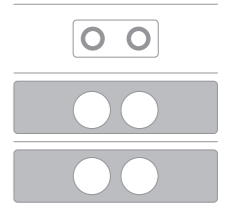
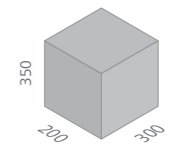




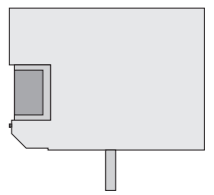
| Working range | | |
|---|-------------------------------------|------------------------|
| X-axis | 200 mm | |
| Y-axis (toolchange position) | 350 mm (525 mm) | |
| Z-axis | 300 mm | |
| Spindle distance | 200 mm | |
| Workpiece carrier | | |
| Swivel carrier / counterbearing with crown gear: swivel time 0 / 180° | approx. 2,25 s | |
| A- and U-axis, prepared for mounting a fixture plate, up to max. | ø 425 mm x 630 mm | |
| Drive system | Torque motor | |
| Load capacity | 2 x 160 kg | |
| Speed range A-, U-axis | 1 - 100 rpm | |
| C- and W-axis* | 2 satellites | |
| Work spindle | | |
| | HSK-A40 | HSK-E40* |
| Speed range / Run up time 0 - n _{max} | 1 - 25 000 rpm / < 0,7 s | 1 - 36 000 rpm / 1,5 s |
| Spindle bearings ø | 50 mm | 50 mm |
| Power / Torque (40% duty cycle) | 2 x 18 kW / 17 Nm | 2 x 14 kW / 7 Nm |
| Feed drive | | |
| Drive system | Ball screw | |
| Rapid traverse X / Y / Z | 70 / 70 / 70 m/min | |
| Axis acceleration X / Y / Z | 15 / 15 / 20 m/s ² | |
| Max. feed thrust X / Y / Z | 4 500 / 6 500 / 4 500 N | |
| Accuracy | | |
| Position measuring system | Direct, absolute | |
| Positioning tolerance X / Y / Z | Tp = 0,006 mm | |
| Tool magazine | | |
| Toolchange system | Pick-Up | |
| Capacity | 2 x 20 (2 x 40, 2 x 60)* | |
| Max. tool ø | 45 / 110 mm (-o-) | |
| Max. tool length | 225 mm | |
| Max. tool weight HSK-A40 | 2,0 kg | |
| Toolchange | | |
| Chip-to-chip time | approx. 2, 00 s | |
| Weight / Dimensions | | |
| Total weight | approx. 6 300 kg | |
| Transport dimensions W x H x L | 1,92 m x 2,35 m x 2,55 m | |
| Space machine | 4,15 m ² | |
| Machine installed W x H x L | 3,20 m x 2,90 m x 5,20 m | |
| Connected load | | |
| Operating voltage | 3 x 400 Volt, 50 Hz, TN-S/TN-C Netz | |
| Total connected load | 37 kVA | |
| Mean air consumption | 0,4 Nm ³ /min (5,5 bar) | |
| CNC control system | | |
| Siemens | SINUMERIK 840D sl | |



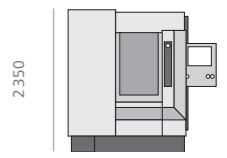
DOUBLE SWIVEL CARRIER
2 OR 4 ROTARY TABLES*



WORKSPACE PER SPINDLE



2 550

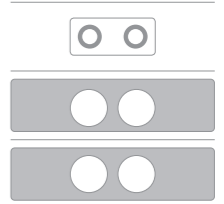


1 920

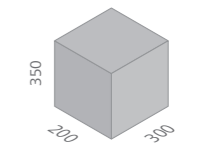
*optional, **on request, -o- occupancy of multiple magazine positions. Details depending on equipment. Technical data according to project planning. Deviation +/- 15% reserved. Subject to change without notice.



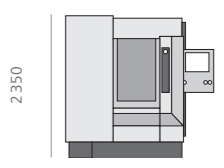
| Working range | | |
|--|-----------------------------------|------------------------|
| X-axis | 200 mm | |
| Y-axis (toolchange position) | 350 mm (525 mm) | |
| Z-axis | 300 mm | |
| Spindle distance | 200 mm | |
| Workpiece carrier | | |
| Swivel carrier / counterbearing with | | |
| crown gear: swivel time 0 / 180° | approx. 2,25 s | |
| Drive system | Torque motor | |
| Speed range A-, U-axis | 1 - 100 rpm | |
| C- and W-axis* | 2 satellites | |
| Work spindle | | |
| | HSK-A40 | HSK-E40* |
| Speed range / Run up time 0 - n _{max} | 1 - 25 000 rpm / < 0,7 s | 1 - 36 000 rpm / 1,5 s |
| Spindle bearings ø | 50 mm | 50 mm |
| Power / Torque (40% duty cycle) | 2 x 18 kW / 17 Nm | 2 x 14 kW / 7 Nm |
| Feed drive | | |
| Drive system | Ball screw | |
| Rapid traverse X / Y / Z | 70 / 70 / 70 m/min | |
| Axis acceleration X / Y / Z | 15 / 15 / 20 m/s ² | |
| Max. feed thrust X / Y / Z | 4500 / 6500 / 4500 N | |
| Accuracy | | |
| Position measuring system | Direct, absolute | |
| Positioning tolerance X / Y / Z | Tp = 0,006 mm | |
| Tool magazine | | |
| Capacity | Max. 24 Pallets | |
| Pallet size | 632 x 436 mm / Inlay 600 x 400 mm | |
| Workpiece dimension | 100 x 100 x 50 mm | |
| Positioning speed | 15 m/min | |
| Travel distance | 864 mm | |
| Positioning time for 36 mm (space / space) | 0,36 s | |
| Positioning time for 864 mm | 3,8 s | |
| Total permissible load | 400 kg | |
| Robot | | |
| Type | LR Mate 200iD, Fa. Fanuc | |
| Range | 717 mm | |
| Load capacity | 7 kg | |
| Pallet change (space / space at v _{lin} = 30 m/min) | 25 s | |
| Weight / Dimension | | |
| Total weight | 7 000 kg | |
| Transport dimensions W x H x L | 1,95 m x 2,37 m x 3,60 m | |
| Space machine | 5,3 m ² | |
| Energy consumption robot (is added to the standard machine) | | |
| Productive operation Active power | 1,0 kW | |
| Productive operation Air consumption | 0,1 Nm ³ /min | |



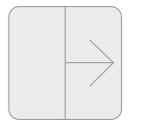
DOUBLE SWIVEL CARRIER
2 OR 4 ROTARY TABLES*



WORKSPACE PER SPINDLE



1920



INTEGRATED
AUTOMATION*

*optional, **on request, -o- occupancy of multiple magazine positions. Details depending on equipment. Technical data according to project planning. Deviation +/- 15% reserved. Subject to change without notice.