305HV / CPHV80 Capacities & Specifications Chart

Material Type	Shape	Max. Section Size	Min. Suggested ID ¹	
Flats, Hard		3 × ¾ in. / 80 × 18 mm	30 in. / 760 mm	
Flats, Easy		5 × 1 in. / 120 × 25 mm	26 in. / 660 mm	
Square Bar		1¾ in. / 45 mm	22 in. / 560 mm	
Angle, Leg-Out		3 × ¾ in. / 80 × 8 mm	42 in. / 1,070 mm	
Angle, Leg-In		2½ × 516 in. / 70× 7 mm	42 in. / 1,070 mm	
Tee, Leg-Out		3 × ¾ in. / 80 × 8 mm	34 in. / 865 mm	
Tee, Leg-In		3 × 51₀ in. / 80 × 7 mm	36 in. / 915 mm	
C, Legs-Out		5 × 2 in. / 120 × 55 mm	28 in. / 710 mm	
C, Legs-In		4 × 2 in. / 100 × 55 mm	36 in. / 915 mm	
Round Bar		Ø2 in. / 55 mm	22 in. / 560 mm	
Pipe, Schedule 40 ²	0	Ø2½ in. / 65 mm	32 in. / 815 mm	
Round Tube ²	\cap	3½ in. / 90 mm × 14Ga		
Square Tube ³		2½ in. / 65 mm × 10Ga		
Rectangular Tube ³		3 in. / 80 mm × 1½ in. / 40 mm × 10Ga		
I-Beam, EZ		S5 × 10 in. / 120 × 58 mm	32 in. / 815 mm	

Section Modulus	1.10 in ³ / 18 cm ³	Roll Diameters	9.65 in. / 245 mm	Usable Shaft	6¼ in. / 155 mm
Rolling Speed	20 fpm / 6.1 mpm	Shaft Diameters	2.76 in. / 70 mm	Thread Length	3¾ in. / 85 mm
Power Output	6.5 HP / 4.9 kW	Approx. Weight	3,450 lbs. / 1,520 kg	Shaft O.D.	2¾ in. / 70 mm
Key Width	7∕% in. / 20 mm	Total Shaft Height	3 in. / 75.2 mm	Overall Roll O.D.	9% in. / 245 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.

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/ CPHV 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.



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