309HV Capacities & Specifications Chart

Material Type	Shape	Max. Section Size	Min. Suggested ID 1	
Flats, Hard		6 × 1 in. / 160 × 40 mm	60 in. / 1,525 mm	
Flats, Easy		9 × 2 in. / 260 × 50 mm	48 in. / 1,220 mm	
Square Bar		3% in. / 100 mm	48 in. / 1,220 mm	
Angle, Leg-Out		5 × % in. / 130 × 15 mm	54 in. / 1,375 mm	
Angle, Leg-In		5 × ½ in./ 130 × 12 mm	60 in. / 1,525 mm	
Tee, Leg-Out		5 × ½ in./130 × 12 mm	60 in. / 1,525 mm	
Tee, Leg-In		4½ × ½ in./115 × 12 mm	60 in. / 1,525 mm	
C, Legs-Out		10 × 3 in. / 260 × 80 mm	48 in. / 1,220 mm	
C, Legs-In		10 × 3 in. / 260 × 80 mm	60 in. / 1,525 mm	
Round Bar		Ø3½ in. / 90 mm	40 in. / 1,015 mm	
Pipe, Schedule 40 ²	0	Ø6 in. / 155 mm	120 in. / 305 cm	
Round Tube ²	0	7 × 3/16 in. / 180 × 5 mm		
Square Tube ³		5 × 5/16 in. / 130 × 8 mm		
Rectangular Tube ³		6 × 3 × ¼ in. 155 × 80 × 7 mm		
I-Beam, EZ		S10 × 35 in. / 260 × 113 mm	48 in. / 1,220 mm	
H-Beam, EZ		W8 × 24 in. / HEA 180	72 in. / 1,830 mm	
C-Beam, On Edge ⁴		C6 × 13 in. / 160 × 65 mm	200 in. / 508 cm	
I-Beam, HW ⁴	H	S7 × 20 in. / 180 × 91 mm	150 in. / 381 cm	
H-Beam, HW ⁴	H	W5 × 19 in. / HEA 140	100 in. / 254 cm	

Section Modulus	6.2-10 in ³ / 100-160 cm ³	Roll Diameters	17 in. / 430 mm	Usable Shaft	10.83 in. / 275 mm
Rolling Speed	0-23 fpm / 0-7 mpm	Shaft Diameters	6.3/5.3 in. / 155/135 mm	Thread Length	5.71 in. / 145 mm
Power Output	24 HP / 18.5 kW	Approx. Weight	15,180 lbs. / 6,700 kg	Shaft O.D.	5.31 in. / 135 mm
Key Width	1.42 in. / 36 mm	Total Shaft Height	5.65 in. / 143.4 mm	Overall Roll O.D.	17 in. / 430 mm

Rev. 0 05/2014. (1.) Minimum suggested internal diameter applies to maximum section size as listed at left. (2.) Set of three rolls required for each tube and pipe size. (3.) Special rolls may improve results on these profile. (4.) Special Beam On-Edge Traction Device required. (5.) With standard equipment. This chart indicates minimum suggested inside diameter with maximum profile size, using mild steel rolling generally in multiple passes. Custom tooling for some profiles may be required for volume production and minimum rolling diameters are limited to level of acceptable deformation. The manufacturer and Carell Corporation reserves the right to revise design, construction and specifications without prior notice. Ratings based on material yield on 36KSI. Machines with extended or shortened shafts are available. Series 3000 machines are designed compliant with ANSI B11.12.1996 standards. The employer of the operator is responsible for providing and insuring the usage of point of operation guards and/or properly applied and adjusted point of operation safety devices are required to meet OSHA, state and local safety requirements.

FABRICATING MACHINERY