

# MULTUS Series



|                                |                                                      |                         | MULTUS B550                                                   | MULTUS B750                                              |                                      |                                                                    | MULTUS B750-W                     |                                      |                        |                 |
|--------------------------------|------------------------------------------------------|-------------------------|---------------------------------------------------------------|----------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-----------------------------------|--------------------------------------|------------------------|-----------------|
| CAPACITY                       | Specifications DBC: *1                               |                         |                                                               |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | T: w/o tailstock C: w/ tailstock W: Opposing spindle |                         | x 2000                                                        | x 3000                                                   | x 4000                               | x 6000                                                             | x 3000                            | x 4000                               | x 6000                 |                 |
|                                | Swing over bed                                       | mm (in.)                | ø830 (32.68)                                                  | ø1,050 (ø41.34)                                          |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | Swing over saddle                                    | mm (in.)                | ø830 (32.68)                                                  | ø1,050 (ø41.34)                                          |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | Distance between centers                             | mm (in.)                | 2,000 (78.74)                                                 | 3,000 (118.11)                                           | 4,000 (157.48)                       | 6,000 (236.22)                                                     | 3,544 (139.53) (DEN)*2            | 4,544 (178.90) (DEN)*2               | 6,544 (257.64) (DEN)*2 |                 |
| TRAVELS                        | X axis                                               | mm (in.)                | 925 (36.42)                                                   | 1,080 (42.52)                                            |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | Z axis                                               | mm (in.)                | 2,215 (87.20)                                                 | 3,215 (126.57)                                           | 4,215 (166.94)                       | 6,215 (244.69)                                                     | 3,215 (126.57)                    | 4,215 (165.94)                       | 6,215 (244.69)         |                 |
|                                | Y axis                                               | mm (in.)                | 520 (-260 to +260)<br>(20.47 (-10.23 to +10.23))              | 660 (-330 to +330) (25.98 (-12.99 to +12.99))            |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | W axis                                               | mm (in.)                | -                                                             | -                                                        |                                      |                                                                    | 3,100 (122.06)                    | 3,395 (133.66)                       | 4,595 (180.91)         |                 |
|                                | C axis control                                       | degree                  |                                                               |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | B axis indexing angle                                | degree                  | -30 ~ 210 <Min controlled angle 0.001>                        |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
| MAIN SPINDLE                   | Spindle speed                                        | min <sup>-1</sup>       | 30 to 3,000 [10 to 2,400]                                     |                                                          |                                      | 11 to 2,000 [14 to 1,500]                                          |                                   |                                      |                        |                 |
|                                | Speed ranges                                         |                         | Infinitely variable x 2 auto ranges<br>(motor coil switching) |                                                          |                                      | Infinitely variable x automatic 4 steps                            |                                   |                                      |                        |                 |
|                                | Spindle nose                                         |                         | JIS A2-11                                                     |                                                          |                                      | JIS A2-11 [JIS A2-15, A2-20]                                       |                                   |                                      |                        |                 |
|                                | Tapered bore / Bearing diameter                      | mm (in.)                | ø112/ø160 [ø130/ø180]<br>(ø4.41/6.3 [ø5.12/ø7.09])            |                                                          |                                      | ø142/ ø220 [ø185/ ø280, ø275/ ø380] (ø5.59/ ø8.66 [ø7.28/ ø11.02]) |                                   |                                      |                        |                 |
|                                | OPPOSING SPINDLE                                     | Spindle speed           | min <sup>-1</sup>                                             | -                                                        |                                      |                                                                    | 11 to 2,000 [14 to 1,500]         |                                      |                        |                 |
| Speed ranges (coil switch)     |                                                      |                         | -                                                             |                                                          |                                      | Infinitely variable x automatic 4 steps                            |                                   |                                      |                        |                 |
| Spindle nose                   |                                                      |                         | -                                                             |                                                          |                                      | JIS A2-11 [JIS A2-15]                                              |                                   |                                      |                        |                 |
| Tapered bore/ Bearing diameter |                                                      | mm (in.)                | -                                                             |                                                          |                                      | ø142/ ø220 [ø185/ ø280] (ø5.59/ ø8.66 [ø7.28/ ø11.02])             |                                   |                                      |                        |                 |
| TURRET                         |                                                      | Type                    |                                                               | H1ATC                                                    |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | No. of tool stations                                 |                         | 1 for both L- and M-tools                                     |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | Tool shank/Boring bar shank dia                      | mm (in.)                | □25/ø50 (□0.98/ø1.97)                                         | □32/ ø63 (□1-1/4/ø2-1/2)                                 |                                      |                                                                    |                                   |                                      |                        |                 |
| MILLING TOOL SPINDLE           | Speed range                                          | min <sup>-1</sup>       | 40 ~ 50,000                                                   |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | Max torque                                           | N · m                   | 321/260/191 (3 min/30 min/cont)                               | 505/300/205 (371.32/ 220.59/ 150.74) (3 min/30 min/cont) |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | Milling tool spindle dia                             | mm (in.)                | -                                                             |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
| FEEDRATES                      | Cutting feed command range                           | mm/rev (ipr)            |                                                               |                                                          | 0.001 to 1,000 (0.0004 to 39.37)     |                                                                    |                                   |                                      |                        |                 |
|                                |                                                      | mm/min                  | XYZ: 40,000 (1,575)                                           | XYZ: 40,000 (1,575)                                      | XY: 40,000 (1,575) Z: 30,000 (1,181) |                                                                    | XYZ: 40,000 (1,575)               | XY: 40,000 (1,575) Z: 30,000 (1,181) |                        |                 |
|                                | Rapid traverse                                       | (ipm)                   |                                                               |                                                          |                                      | -                                                                  |                                   | W: 15,000 (591)                      | W: 12,000 (472)        | W: 10,000 (394) |
|                                |                                                      | min <sup>-1</sup> (rpm) |                                                               |                                                          | C: 100 R: 20                         |                                                                    |                                   |                                      |                        |                 |
| ATC                            | Tool shank/ Pull stud                                |                         | HSK-A100 (CAPTO C8, MAS BT50/P50TII)                          |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | No. of tools                                         |                         | 40 [80, 160]                                                  |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | Max tool dia                                         | mm (in.)                | ø130 (ø260 w/o adjacent tools)<br>(ø5.31 (ø10.24))            | ø135 (ø300 w/o adjacent tools) (ø5.31 (ø11.81))          |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | Max tool length                                      | mm (in.)                | 600 (23.62)                                                   |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | Max tool weight                                      | kg (lb)                 | 30 (66)                                                       |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
| TAILSTOCK                      | Center size                                          |                         | MT5                                                           | MT 6                                                     |                                      |                                                                    | -                                 |                                      |                        |                 |
|                                | Tailstock travel                                     | mm (in.)                | ø130 (5.12)                                                   | ø180 (7.09)                                              |                                      |                                                                    | -                                 |                                      |                        |                 |
|                                | Quill Diameter                                       | mm (in.)                | 250 (9.84)                                                    | 350 (13.78)                                              |                                      |                                                                    | -                                 |                                      |                        |                 |
| MOTORS                         | Main spindle                                         | kW (hp)                 | PREX37/30 (50/40) (30 mi/cont)                                |                                                          | VAC 37/30 (50/40) (45/37 (60/50))    |                                                                    |                                   |                                      |                        |                 |
|                                | Opposing spindle                                     | kW (hp)                 | -                                                             |                                                          | -                                    |                                                                    | VAC 37/30 (50/40) (45/37 (60/50)) |                                      |                        |                 |
|                                | Milling tool spindle (5 min.cont)                    | kW (hp)                 | VAC 37/30/22 (50/40/30) (3 min/30 min/cont)                   |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | Z axis                                               | kW (hp)                 | 5.2 (7)                                                       |                                                          | 9.4 (13)                             |                                                                    |                                   |                                      |                        |                 |
|                                | X axis                                               | kW (hp)                 | 5.2 x 2 (7 x 3)                                               |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | Y axis                                               | kW (hp)                 | 5.1 (7)                                                       |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | W axis                                               | kW (hp)                 | -                                                             |                                                          | -                                    |                                                                    |                                   | 5.2 (7)                              |                        |                 |
|                                | B axis                                               | kW (hp)                 | 4.6 (6)                                                       |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
|                                | Coolant                                              | kW (hp)                 | 0.25 x 1, 0.85 x 4 (0.3 x 1.3, 1.1 x 5.3)                     |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |
| SIZE                           | Height                                               | mm (in.)                | 3,307 (130.20)                                                | 3,557 (140.04)                                           | 3,607 (142.01)                       | 3,610 (142.13)                                                     | 3,557 (140.04)                    | 3,607 (142.01)                       | 3,610 (142.13)         |                 |
|                                | Floor space*2                                        | mm (in.)                | 8,030 x 3,258                                                 | 8,500 x 3,522                                            | 9,725 x 3,552                        | 12,625 x 3,797                                                     | 8,900 x 4,022                     | 10,325 x 4,022                       | 12,624 x 3,797         |                 |
|                                |                                                      |                         | (316x128)                                                     | (335 x 139)                                              | (983 x 139)                          | (497.05 x 149.49)                                                  | 350 x 158)                        | (406 x 158)                          | (497.05 x 149.49)      |                 |
|                                | Weight (w/ CNC system)                               | kg (lb)                 | 29,500 (64,900)                                               | 40,000 (88,000)                                          | 43,500 (95,700)                      | 50,000 (110,000)                                                   | 44,000 (96,800)                   | 47,500 (104,500)                     | 54,500 (119,000)       |                 |
| CNC                            | Okuma                                                | OSP-P300S               |                                                               |                                                          |                                      |                                                                    |                                   |                                      |                        |                 |

\*1. Distance between centers    \*2. Distance between noses    \*3. 5 min/cont    \*4. 3 min/cont    \*5. 20 min/cont    \*6. 15 min/cont    \*7. 50% ED/cont    \*8. machine only

[ ]: Optional