

Semiautomatic 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





Adjustable clamp and feed pressure



Touch screen control



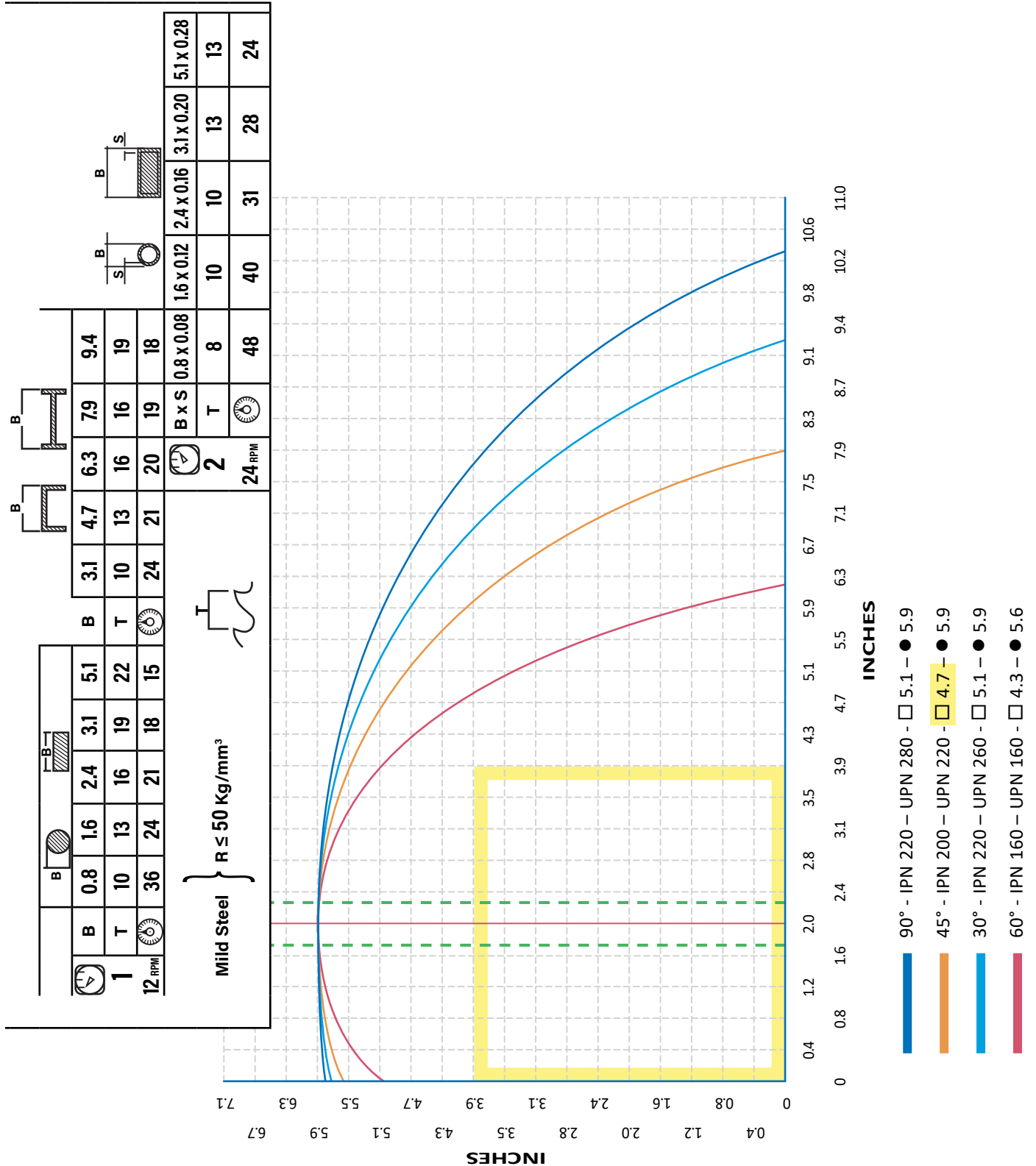
Incoming power transformer



Pivot/Miter Table

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CAPACITY CHART IN INCHES



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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!

*Ordering information:

Part numbers: "Blade size-Number of teeth": 450BL-360; 450BL-320; 450BL-280 etc.