

SANTA BARBARA
DENTAL



5-Axis - Metal Milling Machine

My **EVOLUTION**
FAST

Metal Milling Machine

MY EVOLUTION Fast

DGSHAPE introduces the latest metal milling solutions from Santa Barbara Dental.
A compact 5-Axis metal milling machine manufactured in compliance with the highest standards in the dental market.

Simple and intuitive, it has been developed using the most innovative technologies to meet the demands of the dental technology industry, for metal milling, complementing DGSHAPE's highly successful DWX series mills.

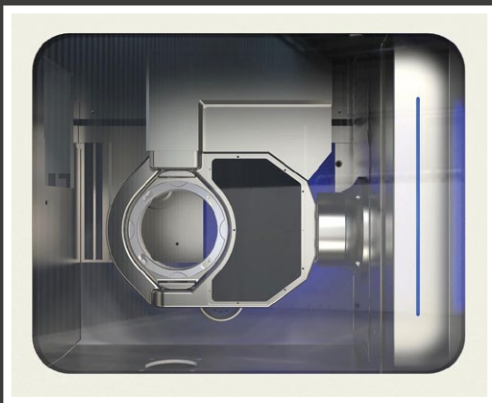
The My Evolution Fast comes with international ISO certification, and is compatible with any CAM software available on the market. This makes it easy to start using immediately, eliminating the initial learning curve and allowing the mill to benefit from continuous software innovations.

Fitted with the advanced technologies.

- Simultaneous 5-Axis numeric control.
- Axis rotation:
Axis A +24 degrees -115 degrees,
axis B +/- 360 degrees continuously.
- 3.6 kW high frequency spindle with a rotation speed of 60,000 RPM, air and coolant nozzle.
- 20 tool positions with integrated control of the tool length with 1 micron accuracy.
- All the 3+2 axes are centrally controlled continuously by motors and brushless servo systems.
- CAD-CAM



- Machinable materials: Titanium, Cobalt Chrome and Lithium disilicate.



“ My Evolution Fast is **highly versatile**, and capable of meeting every demand from the dental industry. ”

“ My Evolution Fast stays connected to ensure it **remains up-to-date** with the latest software. ”



Technical specifications

My Evolution Fast

Machine's external dimensions (mm)

750mm(L) x 850mm (P) x 1800mm(H)

Work area (mm)

350 mm (W) x 350 mm (D) x 480 mm (H)

Machine strokes (mm)

X163mm, Y116mm, Z80mm

Rotation angles

A = +24°-115° B = +/-360°

Motors and Brushless Servo systems

X,Y,Z,A axes 400W power B axis 200W power All with brake

- Fitted with Precision encoder
- Power supply 36 VDC
- Protection rating: IP65
- Nominal speed 3,000 rpm

Tool change stations with tool length sensor and tool breakage detector

- 20 positions
- Tool shaft diameter = 6 mm

Automatic tool pre-setting

- Tool measuring precision ± 0.001 mm (1 μ m)
- Tool length 50-57 mm

Spindle

- Power 3.6KW
- 6,000 to 60,000 rpm
- Tool holder clamp diameter 6mm
- Automatic spindle pressurisation 0.9 bar
- Tool lock adjustment

Axes A and B

A Axes Movement = +24°-115° B = +/- 360° (continuously)

Rotation angles with precision reducers with thousandth helicoidal toothing

X Y Z axes

Linear axes via ball bearing guides and pads with thousandth attainability, pre-loaded thousandth precision ball bearing rectified precision screws with 0 slack.

Material holder for

standard Ø 98.5 mm disks including edge

15" Touch screen control panel

Standard

Incorporated Industrial PC

Standard

Santa Barbara 5-axis CNC SBM

Standard

USB Interface

Standard

Ethernet Interface
Standard

Automatic air jet
Standard

Compressor requirements
Oil free - Dryer
Capacity 200 l/min
Pressure 6.5 bar (0.65 MPa)

Automatic water jet
Standard

Weight
Overall machine weight c. 300 kg
(excluding accessories)

Work Chamber Suction
Standard

Use and maintenance manual

After-sales support and warranty with helpline
managed by DGSHAPE EMEA



Standards and certificates

Directive on electromagnetic
compatibility:
2014 / 30 / UE

Machines directive:
2006 / 42 / CE

Low voltage directive:
2014 / 35 / UE

Santa Barbara Meccanica
Precision mechanics partner

