

SANTA BARBARA
DENTAL



5-Axis - Metal Milling Machine

My **EVOLUTION**
PLUS

Metal Milling Machine

MY EVOLUTION Plus

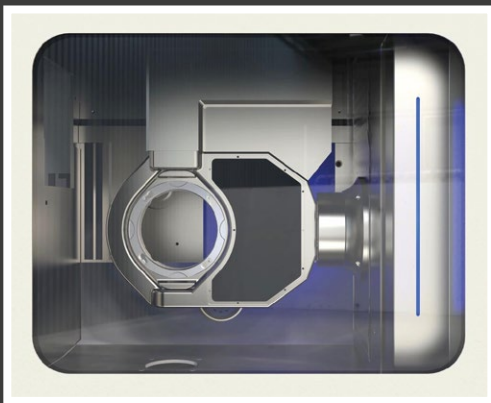
DGSHAPE introduces the latest metal milling solutions from Santa Barbara Dental.
A compact 5-Axis metal milling machine manufactured in compliance with the highest standards in the dental market.

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 Plus 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 advanced technologies.

- Simultaneous 5-Axis numeric control.
- Axis rotation:
Axis A +24 degrees -115 degrees,
axis B +/- 360 degrees continuously.
- 1.8 kW high frequency spindle with a rotation speed of 50,000 RPM, air and coolant nozzle.
- 14 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 Plus is **highly versatile**, and capable of meeting every demand from the dental industry. ”

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



Technical specifications

My Evolution Plus

Machine's external dimensions (mm)

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

Work area (mm)

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

Machine strokes (mm)

X160 mm, Y106 mm, Z75 mm

Rotation angles

A = +24°-115° B = +/-360°

Motors and Brushless Servo systems

X,Y,Z,A axes 400W power B axis 200W power A and Y 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 detection

- 14 positions

- Tool shaft diameter 6mm

Automatic tool pre-setting

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

- Tool length 45-52 mm

Spindle

- Power 1.8 kW

- 5,000 to 50,000 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 precision screws.

Material holder for

standard Ø 98.5 mm discs including step

15" Touch screen control panel

Standard

Incorporated Industrial PC

Standard

Santa Barbara 5-axis CNC SBM

Standard

Interface - USB

Standard

Interface Ethernet
Standard

Automatic air jet
Standard

Compressor requirements
Oil free - Dryer
Capacity 180 l/min
Pressure 6.5 bar (0.65 MPa)

Automatic water jet
Standard

Weight
Overall machine weight c. 200 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

