GVM

Ultra-Precision CNC controlled milling machine

Anderson Group

ANDERSON EUROPE GMBH

TRADITION IN MECHANICAL ENGINEERING

Founded as a family-owned business, we develop and manufacture precision machinery for various industries. For over six decades we have worked closely with our customers and suppliers to find the best solutions for you.

As visionaries in mechanical engineering, we always strive for maximum precision with maximum performance. Process knowledge and application expertise form a solid foundation for technical advancement. Our goal is to push technological boundaries and create pioneering solutions. Our highly precise milling machines not only meet technological requirements but also pave the way for increased efficiency and competitiveness.

OUR SERVICE

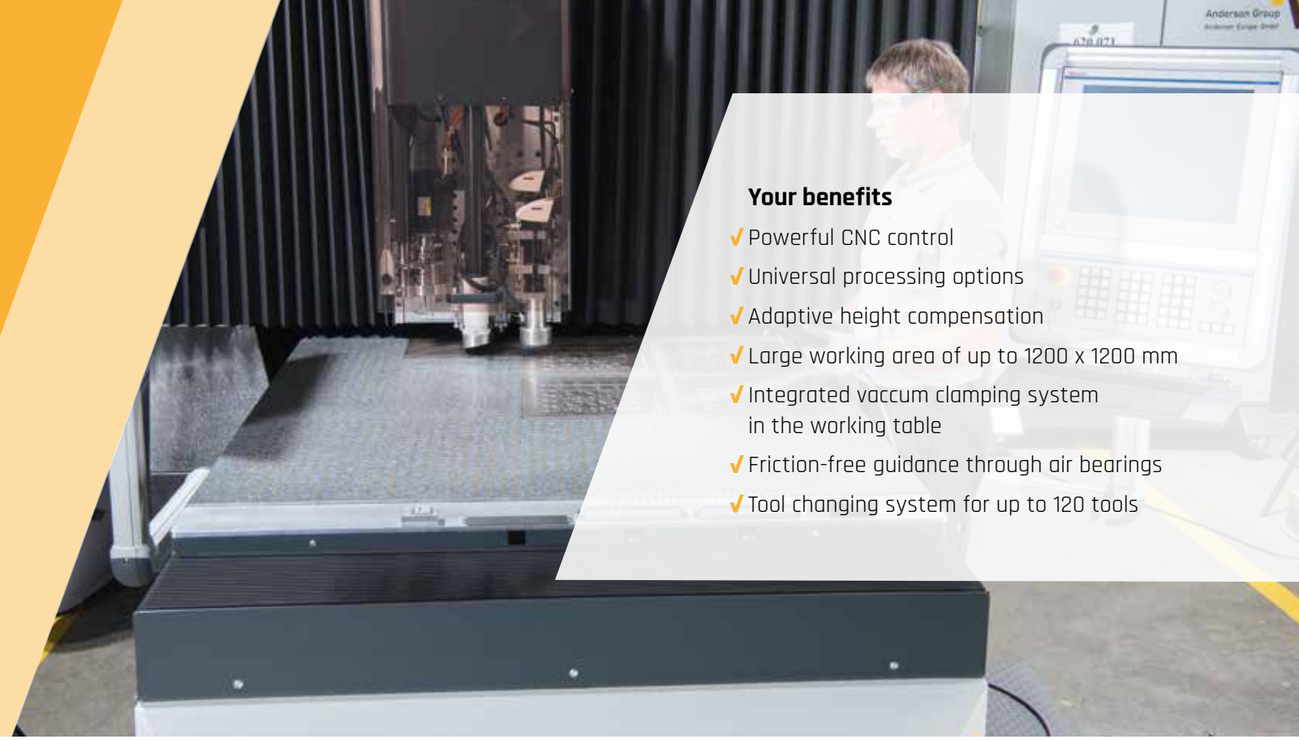
At Anderson Europe we understand that top-notch precision machinery impresses not only through its technical specifications but also through outstanding service that goes beyond delivery. Our commitment to your satisfaction is reflected in our service offerings.

Service

We support you both onsite and remotely. We place great emphasis on a comprehensive system to ensure technical availability.

Upgrades

Your machine can be adapted to new tasks. This keeps you up-to-date with the latest milling technology.



Your benefits

- ✓ Powerful CNC control
- ✓ Universal processing options
- ✓ Adaptive height compensation
- ✓ Large working area of up to 1200 x 1200 mm
- ✓ Integrated vaccum clamping system in the working table
- ✓ Friction-free guidance through air bearings
- ✓ Tool changing system for up to 120 tools

Ultra-precise CNC milling machine. Developed to meet the requirements of macro machining.

The GVM is an ultra-precise CNC milling machine for high-precision processing of sheet material.

Thanks to the use of granite in its construction, it is specially designed to withstand thermal environmental influences and ensure the necessary stability during macro machining.

The high intrinsic mass of the granite and a special guide system ensure optimum damping behavior to counteract mechanical vibrations during the production process. The GVM machining table meets all precision and quality requirements.

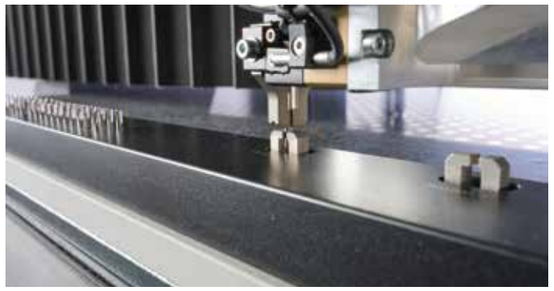
UNIQUE AND TECHNOLOGY-DRIVEN

Key features The machine base for the GVM is natural granite in fine-grained quality with an extremely low quartz content, which has excellent mechanical properties. As a material that is millions of years old, granite offers many advantages compared to conventional materials:

- Outstanding damping capacity for mechanical vibrations
- Extremely high wear resistance and long-term stability
- Significantly harder than steel, free from magnetic influences

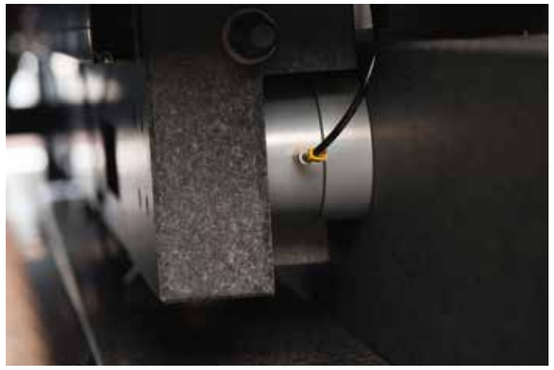
These physical properties of the granite base give the advantage to use pre-stressed air-bearing guides to meet the outstanding high requirements in terms of a jerk-free and precision positioning as well as the demand for an extremely high availability. The compressed air used as a medium in air-bearing guides prevents all friction and makes virtually maintenance-free working possible.

The feed-axes of the GVM feature consistent use of linear direct drives technology. Direct drives do not need any mechanical transmission elements (such as ball screws, toothed belts, toothed racks or similar devices) along the force route. As a result, they lend themselves especially well to really high-speed cutting processes (no wearing parts, robust motor technology and no maintenance), due to an excellent control performance and extremely good positioning behavior.

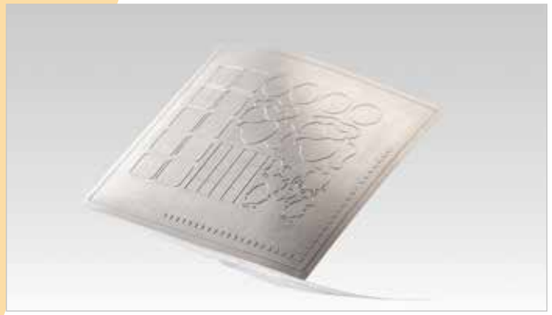


Adaptive System The iHOC system (integrated height optimized cutting system) flexibly ensures that the preselected workpiece height between the cutting edge and the bottom face of the die is maintained. The observance of preselected parameters and quality standarts during the entire machining process is optimized by the adaptive system.

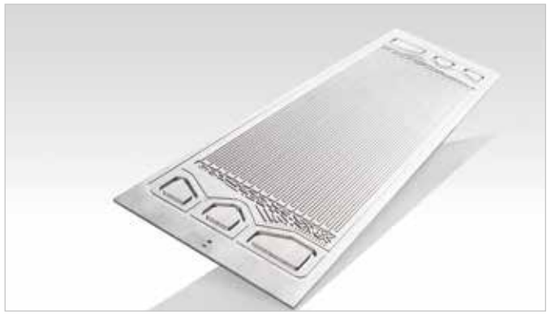
Contactless referencing While workpieces had to be set up manually and laboriously in manual mode, a smart camera now enables the automated alignment of said workpieces - quickly, reliably and independently of the operator. As the system accuracy of a conventional camera is significantly influenced by the operator, this influencing factor can be largely eliminated with the new camera technology. As a result, repeat accuracy is improved with fast set-up times, while at the same time reducing the workload on the machine operator.



APPLICATIONS



Graphic Industry - Flexible Die



Renewable Energies - Bipolar Plate

Electronics - SMT Carrier

Medical Industry - Micro drilling

Jewelry and Watchmaking - Watch Board

Electronics - SMT Stencil

ULTRA-PRECISION CNC CONTROLLED MILLING MACHINE

Specifications

Working Areas:	X 800 mm (31,5“) x Y 800 mm (31,5“) X 1200 mm (47,2“) x Y 1200 mm (47,2“)
Workpiece Clamping:	Solid Granite Table, Vacuum System with Micro-Injectors
Milling Spindle:	Air-Bearings, Water-Cooled, max. 100.000 rpm
CNC-Control:	Bosch Rexroth
Workpiece Referencing:	Various Options available, automatic / manual, with Camera System
Tool Change:	Various Options available, up to 120 Tools
Tool Measurement:	Contactless (laser)
Elec. Power Supply:	Approx. 14 kVA / 3 / N / PE 400V 50 Hz
Compressed Air Supply:	8 bar +/-5% gem. ISO 8573-1

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