Vsmile® HappyZir

The one machine COVERS 90% of your milling needs

■ The 5-axis milling machine for **dry and wet** machining

5 Aixs

18 Tools

5 μm Accuracy

2.5kw
C5 grade high precision ball screw

18tools
Automatic changing tools module

Dry/Wet
All materials available

C5
High precision ball screw

5um
Repetition accuracy

20-28°C
Professional water-cooled spindle

Smile-Craft

C518DW Digital 5-axis Dry and Wet Milling Machine

Get to know better

WhatsApp : +8615084896166

www.vsmilecadcamzirconia.com

Smile-Craft

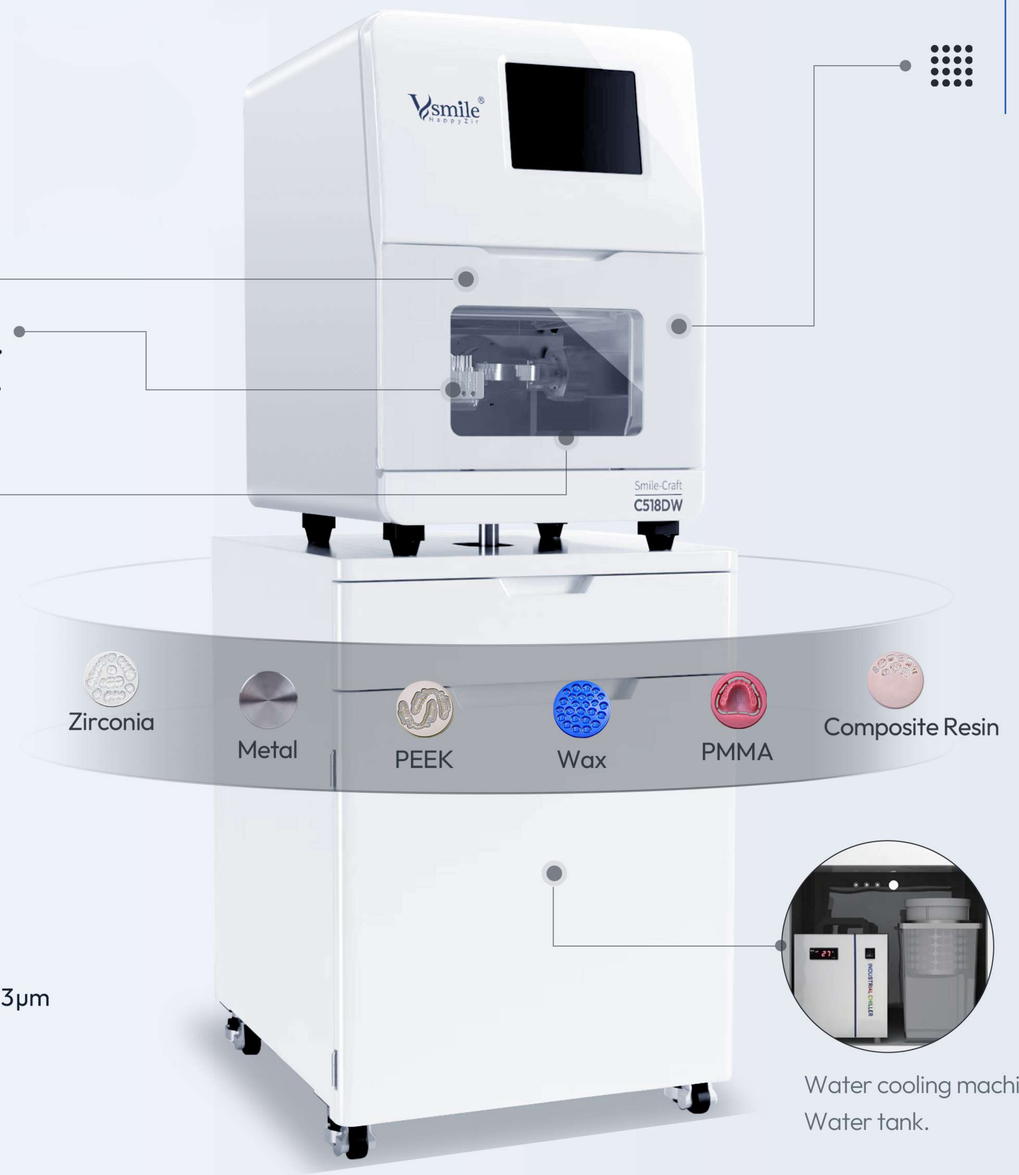
C518DW

The 5-axis milling machine for **Dry and Wet** machining

2.5 KW
Powerful Spindle
Water cooling

18 tools
Tool magazine protective cover.
Tool lifetime monitoring system.

Ultimate Versatility
- 98*35mm disc of titanium, zirconia, pmma...
- 6 glass ceramics and 3 pre-milled holder
- Large rotation angle, A axis±360°, B+90-30°
- Automatic Tool Magazine for 18 tools



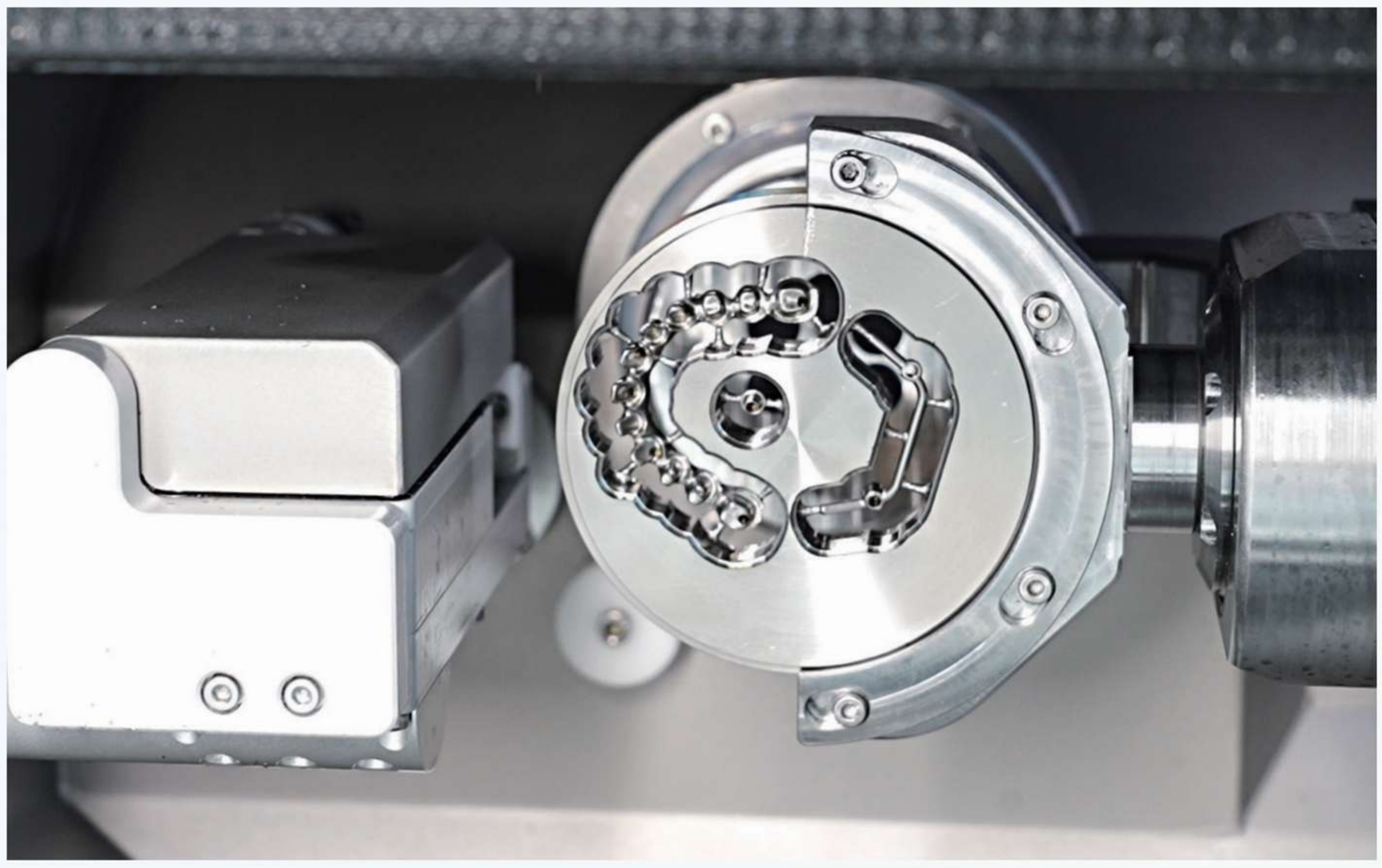
Other Functions
- Automatic calibration
- 90°milling for denture
- Automatic protection of tool magazine

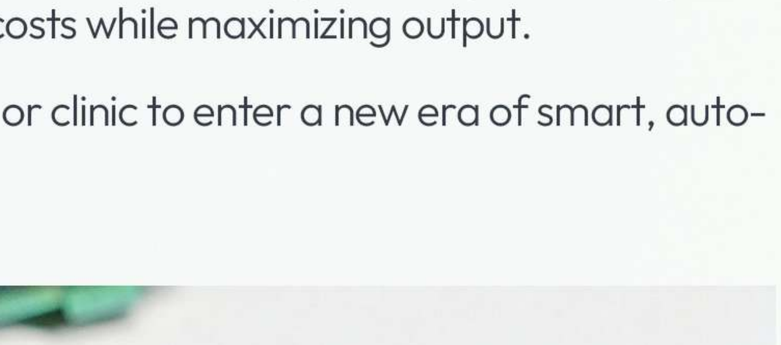
High Precision Features
- C5-grade high-precision ball screw
- P-grade linear guideway
- High-resolution servo control system
- Repetition positioning accuracy up to 5μm
- Hybrid ceramic ball bearings ensure maximum concentricity of < 3μm

Powered by **ball screws**,
Precision in every cut.

Water cooling machine
Water tank.

Cater to More Needs
- Crown/ Bridge
- Inlays/Onlays
- Abutments
- Veneer
- Model cast
- Denture
- Occlusal splint
- Screw-retained bridge
- Surgical guide
- Implant bar

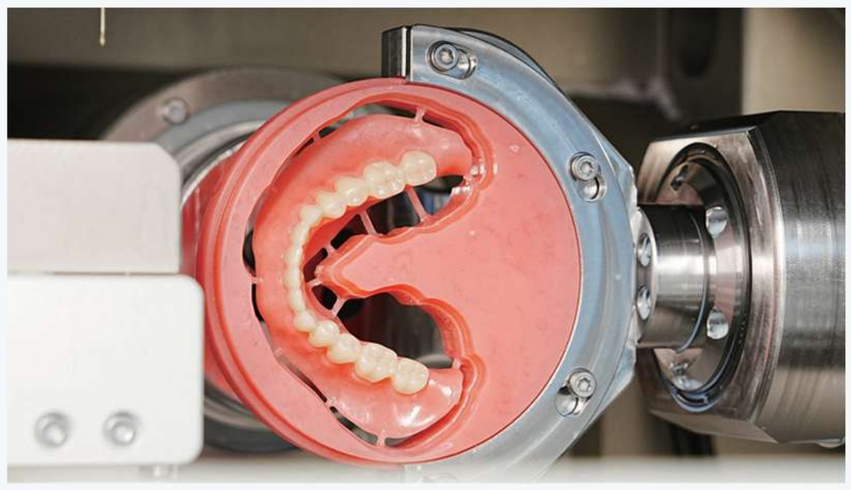




Vsmile introduces the C518DW, a next-generation productivity tool—not just a milling machine, but your gateway to greater efficiency and profitability.

Built to perform, the C518DW covers up to 90% of dental milling cases with ease. From titanium discs and pre-milled abutments to glass ceramics and zirconia, it handles a wide range of materials with confidence. Its integrated dry-wet design streamlines complex workflows, allowing one machine to replace many—cutting costs while maximizing output.

The C518DW simplifies operations and boosts productivity, empowering your lab or clinic to enter a new era of smart, automated manufacturing.



C518DW · Milling Faster, Finish Better

With powerful performance and micron-level precision, the C518DW effortlessly handles a wide range of dental milling tasks—delivering consistent, high-quality results.
By optimizing every milling detail and refining process control, it significantly reduces polishing steps, boosting efficiency and accelerating your turnaround time.

Smile-Craft

C518DW Digital 5-axis Dry and Wet Milling Machine

Get to know better

WhatsApp : +8615084896166

www.vsmilecadcamzirconia.com

SPECIFICATION

General

Processing mode:	Dry&Wet
Millable material:	Zirconia, Glass ceramics, Plastics | Wax, PEEK, Composite, Titanium
Applications:	Crown, Bridge, Veneer, Inlay | Onlay, Abutment, Denture, Screw - retained bridge | Model cast, Occlusal splint, Surgical guide, Implant bar
Power:	220V/3.2kW
Dimension:	525 × 700 × 784 mm
Weight:	150 kg
Air supply pressure:	>0.5 MPa
Air flow:	>90 L/min
Water tank capacity:	10L

Structure parameters

Basic construction:	Aluminium
Number of axes:	5
Rotary axis A - axis:	360°
Rotary axis B - axis:	+30°--90°
Tool:	18

Spindle

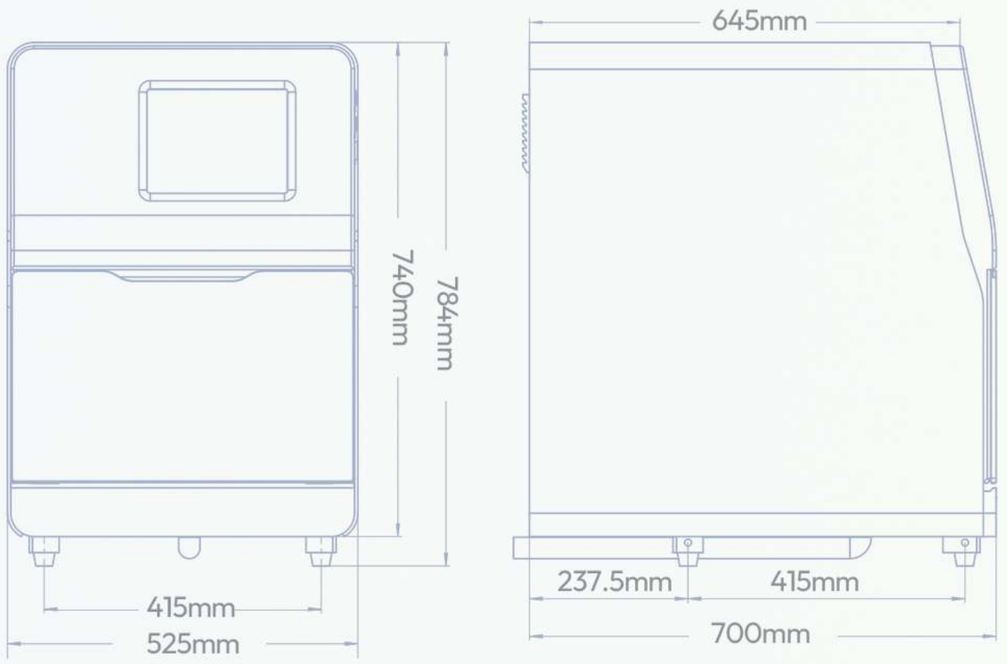
Speed:	60,000 rpm
Power:	2.5kW
Positioning/Repositioning accuracy:	0.01/ 0.005 mm
Collet:	Φ6 mm
Cooling method:	Water cooling

Approvals

All models:	CE
North America model:	FCC

Scope of delivery

CAM Software Adaptation:	Millbox / Hyperdent / WorkNC available
Clamps:	Half - open blank holder (C - CLAMP) Block holder Premill abutment holder



Smile-Craft

C518DW Digital 5-axis Dry and Wet Milling Machine

Get to know better

WhatsApp : +8615084896166

www.vsmilecadcamzirconia.com