# 3 Technical data

Table 3-1 Technical data

| Model / Data / Item | CS6140 CS16" CS6140B CS16"B CS6240 CS16"G CS6240B CS16"GB | CS6150 CS20" CS6150B CS20"B CS6250 CS20"G CS6250B CS20"GB | CS6166 CS26" CS6166B CS26"B CS6266 CS26"G CS6266B CS26"GB |
|---|---|---|---|
| Max. swing over bed | Φ400(16") | Φ500(20") | Φ660(26") |
| Max. swing over slide | Φ220(8") | Φ300(12") | Φ420(17") |
| Max. swing over gap | Φ630(25") | Φ710(28") | Φ870(34") |
| Effective length in gap | 240(9") | | |
| Max. workpiece length | 750/1000/1500/2000/2500/3000(30"/40"/60"/80"/100"/120") | | |
| Max. turning length | 700/950/1450/1950/2450/2950(28"/38"/58"/75"/96"/116") | | |
| Spindle thru-hole | Φ52(2 3/64") B series Φ82(3 15/64") | | |
| Dia. and taper of spindle bore | MT.No.6 B series Φ90 1:20(3 35/64" 1:20) | | |
| Spindle nose | ISO 702/III No.6 bayonet type B series ISO 702/ II No.8 short cam-lock type | | |
| Spindle speeds | 24-step 9—1600r/min | | |
| Max. output torque of spindle | 1400N.m(1013 lbf.ft) | | 1200N.m(885 lbf.ft) |
| Number and range of long. feeds | | | |
| Standard | 0.063-2.52mm/r 65 sorts，(0.0023-0.0937in/r,65) | | |
| Decreased | 0.028-0.056mm/r 13 sorts, (0.0010-0.0021in/r,13) | | |
| Increased | 2.86-6.43mm/r 15 sorts，(0.1064-0.2392in/r,15) | | |
| Number and range of cross feeds | | | |
| Standard | 0.027-1.07mm/r 65 sorts, (0.0011-0.0404in/r,65) | | |
| Decreased | 0.012-0.026mm/r 13 sorts, (0.0004-0.0010in/r,13) | | |
| Increased | 1.21-2.73mm/r 15 sorts, (0.0457-0.1032in/r,15) | | |
| Number and range of threading | | | |
| Metric threads | 0.5-224 48 sorts | | |
| Inch threads | 72-1/8tpi 46 sorts | | |
| Module threads | 0.5-112 42 sorts | | |
| D.P. threads | 56-1/4DP 45 sorts | | |
| Longitudinal rapid traverse | 4.5m/min(15ft/min)50Hz 5.4m/min(18ft/min)60Hz | | |
| Cross rapid traverse | 1.9m/min(6.37ft/min)50Hz 2.3m/min(7.67ft/min)60Hz | | |
| Pitch of leadscrew | 12(2tpi) | | |
| Height of spindle to bearing surface of tool | 28(1 3/32") | | |
| Tool section | 25mm×25mm(1"×1") | | |

| Item \ Data \ Model | CS6140 CS16"<br>CS6140B CS16"B<br>CS6240 CS16"G<br>CS6240B CS16"GB | CS6150 CS20"<br>CS6150B CS20"B<br>CS6250 CS20"G<br>CS6250B CS20"GB | CS6166 CS26"<br>CS6166B CS26"B<br>CS6266 CS26"G<br>CS6266B CS26"GB |
|---|---|---|---|
| Swivel angle of fourway tool post | ±90° | | |
| Max. travel of compound rest | 145 (5 3/4") | | |
| Max. travel of cross slide | 320 (12 5/8") | | 310 (12 1/8") |
| Max. permissible cutting force(Pz) | 14000N(3086 lbf) | | 12000N(2643 lbf) |
| Max. permissible feeding force(Px) | 3500N (772 lbf) | | |
| Tailstock quill diameter | 75(2 61/64") | | |
| Taper of tailstock quill | MT No.5 | | |
| Max. travel of quill | 150 (5 29/32") | | |
| Cross move of tailstock | ±15 (±19/32") | | |
| Main motor type, power and speed | Y132M, 7.5kW(10HP) 1450r/min(50Hz), 1750r/min(60Hz) | | |
| Rapid traverse motor type, power and speed | 2AOS, 5632, 300W(0.40HP), 1360r/min(50Hz), 1660r/min(60Hz) | | |
| Coolant pump type, power and flow | 50L/min(11gal/min) | | |
| V-belt | B2108 4 pieces | B2184 4 pieces | B2337 4 pieces |
| Machine net weight | | | |
| 750(30") | 1975kg(4354 lb) | 2052kg(4520 ib) | 2150kg(4735 lb) |
| 1000(40") | 2050kg(4520 lb) | 2100kg(4630 lb) | 2200kg(4845 lb) |
| 1500(60") | 2250kg(4960 lb) | 2300kg(5070 lb) | 2400kg(5286 lb) |
| 2000(80") | 2450kg(5400 lb) | 2500kg(5510 lb) | 2600kg(5727 lb) |
| 2500(100") | 2650kg(5840 lb) | 2700kg(5950 lb) | 2800kg(6168 lb) |
| 3000(120") | 2850kg(6280 lb) | 2900kg(6390 lb) | 3000kg(6610 lb) |
| Machine dimensions(L×W×H) | | | |
| 750(30") | 2382×975×1230 | 2382×975×1270 | 2382×975×1350 |
| | 94"×38 3/8"×48 7/16" | 94"×38 3/8"×50" | 94"×38 3/8"×53" |
| 1000(40") | 2632×975×1230 | 2632×975×1270 | 2632×975×1350 |
| | 104"×38 3/8"×48 7/16" | 104"×38 3/8"×50" | 104"×38 3/8"×53" |
| 1500(60") | 3132×975×1230 | 3132×975×1270 | 3132×975×1350 |
| | 123"×38 3/8"×48 7/16" | 123"×38 3/8"×50" | 123"×38 3/8"×53" |
| 2000(80") | 3632×975×1230 | 3632×975×1270 | 3632×975×1350 |
| | 143"×38 3/8"×48 7/16" | 143"×38 3/8"×50" | 143"×38 3/8"×53" |
| 2500(100") | 4132×975×1230 | 4132×975×1270 | 4132×975×1350 |