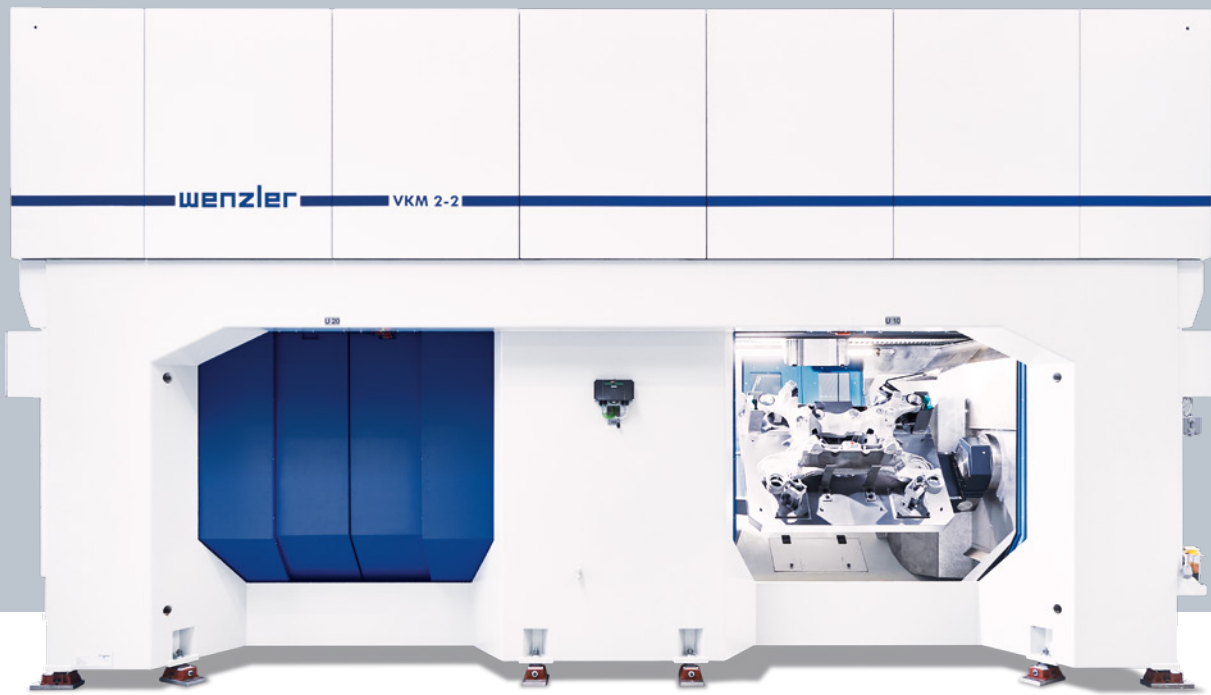




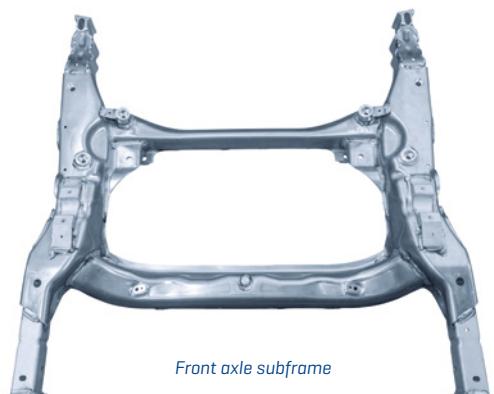
**TRUE GREATNESS
FOR STRUCTURAL COMPONENTS
IN SERIES LIGHTWEIGHT DESIGN
WENZLER VKM**



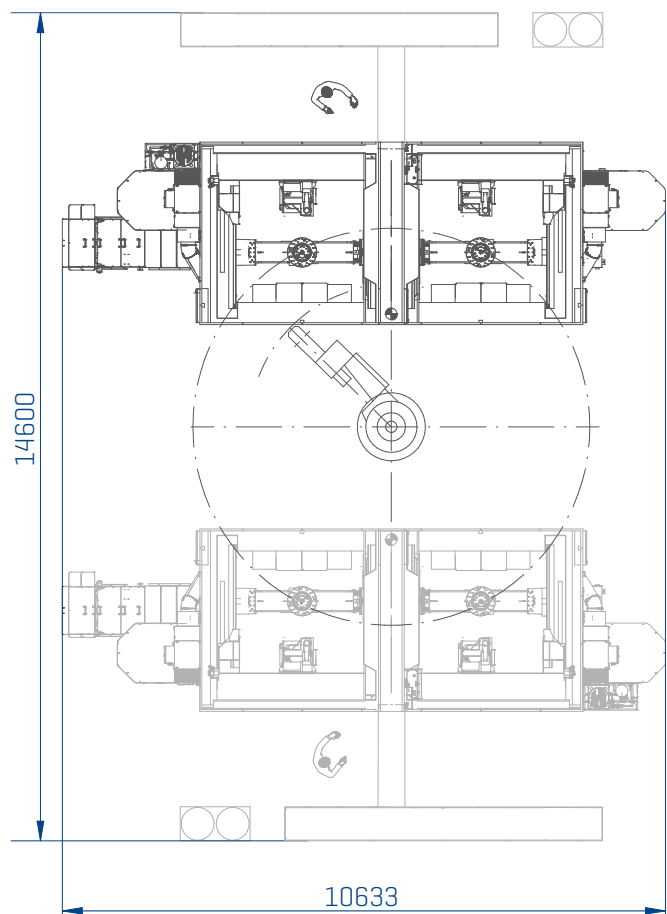
Wenzler VKM 2 – two spindles, two autonomous centers

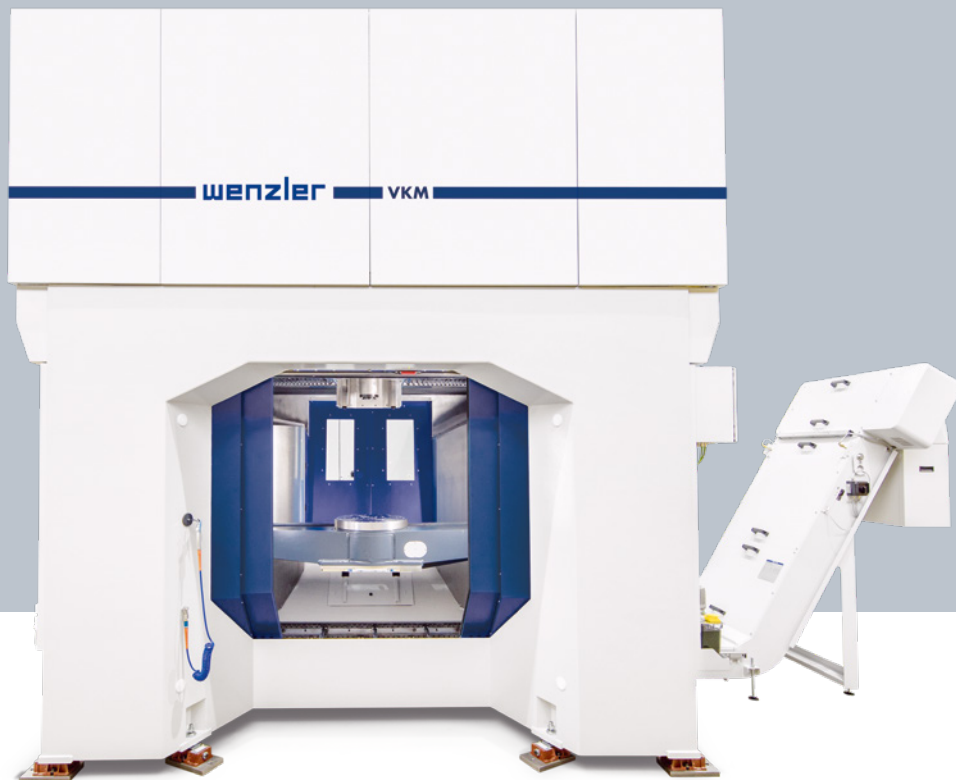
The Wenzler VKM 2 consists of two independent 5-axis machining centers, thus integrating two machines in one basic machine body. Due to this compact design, the VKM 2 offers unrestricted access possibilities. On a footprint of 10633 x 5500 mm, you thus get two 5-axis centers that can be optimally loaded and unloaded – a significant advantage in material flow-optimized layouts. The two centers operate autonomously and, apart from the control system, only share the supply units.

It is also possible to link several Wenzler VKM 2 machining centers. Intelligent automation can connect the machines and optimize the production flow.



Front axle subframe

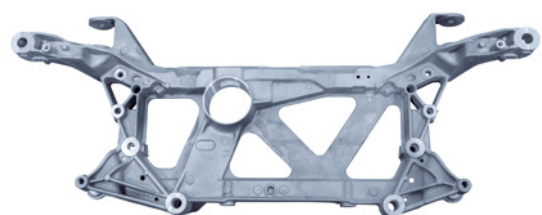
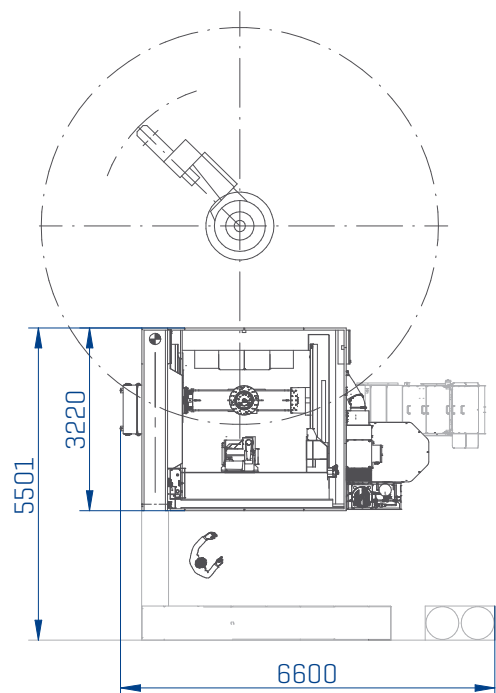




Wenzler VKM – Think big for better machining

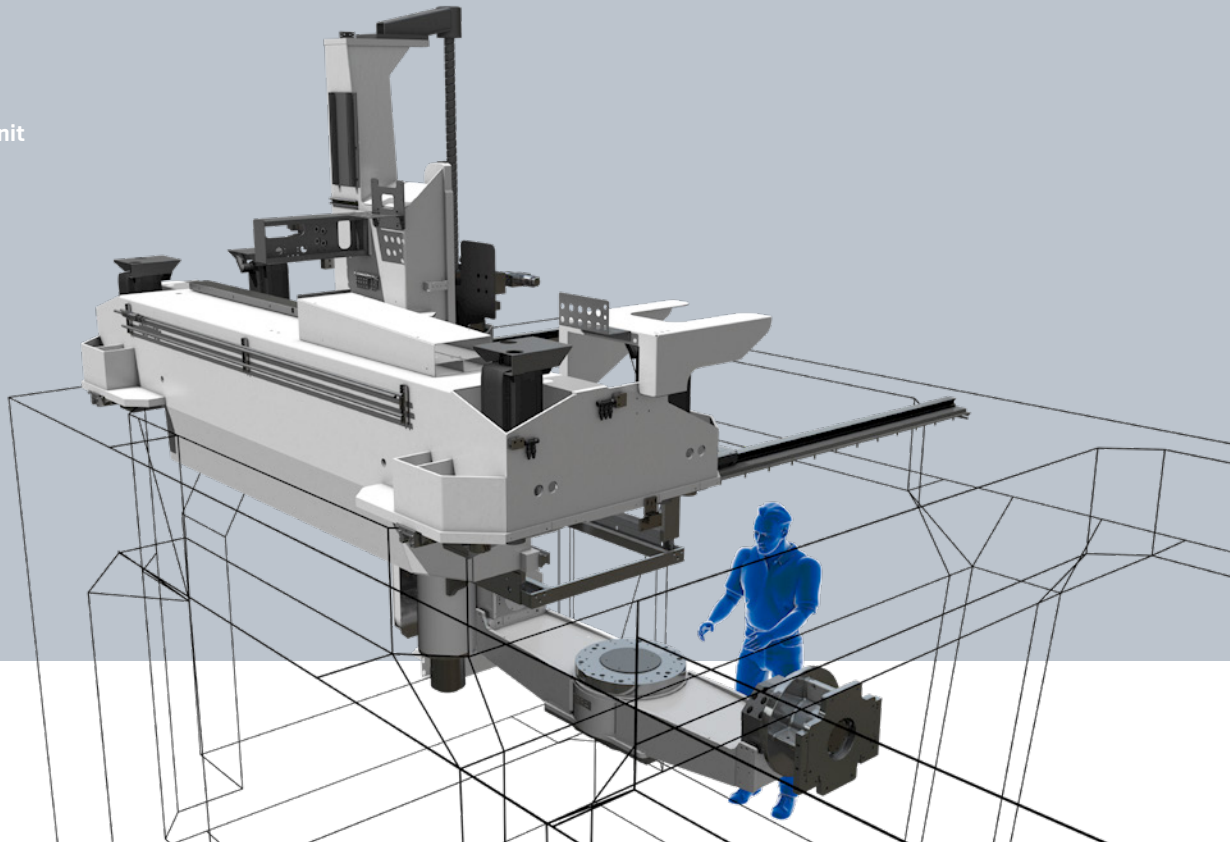
The consistent design of the Wenzler VKM for structural components offers fundamental advantages. The strengths of the vertical machining center include, among others, optimum automation capacity, free chip fall and high agility. The slim machine table guarantees good accessibility to the workpiece – often enabling 6-sided machining in one setup.

The axle configuration featuring the translational axes in the tool and the rotative axes in the work piece allows for the integration of large travel ranges with dimensions of 1500 x 1250 mm on a floor area of 5501 x 6600 mm. At the same time, the machining center is well accessible for the machine operator and during loading and unloading. The position of the control cabinet can be freely chosen according to the layout.



Front axle subframe

Made for great tasks:
Wenzler processing unit



Wenzler VKM – an agile machining center

The Wenzler VKM features special construction characteristics offering decisive advantages in industrial application. A stable, self-supporting and vibration-damping cube forms the machine base.

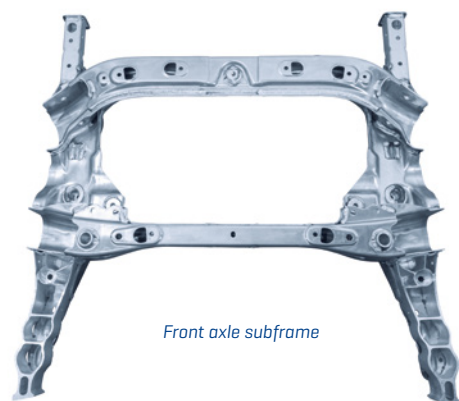
This cube carries the 3-axis unit and offers access to the machining area from two opposite sides. Rotary axle drives and counter bearings and magazines are integrated into the remaining side openings. To increase agility and economic efficiency, the cube has a steel monocoque design and the monocoque is filled with a vibration-reducing and self-hardening special material [Hydropol®].

Technical highlights of the vertical 5-axis machining center:

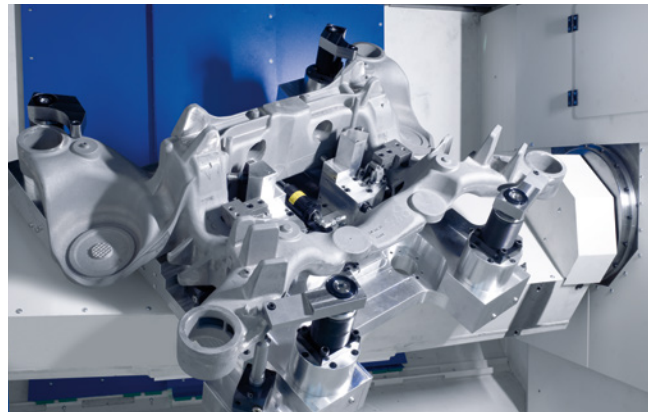
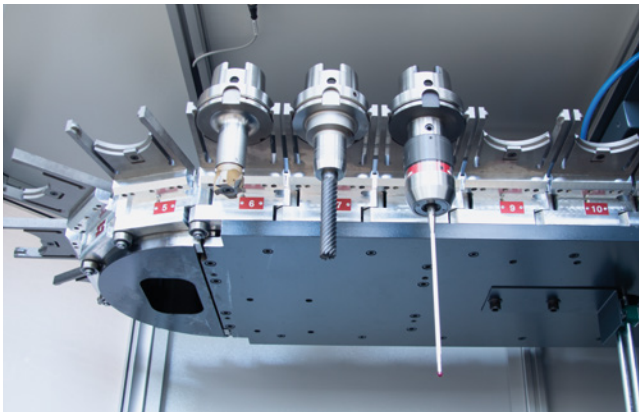
- Large travel ranges
- Tool change via pick-up
- Lightweight moving masses provide high speeds with steep acceleration ramps
- Easy accessibility from two sides
- Manual and automatic loading and unloading
- Optimum chip flow
- Minimum quantity lubrication
- Rotary axes are driven directly



Cross beam



Front axle subframe

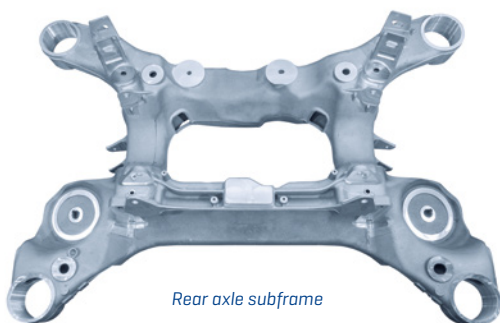


Wenzler process competence

As turn-key machine constructors, we offer you the entire machining process from planning to implementation. What is more, we offer automation for your entire installation and integrate all participants of an extended value chain. All participants can be visualized and their primary functions can be controlled by a central computer. The integration of machine and operating data collection interfaces is also part of our portfolio.

Productivity at a significantly higher level

Through coordinated component scanning and clamping strategy, our intelligent clamping device improves your productivity and process reliability. Integrated sensors ensure that the workpiece is correctly loaded, geometrically within tolerance and optimally clamped. Through continuous data transfer, this in-house development optimizes the machining of aluminum structural components.



Rear axle subframe

Wenzler VKM – Technische Daten

Working area

▪ X axis	1500 mm
▪ Y axis	1250 mm
▪ Z axis	880 mm

Feed rate

▪ Rapid travers	
▪ X, Y, Z axis axis	100 m/min
▪ Axis acceleration	
▪ X axis	8 m/s ²
▪ Y, Z axis	10 m/s ²
▪ Jerk	
▪ X, Y axis	100 m/s ³
▪ Z axis	150 m/s ³

Table load

▪ Max. weight	350 kg
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Work spindle

▪ Spindle taper	HSK 63	HSK 100
▪ Speed range	16000 min ⁻¹	10000 min ⁻¹
▪ Power S6/40% ED	34 kW	40 kW
▪ Maximum torque	85 Nm	175 Nm

Tool magazine

▪ Places	36	45
▪ Length	700 mm	700 mm
▪ Max. Ø (without space free)	120 mm	120 mm
▪ Max. Ø (adjacent space free)	200 mm	200 mm
▪ Max. tool weight	20 kg	20 kg
▪ Load capacity	200 kg	315 kg
▪ Tool change time	3 s	3 s

As a medium-sized company, Wenzler has the ability to respond swiftly and flexibly to individual requirements. All components of Wenzler machining centers requiring our specific know-how are produced in-house to ensure our customers receive reliable and economically efficient solutions at the highest level of quality.

Do you have any question on the Wenzler VKM and our service portfolio? We are very much looking forward to getting in touch with you and talking about your requirements.