



ULTRA-PRECISION-MILLING MACHINE

MMC 600 900

SPECIFICATIONS:

Control:	Delta Tau Power Pmac
CNC-axis:	X und Z, Y (optional), A, C (optional)
Bearing Type:	X-axis air bearing design , Z-axis roller-bearing
Drive system:	DC servo motors
Travel:	X = 600 mm, Z = 410 mm / X = 900 mm, Z = 410 mm
Speed:	1 mm / min up to 800 mm / min

MILLING SPINDLE:

Bearing Type:	air bearing design
Drive system:	brushless DC motor
Speed range:	100 - 3000 RPM
Milling head diameter:	Ø 200 mm up to Ø 500 mm

OPTIONS:

Workpiece thickness measurement ($\pm 0,5 \mu\text{m}$)
Milling spindle for workpiece up to Ø 500 mm
Manually operated tilting axis (B-axis), 360°
Interferometer: measuring area max. 12"
Indexing head (air bearing) for polygon manufacture
Rotary table (air bearing)
Y-axis (roller- air-bearing design)

ULTRA-PRECISION-MILLING MACHINE

MMC 600 900



Non ferrous metals
plastics and
crystals

LT ULTRA
OUR PROFESSION IS PRECISION

MMC 600/900

ULTRA-PRECISION-MILLING MACHINE

- Aerostatic bearing technology
- Granite base
- Passive vibration isolation system
- Flatness: 0,1 μm within \varnothing 100 mm
- Roughness: 2 nm (Ra)

The MMC (micro milling center) series machines were developed according to the needs of ultra precision milling. By using diamond tools, optical surface quality can be achieved on a wide range of materials like crystals, nonferrous metals and plastics. The MMC 600/900 is the basis for a series of machines that, via several accessories and options, can be fully customized to individual needs. In the basic version the machine consists of a main X-axis featuring a linear air bearing (feed axis), a linear roller bearing Z-axis (infeed axis) and the milling spindle (air bearing) mounted on top of Z. The main application is face milling of optical and mechanical precision components. Several accessories like a Y-Axis, an A-axis and/or C-axis are available, thus expanding the range of machinable parts to microstructures, lenticular structures, spheres, polygons and so on. Accessories, like vacuum chucks, different milling spindles, touch probes for part thickness measurement and even machine interferometers for insitu measurement of workpiece shape, make the MMC 600 and 900 machines an effective tool. Besides further accessories, there is the possibility to make customized solutions, to adapt the machine to your needs. Please do not hesitate to contact us.



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