



 **PROFIMILL**
evo

High-Gantry Portal Milling Machine

The Evolution of the ProfiMill Series

High-Gantry Portal Milling Machine in Compact Design

With the ProfiMill **evo**, WaldrichSiegen has developed a flexible yet highly productive high-gantry portal milling machine that combines the proven technology of the ProfiMill series with Herkules Monolith™ technology thus ensuring a rigid machine base that enables flexible, foundation-free installation.

The ProfiMill **evo** impresses with its compact and slim design. During the development process emphasis was placed on short commissioning times and flexible installation.

Flexible and Customizable

The concept of the ProfiMill **evo** is based on the existing modular system of the ProfiMill series. This means that all milling heads with a 450 masterhead interface are compatible and can be used unreservedly.

WaldrichSiegen also offers the development of special milling heads for extremely demanding requirements. By using a universal milling head with integrated B-axis, the ProfiMill **evo** becomes a 5-axis milling machine with maximum flexibility.

Dimensions

Clearance width	5,000 mm
Clearance height	2,000 mm

Performance

Torque	2,750 Nm max.
Drive	80 kW
Speed up to	6,000 min ⁻¹

Technical Data

X-axis	40,000 mm/min
Y-axis	40,000 mm/min
Z-axis	30,000 mm/min
C-axis	10 rpm
Travel distance X-axis	7,500 mm
Travel distance Y-axis	5,000 mm
Travel distance Z-axis	2,000 mm
Travel distance C-axis	+/- 190°



- 1 Crossbeam with integrated bed slide
- 2 Milling support with Masterhead interface
- 3 Automatic tool changing system with pick-up for spindle units
- 4 Monolith™ side walls with integrated gantry bed
- 5 Closed workspace with optional partition wall for pendulum operation

Designed for Highest Stability and Reliability

Developed for Heavy Roughing and Highly Dynamic Finishing Operations

- The rigid cast beds enable foundation-free installation forming the side walls of the working area at the same time
- Excellent mass distribution for optimum dynamic behavior



Sustainable Machine Tool Manufacturing in Germany

Saving Resources with Durable Products

Comprehensive resource-saving technologies for reducing energy consumption and emissions make the ProfiMill **evo** not only efficient, but also durable and sustainable

- Components with high energy efficiency such as LED lighting and frequency-controlled pumps and further units.
- The high cutting performance results in a reduced energy requirement per component thanks to short processing times.
- Strategies for energy recovery are used (e.g. combined heat and energy system, heat pumps etc.).
- The great variability of the ProfiMill **evo** leads to efficient use and applicability of the machine.
- We provide support for our machines even after decades, so that they can be used sustainably in the long term through modernization and overhaul.
- WaldrichSiegen is a partner of the VDMA's Blue Competence* sustainability initiative and is committed to complying with the twelve corresponding guidelines.

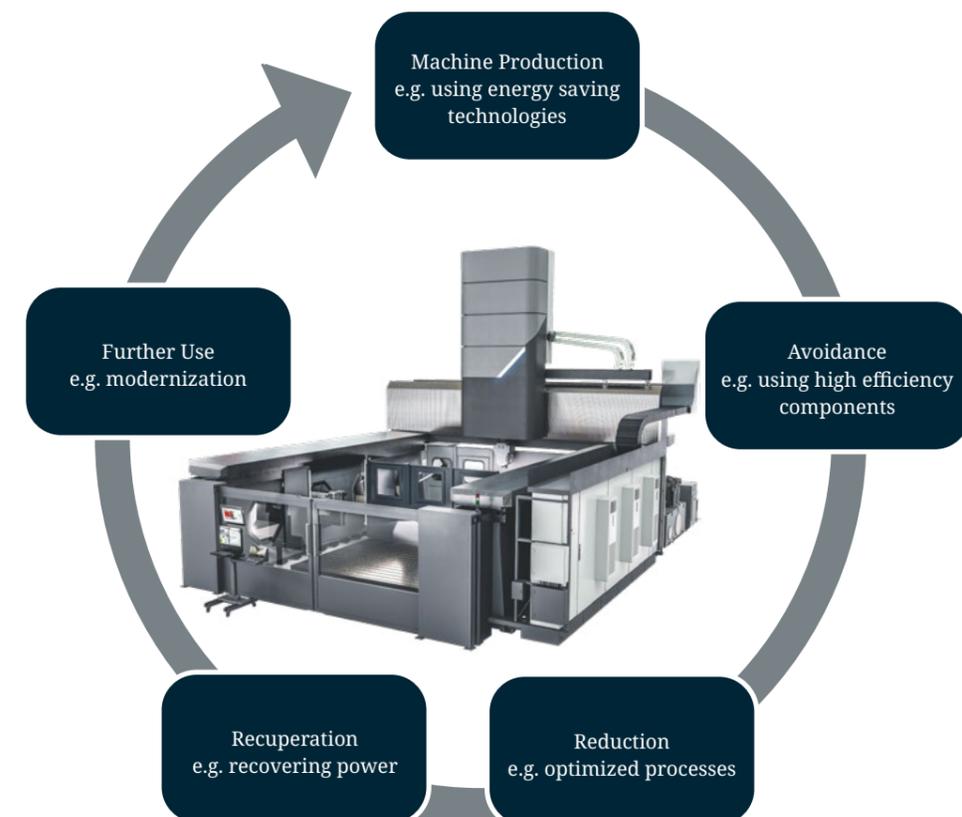
Maximum Performance Without Compromise

The ProfiMill **evo** is characterized by its compact dimensions and flexible installation options without compromising on performance.

Thanks to the hydrostatic guidance of the machine axes, the ProfiMill **evo** achieves highest precision and maximum cutting rates at the same time. The ProfiMill **evo** is designed for both finishing and heavy-duty machining.

- Small footprint required
- The machine achieves its quality without expensive and time-consuming foundation work
- Flexible installation: machine can be relocated if required
- Short delivery time due to modular design
- Short assembly times
- Long service life thanks to wear-free hydrostatic guideways

Saving Energy by...



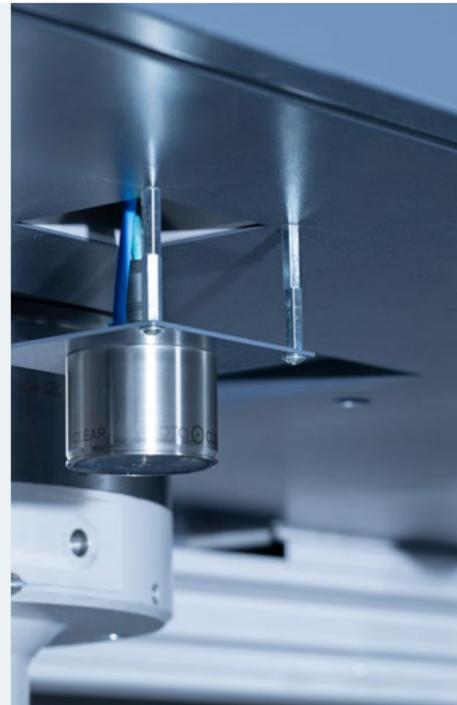
(*<https://www.vdma.org/mitglieder-bluecompetence>)

Digital Performance and Connectivity

The ProfiMill **evo** is supplied with the new Sinumerik ONE control. This provides the basis for a complete digital process chain. Modern software solutions increase productivity and support the entire operation of the machine.

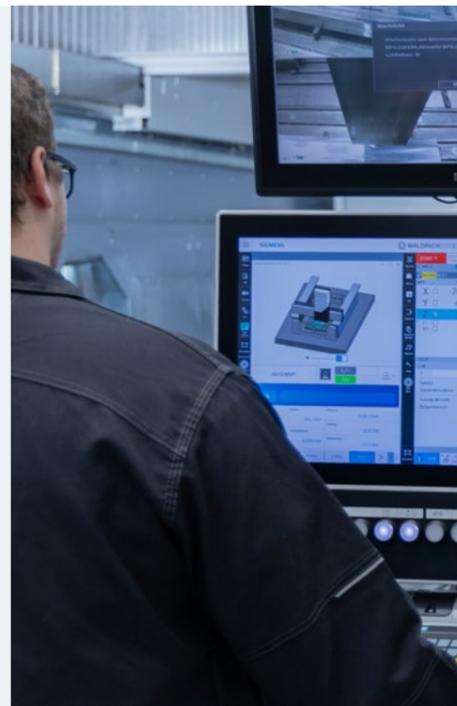
Process Monitoring with High-Tech Camera

A camera (zoom, pan, rotated) attached to the machine support and in each relevant work area can be set from the operating station. The camera image is output via a separate monitor.



Diagnostic System

A highly sensitive diagnostic system immediately detects faults, visualizes them and thus reduces downtimes and maintenance costs - for maximum machine availability. As an option, the customer's machine can be displayed three-dimensionally in order to localize the source of the fault as quickly as possible.



Wide Range of Options and Solutions for the Most Specific Requirements

New Standards in Productivity, Flexibility and Precision

- All guides are mounted on hydrostatic bearings
- Master-slave drives for backlash-free movements
- Cast components for excellent material damping
- Compact dimensions & design for optimum load distribution
- Maximum precision for heavy-duty machining
- Siemens Sinumerik ONE control system
- CAD/CAM systems with digital twin to increase productivity and avoid collisions
- Teleservice



Optional Equipment

- Automatic chain magazine for quick tool changes
- Both standardized and individualized milling heads
- Automatic milling head and unit changer
- Clean factory thanks to complete encapsulation of the work area. A foldable work area cover completely seals off the work area from the surroundings if required by the customer. In conjunction with an extraction system, emissions such as oil, coolant mist and dust are filtered and do not escape into the environment.
- Shuttle operation by separating the work area into two sub-areas: an optional partition wall provides two separately protected areas for set-up during machining
- Optional: Integrated rotary table in the panel field. This allows the ProfiMill **evo** to be used as a vertical turning machine for rotationally symmetrical machining of workpieces.
- Mobile panels ensuring improved ergonomics
- Tool and workpiece measuring station





**Elevating
Engineering
Excellence**