303HV Capacities & Specifications Chart

Material Type	Shape	Max. Section Size	Min. Suggested ID 1
Flats, Hard		2 ³ % × ³ % in. / 60 × 10 mm	20 in. / 500 mm
Flats, Easy		3 × ¾ in. / 76 × 20 mm	18 in. / 450 mm
Square Bar		1¼ in./32 mm	18 in. / 450 mm
Angle, Leg-Out		2 × ¼ in. / 50 × 6 mm	28 in. / 710 mm
Angle, Leg-In		2 × ¾ in. / 50 × 5 mm	28 in. / 710 mm
Tee, Leg-Out		2% × ¼ in. / 60 × 6 mm	24 in. / 600 mm
Tee, Leg-In		2 × 1/16 in. / 50 × 5 mm	22 in. / 550 mm
C, Legs-Out		3 × 1¾ in. / 76 × 45 mm	24 in. / 600 mm
C, Legs-In		2½ × 1½ in. / 64 × 42 mm	30 in. / 760 mm
Round Bar		Ø1% in. / 35 mm	16 in. / 400 mm
Pipe, Schedule 40 ²	0	Ø1½ in. / 40 mm	20 in. / 500 mm
Round Tube ²	9	2¾ in. / 60 mm × 14Ga	
Square Tube ³		2 in. / 50 mm × 14Ga	
Rectangular Tube ³		2 in. / 50 mm × 1¼ in. / 32 mm × 12Ga	
I-Beam, EZ		S3 × 5.7 in. / 80 × 42 mm	24 in. / 600 mm

Section Modulus	0.40 in ³ / 6 cm ³	Roll Diameters	7.0 in. / 180mm	Usable Shaft	4½ in. / 116 mm
Rolling Speed	20 fpm / 5.5 mpm	Shaft Diameters	1.97 in. / 50mm	Thread Length	12 ¹ / ₃₂ in. / 48.5 mm
Power Output	4 HP / 3 kW	Approx. Weight	1,720 lbs. / 720 kg	Shaft O.D.	2 in. / 50 mm
Key Width	½ in. / 14 mm	Total Shaft Height	2½ in. / 54 mm	Overall Roll O.D.	7 in. / 177 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