# 305HV Capacities & Specifications Chart

| Material Type | Shape | Max. Section Size | Min. Suggested ID [1] |
|---|---|---|---|
| **Flats, Hard** |  | 3 × 5/8 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 × 3/8 in. / 80 × 8 mm | 42 in. / 1,070 mm |
| **Angle, Leg-In** |  | 2½ × 5/16 in. / 70× 7 mm | 42 in. / 1,070 mm |
| **Tee, Leg-Out** |  | 3 × 3/8 in. / 80 × 8 mm | 34 in. / 865 mm |
| **Tee, Leg-In** |  | 3 × 5/16 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] |  | Ø2½ in. / 65 mm | 32 in. / 815 mm |
| **Round Tube** [2] |  | 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 |

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|---|---|---|---|---|---|
| **Section Modulus** | 1.10 $in^3$ / 18 $cm^3$ | **Roll Diameters** | 9.65 in. / 245 mm | **Usable Shaft** | 6⅛ in. / 155 mm |
| **Rolling Speed** | 20 fpm / 6.1 mpm | **Shaft Diameters** | 2.76 in. / 70 mm | **Thread Length** | 3⅜ 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** | ⅞ in. / 20 mm | **Total Shaft Height** | 3 in. / 75.2 mm | **Overall Roll O.D.** | 9⅝ 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, 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.

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