

# MB-V Series



| TRAVELS                         | ITEM                           | UNIT                     | MB-46VA [VAE]<br>MB-46VB [VBE]                                                                                    | MB-56VA<br>MB-56VB                                                       | MB-66VA [VAE]<br>MB-66VB [VBE]                                                                   |                  |
|---------------------------------|--------------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------|
|                                 | X axis (ram saddle horizontal) | mm (in.)                 | 560 [762] (22.05 [30.00])                                                                                         | 1,050 (41.34)                                                            | 1,500 (59.06)                                                                                    |                  |
|                                 | Y axis (table front/back)      | mm (in.)                 | 460 (18.11)                                                                                                       | 560 (22.05)                                                              | 660 (25.98)                                                                                      |                  |
|                                 | Z axis (spindle vertical)      | mm (in.)                 | 460 (18.11)                                                                                                       |                                                                          | 660 (25.98)                                                                                      |                  |
|                                 | Table top to spindle nose      | mm (in.)                 | 150 – 610 (5.91 – 24.02)                                                                                          |                                                                          | 150 – 810 (5.91 – 31.89)                                                                         |                  |
| TABLE                           | Max work dimension             | mm (in.)                 | 760 x 460 [1,000 x460]<br>29.92 x 18.11 [39.37 x 16.11])                                                          | 1,300 x 560<br>(51.18 x 22.05)                                           | 1,530 x 660<br>(60.24 x 25.98)                                                                   |                  |
|                                 |                                |                          | Floor to table top                                                                                                | mm (in.)                                                                 | 800 (13.50)                                                                                      |                  |
|                                 | Max load capacity              | kg (lb)                  | 500 [700] ( 1,100 [1,540])                                                                                        | 900 (1,980)                                                              | 1,500 (3,300)                                                                                    |                  |
|                                 | SPINDLE                        | Spindle speed            | min <sup>-1</sup>                                                                                                 | 8,000 {15,000 / 20,000 /25,000 / 35,000}* <sup>1</sup><br>6,000 {12,000} |                                                                                                  |                  |
| Speed ranges                    |                                |                          |                                                                                                                   | Infinitely variable                                                      |                                                                                                  |                  |
| Tapered bore                    |                                |                          | 7/24 taper No. 40 { 7/24 taper No. 40 / HSK-A63 /HSK-A63 /HSK-F63}<br>7/24 taper No. 50 {7/24 taper No. 50}       |                                                                          |                                                                                                  |                  |
|                                 |                                |                          | Bearing dia                                                                                                       | mm (in.)                                                                 | ø70 {ø70 / ø70 / ø60 / ø60} {ø2.76 {ø2.76 / ø2.76 / ø2.37 / ø2.37}}<br>ø90 {ø90} {ø3.55 {ø3.55}} |                  |
| FEEDRATE                        |                                | Rapid traverse (X-Y-Z)   | m/min (ipm)                                                                                                       | X-Y: 40 (1,575) Z: 32 (1,260)                                            |                                                                                                  |                  |
|                                 |                                | Cutting federate (X-Y-Z) | m/min (ipm)                                                                                                       | X-Y-Z: 32 (1,260)                                                        |                                                                                                  |                  |
| MOTORS                          | Spindle (10 min/cont)          | kW (hp)                  | VAC 11/7.5 {22/18.5 , 30/22, 15/11, 15} (15/10 {30/25, 40/30, 20/15, 20})<br>VAC 11/7.5 {26/18.5} (15/10 {35/25}) |                                                                          |                                                                                                  |                  |
|                                 |                                |                          | Feed axes (X-Y-Z)                                                                                                 | kW (hp)                                                                  | X-Y-Z: 4.0 (5.4)                                                                                 | X-Y-Z: 4.4 (5.9) |
|                                 | ATC                            | Tool shank               |                                                                                                                   | MAS BT40 {HSK}<br>MAS BT50                                               |                                                                                                  |                  |
| Pull stud                       |                                |                          |                                                                                                                   |                                                                          | MAS 2 {-}<br>MAS 2 {-}                                                                           |                  |
|                                 |                                | Tool capacity            | tool                                                                                                              |                                                                          | 20 {32 [48]} 48-tool only for 46VAE, 56VA, 66VA                                                  |                  |
| Max tool dia (w/ adjacent tool) |                                | mm (in.)                 | ø90 (3.54)<br>ø100 (3.94)                                                                                         |                                                                          |                                                                                                  |                  |
|                                 |                                |                          | Max tool dia (w/o adjacent tool)                                                                                  | mm (in.)                                                                 | ø125 (4.92)<br>ø152 (5.98)                                                                       |                  |
| Max tool length                 |                                | mm (in.)                 |                                                                                                                   |                                                                          | 300 (11.81)                                                                                      | 400 (15.75)      |
| Max tool mass                   |                                | kg (lb)                  | 8 (18)                                                                                                            | 8 (18)                                                                   |                                                                                                  |                  |
|                                 |                                |                          | 12 (26)                                                                                                           | 12 {15} (26 {33})                                                        |                                                                                                  |                  |
| Max tool moment                 |                                | N-m (ft-lbf)             | 7.8 (5.7) [8 kg x 100 mm (17.6 lb x 3.94 in.)]<br>15.3 [12 kg x 130 mm]<br>(11.3 [26.4 lb x 5.12 in.])            |                                                                          |                                                                                                  |                  |
|                                 |                                |                          | 15.3 (19.1) [12 {15} kg x 130 mm]<br>(11.3 {14.1} [26.4 lb x 5.12 in.])                                           |                                                                          |                                                                                                  |                  |
| Tool selection                  |                                |                          | Memory random                                                                                                     |                                                                          |                                                                                                  |                  |
| SIZE                            |                                | Height                   | mm (in.)                                                                                                          | 2,746 (108.11)                                                           |                                                                                                  | 3,295 (129.72)   |
|                                 | Floor space                    | mm (in.)                 | 1,970 {2,020* <sup>2</sup> } x 2,805<br>(78 {80} x 110)                                                           | 2,510 x 3,100<br>(99 x 122)                                              | 2,940 x 3,265<br>(116 x 129)                                                                     |                  |
|                                 | Weight                         | kg (lb)                  | 6,000 [6,300] (13,200 [13,800])<br>6,200 [6,500] (13,600 [14,300])                                                | 7,500 (16,500)<br>7,700 (16,900)                                         | 11,000 (24,200)<br>11,200 (24,640)                                                               |                  |

\*1. 35,000 min<sup>-1</sup> not available with MB-66VA

\*2. MB-46VB

{ } Optional: with references to respective optional spindle speeds