LENOX ADVANTAGE

YOU CUT STEEL. WE CUT COSTS.

LENOX SITE SURVEY
Identify Facility Goals, Metrics, Challenge and Bottlenecks

COMPREHENSIVE OPERATOR TRAINING
Lenox Team Designed and Led Course

MACHINE DIAGNOSTICS: LENOX 13 POINT INSPECTION
Critical Sawing Parameters Emphasis

PRODUCTIVITY & COST SAVINGS
Detailed Recommendations to Improve Productivity

MACHINE UTILIZATION OPTIMIZATION
Minimize Unplanned Downtime

SOLUTIONS & RESOURCES
Offer Sustainability to Realize Cost Savings and Improved Performance

SAWCALC® SOFTWARE
Cut Smarter. Web-Enabled Solution for Your Cutting Challenges

CUSTOMIZED, ACCURATE RECOMMENDATIONS
Identify the right LENOX blade for the job
Determine the correct parameters to satisfy your cutting goals

HIGHLY TECHNICAL, ENGINEERED SOLUTIONS
Built-in intelligence based on years of engineering experience
Over 35,000 metals and 9,000 band saws inside the program

FREE, EASY TO USE AND ALWAYS UPDATED
SAWCALC® Software is updated regularly to include the latest machines, metals, and LENOX products

VISIT SAWCALC.COM
FOR CUSTOMIZED BAND SAW RECOMMENDATIONS

WE OFFER MORE THAN JUST A BLADE

GUARANTEED TRIAL ORDER GTO

GUARANTEED TRIAL ORDER
The recommended blade will outperform your present blade or your money back – that's the LENOX Guaranteed Trial Order (GTO).

MACHINE TUNE-UP FOR THE BEST SAWING PERFORMANCE
A Factory Trained LENOX Technical Representative will perform a 13-point tune-up to optimize blade and machine performance.

SEMINARS INCREASE PRODUCTIVITY
Seminars offered at your facility to increase the efficiency of your operators and minimize downtime.

TECHNICAL SUPPORT BY PHONE
Answers to sawing questions are just a toll-free call away. LENOX Technical Service professionals will tell you the most appropriate blade for a job. Get tips on sawing and learn ways to make the job easier. The answers will save money and effort.
Call 800-642-0010, E-mail: info@lenoxtools.com

Customer Service: 800-628-8810
Technical Support: 800-642-0010
lenoxtools.com

BAND-ADE®
Semi-Synthetic Sawing Fluid

- ***Extends Blade Life***
- ***Exceptional Cooling***
- ***Increases Productivity***

CONTAINER SIZE

PROD NO	GALLON	LITER	CONTAINERS PER CASE
68004	1	3.8	4
68005	2-1/2	9.5	2
68003	5	18.9	-
68001	55	208.2 drum	-
68007	275	1,040.9 tote	-

LENOX *100CF™*
Chlorine Free Water Soluble Oil for Heavy Duty Machine Applications

- ***Extremely Versatile***
- ***High Lubricity***
- ***Excellent Sump Life***
- ***Chlorine Free***

CONTAINER SIZE

PROD NO	GALLON	LITER	CONTAINERS PER CASE
1920851	1	3.8	4
1920852	5	18.9	-
1920853	55	208.2 drum	-
1920854	275	1,040 tote	-

LENOX LUBE®
Synthetic Lubricant for Spray Applications

- ***Extends Tool Life***
- ***Reduces Cost***
- ***Optimum Performance on Ferrous Metals***

CONTAINER SIZE

PROD NO	GALLON	LITER	CONTAINERS PER CASE
68014	1	3.8	4
68018	5	18.9	-
68017	55	208.2 drum	-
68016	275	1,040 tote	-

SAW MASTER™
Synthetic Sawing Fluid

- ***Longer Blade Life. Faster Cutting.***
- ***Rejects Most Tramp Oils***
- ***Excellent Sump Life***

CONTAINER SIZE

PROD NO	GALLON	LITER	CONTAINERS PER CASE
68064	1	3.8	4
68061	5	18.9	-
68062	55	208.2 drum	-
68063	275	1,040.9 tote	-

Not recommended for use as a spray lubricant. Mix this product with water as recommended.

MACHINE CLEANER
Prepares Your Sump for the use of LENOX Sawing Fluids

- ***Cleans the Machine Between Changes***
- ***Extends the Life of the Sawing Fluid***
- ***Prevents Contamination When Converting Fluids***

BAND-ADE® and *SAW MASTER ™* lubricants not recommended for use as spray lubricants. Mix with water as recommended.

CONTAINER SIZE

PROD NO	GALLON	LITER	CONTAINERS PER CASE
68006	1	3.8	4

For industrial use only. Mix this product with water as recommended.

C/AI™ LUBRICANT
High Lubricity Formulation for Spray Applications

- ***Works Effectively on All Types of Materials***
- ***Increased Productivity***
- ***Extends Tool Life***
- ***Control Costs***

CONTAINER SIZE

PROD NO	GALLON	LITER	CONTAINERS PER CASE
68024	1	3.8	4
68026	5	18.9	-
68025	55	208.2 drum	-
68028	275	1,040 tote	-

Use this product as it comes from the container. Do not mix with water.

301 Chestnut Street, East Longmeadow, MA 01028-0504 USA

BI-METAL BAND SAW BLADES

BI-METAL PRODUCT SELECTION

PRODUCTION SAWING

ALUMINUM NON-FERROUS	CARBON STEELS	STRUCTURAL STEELS	ALLOY STEELS	BEARING STEELS	MOLD STEELS	TOOL STEELS	STAINLESS STEELS	TITANIUM ALLOYS	NICKEL-BASED ALLOYS (INCONEL®)
EASY ← MACHINABILITY → DIFFICULT									
Q2™		*Q2™* Long Life. Fast Cutting							
							CONTESTOR GT® & CONTESTOR XL™ Long Life. Straight Cuts		
	ARMOR® Rex™ Long Life. Structurals/Bundles								
	LENOX Rex® Structurals/Bundles								
CLASSIC PRO™ Long Life. Extremely Versatile						*CLASSIC PRO™*			

GENERAL PURPOSE

LENOX CLASSIC® 3/4" and Wider Blades	*LENOX CLASSIC®*
DIEMASTER 2™ 1/2" and Narrower Blades	*DIEMASTER 2™*

Note: We can provide solutions for many cutting applications not listed here. Please call LENOX Technical Support at 800-642-0010, or go to sawcalc.com.

BI-METAL TOOTH SELECTION

1. Determine the size and shape of the material to be cut
2. Identify the chart to be used (square solids, round solids, or tubing/structurals)
3. Read teeth per inch (TPI) next to material size

SQUARE/RECTANGLE SOLID Locate width of cut (W)

Width of cut (W)

WIDTH OF CUT																										
IN	.1	.2	.3	.4	.5	.6	.7	.8	.9	1	2	5	10	15	20	25	30	35	40	45	50					
MM	2.5	5	7.5	10	12.5	15	17.5	20	22.5	25	50	125	250	375	500	625	750	875	1000	1125	1250					
TPI	14/18		10/14		8/12		6/10		6/8 5/8		4/6		3/4		2/3		1.5/2.0		1.4/2.0		1.0/1.3				0.7/1.0	

ROUND SOLID Locate diameter of cut (D)

Diameter (D)

DIAMETER OF CUT																										
IN	.1	.2	.3	.4	.5	.6	.7	.8	.9	1	2	5	10	15	20	25	30	35	40	45	50					
MM	2.5	5	7.5	10	12.5	15	17.5	20	22.5	25	50	125	250	375	500	625	750	875	1000	1125	1250					
TPI	14/18		10/14		8/12		6/10		6/8 5/8		4/6		3/4		2/3		1.5/2.0		1.4/2.0		1.0/1.3				0.7/1.0	

TUBING/PIPE/ STRUCTURALS Locate wall thickness (T)

Wall thickness (T)

WALL THICKNESS																										
IN	.05		.10		.15		.20		.25		.30	.40	.50	.60	.70	.80	.90	1	1.5	2						
MM	1.25		2.5		3.75		5		6.25		7.5	10	12.5	15	17.5	20	22.5	25	37.5	50						
TPI	14/18		10/14		8/12		6/10		6/8 5/8		4/6				3/4				2/3							

BUNDLED/STACKED MATERIALS:
To select the proper number of teeth per inch (TPI) for bundled or stacked materials, find the recommended TPI for a single piece and choose one pitch coarser to cut the bundle

BI-METAL SPEED CHART

VISIT SAWCALC.COM
FOR CUSTOMIZED BAND SAW RECOMMENDATIONS

MATERIALS			BAND SPEED	
	TYPE	GRADE	FEET/ MIN	METER/ MIN
ALUMINUM / NON-FERROUS	Aluminum Alloys	2024, 5052, 6061, 7075	300+	85+
	Copper Alloys	C0A 220 C0A 360 Cu Ni (30%) Be Cu	210 295 200 160	65 90 60 50
	Bronze Alloys	AMPCO 18 AMPCO 21 AMPCO 25 Leaded Tin Bronze Al Bronze 865 Mn Bronze 932 937	180 160 110 290 150 215 280 250	55 50 35 90 45 65 85 75
	Brass Alloys	Cartridge Brass, Red Brass (85%) Naval Brass	220 200	65 60
CARBON STEELS	Leaded, Free Machining Low Carbon Steels	1145 1215 12L14	270 325 350	80 100 105
	Low Carbon Steels	1008, 1018 1030	270 250	80 75
	Medium Carbon Steels	1035 1045	240 230	75 70
	High Carbon Steels	1060 1080 1095	200 195 185	60 60 55
STRUCTURAL STEEL	Structural Steel	A36	250	75
ALLOY STEEL	Mn Steels	1541 1524	200 170	60 50
	Cr-Mo Steels	4140 4150 4150H	225 235 200	70 70 60
	Cr Alloy Steels	6150 5160	190 195	60 60
	Ni-Cr-Mo Steels	4340 8620 8640 E9310	195 215 185 160	60 65 55 50
BEARING STEEL	Cr Alloy Steels	52100	160	50
MOLD STEEL	Mold Steels	P-3 P-20	180 165	55 50
STAINLESS STEEL	Stainless Steels	304 316 410, 420 440A 440C	115 90 135 80 70	35 25 40 25 20
	Precipitation Hardening Stainless Steels	17-4 PH 15-5 PH	70 70	20 20
	Free Machining Stainless Steels	420F 301	150 125	45 40
TOOL STEEL	Low Alloy Tool Steel	L-6	145	45
	Water-Hardening Tool Steel	W-1	145	45
	Cold-Work Tool Steel	D-2	90	25
	Air-Hardening Tool Steels	A-2 A-6 A-10	150 135 100	45 40 30
	Hot Work Tool Steels	H-13 H-25	140 90	40 25
	Oil-Hardening Tool Steels	O-1 O-2	140 135	40 40
	High Speed Tool Steels	M-2, M-10 M-4, M-42 T-1 T-15	105 95 90 60	30 30 25 20
	Shock Resistant Tool Steels	S-1 S-5, S-7	140 125	40 40
TITANIUM ALLOY	Titanium Alloys	CP Titanium Ti-6Al-4V	85 65	25 20
NICKEL BASED ALLOY	Nickel Alloys	Monel® K-500 Duranickel 301	70 55	20 15
	Iron-Based Super Alloys	A286, Incoloy® 825 Incoloy® 600 Pyromet X-15	80 80 70	25 15 20
	Nickel-Based Alloys	Inconel® 600, Inconel® 718, Nimonic 90, NI-SPAN-C 902, RENE 41 Inconel® 625 Hastalloy B, Waspalloy Nimonic 75, RENE 88	60 60 80 55 50	20 20 25 15 15
OTHER	Cast Irons	A536 (60-40-18) A536 (120-90-02) A48 (Class 20) A48 (Class 40) A48 (Class 60)	225 110 160 115 95	70 35 50 35 30

The Speed Chart recommendations apply when cutting 4" wide (100mm), annealed material with a bi-metal blade and flood sawing fluid:

ADJUST BAND SPEED FOR DIFFERENT SIZED MATERIALS

MATERIAL	BAND SPEED
1/4" (6mm)	Chart Speed + 15%
3/4" (19mm)	Chart Speed + 12%
1-1/4" (32mm)	Chart Speed + 10%
2-1/2" (64mm)	Chart Speed + 5%
4" (100mm)	Chart Speed - 0%
8" (200mm)	Chart Speed - 12%

ADJUST BAND SPEED FOR DIFFERENT FLUID TYPES

FLUID TYPES	BAND SPEED
Spray lube	Chart Speed - 15%
No fluid	Chart Speed - 30–50%

ADJUST BAND SPEED FOR HEAT TREATED MATERIALS

ROCKWELL	BRINELL	DECREASE BAND SPEED
Up to 20	226	-0%
22	237	-5%
24	247	-10%
26	258	-15%
28	271	-20%
30	286	-25%
32	301	-30%
36	336	-35%
38	353	-40%
40	371	-45%

Reduce band speed 50% when sawing with carbon blades

BLADE BREAK-IN

Completing a proper break-in on a new band saw blade will dramatically increase its life.

LENOX

BI-METAL BAND SAW BLADES

DIEMASTER 2™ & LENOX CLASSIC®

Multi-Purpose Entry Level Blades

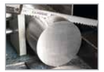
LONG BLADE LIFE
M-42 high speed steel edge for excellent heat and wear resistance

FOR GENERAL PURPOSE APPLICATIONS
Utilize Diemaster 2 for hand-fed applications
Utilize Classic for automated saws

WIDTH X THICKNESS		TOOTH FORM VARI-TOOTH™ TPI							STRAIGHT PITCH TPI					
IN	MM	4/6	5/8	6/8	6/10	8/12	10/14	14/18	3	4	6	10	14	18	24
1/4 x .025	6.4 x 0.64						◆	◆			◆				
1/4 x .035	6.4 x 0.90						◆				◆				
3/8 x .025	9.5 x 0.64						◆	◆							
3/8 x .035	9.5 x 0.90										◆	◆	◆		
1/2 x .020	12.7 x 0.50						◆	◆						◆	◆
1/2 x .025	12.7 x 0.64			◆	◆	◆	◆				◆	◆	◆	◆	◆
1/2 x .035	12.7 x 0.90						◆			◆	◆	◆	◆		
3/4 x .035	19 x 0.90	◆	◆	◆	◆	◆	◆			◆				◆	◆
1 x .035	27 x 0.90	◆	◆	◆	◆	◆	◆							◆	
1-1/4 x .042	34 x 1.07	◆	◆	◆	◆	◆									

LENOX CLASSIC PRO™

The Ultimate Multi-Purpose Blade for Production Cutting



EXCEPTIONAL BLADE LIFE
Robust M42 high speed steel edge provides superior heat and wear resistance

EXTREMELY VERSATILE
Cuts a wide range of metals from low carbon steels to higher strength alloys
Advanced design enables production cutting of solids and structurals

CONSISTENT PERFORMANCE CUT AFTER CUT
Unique tooth geometry and set minimizes noise and vibration from the first cut

WIDTH X THICKNESS		TPI				
IN	MM	1.4/2.0	2/3	3/4	4/6	5/8
1 x .035	27 x 0.90		◆	◆†	◆	◆
1-1/4 x .042	34 x 1.07	◆	◆	◆†	◆	◆
1-1/2 x .050	41 x 1.27	◆	◆	◆†	◆	◆
2 x .050	54 x 1.27		◆	◆	◆	
2 x .063	54 x 1.60	◆	◆†	◆†	◆	
2-5/8 x .063	67 x 1.60	◆	◆†	◆†		

† = Extra heavy set available to prevent blade pinching

GQXP™

Long Blade Life At High Cutting Rates

LONG LIFE, FAST CUTTING
Solids of mild to moderate machinability

Proprietary backing steel preparation provides increased fatigue life

PENETRATES WITH LESS FEED FORCE
Extreme positive rake tooth form

INCREASED CUTTING RATES
Deep gullet design

WIDTH X THICKNESS		TPI					
IN	MM	1.0/1.3	1.5/2.0	2/3	3/4	4/6	5/8
3/4 x .035	19 x 0.90					◆	
1 x .035	27 x 0.90			◆	◆	◆	◆
1-1/4 x .042	34 x 1.07		◆	◆	◆	◆	◆
1-1/2 x .050	41 x 1.27		◆	◆	◆	◆	
2 x .063	54 x 1.60	◆	◆	◆	◆	◆	
2-5/8 x .063	67 x 1.60	◆	◆	◆	◆		
3 x .063	80 x 1.60	◆					

GENERAL PURPOSE DECISION TREE

	CLASSIC PRO™	QXP™
Higher Production Rates	G	B
Structural Sections	B	G
Aluminum	G	B
Large Tubes / Pipes	G	B

G = GOOD
B = BETTER

LENOX

BI-METAL BAND SAW BLADES

LENOX RX+®

Engineered to Cut Structurals, Tubing and Bundles

LONG BLADE LIFE AND EXTREME DURABILITY
Patented tooth profile resists tooth strippage, even at higher feed rates

QUIET CUTTING, REDUCED VIBRATION
Optimized tooth pitch/set sequence

WIDTH X THICKNESS		TPI						
IN	MM	2/3	3/4	4/6	5/7	5/8	6/10	10/14
5/8 x .032	16 x 0.80							*
3/4 x .035	19 x 0.90			◆		◆	◆	◆
1 x .035	27 x 0.90	◆	◆	◆	◆	◆	◆	◆
1-1/4 x .042	34 x 1.07	◆†	◆†	◆†		◆		
1-1/2 x .050	41 x 1.27	◆†	◆†	◆†		◆		
2 x .050	54 x 1.27	◆	◆†	◆		◆		
2 x .063	54 x 1.60	◆†	◆†	◆				
2-5/8 x .063	67 x 1.60	◆†	◆†	◆				

* = Matrix edge
† = Extra heavy set available to prevent blade pinching

ARMOR® RX+™

Engineered for Long Life

AITIN COATING FOR PRODUCTIVITY AND LONG BLADE LIFE
Aluminum, Titanium, and Nitrogen combine to form a coating that is hard and tough, protecting each tooth from heat and wear with an armor-like barrier

UNIQUE, PATENTED TOOTH PROFILE
Special, reinforced tooth design for reduced tooth strippage at higher feed rates

Minimized harmonics and vibrations

Quiet cutting

HIGH PERFORMANCE BACKING STEEL
For longer fatigue life

WIDTH X THICKNESS		TPI		
IN	MM	2/3	3/4	4/6
1-1/4 x .042	34 x 1.07		◆†	◆
1-1/2 x .050	41 x 1.27	◆	◆†	◆†
2 x .063	54 x 1.60	◆	◆†	

† = Extra heavy set available to prevent blade pinching

LENOX HRx®

Optimized to Cut Large Beams and Heavy Walled Tubes

LONG BLADE LIFE
When cutting large structural beams

STRAIGHT CUTS
Through wide cross sections

WIDE KERF LIMITS
Pinching in larger beams

WIDTH X THICKNESS		TPI				
IN	MM	1.4/2.0	2/3	3/4	4/6	5/7
1-1/4 x .042	34 x 1.07			●	●	●
1-1/2 x .050	41 x 1.27		●	●	●	
2 x .063	54 x 1.60	●	●†	●†	●	
2-5/8 x .063	67 x 1.60	●	●†	●†		

† = Extra heavy set available to prevent blade pinching

STRUCTURAL CUTTING DECISION TREE

	RX+®	HRX®	ARMOR® RX+™
Fast Cutting	G	B	E
Dry Cutting	G	G	E
Pinching Concerns	G	E	G
Large Capacity Saws	G	B	B
Beam, Channel, Angle Iron Height	<30"	>30"	All
Wall Thickness	<3/4"	>3/4"	All
SS Pipe / Tube	G	B	E
Small Structurals / Bundles	E	G	G

G = GOOD
B = BETTER
E = EXCELLENT

LENOX

BI-METAL BAND SAW BLADES

CONTESTOR GT®

High Performance Sawing

STRAIGHTER CUTS ON LARGER, DIFFICULT TO CUT MATERIALS
Unique gullet design for increased beam strength

OPTIMUM CHIP FORMATION IN WORK HARDENING ALLOYS
Precision ground teeth—smoother tooth face and gullet surfaces

Patented special set and tooth profile

IMPROVED LIFE WITH OPTIONAL M-51 EDGE MATERIAL
Increased heat and wear resistance

WIDTH X THICKNESS		TPI					
IN	MM	0.7/1.0	1.0/1.3	1.4/2.0	2/3	3/4	4/6
1 x .035	27 x 0.90				●	●	●
1-1/4 x .042	34 x 1.07			◆	◆	◆	◆
1-1/2 x .050	41 x 1.27		◆	◆	◆	◆	◆
2 x .050	54 x 1.27		◆	◆	◆		
2 x .063	54 x 1.60	◆	◆	◆	◆	◆	
2-5/8 x .063	67 x 1.60	◆	◆	◆	◆		
3 x .063	80 x 1.60	◆	◆	◆			

WAVE TECH®

Blade Enhancement for Cutting Work Hardening Metals

ENHANCED CUTTING ABILITY
Engineered back edge enhancement creates a unique cutting action that increases tooth penetration without additional machine feed pressure

INCREASED BLADE LIFE*
Proprietary design balances the depth of penetration with cutting force to optimize chip load and reduce frictional wear

Precision chamfer on the back edge of the blade reduces stress risers and minimizes band breaks

FASTER CUTTING RATES*
Design-induced rocking motion improves cutting efficiency and speed by breaking through the work hardening layer

**Vs. Standard LENOX band saw blades*

WAVE TECH™

CONTESTOR XL™

High Performance Sawing of Large, Difficult to Cut Metals

INCREASED WEAR RESISTANCE DELIVERS LONGER BLADE LIFE
New HSS edge wire increases tooth hardness for better abrasive wear resistance

Patent pending chip controlling design reduces heat and wear

IMPROVED CHIP FORMATION HELPS PENETRATE DIFFICULT TO CUT METALS
Variable tooth heights and multi-level set creates deeper, narrower chips

High rake angles reduce cutting forces

OPTIMIZED DESIGN FOR STRAIGHTER CUTS ON LARGE BLOCKS
Shallow gullet construction increases beam strength

WIDTH X THICKNESS		TPI				
IN	MM	0.7/1.0	1.0/1.3	1.4/2.0	2/3	3/4	4/6
1-1/4 x .042	34 x 1.07				◆	◆	◆
1-1/2 x .050	41 x 1.27			◆	◆	◆	
2 x .063	54 x 1.60		◆	◆	◆	◆	
2-5/8 x .063	67 x 1.60	◆	◆	◆			
3 x .063	80 x 1.60	◆	◆				

● = Milled tooth
◆ = Ground tooth

DIFFICULT TO CUT ALLOYS DECISION TREE

	CONTESTOR GT®	CONTESTOR XL™
Higher Production Saws	G	B
Higher Production Rates	G	B
Wider Cross Sections	G	B
Small Cross Sections (600mm and Less)	B	G
Older Saws / Less Maintained	B	G
Mild Materials - Carbon Steels to Simple Stainless Steels	B	G
Harder Materials (Hot Work Tool Steels, Aerospace Materials)	G	B
Surface Finish Requirement	G	B

G = GOOD
B = BETTER