



## E MX2 series - technical information

### Machine concept, drive technology and axes speed

Machine basis	Natural granite base with low coefficient of thermal expansion for high accuracy and less vibrations.
XY-axes drive	High-dynamic linear motor (wear- and maintenance-free)
Z-axis motor	High-dynamic linear motor (wear- and maintenance-free)
XY-axes speed	75 m/min (2,953 ipm)
Z-axis speed	25 m/min infeed and retraction (984 ipm infeed and retraction)
Tooling system	Prism slot + 1 contact mushroom (mushroom required for CBD)

### Spindles

#### Asynchronous motor

#### Synchronous motor

Drilling spindles	D1686-10 / D1686-180 (160 k / 180 k), PS 300 (300 k)	SM 170S (170 k), SM 220S (200 k)
Routing Spindles	D1331-26 (125 k)	SM 60S (60 k)

### Automatic tool change systems

Euro tool cassette	1 x 110 tools or 2 x 110 tools
Euro tool chain	Tool chain with 3,300 tools (Loading and unloading during production)
Japanese tool cassette	not available

### Features / options

Process stability and process control	Contact Bid Detection, Real-time Broken Bit Detection, Quick Drill Function, Online Accuracy Check, PFIS, S50 Software in English, Chinese, Korean, Japanese (graphical user interface), Laser station, Insert Wearout Control
Applications	Depth drilling/routing by CBD, 2nd measurement system for depth drilling/routing, Smooth Drilling, CCD
Specials	Tooling system with 6 mushroom clamps, individual loading system, pneumatic cover

### Format sizes

Max formats (XY) w/o loader (one contact mushroom)	656 x 714 mm 25.8 x 28.1 inch
Max formats (XY) with loader (one contact mushroom)	633 x 702 mm 24.9 x 27.6 inch
Min / max formats (XY) w/o loader with 6 strd. mushrooms	258 x 714 / 633 x 714 mm 10.2 x 28.1 / 24.9 x 28.1 inch
Min / max formats (XY) with loader with 6 strd. mushrooms	298 x 702 / 633 x 702 mm 11.7 x 27.6 / 24.9 x 27.6 inch

### Machine accuracy

Positioning accuracy	Cpk value must be > 1.67; Cpk tolerance $\pm 18 \mu\text{m}$ (Schmolz method of measuring machine accuracy)
Depth drilling accuracy	With CBD: $\pm 12 \mu\text{m}$ / with 2nd measurement system: $\pm 20 \mu\text{m}$

### Installation data

Machine weight (net / gross)	6,200 kg (13,669 lb) / 7,000 kg (15,432 lb)
Floor loading	2,000 kg/sqm. No special floor foundation is required! Machine is put on 3 machine feet.
Machine dimensions w/o loader L x W x H	2,100 x 1,920 x 1,722 mm (height incl. signal light 2,072 mm) 82.7 x 75.6 x 67.8 inch (height incl. signal light 81.6 inch)
Footprint w/o loader + periphery L x W	4,030 x 4,000 mm (with Loader 4,030 x 4,900 mm) 158.7 x 192.9 inch (with Loader 158.7 x 192.9 inch)