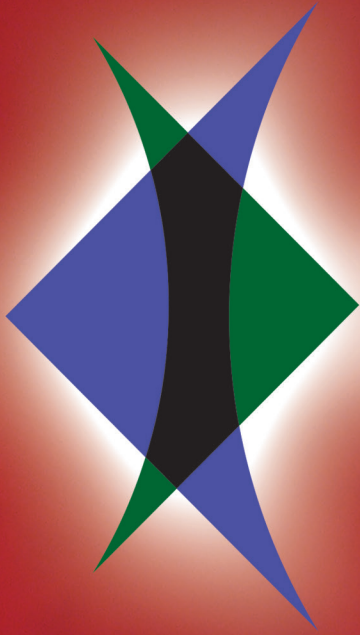




**AHB** Tooling & Machinery, Inc.  
ISO Certified  
(800) 991-4225  
[www.ahbinc.com](http://www.ahbinc.com)  
[customerservice@ahbinc.com](mailto:customerservice@ahbinc.com)

*Complete Metalworking Solutions*  
Roseville Saginaw & Jackson, MI



# GAYLEE SAWS





Our "Back-To-Basics" Goals and Ideals:

- Outstanding Customer Service
- Quality Tools
- Shipped On Time

Contact Don or Mike at Gaylee Saws for all of your sawing requirements.



*Don Muir  
General Manager  
Gaylee Saws*



*Mike Jensen  
Customer Service  
Gaylee Saws*

Thank you for your interest in Gaylee Saws, a leading manufacturer of industrial thin saws and cutters available in solid carbide, carbide-tipped, and now, high speed steel.

Our position as a premier manufacturer of carbide thin saws is the result of over 60 years of extensive experience and service in the industrial tooling market. Originally founded in 1947, the Gaylee Corporation became an integral part of North American Tool Corporation in 1994.

This catalog from Gaylee Saws represents an extensive array of carbide thin saws, manufactured to limits of accuracy and tolerances unsurpassed by most tool manufacturers.

Whether as stocked standards, modified specials, or precision custom designed full specials, Gaylee saws and cutters could be your solution to costly 'problem jobs' or your everyday sawing and cutting operations.

We welcome the opportunity to work with you as your trusted source for solid carbide, carbide tipped and H.S.S. saws and cutters. Feel free to contact us to discuss your cutting tool requirements at: 800-991-4225 Phone



*Gaylee Saw's modern manufacturing facility located in Sterling Heights, Michigan.*

<u>SUBJECT</u>	<u>PAGE</u>
Warranty, Limitations, General Information.....	1
24 Hour Saws.....	2
Multiple Saw Gangs.....	3
Thread Mills for Multi-Spindle Screw Machine	
Threading Attachments.....	4
Smart Cut™ Cutting Fluid/H.S.S. Saws Overview .....	5
Solid Carbide Thin Saws and Cutters	
Features/Benefits.....	6-7
Catalog Listing.....	8-13
Carbide-Tipped Thin Saws and Cutters	
Features/Benefits.....	14-15
Catalog Listing.....	16-21
Modified and Special Thin Saws and Cutters.....	22
Saw Arbors.....	22
Engineering Data:	
Cutting Speed Recommendations for	
Circular Saws.....	23-24
Formulas/Feed Rates/Coatings.....	24
Test Application Data Sheet.....	Inside Back Cover

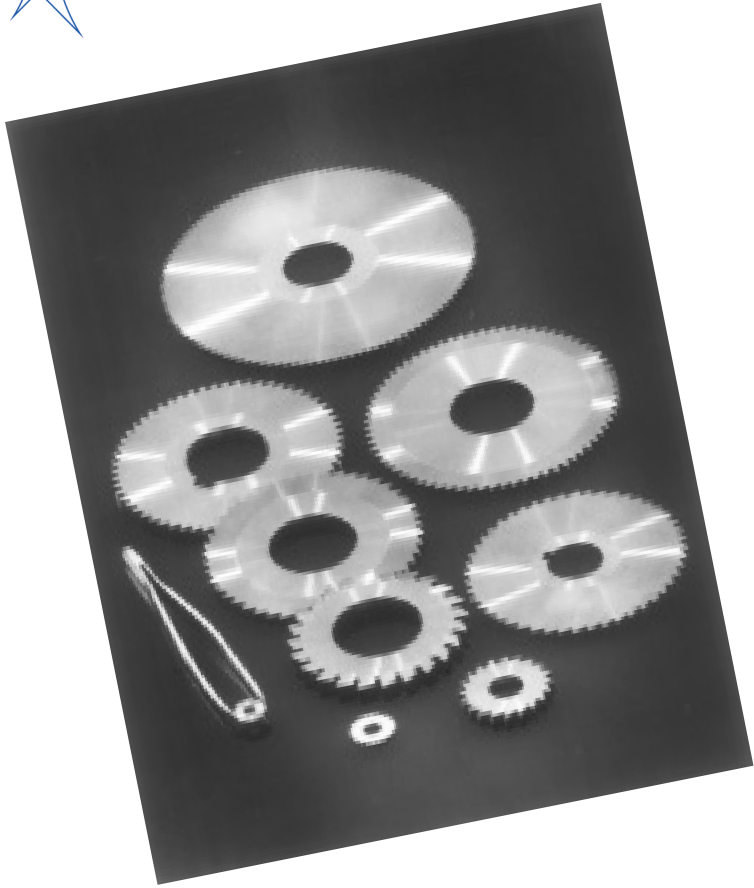


GAYLEE warrants its products to be free from defects in workmanship and material at the time of manufacture. Any products that are found to be defective in workmanship or material, will be repaired, replaced, or credit issued at the option of Gaylee, to the user of our products. Determination as to defective product rests solely with Gaylee. Before using, user shall determine the suitability of the product for its intended use, and user assumes all risk and liability whatsoever in connection therewith. Gaylee shall have no obligation to repair or replace products damaged by misuse, improper operating conditions, products altered or repaired by parties other than Gaylee, or the failure of the user to apply appropriate preventative maintenance or service. No product shall be returned to Gaylee without its prior consent. Product which Gaylee consents to be returned shall be sent freight prepaid. Complete information regarding the complaint must be furnished to Gaylee prior to consent to be returned. Gaylee will not assume responsibility or accept invoices for unauthorized repairs to its products, even though defective. Gaylee makes no warranty as to fitness of its products for specific applications by the user unless Gaylee specifically agrees otherwise in writing after review of the proposed usage, nor does Gaylee make any warranty as to period of service or productivity of its products. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Gaylee shall have no liability or responsibility on any claim of any kind, whether in contract, tort or otherwise, for any loss or damage arising out of, connected with, or resulting from the manufacture, sale, deliver or use of any product sold hereunder, in excess of the cost of replacement or repair as provided herein. IN NO EVENT SHALL GAYLEE BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. Gaylee makes no warranty, express or implied, except as set forth above; and Gaylee neither assumes nor authorizes any other person or entity to assume for it any other obligation or liability in connection with any of its products. All statements, technical information and recommendations herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed.

**SPECIAL GAYLEE THIN SAWS AND CUTTERS**

If the cutting tool you need is not listed in this catalog, send specifications to GAYLEE for quotation on specially manufactured cutters. See page 22 of this catalog for information needed by Gaylee to properly determine the best cutter for your specific application. Gaylee is the cutting tool industry's leading specialist in design and manufacture of high precision, top quality SOLID CARBIDE SAWS, CARBIDE TIPPED SAWS, MULTIPLE SAW SETS, ARBOR MOUNTED SAW GANGS, THIN MILLING CUTTERS, AND AN ARRAY OF OTHER INDUSTRIAL CUTTERS.

**WARNING:** ALL CUTTING TOOLS CAN BREAK. USE EYE PROTECTION AND ADEQUATE SAFEGUARDS, SUCH AS MACHINE GUARDS, WHEN OPERATING TOOLS. DO NOT USE DAMAGED OR DULL TOOLS. KEEP MACHINE IN GOOD REPAIR AND IN PROPER WORKING ORDER. ALWAYS USE SAFE OPERATING PROCEDURES. ELIMINATE ANY POSSIBILITY OF OPERATOR CONTACT WITH A MOVING/OPERATING CUTTING TOOL.

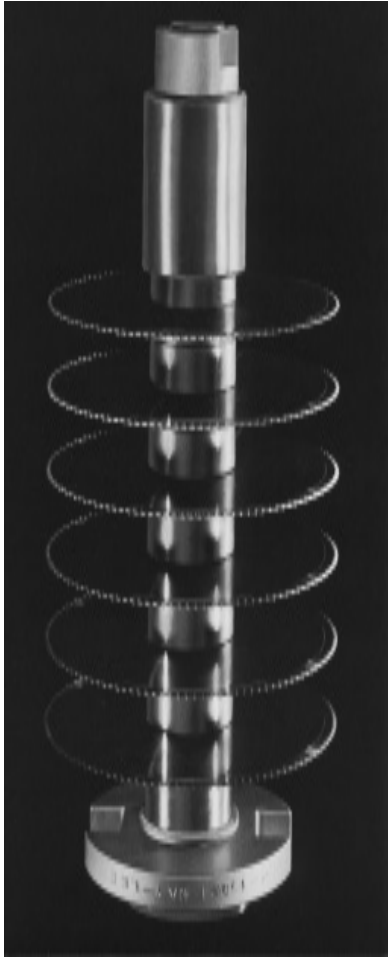


“What’s so  
***SPECIAL***  
about these  
***solid carbide***  
***Thin Saws?*”**

**24-HOUR  
SERVICE!**  
Inch & Metric Sizes!...  
**THAT’S WHAT!**

- ✓ **24-HOUR SHIPMENT** of premium quality SOLID CARBIDE “THIN SAWS”
  - Diameter Range - INCH: 3/4” through 4” • METRIC: 20mm through 100mm
  - Thickness Range - INCH: .008” through .250” • METRIC: .20mm through 6.35mm
  - Arbor hole sizes - INCH: 1/4”, 5/16”, 3/8”, 1/2”, 5/8”, 7/8”, 1”  
METRIC: 5mm, 8mm, 10mm, 13mm, 16mm, 22mm
  - Tolerances - INCH: +.0005”/ -.0000” on ID and thickness; O.D. tolerance = +.005”/-.000”  
METRIC: +.013mm/ -.0000mm on ID and thickness;  
O.D. tolerance = +.13mm/-.000mm
- ✓ Up to 6-pieces in 24-hours.
- ✓ Unsurpassed accuracy and tolerances provide consistent, dependable performance.
- ✓ Standard square tooth configurations available.
- ✓ Technical expertise to solve difficult or unusual sawing, slitting, slotting and cutting operations.
- ✓ Contact our Customer Service Dept. for special applications.
- ✓ GAYLEE SAWS tool designers will be pleased to assist with your specific needs.
- ✓ Inquire about Gaylee Saws carbide-tipped Thin Saws and other cutting tool products.

*High precision, tight-tolerance saw gangs from GAYLEE provide multiple depth cutting, as well as multiple slitting in a single pass. The possibilities are limitless...*

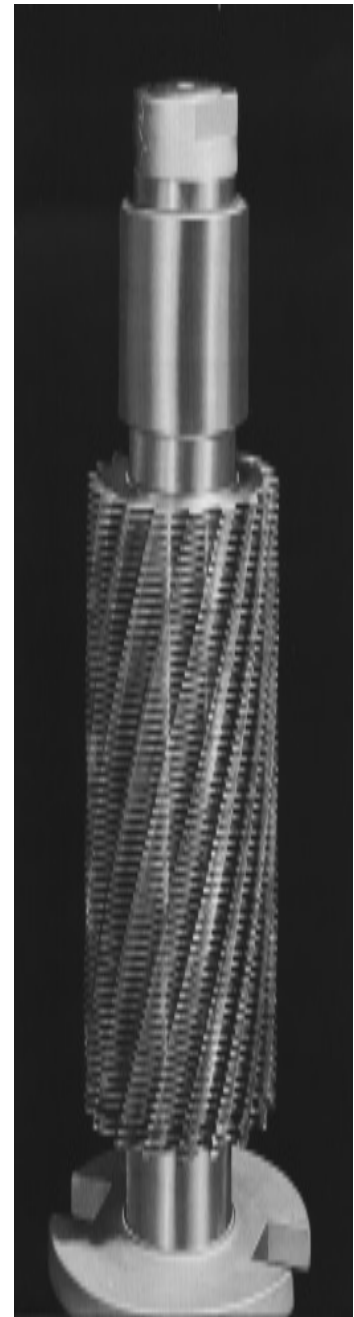


This gang includes six Gaylee solid carbide saws. Specifications are 6" O.D., .050" thickness, 120 teeth per saw, 30 minutes dish each side. Saws are mounted on an arbor with 2 degree spiral keyway and key.



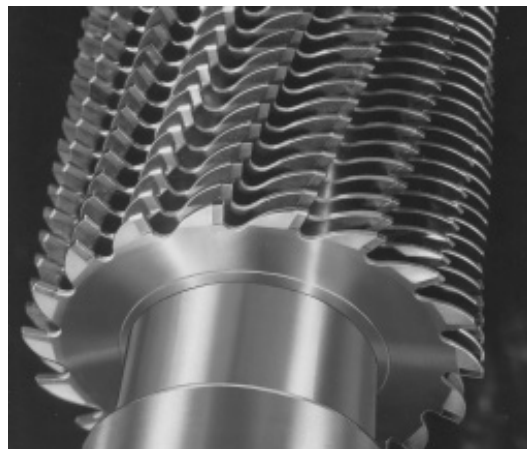
This quill mounted saw gang shows alternate saw diameters for varying depth cutting detail.

- Production costs are fractioned compared to repetitive individual slotting.
- Production capacity and productivity are maximized.
- Consistency and repeatability in your parts production is provided by the precision Gaylee saws built into the saw gang.



Arbors for saw gangs can be designed with a spiral keyway. The faces of the saw teeth are then designed to follow the helix.

This saw gang shows a close-up of saw teeth with faces designed to follow a spiral keyway.

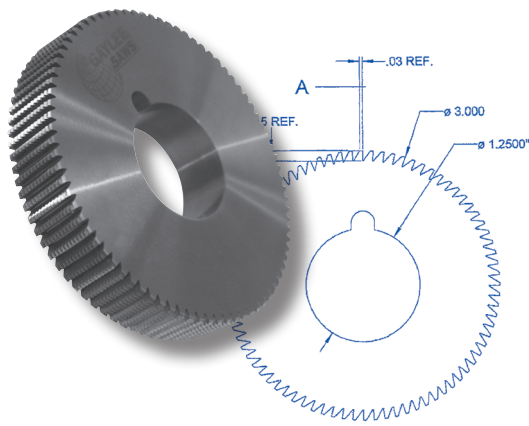




for Multiple Spindle Screw Machine Threading Attachments

For years, you have known Gaylee Saws as a premier manufacturer of high quality carbide and carbide-tipped circular thin saws.

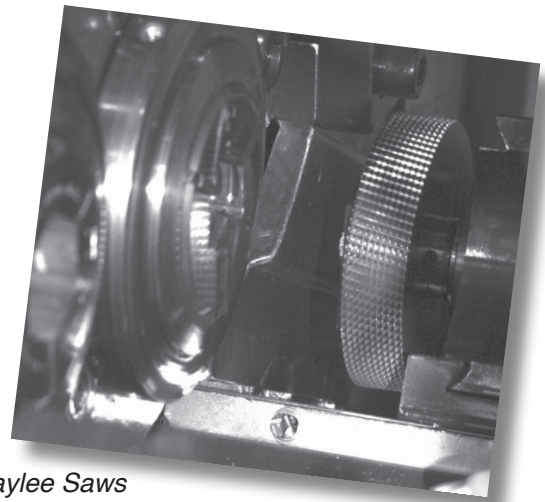
In our continuing effort to help customers trim manufacturing production costs through tooling designed to achieve optimal performance, we are excited to introduce Gaylee thread mills for multiple spindle screw machine threading attachments.



These carbide thread mills are used with threading attachments on your automatic screw machine with direct drive technology from the main housing. This allows the spindle and threading attachment to maintain a 1:1 RPM ratio. By utilizing an easy to install cross-slide mounted threading attachment, you can thread mill parts with incredible accuracy and versatility. These arbor mounted thread mills are designed to cut external threads.

The flexibility and speed of multi-spindle automatics has made them the original 'multi-tasking' machine tool. And with high performance carbide thread mills from Gaylee Saws, the thread milling function of these multi-spindle automatics is further enhanced with increased throughput and improved thread quality.

In a recent application, an 82-tooth Gaylee thread mill cutting external threads on a steel shaft for an appliance manufacturer, yielded an incredible 76,000 threaded parts before a tooling change was needed.



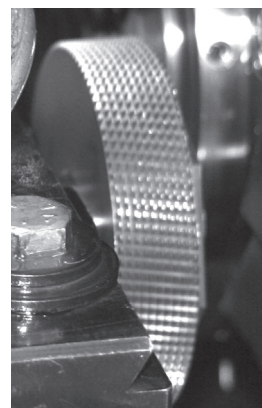
*A Gaylee Saws 82-tooth (fine tooth) thread mill on a multi-spindle screw machine with threading attachment.*

*Photo courtesy of Tribal Manufacturing, Inc., Marshall, MI*

These thread mills can be re-ground or sharpened to a like-new condition (with a smaller diameter). Limitations would be clearance issues of the part being machined. Contact Gaylee Saws for details on re-sharpening.

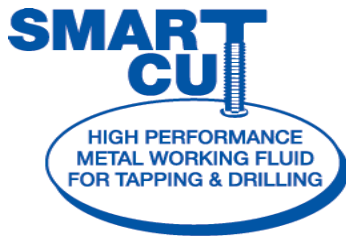
Gaylee thread milling cutters can be designed for single or double threaded components, as well as for deep threaded parts requiring Acme threads.

Varying thread forms and pitches are available. Contact Gaylee Saws for additional information.



*A Gaylee Saws thread mill ready to cut external taper pipe threads on a brass pipe fitting.*

*Photo courtesy of Tribal Manufacturing, Inc., Marshall, MI*



An extreme duty drilling, tapping, cutting fluid which is considered environmentally safe. Smart Cut is thick, like honey, and will stick to the tool throughout the cutting operation. Ideal for machining stainless steel, carbon steel, inconel, monel, hastalloy, titanium, aluminum and other alloys and exotic metals. Originally designed as a tapping and drilling fluid, but works well for sawing and other machining/metalcutting operations.

Advantages:

- Increases Productivity
- Greatly extends tool life
- Reduces torque
- Improves finish and size
- Mild pleasant odor
- Does not contain 1,1,1 Trichloroethane
- Environmentally smart!

High Speed Steel Saws

The following styles of H.S.S. Saws are now available from Gaylee Saws:

- *Specials*
- *Cermet-Tipped*
- *Jewelers Slotting Saws*
- *Straight Tooth Metal Slitting Saws*
- *Staggered Tooth Metal Slitting Saws*
- *Concave Slitting Saws*
- *Screw Slotting Saws*

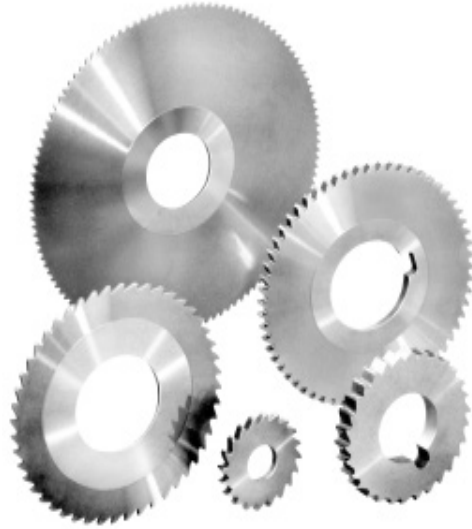


Call, fax or e-mail your H.S.S. saw specifications to Gaylee Saws for quotation. Refer to the inside back cover of this catalog for an application data sheet.

**SOLID CARBIDE THIN SAWS & CUTTERS**

Designed and manufactured to your exact specifications.

- Solid Carbide Saws as THIN as .0020"
- As THICK as 1.000"
- O.D.'s: 1/4" to 7-1/2"
- Tolerances to: +.0005"  
                  -.0000"
- Modified and Special Saws available, with tighter tolerances when required.



**EXTREME THINNESS**

Gaylee solid carbide saws can be manufactured as thin as .0020" (a human hair is about .0040" thick!). This extreme miniaturization is made possible through our numerous years of experience, a dedicated team of saw-makers unparalleled the world over, and our service-oriented approach to meeting your cutting tool requirements. From saws to cutting knives to slitters, slotters and cutters...we're prepared to work with you on your specific application.



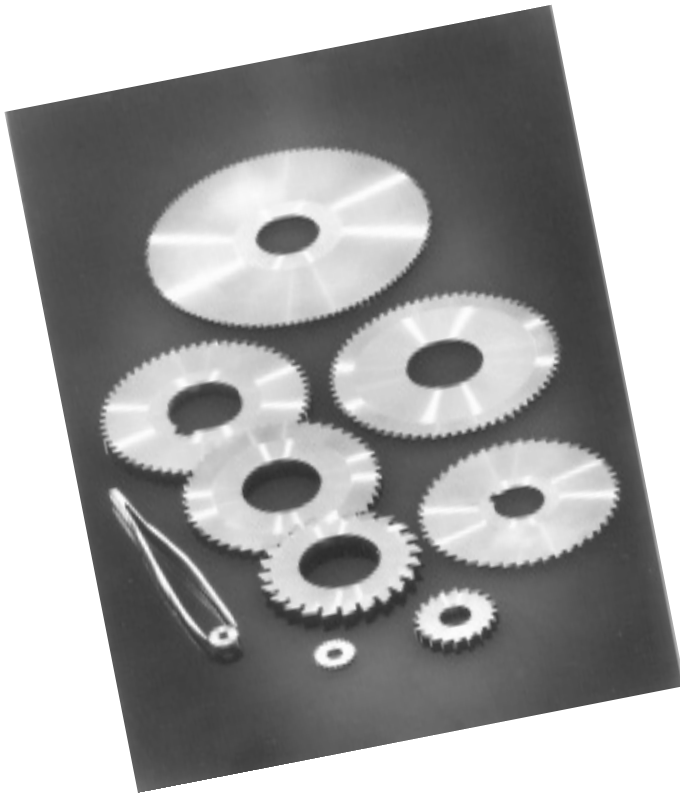
→||← .006" WIDTH  
          +.0005"  
          -.0000"



**EXTREME PRECISION AND MINIATURIZATION**

The miniature saw shown at left has an O.D. of .5000" with 24 precision teeth. GAYLEE takes pride in producing saws with precision and tolerances unexcelled by any other manufacturer. We will provide saws with any degree of precision and tolerance required by your job application.





GAYLEE cutters are manufactured with dish towards the arbor hole to avoid dragging in the cut, thereby reducing side friction. This feature is especially helpful in deep cuts, cutting copper, certain plastics and where parts tend to compress on the saw blade from cutting pressures.

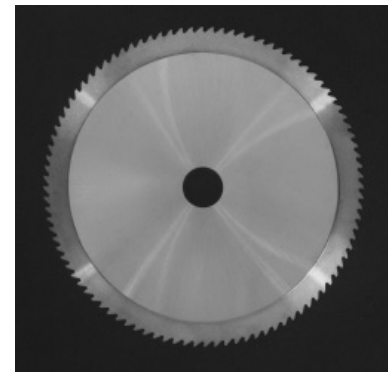
GAYLEE solid carbide saws excel in overcoming the abrasive action encountered in individual and gang slotting of tough steels, cast irons and exotic non-ferrous and non-metallic materials such as fiberglass, epoxies and composites.

Use of solid carbide saws permits a far greater number of teeth in a given saw size than is possible with carbide tipped saws. A greater number of teeth allows reduced chip load, higher speeds and feeds, and improved quality of the finished cut.

Titanium Nitride (TiN) coating and other surface treatments can be added to all GAYLEE cutters for superior cutting performance and finish, providing up to 8 times increase in tool life in many materials.

At GAYLEE, cutters with an O.D. of 2" or larger are stocked with standard hubs and keyways to give you the highest performance. Cutters may be ordered without hubs or keyways.

Timely shipment of your tooling is of paramount importance because GAYLEE believes that customer satisfaction is our most important goal. We realize that we can gain the highest degree of customer confidence by manufacturing and shipping only the best saws and cutters available. This dedication to service excellence has earned GAYLEE recognition as "Specialists in Precision" and has established the company as one of the leading precision saw manufacturers in the world.



*GAYLEE precision solid carbide saws provide the ultimate combination of:*

- *Maximum cutting speeds for minimum cost per unit of production and maximum output;*
- *Maximum tool life (up to 100 times the life of high speed steel), giving dramatic savings in machine downtime, regrinding and tool costs;*
- *Maximum precision and finish of cut (generally burr-free);*
- *Maximum precision of saw tolerances;  
+ .0005" / - .0000" on thickness, and  
+ .005" / - .000" outside diameter.  
(Tighter tolerances are available as specials.)*



<b>STANDARD TOLERANCES</b>
SAW DIA: +.005" -.000"
ARBOR HOLE SIZE: +.0005" -.0000"
SIDE RUN-OUT LESS THAN .0005"
THICKNESS: +.0005" -.0000"

SAW DIA.	ARBOR HOLE DIA.	SAW WIDTH			NO OF TEETH	EDP#
		Fraction	Decimal	MM		
<b>3/4"</b>	<b>1/4"</b>	1/32	0.0313	0.794	18	G15000
		3/64	0.0469	1.191	18	G15005
		1/16	0.0625	1.588	18	G15010
			0.0080	0.203	20	G15100
			0.0100	0.254	20	G15105
			0.0120	0.305	20	G15110
		1/64	0.0140	0.356	20	G15115
			0.0156	0.397	20	G15120
			0.0180	0.457	20	G15125
<b>1"</b>	<b>3/8"</b>		0.0200	0.508	20	G15130
			0.0230	0.584	20	G15135
			0.0250	0.635	20	G15140
			0.0280	0.711	20	G15145
			0.0300	0.762	20	G15150
		1/32	0.0313	0.794	20	G15155
			0.0350	0.889	20	G15160
			0.0394	1.000	20	G15165
			0.0400	1.016	20	G15170
		3/64	0.0469	1.191	20	G15175
			0.0500	1.270	20	G15180
			0.0510	1.295	20	G15185
		1/16	0.0600	1.524	20	G15190
			0.0625	1.588	20	G15195
			0.0700	1.778	20	G15200
		5/64	0.0781	1.984	20	G15205
			0.0787	2.000	20	G15210
			0.0800	2.032	20	G15215
		3/32	0.0900	2.286	20	G15220
			0.0938	2.381	20	G15225
			0.1000	2.540	20	G15230
			0.1100	2.794	20	G15235
			0.1181	3.000	20	G15240
			0.1200	3.048	20	G15245
		1/8	0.1250	3.175	20	G15250
			0.1300	3.302	20	G15255
			0.1400	3.556	20	G15260
		5/32	0.1500	3.810	20	G15265
			0.1563	3.969	20	G15270
			0.1575	4.000	20	G15275
			0.1600	4.064	20	G15280
			0.1700	4.318	20	G15285
			0.1800	4.572	20	G15290
		3/16	0.1875	4.763	20	G15295
			0.1900	4.826	20	G15300
			0.1969	5.000	20	G15305
			0.2000	5.080	20	G15310
			0.2100	5.334	20	G15315
		7/32	0.2188	5.556	20	G15320
			0.2200	5.588	20	G15325
			0.2300	5.842	20	G15330
			0.2362	6.000	20	G15335
	0.2400	6.096	20	G15340		
1/4	0.2500	6.350	20	G15345		



SAW DIA.	ARBOR HOLE DIA.	SAW WIDTH			NO OF TEETH	EDP#
		Fraction	Decimal	MM		
1 1/4"	5/16"	1/32	0.0313	0.794	24	G15400
		3/64	0.0469	1.191	24	G15405
		1/16	0.0625	1.588	24	G15410
		3/32	0.0938	2.381	24	G15415
		1/8	0.1250	3.175	24	G15420
	1/2"	1/32	0.0313	0.794	24	G15450
		3/64	0.0469	1.191	24	G15455
		1/16	0.0625	1.588	24	G15460
1 1/2"	1/2"	3/32	0.0938	2.381	24	G15465
		1/8	0.1250	3.175	24	G15470
		1/32	0.0313	0.794	32	G15500
		3/64	0.0469	1.191	32	G15505
		1/16	0.0625	1.588	32	G15510
1 3/4"	1/2"	3/32	0.0938	2.381	32	G15515
		1/8	0.1250	3.175	32	G15520
		1/32	0.0313	0.794	36	G15600
	5/8"	3/64	0.0469	1.191	36	G15605
		1/16	0.0625	1.588	36	G15610
		1/32	0.0313	0.794	36	G15700
	7/8"	3/64	0.0469	1.191	36	G15705
		1/16	0.0625	1.588	36	G15710
		1/32	0.0313	0.794	36	G15800
		3/64	0.0469	1.191	36	G15805
		1/16	0.0625	1.588	36	G15810
		3/32	0.0938	2.381	36	G15815
2"	1/2"	1/8	0.1250	3.175	36	G15820
		0.0080	0.203	36	G16000	
		0.0100	0.254	36	G16005	
		0.0120	0.305	36	G16010	
		1/64	0.0140	0.356	36	G16015
			0.0156	0.397	36	G16020
			0.0180	0.457	36	G16025
			0.0200	0.508	36	G16030
			0.0230	0.584	36	G16035
			0.0250	0.635	36	G16040
		1/32	0.0280	0.711	36	G16045
			0.0300	0.762	36	G16050
			0.0313	0.794	36	G16055
			0.0350	0.889	36	G16060
			0.0394	1.000	36	G16065
			0.0400	1.016	36	G16070
		3/64	0.0469	1.191	36	G16075
			0.0500	1.270	36	G16080
			0.0510	1.295	36	G16085
		1/16	0.0600	1.524	36	G16090
			0.0625	1.588	36	G16095
			0.0700	1.778	36	G16100
		5/64	0.0781	1.984	36	G16105
			0.0787	2.000	36	G16110
0.0800	2.032		36	G16115		
3/32	0.0900	2.286	36	G16120		
	0.0938	2.381	36	G16125		
	0.1000	2.540	36	G16130		
	0.1100	2.794	36	G16135		

STANDARD TOLERANCES
SAW DIA: +.005" -.000"
ARBOR HOLE SIZE: +.0005" -.0000"
SIDE RUN-OUT LESS THAN .0005"
THICKNESS: +.0005" -.0000"



<b>STANDARD TOLERANCES</b>
SAW DIA: +.005" -.000"
ARBOR HOLE SIZE: +.0005" -.0000"
SIDE RUN-OUT LESS THAN .0005"
THICKNESS: +.0005" -.0000"

SAW DIA.	ARBOR HOLE DIA.	SAW WIDTH			NO OF TEETH	EDP#	
		Fraction	Decimal	MM			
<b>2"</b>	<b>1/2"</b>	1/8	0.1181	3.000	36	G16140	
			0.1200	3.048	36	G16145	
			0.1250	3.175	36	G16150	
		5/32	0.1300	3.302	36	G16155	
			0.1400	3.556	36	G16160	
			0.1500	3.810	36	G16165	
			0.1563	3.969	36	G16170	
			0.1575	4.000	36	G16175	
			0.1600	4.064	36	G16180	
		3/16	0.1700	4.318	36	G16185	
			0.1800	4.572	36	G16190	
			0.1875	4.763	36	G16195	
		7/32		0.1900	4.826	36	G16200
				0.1969	5.000	36	G16205
				0.2000	5.080	36	G16210
				0.2100	5.334	36	G16215
				0.2188	5.556	36	G16220
				0.2200	5.588	36	G16225
			0.2300	5.842	36	G16230	
			0.2362	6.000	36	G16235	
			0.2400	6.096	36	G16240	
	1/4	0.2500	6.350	36	G16245		
	<b>1"</b>	1/16	0.0625	1.588	24	G20536	
			0.0938	2.381	24	G20537	
			0.1250	3.175	24	G20538	
		1/32	0.0313	0.794	36	G16500	
			0.0469	1.191	36	G16505	
			0.0625	1.588	36	G16510	
		3/32	0.0938	2.381	36	G16515	
			0.1250	3.175	36	G16520	
			0.1875	4.763	36	G16525	
		1/4	0.2500	6.350	36	G16530	
			0.0625	1.588	48	G20539	
			0.0938	2.381	48	G20540	
	1/8	0.1250	3.175	48	G20541		
	<b>2 1/4"</b>	<b>1/2"</b>	1/32	0.0313	0.794	40	G17000
3/64			0.0469	1.191	40	G17005	
1/16			0.0625	1.588	40	G17010	
3/32			0.0938	2.381	40	G17015	
1/8			0.1250	3.175	40	G17020	
5/32			0.1563	3.969	40	G17025	
<b>5/8"</b>		1/16	0.0625	1.588	28	G20542	
		3/32	0.0938	2.381	28	G20543	
		1/8	0.1250	3.175	28	G20544	
		1/16	0.0625	1.588	56	G20545	
		3/32	0.0938	2.381	56	G20546	
		1/8	0.1250	3.175	56	G20547	
<b>1"</b>		1/32	0.0313	0.794	40	G17500	
		3/64	0.0469	1.191	40	G17505	
		1/16	0.0625	1.588	40	G17510	
		3/32	0.0938	2.381	40	G17515	
		1/8	0.1250	3.175	40	G17520	
		5/32	0.1563	3.969	40	G17525	



SAW DIA.	ARBOR HOLE DIA.	SAW WIDTH			NO OF TEETH	EDP#
		Fraction	Decimal	MM		
2 1/2"	5/8"	1/64	0.0080	0.203	48	G18000
			0.0100	0.254	48	G18005
			0.0120	0.305	48	G18010
			0.0140	0.356	48	G18015
			0.0156	0.397	48	G18020
			0.0180	0.457	48	G18025
			0.0200	0.508	48	G18030
			0.0230	0.584	48	G18035
			0.0250	0.635	48	G18040
			0.0280	0.711	48	G18045
		1/32	0.0300	0.762	48	G18050
			0.0313	0.794	48	G18055
			0.0350	0.889	48	G18060
			0.0394	1.000	48	G18065
			0.0400	1.016	48	G18070
		3/64	0.0469	1.191	48	G18075
			0.0500	1.270	48	G18080
			0.0510	1.295	48	G18085
			0.0600	1.524	48	G18090
		1/16	0.0625	1.588	48	G18095
			0.0700	1.778	48	G18100
		5/64	0.0781	1.984	48	G18105
			0.0787	2.000	48	G18110
			0.0800	2.032	48	G18115
			0.0900	2.286	48	G18120
		3/32	0.0938	2.381	48	G18125
			0.1000	2.540	48	G18130
			0.1100	2.794	48	G18135
			0.1181	3.000	48	G18140
			0.1200	3.048	48	G18145
		1/8	0.1250	3.175	48	G18150
			0.1300	3.302	48	G18155
			0.1400	3.556	48	G18160
			0.1500	3.810	48	G18165
		5/32	0.1563	3.969	48	G18170
			0.1575	4.000	48	G18175
		3/16	0.1600	4.064	48	G18180
			0.1700	4.318	48	G18185
			0.1800	4.572	48	G18190
			0.1875	4.763	48	G18195
			0.1900	4.826	48	G18200
		7/32	0.1969	5.000	48	G18205
			0.2000	5.080	48	G18210
			0.2100	5.334	48	G18215
			0.2188	5.556	48	G18220
			0.2200	5.588	48	G18225
		1/4	0.2300	5.842	48	G18230
			0.2362	6.000	48	G18235
0.2400	6.096		48	G18240		
0.2500	6.350		48	G18245		
0.2500	6.350		48	G18245		
1"	1/16	0.0625	1.588	28	G20548	
	3/32	0.0938	2.381	28	G20549	
	1/8	0.1250	3.175	28	G20550	
	5/32	0.1563	3.969	28	G20551	

STANDARD TOLERANCES
SAW DIA: +.005" -.000"
ARBOR HOLE SIZE: +.0005" -.0000"
SIDE RUN-OUT LESS THAN .0005"
THICKNESS: +.0005" -.0000"



STANDARD TOLERANCES
SAW DIA: +.005" -.000"
ARBOR HOLE SIZE: +.0005" -.0000"
SIDE RUN-OUT LESS THAN .0005"
THICKNESS: +.0005" -.0000"

SAW DIA.	ARBOR HOLE DIA.	SAW WIDTH			NO OF TEETH	EDP#		
		Fraction	Decimal	MM				
2 1/2"	1"	1/32	0.0313	0.794	48	G18500		
		3/64	0.0469	1.191	48	G18505		
		1/16	0.0625	1.588	48	G18510		
		3/32	0.0938	2.381	48	G18515		
		1/8	0.1250	3.175	48	G18520		
		5/32	0.1563	3.969	48	G18525		
		3/16	0.1875	4.763	48	G18530		
		1/4	0.2500	6.350	48	G18535		
		1/16	0.0625	1.588	56	G20552		
		3/32	0.0938	2.381	56	G20553		
		1/8	0.1250	3.175	56	G20554		
		5/32	0.1563	3.969	56	G20555		
		2 3/4"	1"	1/16	0.0625	1.588	30	G20556
				3/32	0.0938	2.381	30	G20557
1/8	0.1250			3.175	30	G20558		
5/32	0.1563			3.969	30	G20559		
	0.0080			0.203	60	G19000		
	0.0100			0.254	60	G19005		
	0.0120			0.305	60	G19010		
	0.0140			0.356	60	G19015		
1/64	0.0156			0.397	60	G19020		
	0.0180			0.457	60	G19025		
	0.0200			0.508	60	G19030		
	0.0230			0.584	60	G19035		
	0.0250			0.635	60	G19040		
	0.0280			0.711	60	G19045		
1/32	0.0300			0.762	60	G19050		
	0.0313			0.794	60	G19055		
	0.0350			0.889	60	G19060		
	0.0394			1.000	60	G19065		
	0.0400			1.016	60	G19070		
3/64	0.0469			1.191	60	G19075		
	0.0500			1.270	60	G19080		
	0.0510			1.295	60	G19085		
	0.0600			1.524	60	G19090		
1/16	0.0625			1.588	60	G19095		
5/64	0.0700			1.778	60	G19100		
	0.0781			1.984	60	G19105		
	0.0787			2.000	60	G19110		
	0.0800			2.032	60	G19115		
	0.0900			2.286	60	G19120		
3/32	0.0938			2.381	60	G19125		
	0.1000			2.540	60	G19130		
	0.1100			2.794	60	G19135		
	0.1181			3.000	60	G19140		
	0.1200			3.048	60	G19145		
1/8	0.1250			3.175	60	G19150		
	0.1300			3.302	60	G19155		
	0.1400			3.556	60	G19160		
	0.1500			3.810	60	G19165		
5/32	0.1563			3.969	60	G19170		
	0.1575			4.000	60	G19175		
	0.1600	4.064	60	G19180				





SAW DIA.	ARBOR HOLE DIA.	SAW WIDTH			NO OF TEETH	EDP#		
		Fraction	Decimal	MM				
2 3/4"	1"	3/16	0.1700	4.318	60	G19185		
			0.1800	4.572	60	G19190		
			0.1875	4.763	60	G19195		
			0.1900	4.826	60	G19200		
			0.1969	5.000	60	G19205		
		7/32	0.2000	5.080	60	G19210		
			0.2100	5.334	60	G19215		
			0.2188	5.556	60	G19220		
			0.2200	5.588	60	G19225		
			0.2300	5.842	60	G19230		
		1/4	0.2362	6.000	60	G19235		
			0.2400	6.096	60	G19240		
			0.2500	6.350	60	G19245		
			1/16	0.0625	1.588	30	G20560	
			3/32	0.0938	2.381	30	G20561	
3"	1"	1/8	0.1250	3.175	30	G20562		
			5/32	0.1563	3.969	30	G20563	
			1/32	0.0313	0.794	60	G20000	
			3/64	0.0469	1.191	60	G20005	
		1/16	0.0625	1.588	60	G20010		
			3/32	0.0938	2.381	60	G20015	
			1/8	0.1250	3.175	60	G20020	
			5/32	0.1563	3.969	60	G20025	
		3/16	0.1875	4.763	60	G20030		
			1/4	0.2500	6.350	60	G20035	
			1/16	0.0625	1.588	36	G20564	
			3/32	0.0938	2.381	36	G20565	
			1/8	0.1250	3.175	36	G20566	
		4"	1"	5/32	0.1563	3.969	36	G20567
					1/4	0.2500	6.350	36
1/32	0.0313				0.794	72	G20500	
3/64	0.0469				1.191	72	G20505	
1/16	0.0625				1.588	72	G20510	
3/32	0.0938			2.381	72	G20515		
	1/8			0.1250	3.175	72	G20520	
	5/32			0.1563	3.969	72	G20525	
	3/16			0.1875	4.763	72	G20530	
	1/4			0.2500	6.350	72	G20535	

STANDARD TOLERANCES
SAW DIA: +.005" -.000"
ARBOR HOLE SIZE: +.0005" -.0000"
SIDE RUN-OUT LESS THAN .0005"
THICKNESS: +.0005" -.0000"

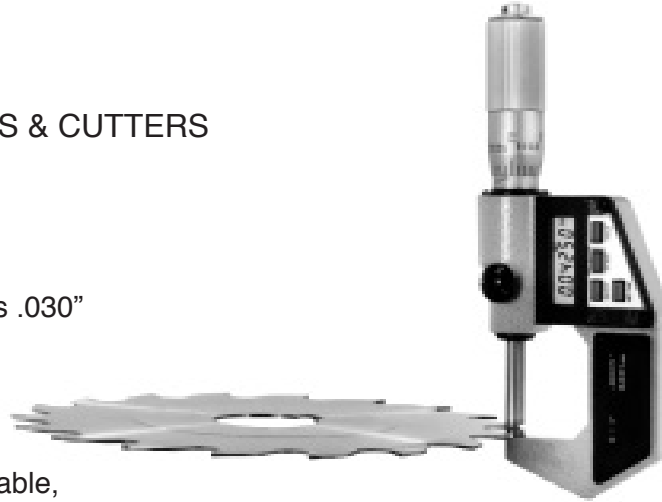
*Your Source for  
High Precision  
Solid Carbide  
and Carbide-Tipped  
Thin Saws and Cutters!*



**CARBIDE-TIPPED THIN SAWS & CUTTERS**

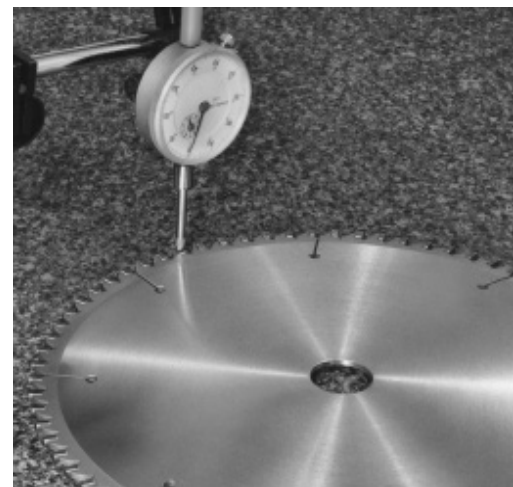
Designed and manufactured to your exact specifications.

- Carbide Tipped Saws as THIN as .030"
- As THICK as 1.000"
- O.D.'s: 1-1/2" to 10"
- Tolerances to: +.0010"  
- .0000"
- Modified and Special Saws available, with tighter tolerances when required.



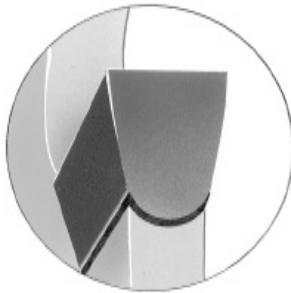
**UNPARALLELED PRECISION AND QUALITY CONTROL**

Thorough inspection and quality control at every step of production insure that every GAYLEE saw is absolutely true to your specifications. These same standards are applied to repair and sharpen your GAYLEE saws. Our unmatched reputation has been built upon years of dedication to superior quality tooling...a reputation that's used as a standard to which others are measured.



**THIN SAW WITH INTEGRAL SPACER FOR PRECISION GANG SET-UPS**

For precision gang set-ups, specify the GAYLEE "Thin Saw" with integral spacer. This spacer is actually part of the saw itself...allowing no room for dirt or chips to accumulate. Made to your specific requirements for the utmost precision spacing in gang sawing, slotting, and slitting.



**CIRCULAR SEAT ADDS STRENGTH TO TIP BRAZE**

The Gaylee circular seat provides mechanical strength, as well as a greater brazing area for the carbide tip, which insures it being held securely to the steel body.

**SAW MODIFICATIONS**

Gaylee can modify standard carbide-tipped saws and cutters to meet many 'special' job cutting requirements. Most modified standard cutters can be shipped within 48 hours...much sooner than the time required to manufacture full special saws and cutters.

Modified standard cutters usually offer substantial cost savings over specialty manufactured tools. Pricing on modified standard cutters is based on quantities and the degree of modifications required. Call GAYLEE to discuss the many modifications possible, depending on your application.

**CUTTING WIDTH OR THICKNESS** can be adjusted to the exact dimension needed.

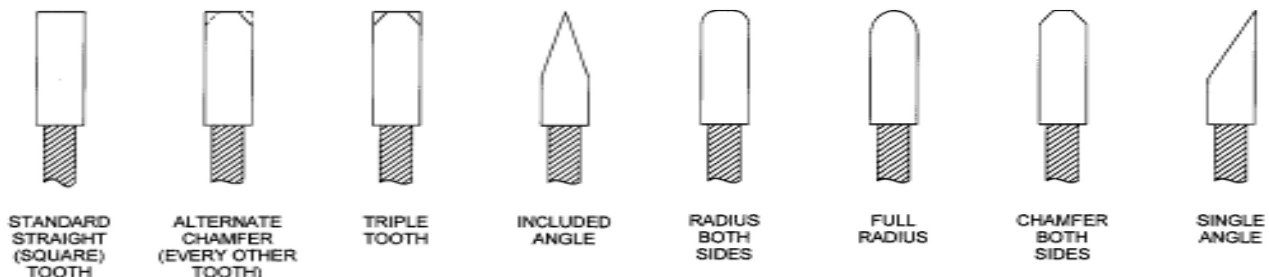
- General Purpose and Stainless Steel Cutting saws and cutters can be modified to any exact width between .040" and .375". Other carbide tipped cutters in this catalog can be modified to most widths within the same range.
- METRIC widths can be provided between: 1.0mm and 9.5mm

**TIGHTER TOLERANCES**

- Although GAYLEE Standard Carbide Tipped cutters already have the tightest tolerances available "off-the-shelf", even tighter tolerances are available on a modified standard basis (i.e. thickness tolerance: +/- .0001). Tolerances may vary depending on O.D. size.
- MATCHED OUTSIDE DIAMETERS can be provided so that a set of cutters used together will all cut to the exact same depth.

**CARBIDE TIPPED TOOTH FORMS (PROFILE GROUND)**

All GAYLEE Standard Carbide Tipped Thin Saws are straight tooth (i.e. square tooth) off-the-shelf. However, a wide variety of profile ground modified tooth forms can be provided, for example:





*Economical cutters for roughing and short-run cutting of cast iron, non-ferrous metals, and non-metallics.*

These cutters are designed for slotting, milling, and cut-off applications. Tool geometry is designed to be suitable for work materials listed. All cutters have optimal dish and side clearance (side run-out) for free-cutting action with reduced friction. Gaylee carbide tipped saws allow maximum durability due to the hardened tool steel saw body that supports the top-grade carbide inserts.

Note: Coarse-tooth cutters are the lowest priced carbide tipped tools made by Gaylee. Cost savings are achieved entirely by use of a minimum number of teeth. These cutters are manufactured with the same premium quality materials and craftsmanship found in our Standard Tooth Cutters. Coarse-tooth cutters on this page are the most economical tools in short-run applications. For improved surface finish, longer tool life, and more economical long-run performance, we recommend the General Purpose Standard Carbide Tipped Thin Saws.

**COARSE TOOTH CUTTERS FOR USE ON NON-FERROUS MATERIALS**

Aluminum • Copper • Plastics • Hard Rubber • Bakelite • Fiber

<b>STANDARD TOLERANCES</b>
SAW DIA: +.015" -.000"
ARBOR HOLE SIZE: +.0005" -.0000"
SIDE RUN-OUT LESS THAN .0005"
THICKNESS: +.0010" -.0000"

SAW DIA.	ARBOR HOLE DIA.	SAW WIDTH			NO. OF TEETH	EDP#
		Fraction	Decimal	MM		
3"	1"	1/4	0.2500	6.350	4	G12000
		5/16	0.3125	7.9375	4	G12005
		3/8	0.3750	9.525	4	G12010
4"	1"	3/32	0.0938	2.381	6	G12015
		1/8	0.1250	3.175	6	G12020
		3/16	0.1875	4.763	6	G12025
		1/4	0.2500	6.350	6	G12030
		5/16	0.3125	7.9375	6	G12035
		3/8	0.3750	9.525	6	G12040
	1.25"	3/8	0.3750	9.525	6	G12045
6"	1.25"	1/8	0.1250	3.175	8	G12050
8"	1.25"	1/8	0.1250	3.175	10	G12055

**COARSE TOOTH CUTTERS FOR USE ON CAST IRON**

SAW DIA.	ARBOR HOLE DIA.	SAW WIDTH			NO. OF TEETH	EDP#
		Fraction	Decimal	MM		
3"	1"	1/4	0.2500	6.350	6	G12200
		5/16	0.3125	7.9375	6	G12205
		3/8	0.3750	9.525	6	G12210
4"	1"	1/8	0.1250	3.175	8	G12215
		3/16	0.1875	4.763	8	G12220
		1/4	0.2500	6.350	8	G12225
		5/16	0.3125	7.9375	8	G12230
		3/8	0.3750	9.525	8	G12235
		1.25"	3/8	0.3750	9.525	8
	6"	1.25"	1/8	0.1250	3.175	12
3/16			0.1875	4.763	12	G12250
1/4			0.2500	6.350	12	G12255
8"	1.25"	3/16	0.1875	4.763	16	G12260
		1/4	0.2500	6.350	16	G12265



## General Purpose

These Gaylee General Purpose standard carbide tipped saws are ideal for use on:

- Cast Iron
- Aluminum
- Brass
- Plastics
- Hard Rubber
- Non-Metallics
- Malleable Iron
- Copper
- Other Non-Ferrous Metals
- Bakelite
- Composites
- Multi-Purpose Use

These cutters are designed for slitting, slotting, milling, and cut-off applications. These are precision cutting tools of the highest quality construction. Contact Gaylee with your requirements.

SAW DIA.	ARBOR HOLE DIA.	SAW WIDTH			NO OF TEETH	EDP#		
		Fraction	Decimal	MM				
3"	1"	3/64	0.0469	1.191	12	G10000		
		1/16	0.0625	1.588	12	G10005		
		5/64	0.0781	1.984	12	G10010		
		3/32	0.0938	2.381	12	G10015		
		7/64	0.1094	2.778	12	G10020		
		1/8	0.1250	3.175	12	G10025		
		5/32	0.1563	3.969	12	G10030		
		3/16	0.1875	4.763	12	G10035		
		7/32	0.2188	5.556	12	G10040		
		1/4	0.2500	6.350	12	G10045		
		5/16	0.3125	7.938	12	G10050		
		3/8	0.3750	9.525	12	G10055		
			1.25"	1/8	0.1250	3.175	12	G10060
			5/8"	1/16	0.0625	1.588	14	G10075
4"	1"	3/64	0.0469	1.191	14	G10065		
		3/64	0.0469	1.191	30	G10070		
		1/16	0.0625	1.588	14	G10080		
		1/16	0.0625	1.588	20	G10085		
		5/64	0.0781	1.984	14	G10090		
		3/32	0.0938	2.381	14	G10095		
		7/64	0.1094	2.778	14	G10100		
		1/8	0.1250	3.175	14	G10105		
		1/8	0.1250	3.175	20	G10110		
		5/32	0.1563	3.969	14	G10115		
		3/16	0.1875	4.763	14	G10120		
		7/32	0.2188	5.556	14	G10125		
		1/4	0.2500	6.350	14	G10130		
		5/16	0.3125	7.938	14	G10135		
	3/8	0.3750	9.525	14	G10140			
		1 1/4"	3/64	0.0469	1.191	14	G10145	
			1/16	0.0625	1.588	14	G10150	
			5/64	0.0781	1.984	14	G10155	
			3/32	0.0938	2.381	14	G10160	
	7/64		0.1094	2.778	14	G10165		
	1/8	0.1250	3.175	14	G10170			
	5/32	0.1563	3.969	14	G10175			
	3/16	0.1875	4.763	14	G10180			
	7/32	0.2188	5.556	14	G10185			
	1/4	0.2500	6.350	14	G10190			
	5/16	0.3125	7.938	14	G10195			
	3/8	0.3750	9.525	14	G10200			

STANDARD TOLERANCES
SAW DIA: +.015" -.000"
ARBOR HOLE SIZE: +.0005" -.0000"
SIDE RUN-OUT LESS THAN .0005"
THICKNESS: +.0010" -.0000"

(cont.)



(cont.)

STANDARD TOLERANCES
SAW DIA: +.015" -.000"
ARBOR HOLE SIZE: +.0005" -.0000"
SIDE RUN-OUT LESS THAN .0005"
THICKNESS: +.0010" -.0000"

SAW DIA.	ARBOR HOLE DIA.	SAW WIDTH			NO OF TEETH	EDP#	
		Fraction	Decimal	MM			
5"	1"	3/64	0.0469	1.191	16	G10205	
		1/16	0.0625	1.588	16	G10210	
		5/64	0.0781	1.984	16	G10215	
		3/32	0.0938	2.381	16	G10220	
		7/64	0.1094	2.778	16	G10225	
		1/8	0.1250	3.175	16	G10230	
		5/32	0.1563	3.969	16	G10235	
		3/16	0.1875	4.763	16	G10240	
		7/32	0.2188	5.556	16	G10245	
		1/4	0.2500	6.350	16	G10250	
	5/16	0.3125	7.395	16	G10255		
	3/8	0.3750	9.525	16	G10260		
	1 1/4"	3/64	0.0469	1.191	16	G10265	
		1/16	0.0625	1.588	16	G10270	
		5/64	0.0781	1.984	16	G10275	
		3/32	0.0938	2.381	16	G10280	
		7/64	0.1094	2.778	16	G10285	
		1/8	0.1250	3.175	16	G10290	
		5/32	0.1563	3.969	16	G10295	
		3/16	0.1875	4.763	16	G10300	
7/32		0.2188	5.556	16	G10305		
1/4		0.2500	6.350	16	G10310		
6"	1"	5/16	0.3125	7.938	16	G10315	
		3/8	0.3750	9.525	16	G10320	
		3/64	0.0469	1.191	18	G10325	
		1/16	0.0625	1.588	18	G10330	
		5/64	0.0781	1.984	18	G10335	
		3/32	0.0938	2.381	18	G10340	
		7/64	0.1094	2.778	18	G10345	
		1/8	0.1250	3.175	18	G10350	
		5/32	0.1563	3.969	18	G10355	
		3/16	0.1875	4.763	18	G10360	
	7/32	0.2188	5.556	18	G10365		
	1/4	0.2500	6.350	18	G10370		
	5/16	0.3125	7.938	18	G10375		
	3/8	0.3750	9.525	18	G10380		
	1 1/4"	3/64	0.0469	1.191	18	G10385	
		1/16	0.0625	1.588	18	G10390	
		5/64	0.0781	1.984	18	G10395	
		3/32	0.0938	2.381	18	G10400	
		7/64	0.1094	2.778	18	G10405	
		1/8	0.1250	3.175	18	G10410	
5/32		0.1563	3.969	18	G10415		
3/16		0.1875	4.763	18	G10420		
7/32		0.2188	5.556	18	G10425		
1/4		0.2500	6.350	18	G10430		
8"	1 1/4"	5/16	0.3125	7.938	18	G10435	
		3/8	0.3750	9.525	18	G10440	
		1/8	0.1250	3.175	24	G10445	
		5/32	0.1563	3.969	24	G10450	
		3/16	0.1875	4.763	24	G10455	
10"	1 1/4"	1/4	0.2500	6.350	24	G10460	
		1"	1/8	0.1250	3.175	72	G10465
		1/8	0.1250	3.175	32	G10470	
		3/16	0.1875	4.763	32	G10475	





## Stainless Steel Cutting

These GAYLEE Stainless Steel Cutting carbide tipped saws are ideal for use on:

- Stainless Steels - AISI Types 200-350 (Austenitic Stainless Steels)

Note: For stainless steels other than AISI Types 200 through 350, we recommend using Steel Cutting saws and cutters.

These cutters are designed for slitting, slotting, milling, and cut-off applications. Tool geometry is designed for work materials of Stainless Steel AISI Types 200 through 350. All cutters have both dish and side clearance for free-cutting action. Carbide tips are the best quality and grade of carbide.

SAW DIA.	ARBOR HOLE DIA.	SAW WIDTH			NO OF TEETH	COARSE TOOTH		STD. TOOTH	
		Fraction	Decimal	MM		EDP#	NO OF TEETH	EDP#	
3"	1"	3/64	0.0469	1.191	8	G12400	12	G10500	
		1/16	0.0625	1.588					
		5/64	0.0781	1.984					
		3/32	0.0938	2.381					
		7/64	0.1094	2.778	8	G12405	12	G10520	
		1/8	0.1250	3.175					
		5/32	0.1563	3.969	8	G12410	12	G10530	
		3/16	0.1875	4.763					
		7/32	0.2188	5.556	8	G12415	12	G10545	
		1/4	0.2500	6.350					
		5/16	0.3125	7.9375	8	G12420	12	G10550	
		3/8	0.3750	9.525					
			1.25"	1/8	0.1250	3.175			12
4"	5/8" - .625"	1/16	0.0625	1.588			14	G10575	
	1"	3/64	0.0469	1.191	10	G12430	14	G10565	
		3/64	0.0469	1.191					
		1/16	0.0625	1.588					
		1/16	0.0625	1.588					
		5/64	0.0781	1.984	10	G12435	14	G10580	
		3/32	0.0938	2.381					
		7/64	0.1094	2.7781	10	G12440	14	G10585	
		1/8	0.1250	3.175					
		1/8	0.1250	3.175	10	G12445	14	G10590	
		5/32	0.1563	3.969					
		3/16	0.1875	4.763	10	G12450	14	G10595	
		7/32	0.2188	5.556					
		1/4	0.2500	6.350	10	G12455	14	G10600	
	5/16	0.3125	7.9375						
	3/8	0.3750	9.525	10	G12455	14	G10640		
	1 1/4"	3/64	0.0469	1.191	10	G12460	14	G10645	
		1/16	0.0625	1.588					
		5/64	0.0781	1.984					
		3/32	0.0938	2.381					
		7/64	0.1094	2.7781					
1/8		0.1250	3.175						
5/32		0.1563	3.969						
3/16		0.1875	4.763						
7/32		0.2188	5.556						
1/4		0.2500	6.350						
5/16		0.3125	7.9375						
3/8		0.3750	9.525						

STANDARD TOLERANCES
SAW DIA: +.015" -.000"
ARBOR HOLE SIZE: +.0005" -.0000"
SIDE RUN-OUT LESS THAN .0005"
THICKNESS: +.0010" -.0000"

(cont.)



(cont.)

COARSE TOOTH

STD. TOOTH

STANDARD TOLERANCES
SAW DIA: +.015" -.000"
ARBOR HOLE SIZE: +.0005" -.0000"
SIDE RUN-OUT LESS THAN .0005"
THICKNESS: +.0010" -.0000"

SAW DIA.	ARBOR HOLE DIA.	SAW WIDTH			NO OF TEETH	EDP#	NO OF TEETH	EDP#
		Fraction	Decimal	MM				
5"	1"	3/64	0.0469	1.191	12	G12465	16	G10705
		1/16	0.0625	1.588			16	G10710
		5/64	0.0781	1.984			16	G10715
		3/32	0.0938	2.381			16	G10720
		7/64	0.1094	2.778			16	G10725
		1/8	0.1250	3.175			12	G12470
		5/32	0.1563	3.969	16	G10735		
		3/16	0.1875	4.763	12	G12475	16	G10740
		7/32	0.2188	5.556	16	G10745		
		1/4	0.2500	6.350	16	G10750		
		5/16	0.3125	7.938	16	G10755		
		3/8	0.3750	9.525	16	G10760		
	1 1/4"	3/64	0.0469	1.191			16	G10765
		1/16	0.0625	1.588			16	G10770
		5/64	0.0781	1.984			16	G10775
		3/32	0.0938	2.381			16	G10780
		7/64	0.1094	2.778			16	G10785
		1/8	0.1250	3.175			16	G10790
		5/32	0.1563	3.969			16	G10795
		3/16	0.1875	4.763			16	G10800
		7/32	0.2188	5.556			16	G10805
		1/4	0.2500	6.350			16	G10810
		5/16	0.3125	7.938			16	G10815
		3/8	0.3750	9.525			16	G10820
6"	1"	3/64	0.0469	1.191			18	G10825
		1/16	0.0625	1.588			18	G10830
		5/64	0.0781	1.984			18	G10835
		3/32	0.0938	2.381			18	G10840
		7/64	0.1094	2.778			18	G10845
		1/8	0.1250	3.175			18	G10850
		5/32	0.1563	3.969			18	G10855
		3/16	0.1875	4.763			18	G10860
		7/32	0.2188	5.556			18	G10865
		1/4	0.2500	6.350			18	G10870
		5/16	0.3125	7.938			18	G10875
		3/8	0.3750	9.525			18	G10880
	1 1/4"	3/64	0.0469	1.191			18	G10885
		1/16	0.0625	1.588			18	G10890
		5/64	0.0781	1.984			18	G10895
		3/32	0.0938	2.381			18	G10900
		7/64	0.1094	2.778			18	G10905
		1/8	0.1250	3.175	14	G12480	18	G10910
		5/32	0.1563	3.969			18	G10915
		3/16	0.1875	4.763	14	G12485	18	G10920
		7/32	0.2188	5.556			18	G10925
		1/4	0.2500	6.350	14	G12490	18	G10930
		5/16	0.3125	7.938			18	G10935
		3/8	0.3750	9.525			18	G10940
8"	1 1/4"	1/8	0.1250	3.175			24	G10945
		5/32	0.1563	3.969			24	G10950
		3/16	0.1875	4.763			24	G10955
		1/4	0.2500	6.350			24	G10960
10"	1"	1/8	0.1250	3.175			72	G10495
	1 1/4"	1/8	0.1250	3.175			32	G10970
		3/16	0.1875	4.763			32	G10975



These GAYLEE Steel Cutting carbide tipped saws are ideal for use on:

- Steel Cutting Applications

Note: On Stainless Steel AISI Types 200 through 350, order Stainless Steel Cutting saws and cutters. For all other types of Stainless Steel, order Steel Cutting cutters from this page.

STEEL CUTTING carbide tipped thin saws are specifically designed for slitting, slotting, milling,

and cut-off of steel workpieces. Carbide tips are of premium quality steel-cutting grade. All cutters have both dish and side clearance for free-cutting action. These are precision cutting tools, with tool geometry to maximize steel cutting performance. Standard number of teeth has been significantly increased to meet steel-cutting demands.

*COARSE TOOTH      MEDIUM TOOTH      STD. TOOTH*

SAW DIA.	ARBOR HOLE DIA.	SAW WIDTH			NO OF TEETH	EDP#	NO OF TEETH	EDP#	NO OF TEETH	EDP#
		Fraction	Decimal	MM						
3"	1"	3/64	0.0469	1.191					16	G11000
		1/16	0.0625	1.588			12	G13000	16	G11005
		5/64	0.0781	1.984					16	G11010
		3/32	0.0938	2.381			12	G13005	16	G11015
		1/8	0.1250	3.175			12	G13010	16	G11020
		5/32	0.1563	3.969			12	G13015	16	G11025
		3/16	0.1875	4.763			12	G13020	16	G11030
		7/32	0.2188	5.556					16	G11035
		1/4	0.2500	6.35	6	G12600			16	G11040
		5/16	0.3125	7.9375	6	G12605				
3/8	0.3750	9.525	6	G12610						
4"	1"	1/16	0.0625	1.588			14	G13025	20	G11045
		3/32	0.0938	2.381			14	G13030	20	G11050
		1/8	0.1250	3.175	8	G12615	14	G13035	20	G11055
		3/16	0.1875	4.763	8	G12620	14	G13040	20	G11060
		1/4	0.2500	6.35	8	G12625			20	G11065
		5/16	0.3125	7.9375	8	G12630				
	3/8	0.3750	9.525	8	G12635					
	1 1/4"	1/8	0.1250	3.175					20	G11070
		3/16	0.1875	4.763					20	G11075
		1/4	0.2500	6.350	8	G12640			20	G11080
3/8		0.3750	9.525	8	G12645					
5"	1"	1/16	0.0625	1.588			16	G13045	24	G11085
		3/32	0.0938	2.381			16	G13050	24	G11090
		1/8	0.1250	3.175			16	G13055	24	G11095
		3/16	0.1875	4.763			16	G13060	24	G11100
	1 1/4"	3/32	0.0938	2.381					24	G11105
		1/8	0.1250	3.175					24	G11110
3/16	0.1875	4.763			16	G13065	24	G11115		
6"	1"	1/16	0.0625	1.588			18	G13070	28	G11120
		3/32	0.0938	2.381			18	G13075	28	G11125
		1/8	0.1250	3.175			18	G13080	28	G11130
		3/16	0.1875	4.763			18	G13085	28	G11135
	1 1/4"	1/16	0.0625	1.588			18	G13090	28	G11140
		3/32	0.0938	2.381			18	G13095	28	G11145
		1/8	0.1250	3.175	16	G12650	18	G13100	28	G11150
		3/16	0.1875	4.763	16	G12655	18	G13105	28	G11155
		1/4	0.2500	6.350	16	G12660	18	G13110	28	G11160
8"	1 1/4"	3/16	0.1875	4.763	16	G12665				
		1/4	0.2500	6.350	16	G12670				

STANDARD TOLERANCES
SAW DIA: +.015" -.000"
ARBOR HOLE SIZE: +.0005" -.0000"
SIDE RUN-OUT LESS THAN .0005"
THICKNESS: +.0010" -.0000"



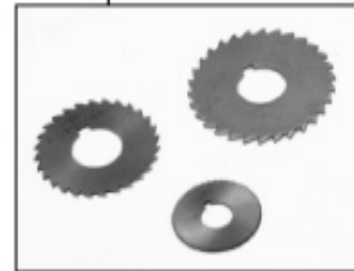
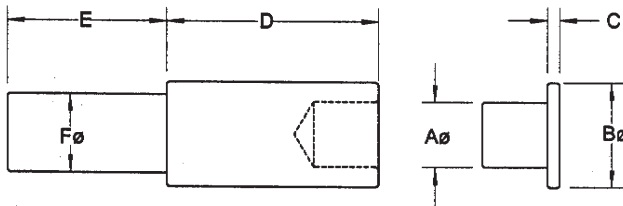
Each saw manufactured by Gaylee goes through stringent quality assurance checks before shipment.

GAYLEE can modify standard cutters in this catalog to meet your special job requirements. Most modified standards can be shipped within one week - much sooner than the time required to manufacture special saws and cutters. In addition, modified standard cutters usually offer substantial cost savings over specialty manufactured tools. Prices of modified and special cutters are quoted on quantities required. If your application requires a modified or special cutter, as much information as possible concerning your specific application should be supplied.

- Saw Diameter
- Saw Thickness
- Number of Teeth
- Keyway Dimension and Type
- Work Material
- Depth of Cut
- Tolerance Required
- Form To Be Generated
- Arbor (Hole) Size
- Slot Width
- Hub Width and Diameter
- Machine Used
- Rockwell Hardness of Workpiece
- Detail of Present Cutter Used
- Results Obtained from Present Cutter
- Speeds - RPM
- Feeds (SFM, CPI and/or IPR)
- Special Tooth Configuration
- Are Saws Used in Gang Configuration?

A FAX or e-mail of a sketch showing your part and/or the saw or cutter now in use would be most helpful in making our recommendations. Include any notes or comments pertinent to the application.

## Stub Arbors For Saws



EDP #	SAW ID	A	B	C	D	E	F
GRA250	1/4"	.250	.500	.080	1.000	1.700	.500
GRA375	3/8"	.375	.625	.080	1.180	1.700	.500
GRA500	1/2"	.500	.750	.095	1.370	1.700	.500
GRA625	5/8"	.625	1.000	.122	1.500	2.030	.750
GRA100	1"	1.000	1.500	.160	1.750	2.030	.750
GRA125	1-1/4"	1.250	1.750	.220	2.000	2.030	.750

- High accuracy, general purpose slitting/sawing applications.
- Vibration absorbing design.
- Weldon shanks.
- Deep sleeve design allows extra support and less slippage of saw/cutter.
- Hardened and ground to .002" concentricity. Tighter tolerances (to .0004") available.



# Cutting Speed Recommendations - Circular Saws



These are general cutting speed recommendations on SFM - m/min. rates, and may vary from application to application. Gaylee Corporation does not assume any liability in the following recommendations, which are basically suggestions on where to start. Contact Gaylee if you have questions on speeds and feeds.

MATERIAL* TO BE CUT	HARDNESS RANGE (Bhn)**	CARBIDE SAW CUTTING SPEED (SFM / m/min.)	H.S.S. SAW CUTTING SPEED (SFM / m/min.)	MATERIAL* TO BE CUT	HARDNESS RANGE (Bhn)**	CARBIDE SAW CUTTING SPEED (SFM / m/min.)	H.S.S. SAW CUTTING SPEED (SFM / m/min.)
Free Machining Carbon Steels-Wrought	100-425	<u>130-555</u> 40-170	<u>30-130</u> 9-40	Malleable Cast Irons	110-320	<u>130-470</u> 40-145	<u>30-110</u> 9-34
Carbon Steels-Wrought	85-425	<u>105-530</u> 35-165	<u>25-125</u> 8-38	Chromium-Nickel Alloy Castings	275-375	<u>85-105</u> 25-35	<u>20-25</u> 6-8
Carbon & Ferritic Alloy Steels (High Temp. Service)	150-200	<u>320-425</u> 100-130	<u>75-100</u> 23-30	Aluminum Alloys-Wrought	30-150	<u>3400-4250</u> 1042-1300	<u>800-1000</u> 245-305
Free Machining Alloy Steels-Wrought	150-425	<u>35-470</u> 11-145	<u>8-110</u> 2.5-34	Aluminum Alloys-Cast	40-125	<u>2125-5315</u> 640-1615	<u>500-1250</u> 150-380
Alloy Steels, Wrought	125-425	<u>35-425</u> 11-130	<u>8-100</u> 2.5-30	Magnesium Alloys-Wrought	40-125	<u>5100-6375</u> 1555-1955	<u>1200-1500</u> 365-460
High Strength Steels-Wrought	225-400	<u>35-255</u> 11-80	<u>8-60</u> 2.5-18	Magnesium Alloys-Cast	50-90	<u>5100-6375</u> 1555-1955	<u>1200-1500</u> 365-460
Maraging Steels-Wrought	275-425	<u>35-215</u> 11-65	<u>8-50</u> 2.5-15	Titanium Alloys-Wrought	110-440	<u>65-530</u> 25-165	<u>15-125</u> 5-38
Tool Steels-Wrought	100-375	<u>35-470</u> 11-145	<u>8-110</u> 2.5-34	Titanium Alloys-Cast	150-350	<u>170-470</u> 55-145	<u>40-110</u> 12-34
Nitriding Steels-Wrought	200-350	<u>150-215</u> 50-65	<u>35-50</u> 11-15	Copper Alloys-Wrought	10R <sub>B</sub> -100R <sub>B</sub>	<u>340-2125</u> 105-640	<u>80-500</u> 24-150
Armor Plate, Ship Plate, Aircraft Plate-Wrought	200-350	<u>65-215</u> 25-65	<u>15-50</u> 5-15	Copper Alloys-Cast	40-200	<u>340-1700</u> 105-510	<u>80-400</u> 24-120
Structural Steels-Wrought	100-400	<u>35-255</u> 11-80	<u>8-60</u> 2.5-18	Nickel Alloys-Wrought and Cast	80-360	<u>65-300</u> 25-90	<u>15-70</u> 5-21
Free Machining Stainless Steels-Wrought	135-425	<u>150-470</u> 50-145	<u>35-110</u> 11-34	Beryllium Nickel Alloys-Wrought and Cast	200-425 47-52R <sub>C</sub>	<u>35-215</u> 11-65	<u>8-50</u> 2.5-15
Stainless Steels-Wrought	135-425	<u>35-425</u> 11-130	<u>8-100</u> 2.5-30	High Temp. Alloys-Wrought and Cast	140-475	<u>35-255</u> 11-80	<u>8-60</u> 2.5-18
Precipitation Hardening Stainless Steels-Wrought	150-440	<u>85-340</u> 25-105	<u>20-80</u> 6-24	Refractory Alloys-Cast, P/M	170-320	<u>150-300</u> 50-90	<u>35-70</u> 11-21
Stainless Steels-Cast	135-425	<u>105-425</u> 35-130	<u>25-100</u> 8-30	Zinc Alloys-Cast	80-100	<u>1380-1700</u> 425-510	<u>325-400</u> 100-120
Precipitation Hardening Stainless Steels-Cast	325-450	<u>65-130</u> 25-40	<u>15-30</u> 5-9	Lead Alloys-Cast	5-20	<u>1065-1275</u> 325-385	<u>250-300</u> 76-90
Carbon Steels-Cast	100-300	<u>170-530</u> 55-165	<u>40-125</u> 12-38	TiN Alloys-Cast	15-30	<u>1065-1275</u> 325-385	<u>250-300</u> 76-90
Alloy Steels-Cast	150-400	<u>105-340</u> 35-105	<u>25-80</u> 8-24	Zirconium Alloys-Wrought	140-280	<u>215-255</u> 65-80	<u>50-60</u> 15-18
Tool Steels-Cast	150-375 & 48-50R <sub>C</sub>	<u>35-300</u> 11-90	<u>8-70</u> 2.5-21	Manganese-Wrought	140-220	<u>105-130</u> 35-40	<u>25-30</u> 8-9
Gray Cast Irons	120-320	<u>105-470</u> 35-145	<u>25-110</u> 8-34	P/M Alloys-Copper	50-70R <sub>F</sub>	<u>170-215</u> 55-65	<u>40-50</u> 12-15
Compacted Graphite Cast Irons	120-330	<u>105-170</u> 35-55	<u>25-40</u> 8-12	P/M Alloys-Brasses	35-81R <sub>H</sub>	<u>215-255</u> 65-80	<u>50-60</u> 15-18
Ductile Cast Irons	120-330	<u>85-510</u> 25-160	<u>20-120</u> 6-37	P/M Alloys-Bronzes	30-75R <sub>F</sub>	<u>170-215</u> 55-65	<u>40-50</u> 12-15

Cont. on page 24

\*Materials list from Machining Data Handbook-3rd Edition, published by the Machinability Data Center. For specific metals/materials within each material category, refer to Machining Data Handbook.

\*\*Hardness range listed in Brinell unless otherwise noted. 'Range' covers all metals/materials listed within each material group.

\*\*\*Thermosetting plastics have various hardness scales. Refer to Machining Data Handbook.

### Cutting Speed Recommendations (cont.)

MATERIAL* TO BE CUT	HARDNESS RANGE (Bhn)**	CARBIDE SAW CUTTING SPEED (SFM / m/min.)	H.S.S. SAW CUTTING SPEED (SFM / m/min.)
P/M Alloys- Copper-Nickel Alloys	22-100RH	170-215 55-65	40-50 12-15
P/M Alloys- Nickel and Nickel Alloys	70-83	170-215 55-65	40-50 12-15
P/M Alloys- Refractory Metal Base	101-260	405-510 124-160	95-120 29-37
P/M Alloys- Irons	50-67	215-255 65-80	50-60 15-18
P/M Alloys- Steels	101-426	150-255 50-80	35-60 11-18
P/M Alloys- Stainless Steels	107-285	170-215 55-65	40-50 12-15
P/M Alloys- Aluminum Alloys	55-98RH	510-640 160-195	120-150 37-46
Machinable Carbides	40-51Rc	35-45 11-13	8-10 2.5-3
Free Machining Magnetic Alloys	185-240	215-340 65-105	50-80 15-24
Magnetic Alloys	185-240	55-215 16-65	12-50 3.6-15
Free Machining Controlled Expansion Alloys	125-220	215-255 65-80	50-60 15-18
Controlled Expansion Alloys	125-250	35-45 11-13	8-10 2.5-333
Carbons and Graphites	8-100 Shore	150-215 50-65	35-50 11-15
Glasses and Ceramics- Machinable	250 Knoop	85-105 25-35	20-25 6-8
Plastics- Thermoplastics	60-120RM 50-120RR	1065-1490 325-450	250-350 76-105
Plastics- Thermosetting	***	340-1490 105-450	80-350 24-105

\*Materials list from Machining Data Handbook-3rd Edition, published by the Machinability Data Center. For specific metals/materials within each material category, refer to Machining Data Handbook.

\*\*Hardness range listed in Brinell unless otherwise noted. 'Range' covers all metals/materials listed within each material group.

\*\*\*Thermosetting plastics have various hardness scales. Refer to Machining Data Handbook.

#### USEFUL METALWORKING FORMULAS

$$\begin{aligned} \text{SFPM} &= .262 \times (\text{CUTTER DIA.} \times \text{RPM}) \\ &(\text{or}) (\text{RPM} \times \text{CUTTER DIA.}) \div .382 \\ \text{RPM} &= (3.82 \times \text{SFPM}) \div \text{CUTTER DIA.} \\ &(\text{or}) \text{SFPM} \div (\text{CUTTER DIA.} \times .262) \\ \text{IPM} &= \text{IPR} \times (\# \text{ TEETH} \times \text{RPM}) \\ \text{IPT} &= \text{IPM} \div (\# \text{ TEETH} \times \text{RPM}) \\ \text{IPR} &= \text{IPM} \div \text{RPM} \\ \text{CIM} &= \text{IPR} \times \text{SPD.} \times \text{DOC} \\ \text{HP} &= \text{CIM} \times \text{UHF} \\ \text{FORCE} &= (33,000 \times \text{HP}) \div \text{SFM} \end{aligned}$$

#### FEED RATES:

##### Carbide Saws:

.0002"-.0015" (in.per tooth - IPT  
or chip load per tooth - CLPT)

##### H.S.S. Saws:

.002-.006 (in.per tooth - IPT  
or chip load per tooth - CLPT)

NOTE: This is a conservative recommendation as a *starting point* for feed rates, and may vary depending on material being cut and cutting speed (SFPM).

#### COATINGS FOR SAWS AND CUTTERS

Cutting tool surface coatings are available upon request. Tool coatings provide tool wear resistance while significantly improving the performance of saws in most applications, particularly when cutting ferrous materials. These coatings are extremely thin, harder than steel and greatly reduce friction and wear. The most common coatings available for Gaylee saws are:

- **TiN: Titanium Nitride** - General purpose TiN hard coating. Best suited for iron-based materials, unalloyed and alloyed steels and hardened steels.
- **TiCN: Titanium Carbonitride** - Enhanced hardness and wear resistance over TiN with better surface lubricity. Suited for difficult to machine materials such as cast iron, aluminum alloys, tool steels, copper, Inconel, titanium alloys and nonferrous materials.
- **TiAlN: Titanium Aluminum Nitride** - Nano-layered coating, high toughness and oxidation resistance. Recommended for high temperature cutting, and a good choice when coating carbide. Suited for difficult materials like cast iron, aluminum alloys, tool steels and nickel alloys.
- **AlCrN: Aluminum Chromium Nitride** - Expanded performance capabilities over titanium-based coatings. Highest oxidation resistance and hot hardness for high temperature wear resistance. Can be used in wet/dry cutting applications. Well suited for a wide range of materials - cast iron, unalloyed steels, high strength steels, high hardness steels.



# SAWS TEST APPLICATION DATA SHEET

*Solid Carbide, Carbide-Tipped and H.S.S. Saws*

Gaylee Saws Rep.: \_\_\_\_\_  
 Customer Name: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
 City/State: \_\_\_\_\_ Distributor: \_\_\_\_\_  
 Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-Mail: \_\_\_\_\_  
 Contact: \_\_\_\_\_ Title: \_\_\_\_\_ Extn.: \_\_\_\_\_

## GENERAL INFORMATION

(Application) B/P or Job # \_\_\_\_\_  
 SC  C-Tipped  H.S.S. Saw Dia. \_\_\_\_\_ Saw Width \_\_\_\_\_ Tolerance \_\_\_\_\_  
 Arbor Hole Dia. \_\_\_\_\_ # Teeth \_\_\_\_\_ Special Tooth Form \_\_\_\_\_  
 Keyway (Y/N) \_\_\_\_\_ Keyway Dimension \_\_\_\_\_ Hub (Y/N) \_\_\_\_\_  
 Hub Dimension: Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ Rake Angle \_\_\_\_\_  
 Positive / Negative \_\_\_\_\_ Surface Treatment \_\_\_\_\_  
 Unique Job Details \_\_\_\_\_

## JOB APPLICATION

Operation \_\_\_\_\_ Slot Width \_\_\_\_\_ Tolerance \_\_\_\_\_  
 Depth of Cut \_\_\_\_\_ Tolerance \_\_\_\_\_ Material \_\_\_\_\_  
 Hardness \_\_\_\_\_ Machine Tool \_\_\_\_\_ Condition \_\_\_\_\_  
 Speed \_\_\_\_\_ Feed \_\_\_\_\_ Coolant Type \_\_\_\_\_ Mix \_\_\_\_\_  
 Are saws ganged? (Y/N) \_\_\_\_\_ If yes, tolerance required \_\_\_\_\_  
 Form to be generated \_\_\_\_\_ (Sketch or B/P helpful)

## COMPETITION

Brand Name \_\_\_\_\_ Price (\$) \_\_\_\_\_  
 Delivery \_\_\_\_\_ Annual Usage \_\_\_\_\_  
 Current performance info. or problem \_\_\_\_\_  
 Criteria for successful test \_\_\_\_\_

## TEST EVALUATION

GAYLEE PO# \_\_\_\_\_ Date \_\_\_\_\_ Dist. PO# \_\_\_\_\_  
 Results \_\_\_\_\_  
 Were you present for test? Y/N \_\_\_\_\_ Comments \_\_\_\_\_





DISTRIBUTED BY:



**AHB** Tooling & Machinery, Inc.  
Complete Metalworking Solutions  
Roseville Saginaw & Jackson, MI

ISO Certified  
(800) 991-4225  
[www.ahbinc.com](http://www.ahbinc.com)  
[customerservice@ahbinc.com](mailto:customerservice@ahbinc.com)



**AHB** Tooling & Machinery, Inc.  
Complete Metalworking Solutions  
Roseville Saginaw & Jackson, MI

ISO Certified  
(800) 991-4225  
[www.ahbinc.com](http://www.ahbinc.com)  
[customerservice@ahbinc.com](mailto:customerservice@ahbinc.com)