





















563-391-7700



PEDRAZZOLI

SAW LINES













CIRCULAR SAWS

Cutting Capacity		 45°	 0°	 45°	 60°
 <p>Super Brown 350/60 MRM Manual Circular Cold Saw</p>		4"	4"	4"	4"
		3.5"	3.3"	3.5"	2.8"
		4.7" x 2.4"	6.2" x 3.3"	4.7" x 3.3"	3.1" x 2.8"
 <p>Super Brown 350/60 SA Semiautomatic Circular Cold Saw with Pneumatic Vise</p>		4"	4"	4"	4"
		3.5"	3.3"	3.5"	2.8"
		4.7" x 2.4"	6.2" x 3.3"	4.7" x 3.3"	3.1" x 2.8"
 <p>Super Brown 350 AP Semiautomatic Circular Cold Saw with Feeder & Pneumatic Vise</p>		-	4"	4"	-
		-	3.3"	3.5"	-
		-	6.2" x 3.3"	4.7" x 3.3"	-
 <p>Perris 350 SA Semiautomatic High-Speed Aluminum Cutting Circular Saw with Pneumatic Vise</p>		3.7"	3.9"	3.7"	2.4" 45° off vertical
		3.7"	3.7"	3.5"	2.4" 45° off vertical
		5.1" x 2.2"	6.1" x 2.4"	5.1" x 2.2"	5.9" x 1.6"








MODEL COMPARISON CHART



BAND SAWS

Cutting Capacity		 45°	 0°	 45°	 60°
 <p>SN 300 Newton Manual Band Saw</p>		6.3"	8.7"	7.9"	5.1"
		4.7"	7.5"	5.9"	4.3"
		6.3" x 5.1"	13" x 5.9"	4.7" x 5.1"	4.3" x 4.3"
 <p>Brown SN 420 SA Semiautomatic Band Saw Variable Speed Control</p>		6.7"	11"	9.1"	5.9"
		5.9"	10.6"	8.7"	5.9"
		9.4" x 3.5"	16.5" x 7.5"	9.1" x 5.9"	3.1" x 2.8"

CIRCULAR UPCUT SAW

Cutting Capacity		 45°	 0°	 45°	 60°
 <p>HB 450 SA Semiautomatic Circular Upcut Saw</p>		5.9"	5.9"	5.9"	5.3"
		4.7"	5.1"	4.7"	4.3"

Super Brown 350/60 MRM

MANUAL CIRCULAR COLD SAW



MACHINE DESCRIPTION:

Introducing Pedrazzoli's classic workhorse circular cold saw, the original Super Brown 350. Ideal for any fabrication shop wanting safe, quick sawing of ferrous or nonferrous tube, pipe and profiles with minimum clean up. All Pedrazzoli saws feature robust heavy-duty cast iron bases that minimize vibration during the cutting cycle. Work head adjusts to miter right or left and locks securely in place. Manual vise with rapid clamp feature and anti-burr device firmly supports the material throughout the cut providing burr free parts with no heat transfer. Proven machine design provides a smooth sawing operation and outstanding reliability. Manufactured and assembled with years of fabrication experience.

















Features:

- > Saw head swivels easily to 45 degrees left and 45-60 degrees right and locks for miter cuts
- > Variable blade speed adjusts between 15-90 rpm
- > Accepts saw blades to 350 mm
- > Coolant tank with immersion electric pump improves cooling
- > Stock stop with micrometer adjustment for repetitive parts
- > Manual locking vise with quick lock handle
- > Blade on / off located in trigger handle for greater safety
- > Head tilt pivots on self-lubricating bearings reduces wear
- > Emergency stop with key on control
- > Easy access to emergency stop and two-speed selector
- > Metal base welded for rigid reinforcement
- > Warranty for customer confidence

7.188.02.41 **7.188.02.55**
240V 480V



CUTTING CAPACITY

	 45°	 0°	 45°	 60°
	4"	4"	4"	4"
	3.5"	3.3"	3.5"	2.8"
	4.7" x 2.4"	6.2" x 3.3"	4.7" x 3.3"	3.1" x 2.8"
	1.5 kW			
	15 / 90 rpm			
	6.6"			
	350 mm			
	640 pounds			
	35.5" x 61.2" x 73"			
	37.5"			

TECHNICAL SPECIFICATIONS

Super Brown 350/60 SA

SEMI-AUTOMATIC CIRCULAR COLD SAW WITH PNEUMATIC VISE



MACHINE DESCRIPTION:

Ideal for safe sawing of ferrous or nonferrous tube, pipe and profiles. Pedrazzoli's semiautomatic cold saw improves productivity and cut quality while extending blade life. Saw head down feed and return movements are adjustable with pneumatic controls. Pneumatic vise firmly supports material throughout cut providing burr free parts with less heat transfer. Control panel is conveniently located to operator in front of saw. Patented speed variation ensures quality cuts on a variety of materials. Blade rotation can be reversed for optimum cutting on thin wall tubes. Transmission with pulley system expands rpm range. Worm drive gearbox with clutch to prevent blade breaking during cutting cycle. Proven machine design provides a smooth sawing operation and outstanding reliability. Manufactured and assembled with years of fabrication experience.















Features:

- > Saw head swivels 45 degrees left and 45-60 degrees right for mitering
- > Variable speed blade adjusts between 15-90 rpm
- > Accepts saw blades to 350 mm
- > Coolant tank with easy access for cleaning
- > Complete blade guard coverage with rapid blade system
- > Pneumatic vise available with removable anti burr device
- > Drive pedal for semiautomatic cycle control
- > Head tilt pivots on self-lubricating bearings
- > Electric pump supplies lubrication to key components constantly
- > Anti burr group grips part throughout cutting cycle minimizing burring
- > Easy access to emergency stop and two-speed selector and locking control
- > Stock stop with micrometer adjustment for repetitive parts
- > Metal base welded for rigid reinforcement
- > Warranty for customer confidence
- > Blade cleaning roller inside cover (optional)

7.188.22.41 240V
7.188.22.55 480V



CUTTING CAPACITY

	 45°	 0°	 45°	 60°
	4"	4"	4"	4"
	3.5"	3.3"	3.5"	2.8"
	4.7" x 2.4"	6.2" x 3.3"	4.7" x 3.3"	3.1" x 2.8"
	1.5 kW			
	15 / 90 rpm			
	6.6"			
	350 mm			
	662 pounds			
	39.375" x 59" x 59"			
	37.5"			

TECHNICAL SPECIFICATIONS

Super Brown 350 AP

SEMI-AUTOMATIC CIRCULAR

COLD SAW WITH FEEDER & PNEUMATIC VISE



MACHINE DESCRIPTION:

Introducing Pedrazzoli's Super Brown circular cold saw with semi-automatic step feeder. Ideal for any fabrication shop to improve production and reduce labor on multiple cuts. Semi-Auto feature offers safe, quick sawing of ferrous tube, pipe and profiles with minimum clean up. All Pedrazzoli saws feature robust heavy-duty cast iron bases that minimize vibration during the cutting cycle. Work head adjusts to miter left and locks securely in place. Pneumatic vise for faster loading and securing work piece. Anti-burr device adjusts firmly to support material throughout the cut providing burr free parts with no heat transfer. Control panel is conveniently located to operator in front of saw. Pneumatic cylinders with feed regulators control and adjust sawing down feed movement and step feed. Feed system can repeat a maximum of nine steps with total movement to 18 feet. Programmable piece counter is standard. Transmission with pulley system expands rpm range. Worm drive gearbox with clutch to prevent blade breaking during cutting cycle. Proven machine design provides a smooth sawing operation and outstanding reliability. Manufactured and assembled with years of fabrication experience.

Features:

- > Saw head swivels 45 degrees left for mitering
- > Variable speed blade adjusts between 15-90 rpm
- > Accepts saw blades to 350 mm with blade cleaning roller inside cover
- > Coolant tank with electric pump for effective cooling
- > Complete blade guard coverage with rapid blade system
- > Pneumatic vise available with removable anti burr device
- > Head tilt pivots on self-lubricating bearings
- > Gear reverser
- > Electric pump supplies lubrication to key components constantly
- > Anti burr group grips part throughout cutting cycle minimize burring
- > Easy access to emergency stop with lockable switch on control
- > Capacity of feeder collet to six inches
- > Minimum final length six inches
- > Metal base welded for rigid reinforcement
- > Warranty for customer confidence

7.187.32.41 7.187.32.55
240V 480V



CUTTING CAPACITY

	0°	45°
	4"	4"
	3.3"	3.5"
	6.2" x 3.3"	4.7" x 3.3"
	1.5 kW	
	15 / 90 rpm	
	6"	
	350 mm	
	926 pounds	
	51.2" x 53.2" x 59"	
	37.5"	

TECHNICAL SPECIFICATIONS

PERRIS 350 SA

SEMI-AUTOMATIC HIGH-SPEED ALUMINUM CUTTING CIRCULAR SAW WITH PNEUMATIC VISE



MACHINE DESCRIPTION:














Ideal for safe sawing of aluminum, or nonferrous tube, pipe and profiles. Pedrazzoli's semiautomatic cold saw improves productivity and cut quality while extending blade life. High-speed carbide tipped blade for accurate sawing of nonferrous tube and other light alloys. Saw head down feed and return movements are adjustable with pneumatic controls with brake for speed adjustment. Two pneumatic vises adjust lengthwise and laterally to firmly supports material throughout cut providing burr free parts. Control panel is conveniently located to operator in front of saw. Foot Pedal for semiautomatic control of saw cycle. Transmission with pulley system expands rpm range to two blade speeds ensuring quality cuts on a variety of materials. Proven machine design provides a smooth sawing operation and outstanding reliability. Manufactured and assembled with years of fabrication experience.

Features:

- > Saw head swivels 45 degrees left, 45 degrees right and 45 degrees off vertical
- > Two speeds of blade rotation obtainable by inverting pulleys
- > Accepts saw blades to 350 mm
- > Coolant tank with easy access for cleaning
- > Complete blade guard coverage with rapid blade change system
- > Pneumatic vise available with removable anti burr device
- > Drive pedal for semiautomatic cycle control
- > Head tilt pivots on self-lubricating bearings
- > Electric pump supplies lubrication to key components constantly
- > Easy access to emergency stop button
- > Control with lockout switch
- > Stock stop with micrometer adjustment for repetitive parts
- > Metal base welded for rigid reinforcement
- > Warranty for customer confidence

7.105.92.41 **7.105.92.55**
240V 480V

CUTTING CAPACITY

	 45°	 0°	 45°	 45°
	3.7"	3.9"	3.7"	2.4" <i>45° off vertical</i>
	3.7"	3.7"	3.5"	2" <i>45° off vertical</i>
	5.1" x 2.2"	6.1" x 2.4"	5.1" x 2.2"	5.9" x 1.6"
	2.2 kW			
	2400 or 3400 rpm			
	6.9"			
	350 mm			
	474 pounds			
	29.5" x 41.3" x 68.9"			
	31.1"			

TECHNICAL SPECIFICATIONS



COLD SAW BLADES

BASIC INFORMATION



MATERIAL:

Cold Saw Blades are manufactured from abrasion resistant M2 HSS (High Speed Steel) with a hardness of 60 Rockwell.

BLADE COATING:

All Cold Saw Blades have a coating. The most common is "Steam Oxide" or "Black Oxide" which help the blade hold its edge and prevents galling. Oxide coating has tiny dips and craters that help carry coolant into the cut.

RUN-OUT:

Typical run-out tolerance for a cold saw blade is 0.01% of the blade's diameter or .001" per diameter inch. Cold Saw Blades are "Hollow Ground", designed to be thicker on the rim gradually tapering to the center "hub" of blade allowing the blade to pass through material and direct coolant into the cut area.



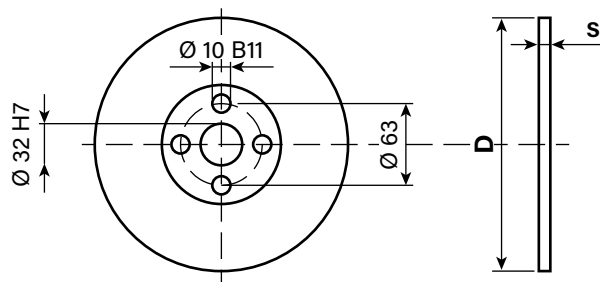
OTHER COATINGS:

High performance coatings, such as a TIN (Titanium Nitride) can increase wear resistance and work well with fine tooth blades.

BLADE SHARPENING:

Cold Saw Blades can be resharpened. Diameter of the blade is reduced with every sharpening. Blades can be resharpened several times (30-40 under optimal conditions).

PEDRAZZOLI BLADE CONFIGURATION:



COLD SAW BLADES

TOOTH GEOMETRY, PITCH & BEVEL

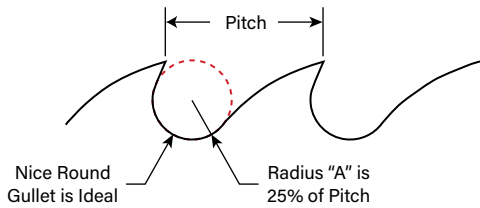


The following diagrams explain tooth geometry and indicate which blade is appropriate for the size and material to be cut. Once proper pitch is decided, number of teeth for blade can be determined.

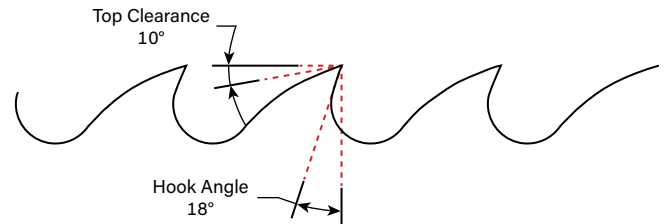
COLD SAW BLADE TOOTH GEOMETRY

Tolerance is $\pm 2^\circ$

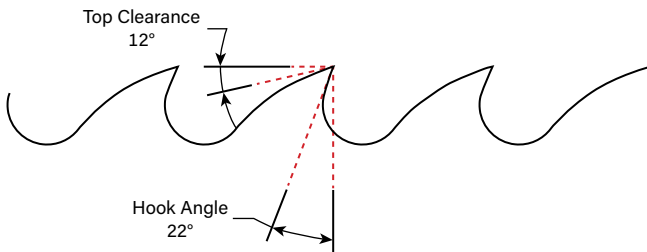
Proper Tooth Shape



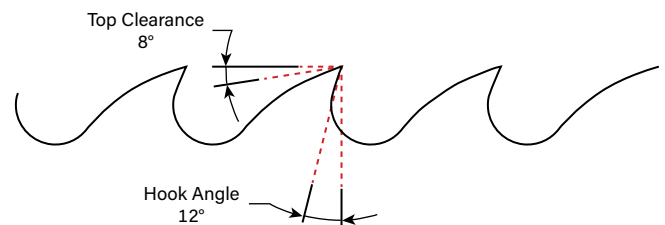
Mild Steel some Low-Alloys



Aluminum, Copper - Non-Ferrous



Stainless Steel and some Tool Steels



$16^\circ - 18^\circ$ Hook Angle is Standard and is often referred to as "Rake" or "Rake Angle"

COLD SAW BLADES

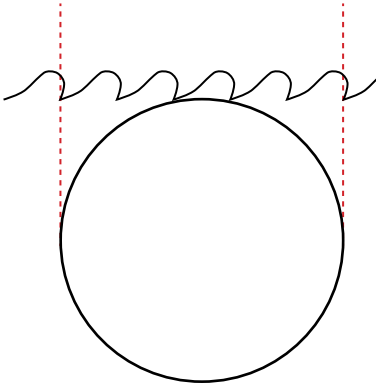
TOOTH GEOMETRY, PITCH & BEVEL (cont.)



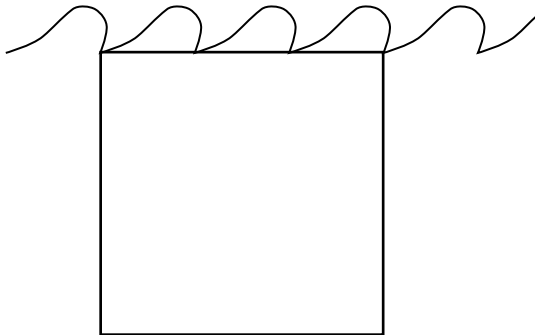
COLD SAW PITCH AND BLADE SELECTION

SOLID - Slower RPM & 3-5 Teeth in the Material

Round cuts better with 5 teeth in the material

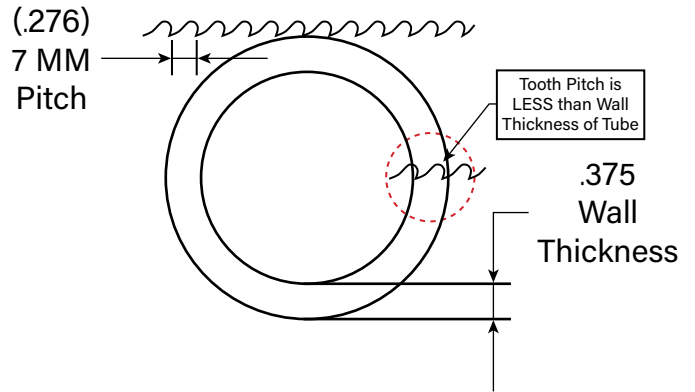


Square cuts better with 3 teeth in the material



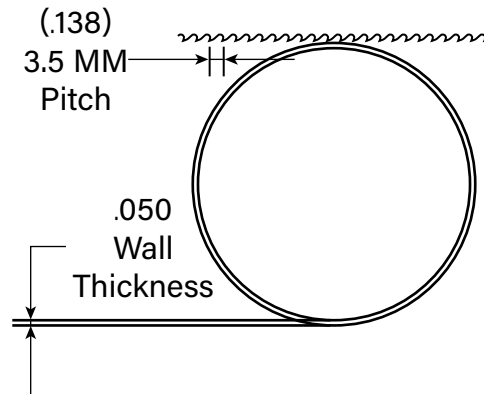
TUBE - Thick Walled

Slower RPM & Pitch should be Less than the Wall Thickness



TUBE - Thin Walled

Higher RPM & Pitch should be as small as Practical. 3 - 3.5 mm (.118 - .138) is the Smallest Pitch Available



COLD SAW BLADES

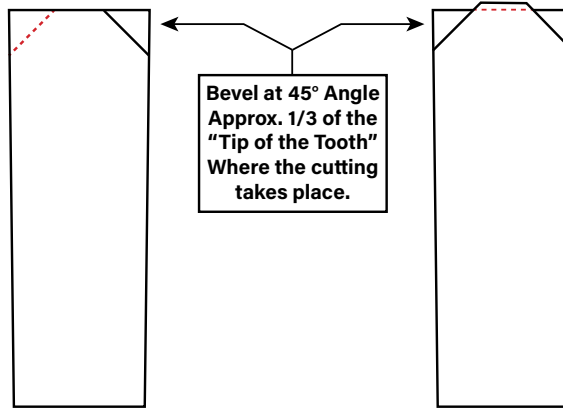
TOOTH GEOMETRY, PITCH & BEVEL (cont.)



BEVELS, NOTCHES AND APPLICATIONS

ALTERNATE

Teeth are the same Height.
All Teeth have a Bevel.
Every Other Tooth is Beveled on Every Other Side. Used on Blades with a 4.5 Pitch or Less. Generally 220 Teeth or more. More Teeth = Smaller Pitch. Used on thinner walled Tube, Angle and Small Solids.

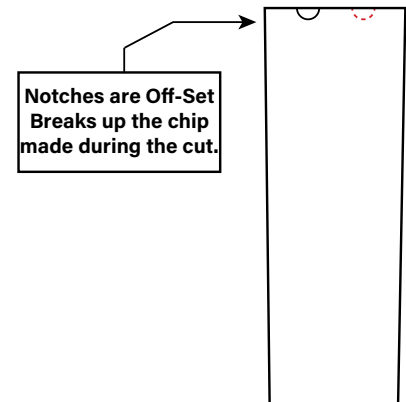


TRIPLE CHIP

Every other Tooth is Taller. Often said to have a "High-Low". The High-Tooth has a Bevel on Both Sides. The Low-Tooth has NO Bevel at all. High-Tooth cuts the middle out and Low-Tooth is the Tooth that leaves Finish on the Cut Part. Generally used on Blades with a 4.5 Pitch or more. Less Teeth = Larger Pitch. Best for Solids and Thick Wall Tube.

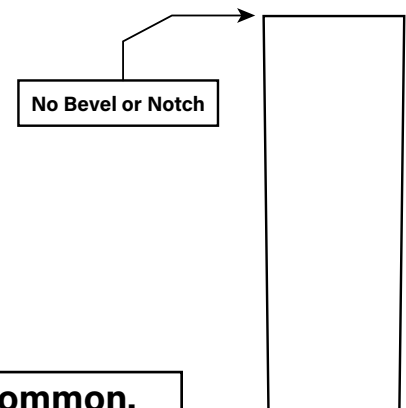
NOTCH GRIND

Teeth are the same Height. All Teeth have a Notch. Notches are Offset from Each Other and breaks up the Chip made during the Cut. Typically used on Blades with a 4.5 Pitch or Less. Generally 220 Teeth or more. More Teeth = Smaller Pitch. Best for thinner walled Tube, Blade RPM should be increased.



ROUND GRIND

Teeth are the same Height. There is No Bevel. Typically used on Blades with a 3.5 Pitch or Less, as Teeth this small are extremely difficult to bevel. This works best for thinner walled Tube. Also used for soft materials such as Nylon, Plastic, PVC, etc. in most any shape or size and with whatever tooth size works best.



Triple Chip and Alternate Grinds are by far the most common.

COLD SAW BLADES

SAW BLADE SELECTION



SAW BLADE SIZE, NUMBER OF TEETH & PITCH

There is no general purpose or "Universal" Cold Saw Blade. The proper blade must be used for the material being cut.

Pitch is the size of one saw blade tooth, OR distance from one tip to the next in millimeters.

More teeth = a smaller pitch (14" 220 has a 5.0 mm Pitch)

Less teeth = a larger pitch (14" 150 has a 7.5 mm Pitch)

Charts show selection of proper saw blade for material being cut.

Cutting Square Tube across the flat you should increase pitch by 1 mm to 2 mm. For example, Mild Steel 2" round .187" (3/16) wall tube or a 2" square .187" (3/16) tube on the diagonal (point-to-point) with a 14" diameter blade, a 180-tooth blade is used with 6.5 mm pitch.

2" square .187" (3/16") walled tube cut across the flat needs a blade with 7.5 mm to 8.5 mm pitch (less teeth). Chart shows a 14" 150-tooth blade has 7.5 pitch.

Round Tubing - Angle & Square Cut on the Diagonal

Square Tube Cut Across the Flat - Increase Pitch 1 mm - 2 mm (less teeth)

MATERIAL	BLADE SIZE, NO. OF TEETH & PITCH			
Wall Thickness	275 mm 10 ³ / ₄ "	315 mm 12 ¹ / ₂ "	350 mm 14"	Pitch
.030 - .060	260 Teeth	280 Teeth	320 Teeth	3.5 mm
.060 - .090	200 Teeth	220 Teeth	250 Teeth	4.0 mm
.090 - .150	160 Teeth	180 Teeth	200 Teeth	5.5 mm
.150 - .250	For Thick-Walled Tube, Please Call Factory for a Recommendation			
.250 - .375				
.375 - .500				

Solid Round & Square Bar

Tough Alloys or Stainless - Decrease Pitch (more teeth) 1 mm - 2 mm

Aluminum & Copper - Increase Pitch (less teeth) 1 mm - 2 mm

MATERIAL	BLADE SIZE, NO. OF TEETH & PITCH			
Solid Bar	275 mm 10 ³ / ₄ "	315 mm 12 ¹ / ₂ "	350 mm 14"	Pitch
½ in.	200 Teeth	220 Teeth	250 Teeth	3.5 mm
5/8 in.	160 Teeth	180 Teeth	200 Teeth	4.0 mm
¾ in.	140 Teeth	150 Teeth	180 Teeth	5.0 mm
1 in.	120 Teeth	140 Teeth	150 Teeth	6.5 mm
1¼ in.	110 Teeth	120 Teeth	140 Teeth	8.0 mm
1½ in.	100 Teeth	110 Teeth	130 Teeth	8.5 mm
1¾ in.	90 Teeth	100 Teeth	120 Teeth	9.5 mm
2 in.	80 Teeth	90 Teeth	100 Teeth	11 mm

COLD SAW BLADES

CHANGING BLADES



PRACTICES TO FOLLOW

CLEAN SPINDLE AND FLANGE

When metal chips are allowed between Flange and/or spindle during mounting, saw blade may “wobble”, have excessive run-out or contribute to other saw blade problems like pick-up.

REMOVE BACKLASH

The saw blade is driven by pins in the flange. When changing blades, backlash must be removed or “taken-up”. When blade is placed on machine, and before bolt on flange is tightened, lift up on front of blade and hold it until bolt is tight. This keeps blade against pins in the flange. If blade breaks through pin-hole, backlash was not removed.



TROUBLESHOOTING

BLADE PICK-UP

Dull blade, improper coolant, wrong blade, incorrect rpm or too much down-pressure contributes to pick-up.

Pick-up occurs when material being cut bonds itself to both sides of blade teeth making them wider. This may cause the saw head to jump or vibrate during the cut. Saw blade may seem “out-of-round” during the cut. Pick-up will jam blade into material and lead to damaged blades or material moving during the cut. This may force blade to one side, and shatter it. If there is pick-up on the blade **STOP** using and replace. Resharpen blade to avoid pick-up.

MATERIAL SLIPPING IN VISE

Material must be properly seated and solidly clamped in vise. If material moves during cut it can bend or break saw blade. Unusual rub marks on one side of blade indicate slippage.

PROLONG SAW BLADE LIFE

BREAKING IN BLADE

New or resharpened blades have sharp edges. Feed blade slowly through material for the first 3-4 cuts.

COOLANT

Use water soluble base coolant mixed to proper strength. Rust indicates weak coolant. Weak coolant will shorten blade life and contribute to pick-up.

SAW BLADE DIAMETER

Small blades are the more rigid. SFM (Surface Feet per Minute) or “Rim Speed” is less with a smaller blade. Smaller blades are less expensive to purchase and sharpen.

SN 300 NEWTON

MANUAL BAND SAW



MACHINE DESCRIPTION:














Introducing the Brown SN300 band saw with gravity controlled down feed from Pedrazzoli. All saws are not created equal, learn how Pedrazzoli leads the industry in design and dependability. Stable saw platforms increase productivity, improve blade life and overall cut quality and squareness. All Pedrazzoli saws feature robust heavy-duty cast iron bases that minimize vibration during the cutting cycle. The large diameter miter base glides easily over tempered bearing track for easy smooth rotation of saw head. Vise shoulders retract and adjust to support to material effectively for more consistently to the profile being cut. Down gravity feed control is balanced with Pedrazzoli's dynamic feed mode. Saw motor mounts vertically reducing overall dimensions of transmission to worm gear drive with full oil bath for longer component life and less maintenance.

Features:

- > Saw positions 60 degrees left and 45 degrees right to fixed stops
- > Large circular saw base rotates over ball track for easy miter movement
- > Saw bow movement supported with conical bearings
- > Two blade speed selections for greater material versatility
- > Control panel with simple operator control functions
- > Blade drive safety switch located in hand grip
- > Safety micro-switch prevents blade operation when guard is open
- > Blade tensioning handwheel with spring for uniform tensioning
- > Blade guide arms adjustable to dimension of workpiece
- > Blade guides feature two hardened guides on eccentric bushings
- > Vise shoulders adjust and retract
- > Coolant reservoir with removable electric pump for easy cleaning
- > Heavy cast iron saw base for greater rigidity when sawing
- > Machine on off switch with lockout switch
- > Length stop with micrometer adjustment
- > Machine base designed to accommodate fork lift

7.193.34.41 **7.193.34.55**
240V 480V

CUTTING CAPACITY

	 45°	 0°	 45°	 60°
	6.3"	8.7"	7.9"	5.1"
	4.7"	7.5"	5.9"	4.3"
	6.3" x 5.1"	13" x 5.9"	4.7" x 5.1"	4.3" x 4.3"
	1.25 / 1.75 kW			
	35 / 70 m/1*			
	360 mm			
	111.2" x 1.0625" x .032"			
	950 lb			
	56" x 60" x 71" *including length stop			

TECHNICAL SPECIFICATIONS

Down feed Mode Selection for Newton models

Manual mode: From control panel select M position (manual). Rotate hand wheel of tension spring to align 0 (zero) on scale tightening balance spring. Secure material in vise, press the start button to activate manual cutting cycle. Adjust bow descent pressure with flow regulator.

Dynamic mode: From control panel select D position (dynamic). Rotate handwheel of tension spring to 40 (forty) on scale loosening balance spring. Adjust limit switch at end of cutting cycle. Secure material in vise, position blade above material to be cut and press the start button. Bow descent pressure is controlled by gravity. At the end of cut limit switch will stop blade motion. Raise bow above workpiece.

Available Accessories

- > Material roller table for loading workpiece



BROWN SN 420 SA

SEMI-AUTOMATIC BAND SAW

VARIABLE SPEED CONTROL



MACHINE DESCRIPTION:

Introducing the Brown SN 420 SA semiautomatic band saw from Pedrazzoli. All saws are not created equal, learn how Pedrazzoli leads the industry in design and dependability. Stable saw platforms increase productivity, improve blade life and overall cut quality and squareness. Ideal for sawing of ferrous or nonferrous tube, pipe and profiles. All Pedrazzoli saws feature robust heavy-duty cast iron bases that minimize vibration during the cutting cycle. Machine can be operated manually or in semiautomatic cycle control of bow movement with flow regulator to adjust downward speed. Bow returns to start position while vise remains closed. The large diameter miter base glides easily over tempered bearing track for easy smooth rotation of saw head. Vise shoulders retract and adjust to support to material effectively for more consistently to the profile being cut. Saw motor mounts vertically reducing overall dimensions of transmission to worm gear drive with full oil bath for longer component life and less maintenance. Proven machine design provides a smooth sawing operation and outstanding reliability. Manufactured and assembled with years of fabrication experience.

Features:

- > Saw positions 60 degrees left and 45 degrees right to fixed stops
- > Large circular saw base rotates over ball track for easy miter movement
- > Variable blade speed adjustment for better sawing performance
- > Laser indicator for aligning cutting position
- > Saw bow movement supported with conical bearings
- > Two blade speed selections for greater material versatility
- > Control panel with simple operator control functions
- > Foot pedal for semiautomatic cutting cycle
- > Blade drive safety switch located in hand grip
- > Safety micro-switch prevents blade operation when guard is open
- > Electronic safety sensor stops band motion in case of breakage
- > Blade tensioning handwheel with spring for uniform tensioning
- > Blade guide arms adjustable to dimension of workpiece
- > Blade guides feature two hardened guides on eccentric bushings
- > Vise shoulders adjust and retract
- > Coolant reservoir with removable electric pump for easy cleaning
- > Heavy cast iron saw base for greater rigidity when sawing
- > Machine on off switch with lockout switch
- > Length stop with micrometer adjustment
- > Machine base designed to accommodate fork lift

Available Accessories















- > Material roller table for loading work piece

7.197.43.41
240V

7.197.43.55
480V



CUTTING CAPACITY

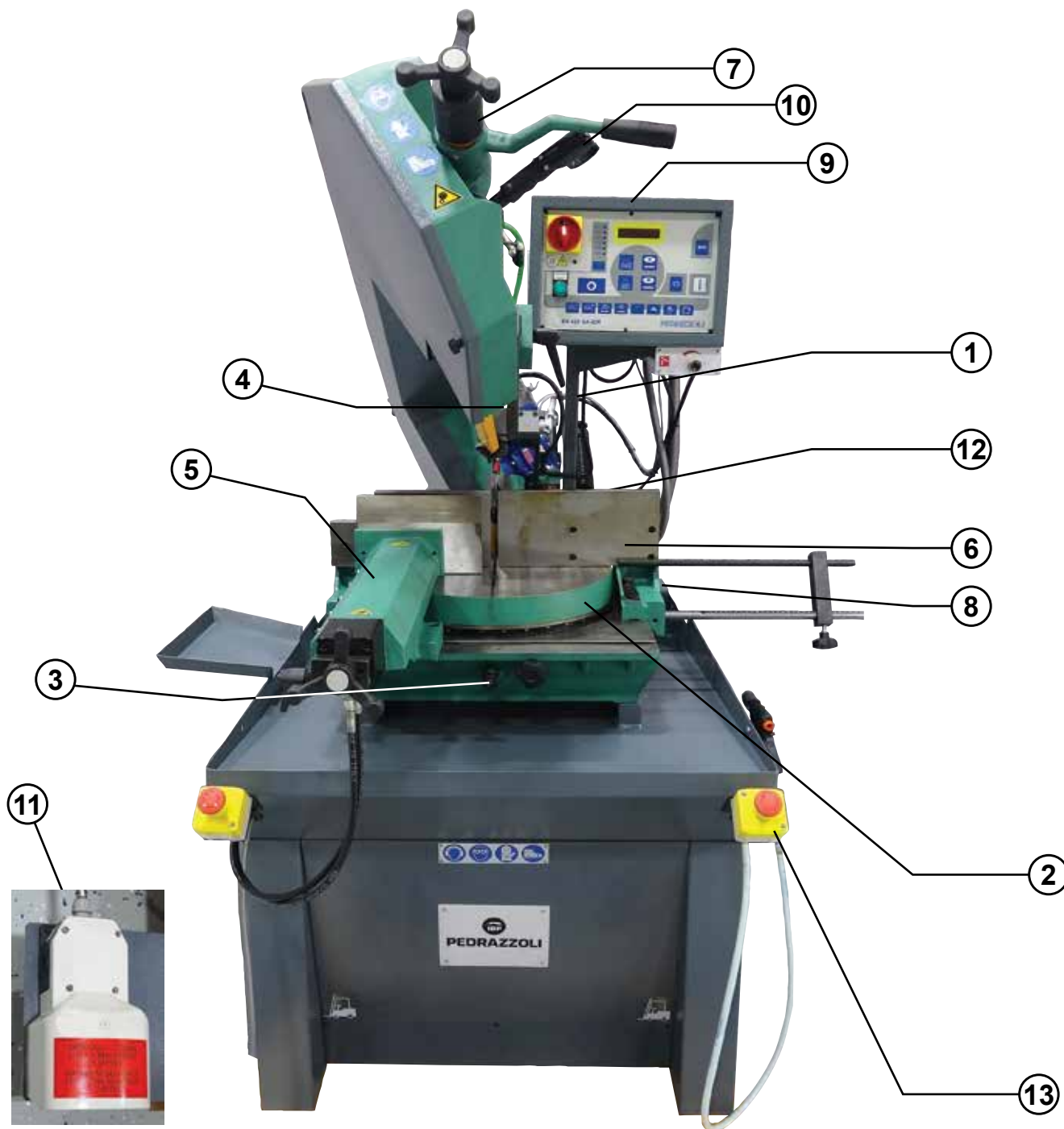
	 45°	 0°	 45°	 60°
	6.7"	11"	9.1"	5.9"
	5.9"	10.6"	8.7"	5.9"
	9.4" x 3.5"	16.5" x 7.5"	9.1" x 5.9"	3.1" x 2.8"
	1.6 / 2.0 kW			
	35 / 70 m/1* Variable			
	16.5"			
	124" x 1.0625" x .035"			
	1342 lb			
	56** x 74" x 83" *including length stop			
	37.5"			

TECHNICAL SPECIFICATIONS

BROWN SN 420 SA

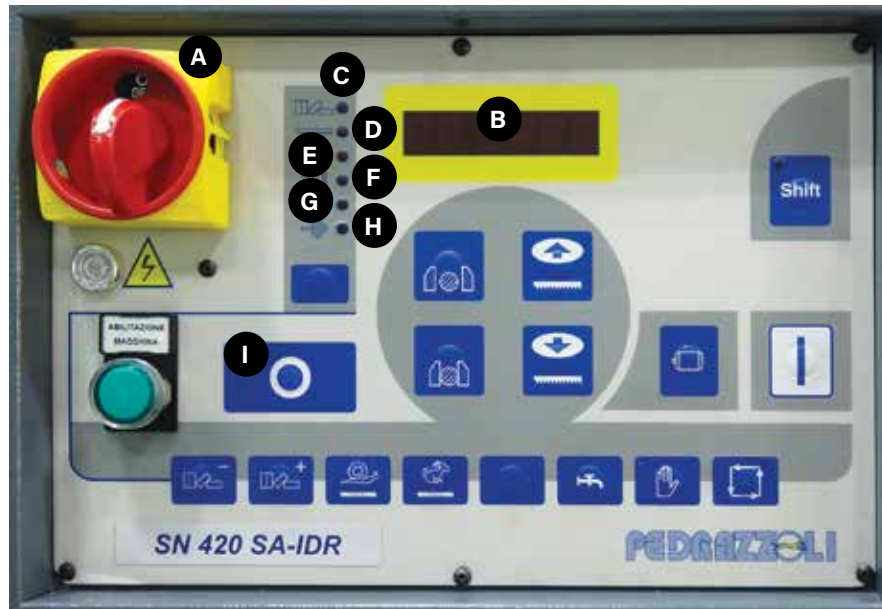
SEMIAUTOMATIC BAND SAW

VARIABLE SPEED CONTROL



GENERAL IDENTIFICATION OF PARTS

- | | |
|---|--|
| 1. Transmission by means of reducer | 8. Lubrication cooling pump |
| 2. Large support table rotating together with blade | 9. Control panel |
| 3. Pin for 90° cuts | 10. Momentary trigger switch for blade drive |
| 4. Blade guides | 11. Start pedal |
| 5. Adjustable semiautomatic hydraulic vise | 12. Bow support by conical bearings |
| 6. Adjustable and retractable vise shoulders | 13. Double emergency push button |
| 7. Blade tightening device | 14. Electronic safety sensor (under guard) |



SA-IDR CONTROL PANEL

PLC control panel specifically developed for Pedrazzoli band saws: it can be programmed by the operator according to the machine use requirements. The machine can work in manual or semiautomatic mode.

- A. ON/OFF switch
- B. Digital display
- C. Programmable piece counter
- D. Blade rotation speed
- E. Lubrication
- F. Manual or semiautomatic cycle selection
- G. Advanced functions (vise opening/closing at the end of cutting - ON/OFF blade rotation at the end of cutting - etc.)
- H. Ampere absorption display (for cutting speed control, blade wear, etc.)
- I. Semiautomatic cycle stop (acting on this key the bow goes up & the vise stays closed)
- J. Flow regulator, for adjusting bow descent speed



Hydraulic cylinder for bow movement



Laser pointer for cutting position

BAND SAW FEATURES



Gear reducer



Large circular table rotating together with the bow to ensure optimal support of the piece to be cut.



Carbide blade guides



Adjustable carbide blade guides

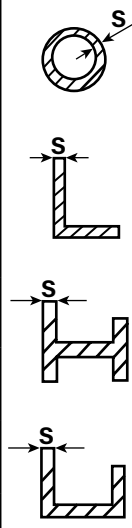
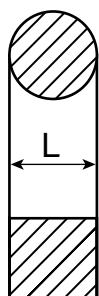


Vise with quick approach, can be positioned transversally along the entire machine base. Adjustable vise shoulders.

BAND SAW BLADE DIMENSIONS FOR PEDRAZZOLI SAWS

	LENGTH	WIDTH	THICKNESS
SN300 BAND SAW	111.2"	1.062"	.035"
SN420 BAND SAW	124"	1.062"	.035"

BAND SAW BLADE SELECTION

	S inches	Z x 1"	Z x 1" Z x 1"		L inches	Z x 1"	Z x 1" Z x 1"	Emulsion Emulsion 7+10%
	< .060	14	-----		< 1½	8	6/10	
< .158 - .316	10	10/14	< 1½ - 3⅞	6	5/8			
> .083 - .158	8	8/12	< 2¾ - 3½	4	4/6			
> .158 - .316	6	6/10	> 4	3	3/4			
> .141 - .282	6	5/8	Reduced speed for stainless steel and large sections		Emulsion Emulsion 7+10%			
> .282	4	4/6						

TYPICAL BLADE MATERIALS

BIMETAL	- Interrupted cuts; structural steel; tubes and broken blade teeth.
COBALT M42	- Automatic saws and machines for production, hard metal, stainless steel.
HARD METAL H.M.	- Hardened special bronze, AMPCO, material COBALT M43 has difficulty cutting.
ONEMETAL/SL	- General and occasional use; with low tool cost.
ONEMETAL/SR	- Efficient higher cutting with production, without offering high production.
COBALT/51	- Hard material with automatic machine cycle with rigid structure teeth.

HB 450 SA

SEMI-AUTOMATIC CIRCULAR UPCUT SAW



MACHINE DESCRIPTION:

Semiautomatic circular cold saw with hydraulically fed upcut blade movement designed to quickly and accurately produce straight and miter cuts in a wide range of profile and solid materials. Workpiece is cut from the center of the table and material is held firmly with vertical hydraulic clamping throughout the cut providing burr free parts with minimum heat transfer. Machine accepts circular saw blade to 450 mm with capacity to 6-inch round profiles when cut at 90 degrees. Blade is driven by precision ground and hardened helical gears providing consistent cutting speed for tube and solid materials. Rotational speed of the blade is variable and adjusts with inverter from machine control panel to accommodate a variety of materials. Proven machine design provides a smooth sawing operation and outstanding reliability. Manufactured and assembled with years of fabrication experience.



Features:

- > Table adjusts 0-170 degrees with three stops and locks
- > Heavy-duty precision gear box with variable blade RPM through inverter drive
- > Self balancing valve for smooth forward movement of blade
- > Digital adjustment of blade stroke
- > RPM 13 to 77 or 24-144 depending on model
- > Accepts saw blades to 450 mm
- > Coolant system to extend blade life
- > Adjustable vertical clamping of material
- > Saw angle adjusts inside of table base via hand wheel for miter cutting
- > Heavy-duty metal base welded for rigid reinforcement
- > Optional in-feed and exit support tables with stock stop for sawing repetitive parts

7.177.08.41 **7.177.08.55**
240V 480V



CUTTING CAPACITY

	45°	0°	45°	60°
	5.9"	5.9"	5.9"	5.5"
	4.7"	5.1"	4.7"	4.3"
	4.0 kW			
	13-77 / 24-144 rpm (specify when ordering)			
	6.9"			
	450 mm			
	2,600 pounds			
	55" x 69" x 70"			
	42"			

TECHNICAL SPECIFICATIONS

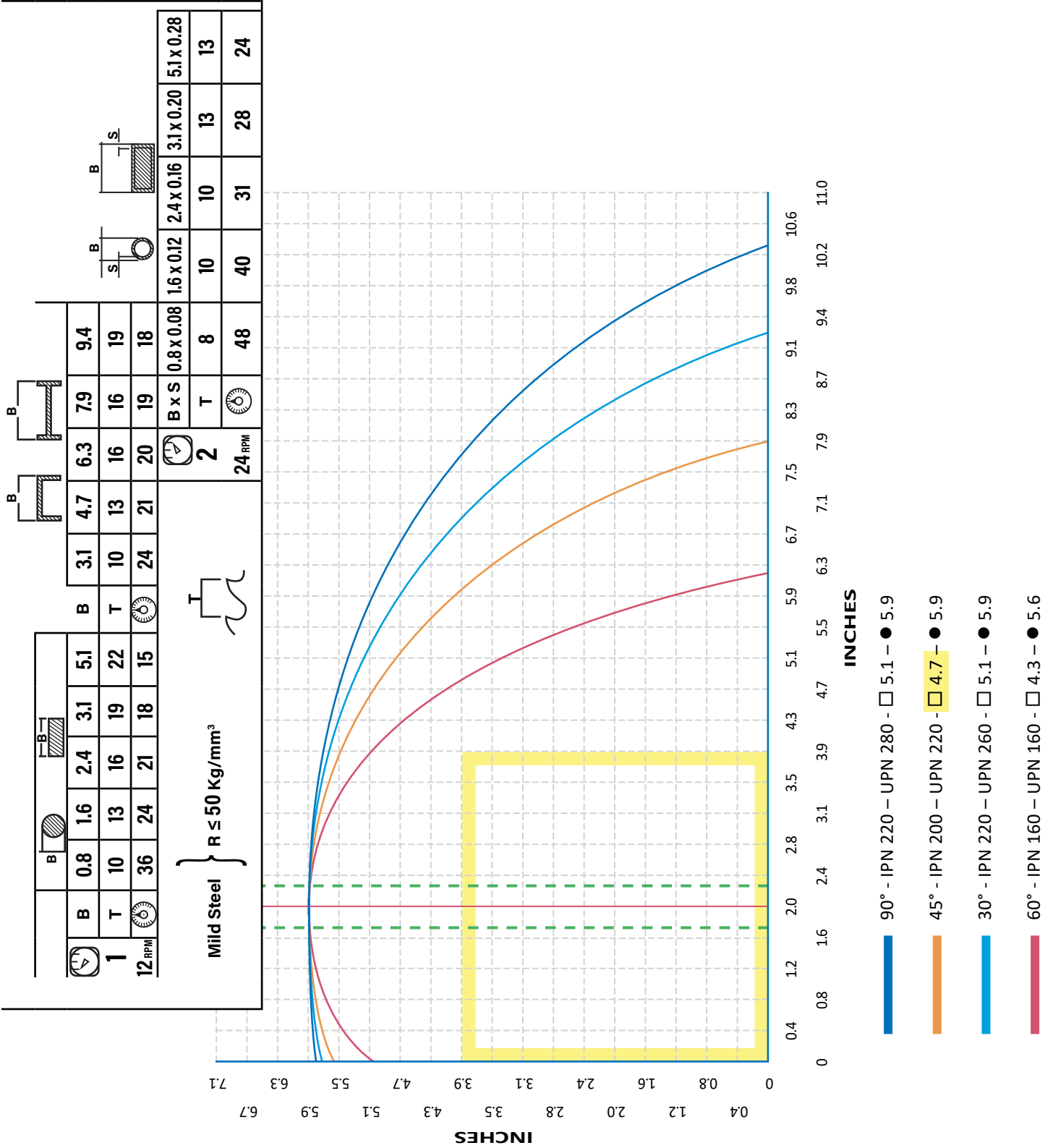


HB 450 SA

SEMI-AUTOMATIC CIRCULAR UPCUT SAW



CAPACITY CHART IN INCHES



HB 450 SA

SEMI-AUTOMATIC CIRCULAR UPCUT SAW



OPTIMAL RPM FOR 450 MM HSS BLADE

It is important to dial in RPM for best performance and blade life

Running cold saw blade at too low RPM will cause poor cut quality, tooth breakage, and lower production.

Running cold saw blade too fast will dull the blade prematurely.

Variable speed machines dial in the RPM exactly. Two speed machines select speed closest to recommended RPM.

RECOMMENDED SFM & RPM FOR 450 MM HSS BLADE

Material Type & Shape	SFM	RPM
Mild Steel - Solids & Thick Walled Pipe	90 - 125	20 - 27
Mild Steel - Thin Wall Tubing (0.062" or less)	140 - 185	27 - 40
Stainless Steel - Solids & Thick Walled Pipe	50 - 90	11 - 20
Stainless Steel - Thin Wall Tubing (0.062" or less)	85 - 130	18 - 28
Non-Ferrous - Aluminum, Brass, Copper	225 - 360	49 - 76

RECOMMENDED NUMBER OF TEETH BASED ON APPLICATION SHAPE/SIZE

Square Tube Cut Flat					
Wall Thickness	Width				
	1"	1.5"	2"	3"	4"
0.062	360	320	280	260	240
0.093	340	280	240	200	200
0.125	300	260	220	200	180
0.187		240	200	180	160
0.250			180	160	150
0.312			160	150	140
0.375				140	120

Steel Round Tube							
Wall Thickness	Diameter						
	1"	1.5"	2"	3"	4"	5"	6"
0.062	440	400	380	380	380		
0.093	400	380	340	320	320		
0.125	360	340	300	280	280	280	
0.187		300	280	260	240	240	240
0.250			220	200	200	200	200
0.312				180	180	180	180
0.375				160	160	160	150
0.500				160	150	140	130

Solid	#	Solid	#
1/8"	520	1-1/2"	180
1/4"	400	1-3/4"	160
3/8"	360	2"	150
1/2"	300	2-1/4"	140
5/8"	280	2-1/2"	130
3/4"	240	3"	120
1"	220	3-1/2"	110
1-1/4"	200	4"	100

Angle	#
1/16"	520
1/8"	440
3/16"	360
1/4"	320
3/8"	280
1/2"	220
3/4"	180

When cutting angle iron, position elbow upward to avoid blade breakage!

563-391-7700



PEDRAZZOLI



About This Brochure: We have tried to make this brochure comprehensive and factual. We reserve the right to make changes at any time without notice, to prices, colors, materials, equipment, specifications, models and availability.

Brochure may have been updated since the time of printing.



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