	Heavy-duty cleaning applications	Dark brown in color
	<ul> <li>Very coarse, tough fibers</li> </ul>	Use on rough surfaces	
	Excellent durability		

Nylon	Excellent durability	Heavy-duty industrial	May be level or crimped
65754111 42 MARKET BERTHE • 1	Resistant to most acids & alkali	Scrubbing and cleaning	
CONTROL OF THE PROPERTY OF THE	High water absorbency	<ul> <li>Wet and dry applications</li> </ul>	
KOS POLICIO EN MORE APROPRIA .	Resistant to high temperatures (to 350°F)		
•	Best man-made fiber to resist fatigue		
Polypropylene //////// • \	Very durable	Variety of medium to coarse	May be level or crimped
(2000)	Acid, oil, bacteria and fungus resistant	industrial applications	
2000 000 000 000 000 000 000 000 000 00	Versatile		
<i>- 1</i>	Resistant to high temperatures (to 225°F)		
######################################	Will not absorb moisture		
Polystyrene •	Extremely durable	Used in vehicle care brushes	May be level or crimped
	Liquid and oil resistant	• Used in fruit and vegetable wash brushes	<ul> <li>Not for use with sweeping</li> </ul>
	Resistant to temperatures (to 180°F)	<ul> <li>Wet and dry applications</li> </ul>	compounds
<ul><li>(2) (2) (2) (4) (4) (4) (5) (4) (4) (5) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4</li></ul>	Ends can be flagged		
Recycled PET • E	Environmentally-friendly	• Fine, Medium & Coarse	Fill made from recycled
god tout and the first in the state of	Less landfill waste	• For a variety of applications	water bottles

VNTHFTIL

## FLOOR BRUSH SELECTION GUIDE

Surface Type	Debris	Recommended Brush
Tile, linoleum, highly polished	Fine dust	Black horsehair
Smooth wood	Fine to medium dirt	Flagged silver polystyrene
Smooth concrete	Fine to medium dirt	Black polypropylene
Uneven or rough floors, heavy traffic areas	Medium to heavy dirt and debris	Black tampico
Rough concrete, asphalt	Heavy, caked dirt, grease, litter	Black tampico - inner row of steel wire or palmyra

## **FLOOR BRUSH FEATURES**

**Block:** Fill material is set into this part of the sweep.

#### Synthetic Foam Block:

- Made with a synthetic cellular core surrounded by a solid skin.
- Will not crack, split, warp or house contaminating bacteria.
- · Water, solvent and mild acid resistant.
- · Lighter weight than hardwood blocks.

Set into the block and serves

as the actual working part

· More efficient sweeping.

## Reorder Number:

· Shown on block.

#### Lacquered Hardwood Block:

- Made of natural, kiln-dried hardwood.
- Resists moisture.
- Helps prevent cracking, increasing brush life.

#### **Two Handle Holes:**

 Allows user to change sweeping direction to prevent the fill material from setting in one direction.
 Periodically changing sweeping direction increases the life of the brush.

#### **Staggered Hole Pattern:**

 Prevents gaps in the fill material so brush sweeps up all the dirt in its path.



#### Flagged Tips:

of the brush.

Longer brush life.

Center / Border Fill

**Dense Fill:** 

 Each synthetic filament end is mechanically split, forming multiple tips which "pick up" fine dust and dirt particles.

· Horsehair has naturally tapered or flagged tips.

# Border (Casing) Moves fine dust and dirt Solid Brush Face

## Center

Loosens and moves heavy dirt

## Solid Brush Face with Flared Ends: • The tufts of fill material on each end

- The tufts of fill material on each end of a contractor, floor, garage or street brush are flared outward.
- Flared ends allow the brushing material to get into corners without marking or scraping the wall with the block.
- Prevents a gap in the middle of the brush.

## **FLOOR BRUSH CARE**

**Storage** - Floor brushes should be hung when not in use so no weight is against the fill material. This will help keep the shape and prolong the life of the brush.

Handles - The handle should be periodically re-positioned from one staff hole to the other to prevent fill material from setting in one position. The use of a brace will help prevent handle breakage. Perma-Flex™ (#44301) handles are guaranteed to outlast the life of the brush.

**Blocks** - Avoid knocking a wood block against the floor to remove embedded material, as this will damage the end of the block.

**Cleaning** - Synthetic filled brushes can be cleaned with detergent and water. Fiber filled brushes should be combed to remove dirt and other foreign material. Dip coarse natural fiber brushes in water to help prevent breakage due to dry fiber.



36 billion water bottles end up in landfills every year. Help us make a difference!

## **GREEN WORKS™ MAINTENANCE PRODUCTS**

Sustainable, recyclable, environmentally-friendly, Green - all of these come to mind with the new Green Works line from Weiler. Made from recycled or sustainable raw materials, the Green Works line is manufactured in a LEED (Leadership in Energy & Environmental Design) approved facility to ensure that even the production environment is environmentally-friendly. All of this, plus the same great performance! Every product is made to the quality levels you expect when you hear the name Weiler.

#### **Green Works Product Construction:**

- Fill material is made out of recycled water bottles, giving a second life to these waste products and helping to clean
  up the environment.
- Rubberwood blocks are made from the wood of rubber trees that have ended their life cycle in the rubber production industry. We are putting the waste product of that industry to good use.
- Foam blocks are made from recycled plastics.



**FLOOR SWEEPS** - Choose from flagged tips that pick-up fine dust and dirt to durable fibers that sweep heavy, caked dirt and debris.

<b>Block Size</b>	Block Type	Fill Material	Trim Length	Standard Pack	Item Number	
Fine Sweeping - For fine dust and dirt on smooth surfaces						
24"	Recycled Black Foam	Recycled Grey Fill	3"	12	42352	
24"	Renewable Rubberwood	Recycled Grey Fill	3"	12	42355	
	Medium Sweeping	g - For general purpo	se sweeping on sen	ni-smooth surfaces		
24"	Recycled Black Foam	Recycled Blue Fill	3"	12	42353	
24"	Renewable Rubberwood	Recycled Blue Fill	3"	12	42356	
Coarse Sweeping - For heavy dirt and debris on very rough surfaces						
24"	Recycled Black Foam	Recycled Maroon Fill	3"	12	42354	
24"	Renewable Rubberwood	Recycled Maroon Fill	3"	12	42357	

Handle #44018 or #44300 are recommended for use with these sweeps



**STREET BROOM -** Ideal for wet or dry sweeping on streets, parking lots, loading docks and driveways.

<b>Block Size</b>	Block Type	Fill Material	Trim Length	Standard Pack	Item Number
16"	Renewable Rubberwood	Recycled Black Fill	6"	6	42360

Handle #44020 is recommended for use with this broom.



**DUO SWEEP -** Heavy-duty upright with two handle holes - one straight and one angled.

Size	Block Type	Fill Material	Trim Length	Standard Pack	Item Number
9"	Recycled Black Foam	Recycled Yellow Fill	7"	12	42365

Handle #42383 is recommended for use with this sweep.



**COUNTER DUSTER -** Ideal for quick clean-ups. Features a comfortable grip handle.

<b>Block Size</b>	Block Type	Fill Material	Trim Length	Overall Length	Std. Pack	Item Number
8"	Recycled Black Foam	Recycled Grey Fill	2-1/2"	13-1/8"	12	42368





**SCRUB BRUSHES** - Designed to provide the most effective brushing and cleaning action.

Block Size	Type	Block Type	Fill Material	Standard Pack	Item Number
8"	Utility	Recycled Black Foam	Recycled Yellow Fill	12	42375
9"	Pointed Deck	Renewable Rubberwood	Recycled Yellow Fill	12	42373
10"	Deck	Renewable Rubberwood	Recycled Yellow Fill	12	42371
	Bi-Level	Recycled Black Foam			42372
20"	Utility	Recycled Black Foam	Recycled Yellow Fill	12	42376

Handle #44018 or #44300 are recommended for use with these scrub brushes.

Key:





#### **QUICK ASSEMBLY & UNBREAKABLE!**

**Easy-to-Assemble:** The convenient and easy-to-assemble T-knob construction of the Pro-Flex Sweep takes less than 1 minute to assemble. The handle connects easily and securely to the broom head, and there's no need for a brace!

**Unbreakable:** Utilizing an advanced polymer technology, the Pro-Flex Sweep's unique handle/sweep connector flexes on impact, providing unbelievable shock absorbency...and it's unbreakable! Ideal for the most demanding applications on a construction site.

**More Maneuverable:** Without the need for a brace, the Pro-Flex Sweep is lighter, easy to maneuver and eliminates potential damage to low surface areas.

The Pro-Flex Sweep... the strongest sweep on the market AND the easiest to assemble!



Flexible connection makes these sweeps the strongest on the market!



The Pro-Flex Sweep's indestructible design will make it the last sweep you will ever buy!

# A I E U ABKASIVES

# **NON-WOVEN ABRASIVES**

## P

#### PRO-FLEX SWEEPS - Hardwood Block

Includes comfort grip Pro-Flex handle and scraper for removal of heavy, caked dirt and debris.

<b>Block Size</b>	Fill Material	Trim Length	Standard Pack	Item Number
	Convenient scraper attaches handle	to sweep head for dis	play and shipping purp	oses
24"	Flagged Grey Polystyrene Border with Stiff Black Polypropylene Center	3"	1	44600 ■
24"	Palmyra	4"	1	44601 ■
24"	Medium Maroon Polypropylene	3-1/4"	1	44604 ■
24"	Stiff Blue Polypropylene	3-1/4"	1	44606 ■
■ Packaged product	available. See pages 141-142 for details.	•		

## QUICK ASSEMBLY - NO TOOLS REQUIRED!



Remove nuts from broom assembly



Flip scraper and place over bolts



Place handle connector over bolts and tighten nuts securely





Sweeping leaves from a garage floor.

## **SPECIALTY FLOOR BRUSHES**

**CONTRACTOR BROOMS** - Designed to withstand rugged, every day use. The 1-1/8" bolton handle design combined with a lacquered hardwood block and 12-gauge steel brace makes the Contractor Broom the most durable sweep in our product line.



CONTRACTOR BROOMS - Hardwood Block - Heavy-duty brace included with all brooms. Ideal for construction sites and other heavy use environments.

Block Size	Fill Material	Trim Length	Standard Pack	Item Number
	Fine Sweeping - For f	ine dust and dirt on sm	ooth surfaces	
24"	Flagged Silver Polystyrene	3"	1	44553
	Medium Sweeping - For genera	l purpose sweeping or	semi-smooth surfaces	
24"	Flagged Grey Polystyrene Border	3"	1	44581
30"	with Stiff Black Polypropylene Center			44582 •
	Coarse Sweeping - For hea	vy dirt and debris on v	ery rough surfaces	
24"	Palmyra	4"	1	44584
24"	Medium Maroon Polypropylene	3-1/4"	1	44587
24"	Stiff Blue Polypropylene	3-1/4"	1	44590
30"				44591 •

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

#### NOTE



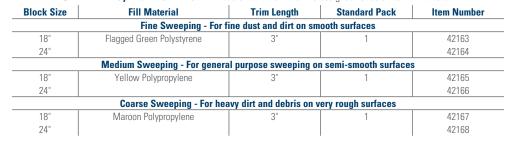
- For Contractor Brooms, use Handle No. 44635 (1-1/8" x 60").
- Handle not included in price order handle separately.
   Bolt to assemble broom is included with the broom, not with the handle.



**PERMA-SWEEP™ FLOOR BRUSHES** - Weiler offers color-coded floor sweeps to make product selection and identification easier. Constructed with foam blocks and synthetic filaments, these materials are durable, resist acid and bacteria and can be used in wet or dry sweeping applications.



#### PERMA-SWEEP - Synthetic Foam Block - Made of durable materials designed to resist acid and bacteria.









- For Perma-Sweep Floor Brushes, use Perma-Flex Handle No. 44301 (15/16" x 60") Guaranteed for the life of the brush!
- · Handle not included in price order handle separately.

- Handle No. 44300 (15/16" x 60") recommended for use with all Floor Brushes.
- Handle not included in price order handle separately.

## FINE SWEEPS - Lacquered Hardwood Block

For dust and fine dirt on smooth surfaces: Tile, Wood, Linoleum, Marble, Ceramic Tile and Smooth Concrete.

Block Size	Fill Material	Trim Length	Standard Pack	ltem Number	★ Combo Qty. Item Number
18"	Black Horsehair	3"	1	42001	44855 •
24"				42002	44856 •
18"	Black Horsehair	3"	1	42013	-
24"	and Black Polypropylene Blend			42014	_
10"	Flagged Silver Polystyrene	3"	12	70312	_
18"			1	42041	44857 •
24"			1	42042	44858 •
36"			1	42098 <del>*</del>	_









Reliable and efficient sweeps at a value price.

Block	Fill	Trim	Standard	Item
Size	Material	Length	Pack	Number
18" 24"	Flagged Grey Polystyrene	3"	12	77013 77014



#### MEDIUM SWEEPS - Lacquered Hardwood Block

General purpose sweeping on semi-smooth surfaces: Wood, Smooth Concrete, Asphalt and Factory/Shop Floors.

Block Size	Fill Material	Trim Length	Standard Pack	ltem Number	★ Combo Qty. Item Number
14"	Black Tampico	3"	1	42114	-
16"				42006	_
18"				42007	44859 •
24"				42008	44860 •
36"				42047 <del>*</del>	_
18"	Horsehair Border	3"	1	42016	-
24"	with Black Tampico Center			42017	_
36"				42049 <del>*</del>	_
24"	Horsehair and Polystyrene Border	3"	1	70068 •	-
	with Black Polypropylene Center				
18"	Black Polypropylene	3"	1	42035	44861 •
24"				42037	44862 •
36"				42095 <del>*</del>	_

<sup>★</sup> Combo Packs include 12 sweeps per pack and 12 #44300 handles (not assembled).

#### VORTEC PRO MEDIUM SWEEPS - Lacquered Hardwood Block

Reliable and efficient sweeps at a value price.

Block Size	Fill Material	Trim Length	Standard Pack	Item Number	★ Combo Qty.
18"	Dark Grey Polystyrene Border	3"	1	25234	44851 •
24"	with Black Polypropylene Center			25235	44852 •
18"	Black Tampico	3"	1	25231	44853 •
24"				25232	44819 •

<sup>★</sup> Combo Packs include 12 sweeps per pack and 12 #44300 handles (not assembled).





<sup>\*</sup> Brace included

Non-stock product, contact Customer Service for lead times and minimum order quantities.



#### **COARSE SWEEPS** - Lacquered Hardwood Block

For heavy dirt and debris on rough surfaces: Wood, Concrete, Asphalt and Brick.



Block Size	Fill Material	Trim Length	Standard Pack	Item Number	★ Combo Qty. Item Number
18"	Black Tampico with 1 row	3"	1	42134	44871 •
24"	Tempered Steel Wire in Center			42135	44872 •

★ Combo Packs include 12 sweeps per pack and 12 #44300 handles (not assembled).

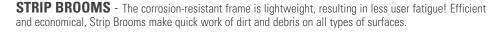
• Non-stock product, contact Customer Service for lead times and minimum order quantities.





- Handle No. 44300 (15/16" x 60") recommended for use with all Floor Brushes.
   Handle not included in price order handle separately.







#### VORTEC PRO® STRIP BROOMS - Economy brushes provide lasting, efficient service at minimal cost.

Block Size	Fill Material	Trim Length	Standard Pack	ltem Number						
Fine Sweeping - For smooth surfaces										
24"	Green Polypropylene	3"	12	25299						
Medium Sweeping - For semi-rough surfaces										
18"	Red Polypropylene	3"	12	25290						
24"				25291						
· ·	Coars	se Sweeping - For rough s	urfaces							
18"	Brown Polypropylene	3"	12	25294 •						
24"				25295						

• Non-stock product, contact Customer Service for lead times and minimum order quantities.





#### **NOTE**



Handle not included in price - order handle separately.





#### **DRIVEWAY COATERS** - For applying blacktop driveway and parking lot dressings;

asphalt, sealers or roof coatings.

Block Size	Fill Material	Trim Length	Standard Pack	Item Number	★ Combo Qty. Item Number
10"	Black Tampico	2-5/8"	12	73180	-
18"	Palmyra	2"	12	73182 <del>*</del>	44885 •

★ Combo Packs include 12 brushes per pack and 12 #75527 handles (not assembled).

\* With squeegee

 Non-stock product, contact Customer Service for lead times and minimum order quantities.



#### **NOTE**



- Handle No. 75527 (7/8" x 48") recommended for Driveway Coaters.
- Handle not included in price order handle separately.

#### Key:





#### GARAGE BRUSHES - Lacquered Hardwood Block

For wet or dry sweeping heavy, caked dirt and debris on rough surfaces: Concrete, Garage/Factory Floors, Rough Wood, Sidewalks, Barns and Brick Surfaces. Solvent, oil, chemical and liquid resistant.

Block Size	Fill Material	Trim Length	Standard Pack	Item Number	★ Combo Qty. Item Number
16"	Palmyra	4"	1	42021	-
18"				42022	44867 •
24"				42023	44868 •
36"				42138 <del>*</del>	_
18"	Maroon Polypropylene	3-1/4"	1	42025	-
24"				42026	_
36"				42149 <del>*</del>	_



<sup>•</sup> Non-stock product, contact Customer Service for lead times and

minimum order quantities.





#### VORTEC PRO® GARAGE BRUSHES - Lacquered Hardwood Block

Reliable and efficient brushes at a value price.

Block Size	Fill Material	Trim Lenath	Standard Pack	ltem Number	★ Combo Qty.
3126	ivialeriai	Lengui	Fack	Mullipel	Itelli Mullibei
18"	Palmyra	4"	1	25241	44865 •
24"				25242	44866 •
18"	Maroon Polypropylene	3-1/4"	1	25238	44863 •
24"				25239	44864 •

★ Combo Packs include 12 sweeps per pack and 12 #44300 handles (not assembled).

★ Combo Packs include 12 sweeps per pack and 12 #44300 handles (not assembled).

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

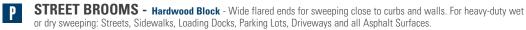


#### NOTE

\* Brace included



- Handle No. 44435 (1-1/8" x 60") recommended for use with all Garage Brushes.
- · Handle not included in price order handle separately.



Block Size	Fill Material	Trim Length	Standard Pack	Item Number	★ Combo Qty. Item Number
16"	Natural Palmyra	6-1/4"	6	70208	_
16"	Dyed Palmyra	6-1/4"	6	70209	_
16"	Bass & Palmyra Blend	6-1/4"	6	42032	44873 •
16"		7-1/4"		42099	_
16"	Brown Polypropylene	5-1/4"	6	42033	44874 •
18"				42173	_
24"				42174	_
16"	Orange Polypropylene	5-1/4"	6	70212	-
18"				42054	-
24"				42055	_
14"	White Polypropylene Fill	4"	6	70210	-
16"	Orange Block			70211	_

- ★ Combo Packs include 12 brooms per pack and 12 #44020 handles (not assembled).
- Non-stock product, contact Customer Service for lead times and minimum order quantities.





#### WIRE BROOMS - Hardwood Block

For sweeping or scrubbing concrete or stone floors, driveways, etc. Ideal for sweeping heavy chips and debris.

Block Size	Fill Material	Trim Length	Standard Pack	Item Number
14"	Flat Wire	5"	1	42030
16"	Round Wire	3-3/4"	6	70215



- Street and wire brooms require a tapered tip handle.
- Handle No. 44020 (1-1/8" x 60") recommended for use with all Street & Wire Brooms.
- Use Spring-Loc Adapter to keep tapered wood handle securely fastened to the block.
- · Handle not included in price order handle separately.





The Perma-Flex tip is guaranteed not to break when used with a Perma-Sweep.

## HANDLES, BRACES & TIPS

Weiler's wood and metal handles are constructed for long life. Handles are available in a large variety of styles and tips to fit a wide selection of block types. The following charts provide recommended uses for each style handle.















#### WOOD HANDLES - Quality hardwood

Length	Diameter	Tip	Description	Std. Pack	Item No.
48"	7/8"	Threaded	Use with floor and garage brushes.	12	75527
48"	15/16"	Wood			44571
54"	15/16"				44572
60"	15/16"				44018
60"	1-1/8"				44019
72"	15/16"				44303
11"	3/4"	Tapered	Use with masonry and roof brushes,	36	75528 •
48"	7/8"	Wood	street brooms, floor and deck scrubs	12	44574
54"	1-1/8"		and squeegees.	12	44573
60"	1-1/8"			12	44020
72"	1-1/8"			12	44306
48"	15/16"	Threaded	Heavy-duty metal tip provides	12	75525
60"	15/16"	Metal	additional strength.		44300
60"	1-1/8"				44435
72"	15/16"				44302
48"	15/16"	Perma-Flex™	Durable threaded plastic tip	12	75516
60"	15/16"		guaranteed not to break when used		44301
			with Perma-Sweep™ Floor Brushes.		
60"	15/16"	-	Use with Strip Brooms.	12	25297
60"	1-1/8"	_	Use with Contractor Brooms.	12	44635

• Non-stock product, contact Customer Service for lead times and minimum order quantities.



75555



#### **METAL HANDLES -** Reinforced, heavy-duty metal handles are available in two colors and optional foam cover.

Length	Diameter	Tip	Description	Std. Pack	Item No.
48"	3/4"	Threaded Plastic	Black metal with plastic hang cap.	12	42383
60"	15/16"	Threaded Metal	Black plastic coat with plastic hang cap.	12	44577
60"	15/16"	Threaded Metal	Black plastic coat with black foam cover and plastic hang cap.	12	44578



#### VORTEC PRO® METAL HANDLES - Reliable and efficient handles at a value price.

Length	Diameter	Tip	Description	Std. Pack	Item No.
60"	15/16"	Threaded Plastic	Black plastic coat with convenient hang-up cap.	12	75555

#### P

#### **METAL TELESCOPING HANDLES**

Use telescoping handles to shorten or extend the reach of the handle.

Length	Diameter	Туре	Use	Std. Pack	Item No.
6' extends to 12'	-	Telescoping	Window, wall and Vehicle wash brushes	6	44499





#### **FIBERGLASS HANDLES -** Fiberglass handles are stronger than wood or metal. Virtually indestructible.

Length	Diameter	Tip	Description	Std. Pack	Item No.
56-3/4"	1"	Tapered/Threaded	Hollow handle	12	44561*
54"	1"	Threaded	Honeycomb core	12	44562
60"	1"	Threaded	All white	12	44563+

\* For use with both tapered and threaded holes + Approved for the food so







Fiberglass with polyethylene reinforced honeycomb core



Fiberglass hollow handle.





#### **HANDLE ACCESSORIES**

Description	Use	Std. Pack	Item No.
Steel brace. Fits all handle sizes.	Reinforces & locks handle to block. (Standard with sweeps 30" and larger)	12	44021
Heavy-duty steel brace attaches to block with wood screws and wraps around handle.  Fits all handle sizes.	Increases life of the brush by providing extra support for handle and block.	12	44290
Replacement handle thread. Made of heavy-duty fiberglass. For any 15/16" diameter handle.	Cut off damaged threads and slip this tip in place for a new handle.	12	44317
Tapered Adapter to tapered ends.	Converts threaded handle ends	12	75505
Spring Loc Adapter for any 1-1/8" diameter tapered wood handle for street brooms and window brushes.	Keeps tapered wood handles from separating from the block.	6	44624











Key:







Sweeping plastic and metal chips in a tool room

## **UPRIGHT AND WHISK BROOMS**

Made of fine quality broom corn, fiber or synthetic material, Weiler's upright brooms and whisks are durable enough to meet all industrial and commercial applications.

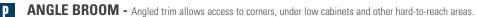
P

#### UPRIGHT BROOMS - Ideal for sweeping floors, reaching into corners, cleaning ceilings, etc.



Description	Fill Material	Trim Length	Overall Length	Standard Pack	Item Number						
Household Broom - Good Quality											
4 sews - 7/8" handle	Corn & Fiber	15"	54"	12	44547						
	Lig	ht Industrial Brooms	- Better Quality								
5 sews - 7/8" handle	Corn & Fiber	17"	57"	12	44548						
5 sews - 7/8" handle	100% Corn	15"	56"	12	44009						
6 sews - 1-1/8" handle	100% Black Corn	16"	56"	12	70304						
		Janitor's Broom - B	est Quality								
5 sews - 1-1/8" handle Wire banded	Corn & Fiber	17"	57"	12	70308						
Warehouse Broom - Heavy-Duty											
4 sews - 1-1/8" handle Wire banded	Corn & Fiber	18"	57"	12	44008						





Description	Fill Material	Trim Length	Overall Length	Standard Pack	Item Number
Large Plastic 12" sweep face	Flagged Plastic	7-1/2"—6"	54"	12	44305



#### VORTEC PRO® ANGLE BROOM - Reliable and efficient broom at a value price.

Description	Fill Material	Trim Length	Overall Length	Standard Pack	Item Number
Small Plastic 8" sweep face	Flagged Plastic	3-7/8"-4-1/2"	54"	12	75160



#### **CAP BROOMS** - Metal top for added durability. Ideal for wet or dry applications.

Description	Fill Material	Trim Length	Overall Length	Standard Pack	Item Number
Metal Cap - Wire banded 12" sweep face	Palmyra	10"	55"	6	44007
Metal Cap - Wire banded 12" sweep face	Brown Poly	10"	55"	6	70325
Track & Switch Steel chisel point on handle end	Palmyra	8"	55"	6	70324



#### VORTEC PRO LOBBY BROOMS - Reliable and efficient brooms at a value price.

Description	Fill Material	Trim Length	Overall Length	Standard Pack	Item Number
Plastic Cap - 8" sweep face	Flagged Plastic	5"	36"	12	44546 •
Toy/Lobby - 3 sews, 7/8" handle	Corn & Fiber	11"	40"	12	70300

Non-stock product, contact Customer Service for lead times and minimum order quantities.



#### WHISK BROOMS - For fast, efficient clean-up.

Use	No. of Sews	Fill Material	Trim Length	Overall Length	Std. Pack	Item No.
General purpose - all applications	3	Corn & Fiber	10"	12-1/2"	12	44266
Sweeping coarse & heavy material	2	Palmetto	7"	9-1/4"	12	44099
Coarse sweeping of hot chips	-	Bassine	5-1/4"	10-1/4"	12	44103

## **DUSTERS AND DUST PANS**

Whether cleaning fine particles or heavy debris, Weiler has a Counter Duster to do the job. These brushes are available in a wide selection of fill materials and have comfortably shaped blocks in wood or foam. Also choose from an array of Dust Pans to meet the application requirements.



Cleaning up oil absorbent from a shop floor.

#### **COUNTER DUSTERS -** For clean up in hard-to-reach areas.

Fill Material	Trim Length	Brush Length	Overall Length	Block Type	Std. Pack	Item No.						
Horsehair												
Horsehair	2-1/4"	8"	13-1/4"	Wood	12	44003						
	2-1/4"	9"	14-1/4"			44351						
Black Horsehair and Fiber Mix	2-1/2"	8"	13-1/2"	Wood	12	71019						
		Syn	thetic									
Flagged Silver Polystyrene	2-1/2"	8"	13-1/4"	Wood	12	44354						
Black Polystyrene	2-1/2"	8"	13-1/4"	Wood	12	25252						
Orange Polystyrene	2"	9"	14"	Foam	12	42213						
Natural Fiber												
Black Tampico	2-1/2"	8"	13-1/4"	Wood	12	25251						
Tri-colored Tampico	2-1/2"	8"	13-1/2"	Wood	12	44004						







#### **DUST PANS -** Durable, industrial grade - For quick clean-ups.

Description	Height	Width	Depth	Std. Pack	Item No.
Heavy-duty 20 gauge steel Black enamel finish	_	12"	13-1/2"	12	71078
Extra wide - Heavy-duty 20 gauge steel; Black enamel finish	-	16"	15"	12	71079
Lobby Dust Pan - Black enamel metal hopper; Aluminum handle	39-1/2"	12"	9"	6	71081 •

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.



#### VORTEC PRO® DUST PANS - Reliable and efficient pans at a value price.

Description	Height	Width	Depth	Std. Pack	Item No.
Molded plastic	-	12-1/4"	12"	12	71077
Lobby Dust Pan Molded plastic hopper Aluminum handle	39-1/2"	12"	11"	6	71080











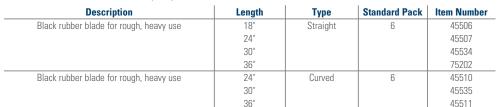
Cleaning a window with a window squeegee.

## **SQUEEGEES & WINDOW BRUSHES**

Squeegees deliver fast, efficient cleaning. Weiler provides a variety of non-scratching floor and window squeegees and window brushes. Designed for high durability.



#### FLOOR SQUEEGEES - Heavy-duty construction, iron handle socket.







#### WINDOW SQUEEGEES - Rust-proof handle socket and frame.

Description	Length	Standard Pack	Item Number
One piece frame with hard rubber section	6"	12	45537
joined with a soft, red rubber blade.	12"		45500
	1/1"		45538 •

• Non-stock product, contact Customer Service for lead times and minimum order quantities.





- All squeegees require a tapered tip handle.
- Handle No. 44020 (1-1/8" x 60") recommended for use with all Squeegees.
- Use Spring-Loc Adapter to keep tapered wood handle securely fastened to the block.
   Handle not included in price order handle separately.





#### **ROUND STYLE WINDOW BRUSH -** Two threaded handle holes

High quality, non-scratching brushes used for industrial window washing.

Description	Block Size	Block	Trim Length	Standard Pack	Item Number
Flagged Gold Polystyrene	4-1/2"	Plastic	2-1/2"	12	25271

#### **NOTE**



- Handle No. 44019 (1-1/8" x 60") recommended for use with #25271 & #73003 Window Brushes.
- Handle not included in price order handle separately.

#### Key:





## **VEHICLE CARE PRODUCTS**

Weiler's line of vehicle care brushes meets the cleaning needs of car and truck fleets. Brushes are also popular in the marine industry. All products are designed to provide professional results.



Washing a car with a vehicle wash brush and fountain tube handle.

**VEHICLE WASH BRUSHES -** Protective bumper - Foam block with two handle holes.

Block	Fill	Trim	Standard	Item
Size	Material	Length	Pack	Number
9-1/2" x 2-3/4"	Grey Fiber	2-1/2"	12	44318*
9-1/2" x 2-3/4"	Flagged White Polystyrene	2-1/2"	12	44510
9-1/2" x 2-3/4"	Flagged Orange Polystyrene	2-1/2"	12	42210
9-1/2" x 2-3/4"	Flagged Green Polystyrene	2-1/2"	12	73146



- $\hbox{\bf *} \ \, \text{May scratch smooth or high gloss surfaces, use polystyrene filled products for these surfaces.}$
- ★ Combo Packs include 12 brushes per pack and 12 #44319 handles (not assembled).
- Non-stock product, contact Customer Service for lead times and minimum order quantities.



Block	Fill	Trim	Standard	ltem
Size	Material	Length	Pack	Number
10" x 2-1/2"	Flagged Silver-grey Polystyrene	3"	12	70312



P UPHOLSTERY/SPOTTING BRUSH - Shaped plastic handle

Wet & dry cleaning, prespotting, carpet touch-up, etc.

	<b>Block Size</b>	Fill Material	Trim Length	Overall Length	No. of Rows	Std. Pack	Item Number	
	8-1/2" x 2-9/16"	.016 Crimped Polypropylene	5/8"	8-1/2"	8 x 9	12	44307	



**SPOKE BRUSH** - Ideal for cleaning spokes or confined spaces.

	Length of Brush Part	Fill Material	Brush Part	Overall Length	Standard Pack	Item Number	
	10"	White Tampico	2-7/8" tapered	15"	12	44315	



TIRE CLEANING BRUSHES - Foam block - Used for cleaning sidewalls of tires.

Block Size	Fill Material	Trim Length	Overall Length	No. of Rows	Std. Pack	Item No.
8-1/2" x 2-9/16"	.008 Brass	5/8"	8-1/2"	8 x 9	12	99593
7" x 1-9/16"	.008 Brass	5/8"	7"	6 x 8	12	73156







Scrubbing a stainless steel sink.

## **SCRUB BRUSHES**

A broad range of high quality scrub and utility brushes are available from Weiler. From quick cleaning to heavy-duty scrubbing, Weiler's brushes are designed to provide the most effective brushing and cleaning action.









#### HAND SCRUB BRUSHES - Heavily filled for heavy-duty scrubbing.

Block Size	Fill Material	Trim Length	Block Type	Standard Pack	Item Number
6"	White Polypropylene	1-1/8"	Iron Style - Plastic	12	44395
7-1/4"	Palmyra	1"	Square - Wood	24	72034 •
8"	White Tampico	1-1/8"	Square - Wood	12	44024
	White Tampico	1"			72058*
	Palmyra	1-1/8"			44025
8-1/4"	White Tampico	1-1/8"	Square - Wood	12	73111+
9"	White Tampico	1-1/8"	Pointed - Wood	12	44023

<sup>\*</sup> Threaded handle hole







## **DECK SCRUB BRUSHES** - Excellent for scrubbing decks or floors. One threaded and one tapered handle hole. Can be used with threaded handle #44018 or tapered handle #44020.

<b>Block Size</b>	Fill Material	Trim Length	No. of Rows	Block Type	Standard Pack	Item Number
9"	Palmyra	2"	5 x 14	Wood	12	44428
	Tampico					44429
10"	Palmyra	2"	6 x 18	Wood	12	44026
	Tampico					44028
	Polypropylene					44434
12"	Palmyra	2"	6 x 20	Wood	12	44027
	Tampico					44029 •
	Polypropylene					44438

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.





## **BI-LEVEL SCRUB BRUSHES** - The bi-level design allows the brush to stay in contact with the surface. Can be used with Perma-Flex handle #44301.

Block Size	Fill Material	Trim Length	Block Type	Standard Pack	Item Number
10"	Stiff Crimped Blue Polypropylene	1-3/4"	Foam	6	44692
10"	Flagged White Polystyrene	2-3/4"	Foam	6	44699
10"	Fine Green Nylex	2-3/4"	Foam	12	44693





#### VORTEC PRO® BOOT BRUSH - Reliable and efficient brush at a value price.

Size	Description	Item Number
9" x 6"	Boot Cleaning Brush - Metal Frame - Wood Block - Black Nylon Fill	44391

<sup>+</sup> Tapered handle hole

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

## UTILITY SCRUB BRUSHES - For general scrubbing in factories, kitchens, institutions, etc.

Overall Length	Fill Material	Trim Length	Block Type	Standard Pack	Item Number
8"	Palmyra	2"	Wood	12	72086
	Yellow Polypropylene				44013
	White Tampico				44014
20"	Palmyra	2"	Wood	12	72101
	Yellow Polypropylene				44016
	White Tampico				44017



Removing stubborn dirt, grime and mildew from a tiled surface with a grout detail brush.

## UTILITY SCRUB BRUSHES - Chemical and water resistant, will not warp or crack.

Overall Length	Fill Material	Trim Length	Block Type	Standard Pack	Item Number
8"	Palmyra	2"	Foam	12	79101
	Yellow Polypropylene				79120
	White Tampico				79100
20"	Palmyra	2"	Foam	12	79107
	Yellow Polypropylene				79109
	White Tampico				44663



UTILITY SCRUB BRUSHES - Designed for high temperature cleaning, ideal for food service.

Overall	Fill	Trim	Block	Standard	Item
Length	Material	Length	Туре	Pack	Number
8"	White Nylon	2"	Plastic	12	44416
20"	White Nylon	2"	Plastic	12	44418



VORTEC PRO\* UTILITY SCRUB BRUSHES - Ideal for general purpose cleaning.

		3 1- 3 3				
Overall Length	Fill Material	Trim Length	Block Type	Standard Pack	Item Number	
8"	Tampico	2"	Foam	12	25262	
20"	Tampico	2"	Foam	12	25263	



**GROUT DETAIL BRUSH** - Use for removing stubborn dirt, grime and mildew from tiled surfaces.

<b>Block Size</b>	Fill Material	Trim Length	Standard Pack	Item Number
8-1/2"	Stiff Black Nylon	7/8"	24	73233



Brush Part	Fill Material	Handle	Overall Length	Standard Pack	Item Number
5-3/4" x 4-3/4"	Black Nylon	Plastic	21"	12	75068



Key:











#### PROFESSIONAL BOWL BRUSHES - Hardwood handle and natural fiber - For thorough cleaning.

Brush Part	Fill Material	Diameter	Overall Length	Standard Pack	ltem Number
6" x 5"	White Tampico	2"	20"	12	44001*
6-1/2"	Tampico	3-1/4"	23"	12	75060

<sup>\*</sup> Foam handle





#### VORTEC PRO® BOWL BRUSH SET - 2" Trim Length - Reliable and efficient brushes at a value price.

Brush	Fill	Handle	Overall	Standard	ltem
Part	Material		Length	Pack	Number
3-1/2" x 3-3/4"	Polypropylene	Plastic	14-1/2"	6	75000





#### VORTEC PRO NAIL BRUSH - Great for use in shop or industrial settings.

<b>Block Size</b>	Fill Material	Trim Length	No. of Rows	Block Type	Standard Pack	Item Number
4-3/4" x 1-1/2"	Polypropylene	3/4"	4 x 15	Wood	36	44314





#### **BOTTLE WASHING BRUSH -** Brush shape enables access to hard-to-reach areas when cleaning.

Length of	Fill	Handle	Overall	Standard	Item
Brush Part	Material		Length	Pack	Number
6"	Black Horsehair	Wood	16"	12	99594



#### VORTEC PRO BOTTLE WASHING BRUSH - Reliable and efficient brush at a value price.

Length of	Fill	Handle	Overall	Standard	ltem
Brush Part	Material		Length	Pack	Number
5-1/2" x 2-3/8"	White Nylon	Twisted-in-wire	17"	24	75085





#### NYLON TUBE BRUSHES - Loop handle, Straight black nylon fill.

44111
44115

Diameter	Fill Diameter	Brush Part	Stem Diameter	Overall Length	Standard Pack	Item Number
1/4"	.005	2"	3/32"	6-1/4"	36	44110
3/8"	.005	2"	3/32"	6-1/4"	36	44213
1/2"	.010	3"	1/8"	8-1/2"	36	44111
3/4"	.012	3"	1/8"	8-1/2"	36	44112
1"	.014	4"	5/32"	12-1/4"	36	44113
1-1/4"	.014	4"	5/32"	13"	36	44114
2"	.014	5"	3/16"	16-3/4"	36	44115



#### PERCOLATOR BRUSH - Straight white nylon fill

Ideal for internal cleaning in industrial, laboratory and food service.

Diameter	Fill Diameter	Brush Part	Stem Diameter	Overall Length	Standard Pack	Item Number
7/16"	.010	3-1/2"	5/32"	11-1/2"	10	44316



75570



## **VAT BRUSH -** For valves, outlets, small tanks, beverage dispensers & coffee urns. Can be used with the Perma-Flex handle #44301.

Fill	Block	Overall	Standard	Item
Material	Туре	Length	Pack	Number
White Nylon	White Nylon	8"	1	75570

Weight	Material	Standard Pack	Item Number				
•	Cut End						
16 oz.	8-ply tight twist cotton	12	75102				
20 oz.			75103				
24 oz.			75104				
32 oz.			75105				
Small	4-ply high bulk cotton	12	75170 •				
Medium	economy		75171				
Large			75172				
X-Large			75173 •				
	Loop End						
Small	4-ply tight twist cotton	12	75180 •				
Medium			75181				
Large			75182 •				





Use the Combo Bucket with 12 to 32 oz. mop heads





P

#### WET MOP HANDLES - Industrial Grade. Hardwood handle with plated metal heads.

Description	Size	Standard Pack	Item Number
Quick-Change Plastic Head	54" x 15/16"	12	75140
Screw Type	54" x 1-1/8"	12	75131
Spring Type	54" x 1-1/8"	12	75132
Jaw Type	54" x 1-1/8"	12	75130





#### **ONE-PIECE COTTON DECK MOPS -** Industrial grade. Mop head securely tied to handle.

Description	Weight	Standard Pack	Item Number
#10	10 oz.	12	75096 •
#12	12 oz.	12	75097 •
#16	16 oz.	12	75109
#20	20 oz.	12	75098
#24	24 oz.	12	75110

• Non-stock product, contact Customer Service for lead times and minimum order quantities.



V

## **VORTEC PRO® COMBO BUCKET -** One-piece construction that will not rust, fade, crack, peel, chip, dent or warp. Wringer fits all sizes of plastic or metal buckets.

<b>Bucket Size</b>	Wringer	Standard Pack	Item Number
36 qt.	12-32 oz.	1	36666









Cleaning a corner with a dust mop.

## **DUST MOPS & DUSTING BRUSHES**

Our dust mops are made with industrial grade cotton and can be laundered. They will not scratch floors or unravel.



PROFESSIONAL DUST MOPS - Tie-on style, 4-ply cotton. Can be laundered.



Mop Size	Frame Size	Standard Pack	Item Number
24"	5" x 24"	12	75117
36"	5" x 36"	12	75118





#### PROFESSIONAL DUST MOP FRAMES - Heavy-duty full swivel frame.

Mop Size	Frame Size	Standard Pack	Item Number
24"	5" x 24"	12	75137
36"	5" x 36"	12	75138



#### PROFESSIONAL DUST MOP HANDLE - Heavy-duty clamp-on style.

Length	Diameter	Standard Pack	Item Number
60"	15/16"	12	75133





#### **RADIATOR BRUSHES -** 24" Overall Length. Ideal for cleaning radiators and narrow, hard-to-reach places.

Fill Material	Туре	<b>Brush Part</b>	Trim Length	Overall Length	Std. Pack	Item No.
Black Horsehair	Foam Handle	9-1/2"	2-1/2"	23-13/16"	12	73050
Black Horsehair	Twisted-in-wire handle	7-1/2"	2-1/2"	24-11/16"	12	73055





**WALL DUSTING BRUSH -** For dusting ceilings, valances, high moldings and other hard-to-reach places. Twisted-in-wire construction with plastic handle.

Fill	Overall	Trim	Standard	Item
Material	Length	Length	Pack	Number
Horsehair	12" x 5"	2-3/4"	2	71076

## MASONRY & APPLICATOR BRUSHES

Weiler's full line of Masonry & Applicator Brushes covers everything from the ground up - cement finishing and stippling brushes for texturing and applying cement and asphalt; whitewashing and masonry brushes for applying cement, water paints and liquid waterproofing materials on concrete block and masonry walls; smoothing brushes for applying wallpaper; and roof brushes for spreading roofing tar and coatings.



Applying waterproofing material with a masonry brush.



#### **KNOT-TYPE ROOF BRUSHES -** For application of roof coatings.

Can be used with tapered handle #44574.

Block	Fill	Trim	No. of	Standard	Item	★ Combo Qty.
Size	Material	Length	Knots	Pack	Number	Item Number
6-1/4"	Tampico	3-1/4"	3	12	44010	

- ★ Combo Packs include 12 brushes per pack and 12 #44574 handles (not assembled).
- . Non-stock product, contact Customer Service for lead times and minimum order quantities.





#### **BLOCK-TYPE ROOF BRUSHES -** For application of roof coatings.

Can be used with tapered handle #44574 or threaded handle #75527.

Block Fill Size Material		Trim Length	No. of Knots	Standard Pack	ltem Number	★ Combo Qty. Item Number	
	7"	White Tampico One tapered handle hole	2"	5	12	44011	44884 •
7" White Tampico One threaded handle hole		2"	5	12	73195	_	

- ★ Combo Packs include 12 brushes per pack and 12 #44574 handles (not assembled).
- Non-stock product, contact Customer Service for lead times and minimum order quantities.





#### **MASONRY BRUSHES -**

Useful tools for applying cement, waterpaints and liquid waterproofing materials on masonry walls. Handle attached.

Block Size	Fill Material	Trim Length	Overall Length	No. of Rows	Standard Pack	Item Number
7"	White Tampico	3-1/4"	11"	2	12	44032
6"	Solvent Resistant Polypropylene	3-1/4"	11-1/2"	3	12	74020
4"	White Tampico	3"	10-3/4"	4	12	74004
6-1/2"	White Tampico	3-1/2"		4		44031
6"	White Tampico	3"	10-1/2"	5	12	74002
6-1/2"	White Tampico	4"	11-3/4"	5		44448







#### WHITEWASH BRUSHES - Two tapered handle holes allow user to choose the correct brush angle needed. Can be used with tapered handle #75528.

Block Size	Fill Material	Trim Length	No. of Rows	Standard Pack	Item Number
6"	White Tampico	2-5/8"	2	12	74048
7"	White Tampico	2-5/8"	2	12	44034 74053*

\* Includes a 12" tapered wood handle.













ACID BRUSH - Detachable handle - For the application of Kalsomine, cold water, acid and water repellents to concrete and other rough surfaces.

Block	Fill	Trim	No. of	Standard	ltem
Size	Material	Length	Rows	Pack	Number
7"	White Tampico	3-1/2"	3	12	74015





ACID SCRUB BRUSH - Hardwood block - Tapered handle hole Recommended for applying sealcoating, cement slurry, water-proofing, etc.

Block Size	Fill Material	Trim Length	Standard Pack	Item Number
8-1/4" x 2-3/4"	White Tampico	1-1/8"	12	73111

NOTE: Handle not included - can be used with tapered handle #44574.



CEMENT FINISHING BRUSHES - Hardwood block - Ideal for creating texture to newly poured cement and for applying coatings on asphalt or concrete. Use handle #44303.



Block Length	Fill Material	Trim Length	No. of Knots	Standard Pack	Item Number	★ Combo Qty. Item Number
24"	Black Polypropylene	2-1/4"	3	6	79251	-
24"	Black Polypropylene	3-1/4"	3	6	79252	44879 •
36"	Black Polypropylene	3-1/4"	3	6	79253	44880 •
24"	Horsehair	2-1/2"	3	6	79255 •	44881 •
36"	Horsehair	2-1/2"	3	б	79256 •	44882 •

★ Combo Packs include 12 brushes per pack and 12 #44303 handles (not assembled).

• Non-stock product, contact Customer Service for lead times and





SMOOTHING BRUSH - Hardwood block - For smoothing wallpaper.

Block Length	Fill Material	Trim Length	Standard Pack	Item Number
12"	White Tampico	2"	12	74078

Creating texture on newly poured concrete with a cement finishing brush.







#### P

#### CURVED HANDLE SCRATCH BRUSHES - Hardwood block - Ideal for cleaning and prepping surfaces.

Block	Brush	Number	Trim	Standard	Item
Size	Length	of Rows	Length	Pack	Number
		.012 Ste	el Wire		
13-3/4" x 1-1/8"	5-1/4"	3 x 14	1-1/4"	12	44594*
14" x 7/8"	5-1/2"	3 x 19	1-3/16"	12	44053
14" x 1-1/8"	6"	4 x 18	1-3/16"	12	44056
		.012 Steel Wire	e with Scraper		
14" x 7/8"	5-1/2"	3 x 19	1-3/16"	12	44055
14" x 1-1/8"	6"	4 x 18	1-3/16"	12	44058
		.012 Stainles	s Steel Wire		
13-3/4" x 1-1/8"	5-1/4"	3 x 14	1-1/4"	12	44432*
14" x 7/8"	5-1/2"	3 x 19	1-3/16"	12	44054
14" x 1-1/8"	6"	4 x 18	1-3/16"	12	44057

<sup>\*</sup> V-Groove



Removing excess concrete from the surface of a steel support plate.



#### V

#### **VORTEC PRO® CURVED HANDLE SCRATCH BRUSHES -**

Reliable and efficient brushes at a value price.

Block Size	Brush Length	Number of Rows	Trim Length	Standard Pack	ltem Number
		.012 Ste	el Wire		
13-1/2" x 1"	6"	3 x 19	1"	12	25150
14" x 1-1/8"	6"	4 x 18	1"	12	25201
		.012 Stainles:	s Steel Wire		
13-1/2" x 1"	6"	3 x 19	1"	12	25154
14" x 1-1/8"	6"	4 x 18	1"	12	25202





#### **SHOE HANDLE SCRATCH BRUSHES - Hardwood block** - Ideal for cleaning and prepping surfaces.

Block	Brush	Number	Trim	Standard	Item			
Size	Length	of Rows	Length	Pack	Number			
		.012 Ste	el Wire					
10" x 3/8"	5"	1 x 17	1-1/16"	12	44100			
10" x 5/8"	5"	2 x 17	1-3/16"	12	44061			
10" x 1-1/8"	5"	4 x 16	1-3/16"	12	44063			
11"	5"	4 x 16	1-3/16"	12	73217 •			
	.012 Steel Wire with Scraper							
10" x 1-1/8"	5"	4 x 16	1-3/16"	12	44065			
		.012 Stainles	s Steel Wire					
10" x 3/8"	5"	1 x 17	1-1/16"	12	44101			
10" x 3/8"	5"	1 x 17	3/4"	12	44235			
10" x 5/8"	5"	2 x 17	1-3/16"	12	44062			
10" x 1-1/8"	5"	4 x 16	1-3/16"	12	44064			
11"	5"	4 x 16	1-3/16"	12	44299 •			
		.012 Bra	iss Wire					
11"	5"	4 x 16	1-1/4"	12	73218 •			

Plastic block







#### **VORTEC PRO SHOE HANDLE SCRATCH BRUSHES -**

Reliable and efficient brushes at a value price.

Block Size	Brush Length	Number of Rows	Trim Length	Standard Pack	Item Number				
	.012 Steel Wire								
10" x 1"	5"	4 x 16	1"	12	25100				
	.012 Stainless Steel Wire								
10" x 1"	5"	4 x 16	1"	12	25104				





#### P

#### HEAVY-DUTY SCRATCH BRUSH WITH SCRAPER - .012 Steel Wire

Ideal for cleaning and prepping surfaces.

Block Size	Brush Length	Number of Rows	Trim Length	Standard Pack	Item Number
11-1/2" x 1-1/2"	5-1/2"	4 x 11	1-1/2"	12	44069



#### VORTEC PRO® HEAVY-DUTY SCRATCH BRUSH WITH SCRAPER - .012 Steel Wire

Reliable and efficient brushes at a value price.

Block	Brush	Number	Trim	Standard	Item
Size	Length	of Rows	Length	Pack	Number
11-1/2" x 1-1/2"	5"	4 x 11	1-5/8"	12	25211



**PLATER'S BRUSHES - Hardwood block** - For general cleaning in the plating, metal finishing, aircraft and missile industries. Also used with inert arc aluminum welding.

Block Size	Brush Length	Number of Rows	Trim Length	Standard Pack	ltem Number
		Tamp	oico		
13" x 1-1/4"	5-1/4"	4 x 18	1"	12	44076
		Nyl	on		
13" x 1-1/8"	5-1/4"	4 x 18	1"	12	44077
		.006 Stee	el Wire		
10" x 1-1/8"	5"	4 x 16	1"	12	44117 •
13" x 7/8"	5-1/2"	3 x 19	1"	12	44116
		.006 Stainless	Steel Wire		
10" x 1-1/8"	5"	4 x 18	1"	12	44240
13" x 7/8"	5-1/2"	3 x 19	1"	12	44660
13" x 1-1/8"	5-1/2"	4 x 19	1"	12	44232
		.006 Bras	s Wire		
10" x 1-1/8"	5"	4 x 18	1"	12	44119
13" x 7/8"	5-1/2"	3 x 19	1"	12	44118

Non-stock product, contact Customer Service for lead times and minimum order quantities.



44551

44189

44619



#### **SMALL HAND SCRATCH BRUSHES -** Ideal for cleaning and prepping surfaces.

Block Size	Block	Number of Rows	Wire Size	Trim Length	Standard Pack	Item Number
·		S	tainless Steel Wire	-		
7-1/2" x 1/2"	Plastic	3 x 7	.006	1/2"	36	44075 ■
7-1/2" x 1/2"	Wood	3 x 7	.006	1/2"	36	44167 ■ +
7-3/4" x 3/8"	Wood	3 x 7	.006	1/2"	36	44551 *
8-3/4" x 1/2"	Wood	2 x 9	.006	5/8"	36	95013
·		S	Straight Brass Wire			
7-1/2" x 1/2"	Wood	3 x 7	.006	1/2"	36	44189 ■
		C	rimped Brass Wire			
6" x 1/2"	Wood	3 x 10	.005	5/8"	72	44619
8-3/4" x 1/2"	Wood	2 x 9	.008	5/8"	36	95014
		(	Crimped Aluminum			
6-3/4" x 1-5/8"	Wood	6 x 9	.008	5/8"	12	95151
8-3/4" x 1/2"	Wood	2 x 9	.008	5/8"	36	44251
·		S	traight Black Nylon	l		
6-1/2" x 1/2"	Plastic	4 x 15	.010	1/2"	24	99383
7-1/2" x 1/2"	Wood	3 x 7	.012	1/2"	36	44637 ■
			White Nylon			
7-1/2" x 1/2"	Plastic	3 x 7	.016	1/2"	36	44609
		Double-	Sided Brass/White	Nylon		
7-1/2" x 1/2"	Plastic	3 x 7	.006/.016	1/2"	24	44731
		Double-S	ided Brass/Stainle	ss Steel		
7-1/2" x 1/2"	Plastic	3 x 7	.006/.006	1/2"	24	44732
·		Double-Side	d Stainless Steel/V	White Nylon		
7-1/2" x 1/2"	Plastic	3 x 7	.006/.016	1/2"	24	44733



<sup>\*</sup>Wire drawn







VORTEC PRO® SMALL HAND SCRATCH BRUSHES - Reliable and efficient brushes at a value price.

Block Size	Handle	Number of Rows	Trim Length	Standard Pack	ltem Number			
.006 Stainless Steel Wire								
7-1/2" x 1/2"	Wood	3 x 7	1/2"	36	44805			
7-1/2" x 1/2"	Plastic	3 x 7	1/2"	36	44806			
.006 Straight Brass Wire								
7-1/2" x 1/2"	Wood	3 x 7	1/2"	36	44810			



**BLOCK TYPE SCRATCH BRUSHES** - For rugged cleaning on bricks, stone and similar large flat areas.

Block Size	Fill Material	Brush Part	Number of Rows	Trim Length	Standard Pack	ltem Number
7-1/4" x 2-5/8"	.012 Round Wire - Curved Face	7"	9 x 21	1-3/16"	12	44066
7-1/4" x 2-1/4"	.014 Round Wire - Flat Face	7"	6 x 19	1-5/8"	12	44067



VORTEC PRO BLOCK TYPE SCRATCH BRUSH - Reliable and efficient brushes at a value price.

Block	Fill	Brush	Number	Trim	Standard	ltem
Size	Material	Part	of Rows	Length	Pack	Number
7-1/4" x 2-1/4"	.012 Steel	7"	6 x 19	1-5/8"	12	



CHIPPING HAMMER REFILL - A refill brush for most chipping hammers. Used for weld cleaning.

Block	Fill	Brush	Number	Trim	Standard	ltem
Size	Material	Part	of Rows	Length	Pack	Number
4-5/8" x 7/8"	.012 Steel	4-1/2"	3 x 15	1-1/8"	12	



WIRE DUSTER - For cleaning chips, borings, solder, rust, dirt & corrosion from castings.

Block Size	Fill Material	Handle Length	Number of Rows	Trim Length	Standard Pack	ltem Number
3" x 1-1/8"	.012 Steel	5-3/4"	4 x 8	2-1/2"	12	44451



**FILE CARD BRUSH -** Waxed hardwood block. Use for file cleaning or to roughen and prepare surface material prior to sweating and soldering.

Overall	Fill	Brush	Trim	Standard	ltem
Length	Material	Part	Length	Pack	Number
8-1/4"	.012 Steel	1-5/8" x 4"	1/4"	12	



METAL CHIP BRUSH - Small stiff wire brush for brushing hot metal. Can be exposed to flames without burning.

Overall	Fill	Trim	Face	Standard	Item
Length	Material	Length	Width	Pack	Number
5-1/2"	.012 Steel	1-1/2"	1-1/4"	12	44074





Cleaning boiler pipes with a flue brush.

## **FLUE BRUSHES**

Flue Brushes are designed and engineered from black oil-tempered wire. Flue brushes are available in single spiral and double spiral construction. Other fill materials and sizes available by special order. Contact Customer Service for details.

#### **APPLICATIONS**

Provides increased conformability and long life when:

- Pipe cleaning
- Flue cleaning
- Boiler tube cleaning



**FLUE BRUSHES** - Filled with .012 round wire and fitted with 1/4" x 2" NPT pipe nipple. For internal cleaning of pipes and flues.



Brush	Brush	Overall	Standard	Item
Diameter	Length	Length	Pack	Number
		Single Spiral		
7/8"	4-1/2"	7-1/2"	1	44124 •
1"	4-1/2"	7-1/2"	1	44125
1-1/4"	4-1/2"	7-1/2"	1	44047
1-1/2"	4-1/2"	7-1/2"	1	44128
1-3/4"	4-1/2"	7-1/2"	1	44048
2"	4-1/2"	7-1/2"	1	44131
2-1/2"	4-1/2"	7-1/2"	1	44133
3"	4-1/2"	7-1/2"	1	44135
3-1/2"	4-1/2"	7-1/2"	1	44137
4"	4-1/2"	7-1/2"	1	44139
		Double Spiral		
1"	4-1/2"	7-1/2"	1	44149
1-1/4"	4-1/2"	7-1/2"	1	44035
1-1/2"	4-1/2"	7-1/2"	1	44150
1-3/4"	4-1/2"	7-1/2"	1	44036
2"	4-1/2"	7-1/2"	1	44152
2-1/4"	4-1/2"	7-1/2"	1	44037
2-1/2"	4-1/2"	7-1/2"	1	44154
2-3/4"	4-1/2"	7-1/2"	1	44038
3"	4-1/2"	7-1/2"	1	44156
4"	4-1/2"	7-1/2"	1	44169
4-7/8"	4-1/2"	7-1/2"	1	44159



Non-stock product, contact Customer Service for lead times and minimum order quantities.



FLUE BRUSH EXTENSION ROD - One 1/4" male pipe nipple and one 1/4" female pipe coupling allows user to extend flue brush.

Description	Standard Pack	Item Number
36" Fiberglass Extension Rod	1	95925

#### **NOTE**

- "Pipeline" Flue Brushes By Special Order Only.

   Heavy-duty. Exact size diameter. Rugged double stem, single spiral.

   Fitted with 1/4" pipe nipple. Available in diameters of 1-5/8" 15".

Key:





## **TUBE FITTING BRUSHES**

Several configurations and sizes of Tube Fitting Brushes are available for cleaning and deburring copper, internal and external tube fittings. The handy 4-in-1 tube fitting brush cleans both outside and inside diameters of multiple tube sizes.



Pipe Size	Actual Brush Diameter	Brush Length	Overall Length	Handle Length	Standard Pack	Item Number
1/8"	1/4"	1"	6-1/2"	3-1/4"	12	44078
1/4"	3/8"	1"	6-1/2"	3-1/4"	12	44079
3/8"	1/2"	1"	6-1/2"	3-1/4"	12	44080 ■
1/2"	5/8"	1"	6-1/2"	3-1/4"	12	44081
5/8"	3/4"	1"	6-1/2"	3-1/4"	12	44082
3/4"	7/8"	1"	6-1/2"	3-1/4"	12	44083
7/8"	1"	1"	6-1/2"	3-1/4"	12	44084
1"	1-1/8"	1"	6-1/2"	3-1/4"	12	44085
1-1/4"	1-3/8"	1"	6-1/2"	3-1/4"	12	44086
1-1/2"	1-5/8"	1-1/2"	6-1/2"	3-1/4"	6	44087

<sup>■</sup> Packaged product available. See pages 141-142 for details.



Cleaning the inside of a copper fitting prior to soldering.





#### **EXTERNAL TUBE FITTING BRUSHES - 1/4" Stem**

Ideal for cleaning tube ends. Mount to a hand drill for fast results.

Outside Diameter	Standard Pack	Item Number
3/8"	40	44734 •
1/2"	40	44735 •
5/8"	40	44736 •
3/4"	40	44737 •
7/8"	40	44738 •
1"	40	44739 •

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.







#### 4-IN-1 TUBE FITTING BRUSH - ONE BRUSH REPLACES FOUR! - Steel Wire

Cleans the outside and inside diameters of 1/2" and 3/4" tubes and fittings. Use for soldering prep, deburring, drill hole cleaning and cleaning battery terminals.

<b>Tube Inside Diameter</b>	Tube Outside Diameter	Standard Pack	Item Number
3/4" and 1/2"	7/8" and 5/8"	1	44690



TURBO TUBE™ BRUSHING TOOL - The Turbo Tube Brushing Tool is two brushes in one, so fittings and copper tubing can be easily cleaned without changing tools!

#### **APPLICATIONS**

- · Fitting brush cleans outside diameter
- Tube brush cleans inside diameter
- Ideal for plumbing and HVAC projects



#### VORTEC PRO® TURBO TUBE BRUSHES - Clean I.D. and O.D. with the same tool. Rust-proof stainless steel bristles. Reliable and efficient brushes at a value price.

I.D. Size	O.D. Size	Wire Type	Max. RPM	Standard Pack	Item Number
1/2"	5/8"	Stainless	1,000	1	36303
3/4"	7/8"				36304
1"	1-1/8"				36305



# **SELECTING THE RIGHT BRUSH**

#### P PERFORMANCE LINE (INDUSTRIAL GRADE)

Engineered and manufactured to maximize performance and minimize operating costs. The use of superior construction, the highest quality materials and the most stringent manufacturing processes deliver the lowest cost-of-use and most consistent performance.

#### **VALUE LINE (PROFESSIONAL GRADE)**

Weiler's value line is manufactured using similar product construction and the same exacting standards as other Weiler paint & varnish products, but engineered to provide cost-effective use specifically designed for the professional, providing a cost-effective price. Vortec Pro® paint & varnish products are an economical choice for the construction trades, low volume production shops and light-duty industrial MRO use.

## **SELECTION GUIDE**

Brush Fill	Recommended For	Benefits
China Bristle	All oil based and alkyd paints, stains,	Softest tip for fewest brush marks
	varnish urethane & shellac	Natural fibers hold paint better than synthetics
Polyester/Nylon blend	All paints and coatings	Most durable material
		Precise tipping
		Cleans up easily
Polyester	All paints and coatings	Low cost
		Does not absorb water

## **PAINT BRUSH FEATURES**



is picked up and released for a

quicker, easier job.

## **PAINT BRUSH CARE**

quality level of the brush. The thicker the

brush, the more paint pick-up and release.

Brushes Used In	Clean With
Oil base paint	Turpentine or mineral spirits
<ul> <li>Latex paint</li> </ul>	<ul> <li>Warm soapy water</li> </ul>
<ul> <li>Water base paint</li> </ul>	Warm soapy water
<ul> <li>Varnish</li> </ul>	<ul> <li>Turpentine or mineral spirits</li> </ul>
<ul> <li>Shellac</li> </ul>	Alcohol

Note: After cleaning, shake out, comb bristles and hang by handle.

## **SPECIAL PAINT BRUSHES**

The brushes listed in this catalog will cover the major requirements of industry. However, if an application requires another type, size or style of brush, contact your nearest Weiler distributor or Weiler's Customer Experience Team.

## PROFESSIONAL PAINT, VARNISH & SASH BRUSHES

These high quality brushes are available in a wide variety of sizes and materials to fill all applications. The Professional Wall Brushes have a sanded wooden handle, the preferred standard among professional users. The Professional Varnish and Sash Brushes are color coded - Blue for Bristle and Red for Polyester/Nylon Blend, and feature painted foam handles in the "beaver tail" style. These handles are attractive and easier to grip, reducing user fatigue.



Applying paint to clap board siding.

#### WALL PAINT BRUSHES - For interior/exterior painting of large flat surfaces.

Width	Thickness	Bristle Length	Overall Length	Standard Pack	Item Number
		Black China Bristle -	Sanded Wood Handle	)	
3"	7/8"	3-1/4"	10-3/16"	6	40022
4"	7/8"	3-3/4"	11-1/2"	6	40023
		Polystyrene/Nylon - S	Sanded Wood Handle		
3"	7/8"	3"	10-1/8"	6	40061
4"	7/8"	3"	11-1/4"	6	40062





#### VARNISH BRUSHES - Comfortable foam grip handle; smooth paint flow.

Width	Thickness	Bristle Length	Overall Length	Standard Pack	Item Number
		Black China Bristle	- Blue Foam Handle		
1"	7/16"	2"	8-1/2"	12	40000
1-1/2"	1/2"	2-1/4"	8-7/8"	12	40001
2"	9/16"	3"	9-3/4"	12	40002
3"	11/16"	3"	10-1/8"	12	40004
4"	11/16"	3"	10-9/16"	12	40010
		Polystyrene/Nylon	- Red Foam Handle		
1"	7/16"	2-1/4"	8-13/16"	12	40058
2"	3/4"	2-3/4"	9-15/16"	12	40059
3"	7/8"	3"	10-1/8"	12	40060
4"	7/8"	3"	11"	6	40106





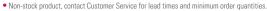
#### ANGLED SASH BRUSHES - For trim or cut work like window sills, door frames, etc.

Width	Thickness	Bristle Length	Overall Length	Standard Pack	Item Number
		Black China Bristle	- Blue Foam Handle		
1-1/2"	7/16"	2-1/4"	10-7/8"	12	40041
2"	1/2"	2-1/4"	10-3/4"	12	40008
		Polystyrene/Nylon	- Red Foam Handle		
1-1/2"	7/16"	2-1/2"	11-1/4"	12	40011
2"	1/2"	2-1/2"	11-1/8"	12	40040



#### **FLAT SASH BRUSHES** - For trim or cut work like window sills, door frames, or other narrow, flat surfaces.

Width	Thickness	Bristle Length	Overall Length	Standard Pack	Item Number
		Black China Bristle	- Blue Foam Handle		
1"	3/8"	2"	10-3/8"	12	40113
1-1/2"	7/16"	2-1/4"	10-1/2"	12	40114 •
2"	9/16"	3"	11-15/16"	12	40115
		Polystyrene/Nylon	- Red Foam Handle		
1"	3/8"	2-1/4"	10-1/4"	12	40014 •
1-1/2"	7/16"	2-1/4"	10-1/2"	12	40017
2"	9/16"	2-1/2"	10-15/16"	12	40018







Cleaning an oil pan with a parts cleaning brush.

## PROFESSIONAL SASH & PARTS CLEANING BRUSHES

These high quality brushes are available in a wide variety of sizes and materials to fill all applications. The Professional Sash Brushes are color coded - Blue for Bristle and Red for Polyester/Nylon Blend, and feature painted foam handles in the "beaver tail" style. These handles are attractive and easier to grip, reducing user fatigue. Parts cleaning brushes are ideal for applications such as cleaning carburetors, transmission components, applying adhesives and lubricants.





#### **OVAL SASH BRUSHES** - Ideal for cleaning parts, crevices and painting hard-to-reach areas.

Size	Thickness	Bristle Length	Overall Length	Standard Pack	Item Number
	Black	China Bristle - Plain	Foam Handle - Chise	l Trim	
#2	7/16"	1-3/4"	8-7/8"	24	40116
#4	11/16"	1-3/4"	8-5/8"	12	40019
#6	13/16"	1-3/4"	9-5/16"	12	40056
#8	15/16"	3"	11-1/8"	12	40020
#10	1-1/16"	3"	11-3/16"	12	40021





#### ROUND SASH BRUSHES - Ideal for cleaning parts, crevices and painting hard-to-reach areas.

Size	Thickness	Bristle Length	Overall Length	Standard Pack	Item Number					
	Grey Bristle - Plain Foam Handle - Flat Trim									
#2	7/16"	1-3/4"	8-3/4"	24	40118					
#4	11/16"	2"	8-13/16"	12	40119					
#6	13/16"	2"	10-1/16"	12	40120 •					
#8	15/16"	2-1/4"	10-9/16"	12	40121					
#10	1-1/16"	2-1/4"	10-9/16"	12	40122 •					

<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.





#### PARTS CLEANING BRUSHES - Stainless steel ferrule - Heavily filled.

Thickness	Fill Material	Bristle Length	Overall Length	Standard Pack	Item Number		
Plain Foam Handle - Chisel Trim							
1"	Polypropylene	2-1/2"	10-11/16"	12	40035		
1"	Tampico	2-3/4"	11-1/8"	12	40036		





#### VORTEC PRO® PARTS CLEANING BRUSHES - Reliable and efficient brushes at a value price.

Thickness	Fill Material	Bristle Length	Overall Length	Standard Pack	Item Number			
Plain Foam Handle - Chisel Trim								
15/16"	Nylon	2-1/2"	11-3/16"	12	25221			
1"	Tampico	2-3/4"	11-3/8"	12	25222			

## **INDUSTRIAL PAINT BRUSHES**

The Industrial paint brush line features color coded plastic handles to provide quality paint brushes at competitive prices.



Painting inside the fins of a radiator with a Radiator brush.

#### INDUSTRIAL VARNISH BRUSHES - Heavily-filled brush with comfortable handle in a variety of sizes.

Width	Thickness	Bristle Length	Overall Length	Standard Pack	Item Number
		Black Bristle - Bla	ack Plastic Handle		
1"	3/8"	1-3/4"	7-3/4"	36	40089
1-1/2"	7/16"	2"	8-5/16"	24	40101
2"	7/16"	1-3/4"	8"	12	40074
3"	1/2"	2"	8-13/16"	12	40103
4"	5/8"	2-3/4"	9-7/8"	12	40104
		Black Polyester -	Red Plastic Handle		
1"	3/8"	2"	8"	36	40107
1-1/2"	7/16"	2"	7-11/16"	24	40108
2"	7/16"	2"	8-1/2"	12	40109
3"	1/2"	2"	9-1/4"	12	40110
4"	11/16"	2-3/4"	9-7/8"	12	40111





#### **BENT RADIATOR BRUSH -** Ideal for painting radiators and other hard-to-reach areas.

Width	Thickness	Bristle Length	Overall Length	Standard Pack	Item Number		
Black Bristle - Wood Handle							
2"	9/16"	2-1/4"	19-1/2"	12	95502		



## VORTEC PRO\* FOAM APPLICATOR BRUSHES - Reliable and efficient brushes at a value price. Not recommended for use with lacquer, shellac or solvents.

Width	Thickness	Foam Length	Overall Length	Standard Pack	Item Number				
Wood Handle									
1"	5/8"	2-5/8"	6-3/8"	50	99801				
2"	5/8"	2-5/8"	6-1/2"	50	99805				
3"	7/16"	2-5/8"	6-1/2"	40	99806				









Removing chips from the ways of a lathe.

## **CHIP AND OIL BRUSHES**

Chip and Oil brushes are inexpensive, multi-purpose brushes for use in applications requiring disposable brushes.

#### P

#### **CHIP AND OIL BRUSHES**



Width	Thickness	Bristle Length	Overall Length	Standard Pack	Item Number					
	White Bristle - Wood Handle									
1/2"	5/16"	1-1/2"	7-3/16"	30	40065					
1"	5/16"	1-1/2"	7"	30	40066					
1-1/2"	5/16"	1-1/2"	7-7/8"	30	40067					
2"	5/16"	1-1/2"	7-5/8"	20	40068					
2-1/2"	3/8"	1-1/2"	7-3/4"	20	40069					
3"	3/8"	1-1/2"	7-7/8"	10	40070					
4"	5/8"	1-5/8"	8-9/16"	10	40071					
	3/8"	2"	8-7/8"		40076					

#### V

#### VORTEC PRO® CHIP AND OIL BRUSHES - Reliable and efficient brushes at a value price.









Width	Thickness	Bristle Length	Overall Length	Standard Pack	Item Number
		White Bristle	- Wood Handle		
1/2"	5/16"	1-1/2"	7-3/16"	36	40177
1"	5/16"	1-1/2"	7-3/16"	36	40179
1-1/2"	5/16"	1-1/2"	7-1/16"	24	40180
2"	5/16"	1-1/2"	7-5/8"	24	40181
2-1/2"	3/8"	1-1/2"	7-15/16"	12	40182
3"	3/8"	1-1/2"	8-1/4"	12	40183
4"	5/8"	1-3/4"	8-3/4"	12	40184
4"	3/8"	1-3/4"	8-1/2"	12	40185
		Black Bristle -	Plastic Handle		
1/2"	1/4"	1-5/8"	7-1/8"	30	40160
1"	5/16"	1-5/8"	7-5/16"	30	40161
1-1/2"	5/16"	1-5/8"	7-3/8"	30	40162
2"	5/16"	1-5/8"	7-3/4"	20	40163
2-1/2"	3/8"	1-3/4"	7-3/4"	20	40164
3"	3/8"	1-3/4"	7-15/16"	10	40165
4"	11/16"	2"	8-1/2"	10	40166
		Grey China Brist	e - Plastic Handle		
1/2"	1/4"	1-1/2"	7-1/8"	48	40026
1"	5/16"	1-1/2"	7-5/8"	36	40027
1-1/2"	5/16"	1-1/2"	7-5/8"	24	40028
2"	3/8"	1-1/2"	7-7/8"	24	40029
2-1/2"	1/2"	1-1/2"	8-5/16"	12	40030
3"	1/2"	1-1/2"	8-9/16"	12	40031
4"	11/16"	1-1/2"	8-13/16"	12	40032
			- Red Plastic Handle		
1"	5/16"	1-3/4"	7-9/16"	36	40137
2"	3/8"	1-3/4"	7-15/16"	24	40139
3"	1/2"	1-3/4"	9-3/16"	12	40140
4"	11/16"	2-3/4"	9-5/8"	12	40141

Key:





## **MARKING BRUSHES**

Weiler's high quality Marking Brushes come in a variety of animal, natural and synthetic bristles in numerous handle styles for many applications such as fine artwork, pin striping and sign painting.



Painting a tight area on a steel door with a Marking Brush.

## RED SABLE WATERCOLOR BRUSHES - Seamless ferrule. Pointed tip - Round black handle

Size	Diameter	Trim Length	Overall Length	Standard Pack	Item Number
3/0	3/64"	1/4"	7"	12	41000
0	1/16"	5/16"	7-1/4"	12	41001
2	3/32"	7/16"	7-3/8"	12	41002
4	1/8"	5/8"	7-5/8"	12	41003



#### **BLACK BRISTLE MARKING BRUSHES -** Long, lacquered handle

Size	Diameter	Trim Length	Overall Length	Standard Pack	Item Number
1	1/8"	3/4"	11-7/8"	12	41004
2	5/32"	15/16"	12"	12	41005
4	7/32"	1-1/8"	12-1/2"	12	41007
5	1/4"	1-1/4"	12-1/2"	12	41008
6	9/32"	1-3/8"	12-3/4"	12	41009



#### FLAT MARKING BRUSHES - Ox hair - Single stroke - Round black handle

Width	Trim Length	Overall Length	Standard Pack	Item Number
1/4"	7/8"	7-7/8"	12	41018
1/2"	1"	8-3/4"	12	41019
3/4"	1-1/4"	8-3/4"	12	41020
1"	1-3/8"	9-3/8"	12	41021



#### FITCH BRUSHES - Black china bristle - Chiseled edge - Clear lacquered handle

Width	Trim Length	Overall Length	Standard Pack	Item Number
1/4"	13/16"	12"	12	41022
1/2"	1-1/16"	12-3/8"	12	41023
3/4"	1-5/16"	12-7/8"	12	41024 •
1"	1-9/16"	13"	12	41025 •



<sup>•</sup> Non-stock product, contact Customer Service for lead times and minimum order quantities.

#### LACQUERING BRUSHES - Seamless aluminum ferrule - Camel hair - Round black handle

Size	Diameter	Trim Length	Overall Length	Standard Pack	Item Number
1	5/32"	11/16"	7-1/2"	12	41010
3	7/32"	13/16"	8"	12	41011
5	1/4"	1-1/8"	8-3/4"	12	41012 •
6	5/16"	1-3/16"	8-7/8"	12	41013 •







Applying flux to a copper tube prior to soldering.

## **GLUE AND ACID BRUSHES**

Weiler's Glue and Acid Brushes come in multiple sizes, ferrule types, handles and fill materials for a wide variety of cleaning and coating applications.





#### **BRIDLED GLUE BRUSHES -** Grey china bristle - Steel ferrule - Long foam handle

Diameter	Trim Length	Overall Length	Standard Pack	Item Number
7/16"	1-7/16"	8-1/4"	36	40077
13/16"	1-3/4"	9-3/8"	24	40078 •

Non-stock product, contact Customer Service for lead times and minimum order quantities





#### ACID/FLUX BRUSHES - Horsehair - Tin ferrule

Width		Trim Length	Overall Length	Standard Pack	Item Number
	5/16"	3/4"	5-3/4"	144	44088 ■
	3/8"	3/4"	5-3/4"	144	44089 ■
	1/2"	3/4"	5-3/4"	144	44090 ■

■ Packaged product available. See pages 141-142 for details.





## **STYLUS BRUSH** - Stiff grey horsehair - Aluminum tube with cork to hold cleaning fluid. For cleaning electrical contact points.

Width	Trim Length	Overall Length	Standard Pack	Item Number
1/2"	3/8"	5"	100	44097





#### STENCIL BRUSHES - China bristle - Seamless steel ferrule - Lacquered wood handle

Diameter	Bristle Length	Overall Length	Standard Pack	Item Number
1"	1-3/8"	5-1/2"	12	40080
2"	1-3/4"	6-3/8"	12	40082



#### **DOPE BRUSHES** - With hanger for coating applications in drilling operations.

<b>Brush Part</b>	Fill Material	Diameter	Overall Length	Standard Pack	Item Number
4"	Mixed	2"	16"	24	44261
	Tampico	3"		6	44263

Key





## PAINT ROLLERS AND ACCESSORIES

Paint Rollers can be used almost anywhere including walls, ceilings, floors, decks, fences, metal surfaces, concrete, and brick walls. Weiler carries a wide variety of rollers for the professional painter, industrial use and those weekend DIY projects.

#### **PAINT ROLLER SELECTION GUIDE**

Work Surface	Coating	Recommended Nap
Metal, Smooth Wood, Smooth Concrete	Enamels, Epoxies, Adhesives, Paint	3/16", 3/8" (Low nap)
Rough Wood, Drywall, Cement Block	All Paint	1/2", 3/4" (Medium nap)
Stucco, Brick, Concrete	All Paint	1" (High nap)



Applying primer to new drywall.

#### PROFESSIONAL GRADE ROLLERS - Poly blend with phenolic core.

Size	Nap	Painting Surface	Standard Pack	Item Number
9"	3/16"	Smooth	12	49050
	1/2"	Semi-smooth		49051
	3/4"	Rough		49052



#### INDUSTRIAL GRADE ROLLERS - Poly blend with PVC core.

Size	Nap	Painting Surface	Standard Pack	Item Number
3"	3/8"	Semi-smooth	24	49046
4"	3/8"	Semi-smooth	12	49044
	3/4"	Rough		49045
9"	3/16"	Smooth	12	49061
	1/2"	Semi-smooth		49062
	3/4"	Rough		49063





Size	Nap	Painting Surface	Standard Pack	Item Number
9"	3/8"	Semi-smooth	12	49070
	1/2"	Semi-smooth		49071



#### **SPECIALTY ROLLERS -** Can be used with all paints. Ideal for trim and touch-up.

Description	Overall Length	Std. Pack	Item No.
3" Roller with 3/8" nap. Standard duty frame	11-1/2"	24	49016
3" Roller with 3/8" nap. Wire frame with two tin end caps. Bent wire handle.	6-1/8"	12	49015
4" Micro Perlon Roller Reach	16-3/8"	24	49025
4" Micro Perlon Twin Pack Cover	4-1/8"	24	49066



**P FRAMES -** All metal with two plastic caps. Solid plastic handle with threaded grip. Can be used with threaded handle #44300.

Size	Description	Overall Length	Standard Pack	Item Number
3"	Standard-duty 1/4" dia. frame with 4 wire cage	11-3/8"	24	49019
4"	Standard-duty 1/4" dia. frame with 4 wire cage	11-3/4"	24	49018
9"	Heavy-duty 5/16" dia. frame with 5 wire cage	13-1/2"	12	49022



VORTEC PRO FRAME - Reliable and efficient frame at a value price.

Size	Description	Overall Length	Standard Pack	Item Number
9"	Standard-duty 1/4" dia. frame with 4 wire cage	12-3/4"	24	49020



PAINT TRAYS - A variety of trays available to meet users' specific needs.

Description	Paint Capacity	Standard Pack	Item Number
4" Plastic tray	1 Quart	24	49008
9" Galvanized steel tray; Rust resistant	2 Quart	24	49010
9" Paint tray liner	2 Quart	24	96702



Description	Paint Capacity	Standard Pack	Item Number
9" Economy plastic tray; Rust proof	2 Quart	20	49011



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35	83	16521		17917		21086	92	21322 21325	92	26113	10
36	83,137	16712		17922		21087	92	21325	123	26114	10
	142	16833 16843		17923 17930		21088 21089		21326 21327	123	26115 26116	
	71	16853		17931		21099		21328	123	26119	
	71	16873		17933		21091		21329	123	26122	10
)6	71	16933	78	17935	81	21092	93	21330	123	26121	10
	71	16943		17936		21093		21332	103	26128	10
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	71	17202		17951		21096		21345	123	26133 26136	101,120,12
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	71	17205		17953		21098		21413		26140	
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	83	17208		17956	81	21101	93	21757	123	26144	
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	83	17210		17958		21104		21759		26155	
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17	83	17215	122	17963	81	21107V		21763	123	26901	
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6	85,137	17233		17969	81	21111		22241	76	26907	12
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6	85	17532	119	17974	81	21114V	138	22605	123	26911	12
)6	85,137	17533	119	17975	81	21115	91	22606	123	26912 26913	12
	85	17535		17976	81	21116		22607	123	26913	12
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	85	17543	119	17978 17979	81	21119	91	22614	123	29059	10
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1772	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
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1724												
1972   1   1448	30724	51	31447	39	34202	98	34302	97	35823	92	40070	176
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1074	0745	51	34116	97	34219	98	34319	97	36219	73	40111	175
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1364   39   34171   97   34271   99   35223   89   40011   173   42006   1   1367   39   34172   97   34272   99   35224   89   40014   173   42007   1   1   1368   39   34173   97   34273   99   35226   89   40017   173   42008   1   1   1   1   1   1   1   1   1									40008	1/3	42001	151 15
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1390.       40       34179.       97       34279.       99       35293.       79       40023.       173       42022.       1         1391.       40       34180.       97       34280.       99       35294.       79       40026.       176       42023.       1         1392.       40       34181.       97       34281.       99       35305.       80       40027.       176       42025.       1         1401.       39       34182.       97       34282.       99       35310.       80       40028.       176       42026.       1         1402.       39       34184.       97       34283.       99       35310.       80       40029.       176       42030.       1         1403.       39       34184.       97       34284.       99       35340.       88       40029.       176       42030.       1         1404.       39       34185.       97       34286.       99       35345.       88       40031.       176       42033.       1         1407.       39       34186.       97       34286.       99       355406.       84       40032.       176       42033. </td <td>31388 31389</td> <td>40 40</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>40021</td> <td>1/4 173</td> <td></td> <td></td>	31388 31389	40 40							40021	1/4 173		
1391			34179	97	34279	99	35293	79	40023	173	42022	153
1401   39   34182   97   34282   99   35310   80   40028   176   42026   1   1   1   1   1   1   1   1   1			34180	97	34280	99			40026	176	42023	153
1402.       39       34183.       97       34283.       99       35315.       80       40029.       176       42030.       1         1403.       39       34184.       97       34284.       99       35340.       88       40030.       176       42032.       1         1404.       39       34185.       97       34285.       99       35350.       88       40031.       176       42035.       1         1407.       39       34186.       97       34286.       99       35350.       88       40032.       176       42035.       1         1408.       39       34188.       97       34287.       99       35406.       84       40035.       174       42037.       1         1409.       39       34188.       97       34288.       99       35416.       80       40035.       174       42037.       1         1410.       39       34189.       97       34289.       99       35500.       88       40040.       173       42041.       1         1414.       39       34190.       98       34290.       99       35500.       88       40040.       173       42047. <td></td> <td>42026</td> <td>153</td>											42026	153
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1407     39     34186     97     34286     99     35350     88     40032     176     42035     1       1408     39     34187     97     34287     99     35406     84     40035     174     42037     1       1409     39     34188     97     34288     99     35416     80     40036     174     42041     1       1410     39     34189     97     34289     99     35500     88     40040     173     42042     1       1414     39     34190     98     34290     99     35505     88     40041     173     42047     1       1415     39     34191     98     34292     99     35500     75     40056     174     42047     1       1419     39     34192     98     34292     99     35500     84     40058     173     42049     1       1420     39     34193     98     34293     99     35535     88     40059     173     42055     1       1421     39     34194     98     34293     99     35540     88     40060     173     42095     1       1422					34284	99					42032	153
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1415.     39     34191.     98     34291.     99     35520.     75     40056.     174     42049.     1       1419.     39     34192.     98     34292.     99     35530.     84     40058.     173     42054.     1       1420.     39     34193.     98     34293.     99     35535.     88     40059.     173     42055.     1       1421.     39     34194.     98     34294.     99     35540.     88     40060.     173     42095.     1       1422.     39     34195.     98     34295.     99     35545.     88     40061.     173     42098.     1       1439.     40     34196.     98     34296.     99     35600.     73     40062.     173     42099.     1       1440.     40     34197.     98     34297.     99     35760.     84     40065.     176     42114.     1			34190	98	34290	99					42047	151
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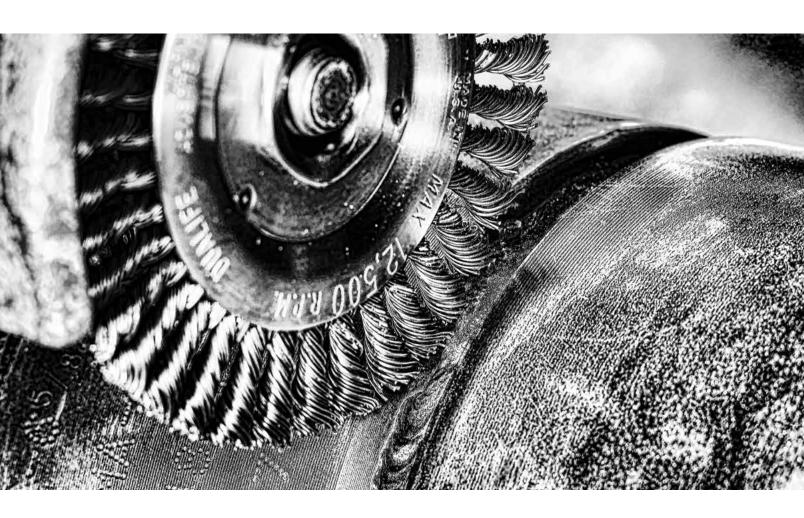
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		168 168	44735 44736		50114 50115		50903 50904		51163 51164	
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At Weiler, we passionately embrace change to improve our products and our processes to move the company and our customers forward. By bringing new ideas and creative problem solving together in an open, collaborative environment, we will improve our customers' productivity and create profitable growth.



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