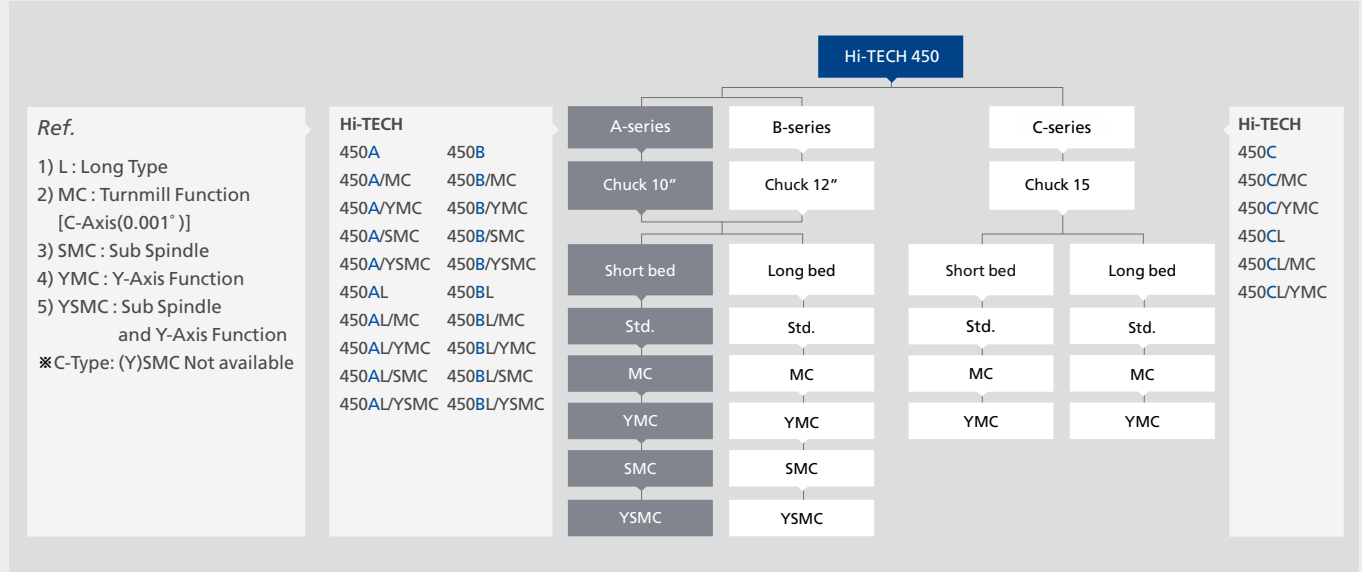


Product Configuration

Each product can be configured to fit your application.



Machine Specifications

| ITEM                           | Hi-TECH 450 SERIES |   |                                    |   |  |                                       |
|--------------------------------|--------------------|---|------------------------------------|---|--|---------------------------------------|
|                                | 450A[YSMC]         | 450B[YSMC]  | 450C[YMC]                          | 450AL[YSMC]   | 450BL[YSMC]  | 450CL[YMC]                            |
| <b>Capacity</b>                |                    |   |                                    |   |  |                                       |
| Swing over Bed                 | mm (inch)          | Ø700 (27.56")   |                                    |   |  |                                       |
| Swing over Saddle              | mm (inch)          | Ø550 (21.65")   |                                    |   |  |                                       |
| Max. Cutting Diameter          | mm (inch)          | Ø420 (16.54")   |                                    | Ø500 (19.69")<br>[MC: Ø420 (16.54")]                      | Ø420 (16.54")  |                                       |
| Standard Cutting Diameter      | mm (inch)          | Ø295 (11.61")<br>[MC: Ø254 (10")]   |                                    | Ø308 (12.13")<br>[MC: Ø254 (10")]                         | Ø295 (11.61")<br>[MC: Ø254 (10")]  |                                       |
| Max. Turning Length            | mm (inch)          | 760 (29.92")<br>[MC: 637 (25.08")]  | 737 (29.02")<br>[MC: 614 (24.17")] | 673 (26.49")<br>[MC: 550 (21.65")]                        | 1,360 (53.54")<br>[MC: 1,237 (48.7")]  | 1,337 (52.64")<br>[MC: 1,214 (47.8")] |
| Chuck Size                     | inch               | 10" (sub: 8")   | 12" (sub: 8")                      | 15"   | 10" (sub: 8")  | 12" (sub: 8")                         |
| <b>Spindle</b>                 |                    |   |                                    |   |  |                                       |
| Type of Spindle Nose           | ASA                | A2 - 8 (sub: A2 - 6)  |                                    | A2 - 11   | A2 - 8 (sub: A2 - 6)   |                                       |
| Max. Spindle Speed             | rpm                | 3,500 (sub: 4,000)  |                                    | 1,800   | 3,500 (sub: 4,000)   |                                       |
| Through Spindle Hole Diameter  | mm (inch)          | Ø90 (3.54")<br>[sub: Ø62 (2.44")]   |                                    | Ø132 (5.20")  | Ø90 (3.54")<br>[sub: Ø62 (2.44")]  |                                       |
| Max. Bar Size                  | mm (inch)          | Ø76 (2.99")<br>[sub: Ø51 (2.01")]   |                                    | Ø116 (4.57")  | Ø76 (2.99")<br>[sub: Ø51 (2.01")]  |                                       |
| Spindle Bearing Inner Diameter | mm (inch)          | Ø140 (5.51")<br>[sub: Ø100 (3.94")]   |                                    | Ø180 (7.09")  | Ø140 (5.51")<br>[sub: Ø100 (3.94")]  |                                       |
| Spindle Motor (30min/cont)     | kW(HP)             | 22 / 18.5 (30 / 25)[Sub: 7.5 / 5.5(10 / 7.5)]                                       |                                    | 22 / 18.5 (30 / 25)                                       | 22 / 18.5 (30 / 25)[Sub: 7.5 / 5.5(10 / 7.5)]  |                                       |
| <b>Turret</b>                  |                    |   |                                    |   |  |                                       |
| Number of Tool Station         | ea                 | 12  |                                    | 10 (MC: 12)   | 12   |                                       |
| Tool Size (OD x ID)            | mm (inch)          | □25 x Ø50 (□1" x Ø1.97")  |                                    |   |  |                                       |
| Turret Indexing Time           | sec/step           | 0.25  |                                    |   |  |                                       |
| <b>Axes</b>                    |                    |   |                                    |   |  |                                       |
| Rapid Speed (X / Z / Y / B)    | m/min (ipm)        | 20 / 24 / 10 / 16<br>(787.4 / 944.8 / 393.7 / 629.92)                               |                                    | 20 / 24 / 10 / -<br>(787.4 / 944.8 / 393.7 / -)           | 20 / 24 / 10 / 16<br>(787.4 / 944.8 / 393.7 / 629.92)                                    |                                       |
| Max. Stroke (X / Z / Y / B)    | mm (inch)          | 280 / 790 / 120 (±60) / A:690, B:670<br>(11.02" / 31.1" / 4.72" / A:27.1", B:26.3") |                                    | 280 / 790 / 120 (±60) / -<br>(11.02" / 31.1" / 4.72" / -) | 280 / 1,390 / 120 (±60) / A:1,290, B:1,270<br>(11.02" / 54.72" / 4.72" / A:50.7", B:50") |                                       |
| Feed Motor (X / Z / Y / B)     | kW(HP)             | 4.0(5.4) / 4.0(5.4) / 4.0(5.4) / 1.6(2.2)   |                                    | 4.0(5.4) / 4.0(5.4) / 4.0(5.4) / -                        | 4.0(5.4) / 4.0(5.4) / 4.0(5.4) / 1.6(2.2)  |                                       |
| <b>Tailstock</b>               |                    |   |                                    |   |  |                                       |
| Tailstock Travel               | mm (inch)          | 650 (25.59")  |                                    |   | 1,250 (49.21")   |                                       |
| Quill Dia.                     | mm (inch)          | Ø100 (3.94")  |                                    |   |  |                                       |
| Taper Hole                     | MT                 | MT # 5 (Live Center)  |                                    |   |  |                                       |
| Quill Stroke                   | mm (inch)          | 120 (4.72")   |                                    |   |  |                                       |
| <b>Turnmill</b>                |                    |   |                                    |   |  |                                       |
| Rotary Tool Spindle Motor      | kW                 | 3.7 / 2.2   |                                    |   |  |                                       |
| Max. Rotary Tool Speed         | rpm                | 5,000   |                                    |   |  |                                       |
| Max. Drill / Tap Size          | mm (inch)          | Ø20 (0.79") / M16   |                                    |   |  |                                       |
| Min. Spindle Indexing Angle    | °(deg)             | 0.001° (sub: 0.001°)  |                                    |   |  |                                       |
| <b>Tank Capacity</b>           |                    |   |                                    |   |  |                                       |
| Lubrication                    | ℓ (gal)            | 12(3.17)  |                                    |   |  |                                       |
| Hydraulic                      | ℓ (gal)            | 50(13.21)   |                                    |   |  |                                       |
| Coolant                        | ℓ (gal)            | 190 (50.19)   |                                    |   | 240 (63.4)   |                                       |
| <b>Power Source</b>            |                    |   |                                    |   |  |                                       |
| Electrical Power Supply        | kVA                | STD, MC, YMC: 50 / SMC, YSMC: 55  |                                    |   |  |                                       |
| <b>Dimension</b>               |                    |   |                                    |   |  |                                       |
| Height                         | mm (inch)          | 1,875(Y:2,205) [73.82"(Y:86.81")]   |                                    |   |  |                                       |
| Floor Space (L x W)            | mm (inch)          | 3,500 x 1,970(Y: 2,045)[137.80" x 77.56"(Y: 80.51")]                                |                                    |   | 4,100 x 1,970(Y: 2,045)[161.42" x 77.56"(Y: 80.51")]                                     |                                       |
| Weight                         | kg(lb)             | STD: 5,500(12,125) / MC: 6,000(13,228) / YMC: 6,500(14,330) / YSMC: 7,500(16,535)   |                                    |   | STD: 6,800(14,991) / MC: 7,300(16,094) / YMC: 7,800(17,196) / YSMC: 8,800(19,401)        |                                       |
| <b>NC Controller</b>           |                    |   |                                    |   |  |                                       |
| Fanuc Oi-TF                    |                    |   |                                    |   |  |                                       |