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About Us

We are ZAKO Turčín – a family-owned engineering company established in 1996. We specialize in precision welding & fabrication, metalworking, surface treatment, and assemblies, with a long-term focus on stability, quality, and reliable delivery performance.

1996

Established

160+

Employees

80%

Export Share

20 000 MH

Production Capacity

Why Work with Us?



A reliable partner with a personal approach.



Advanced technology and modern production facilities.



Quality backed by international standards.



Comprehensive engineering solutions in one place.



Tailor-made solutions and long-term cooperation.



Custom and medium-volume production for the railway, food processing, pharmaceutical, defence, energy, and other engineering industries.

Welding & Fabrication

Our Welding & Fabrication division is built on experienced specialists, certified processes, and modern technologies. We manufacture welded structures from carbon steel, stainless steel, aluminium, armour steel, and other special materials in accordance with the highest industry standards and customer requirements.

Key Added Value

- Certified in accordance with EN ISO 3834-2, EN 15085-2 CL1, and DIN 2303 Q2.
- Robotic and manual welding using MIG, MAG, TIG, MMA, FCAW, laser, and resistance spot welding.
- An experienced team, including EWE-certified welding engineers.
- **Complete process:** material preparation, welding, heat treatment, machining, surface treatment, and assembly.
- Weld quality verification through magnetic particle, penetrant, and visual inspections.
- Dimensional accuracy ensured by advanced 3D measuring arms and 3D scanning systems.



Key Capabilities & Capacities

- Weldments up to 5,000 kg.
- Robotic welding of components up to 6,000 mm and 4,000 kg.
- **Materials processed:** carbon steel, stainless steel, aluminium, and armour steel.
- Preparation of semi-finished components through thermal cutting, machining, and heat treatment.
- Certified welders qualified for all major welding processes, with process quality validated through WPQR testing.



Metalworking

In metalworking, we rely on innovation, advanced CNC technologies, and modern manufacturing processes. This enables us to achieve exceptional precision in the production of complex components, from smaller batches to medium-volume production runs.

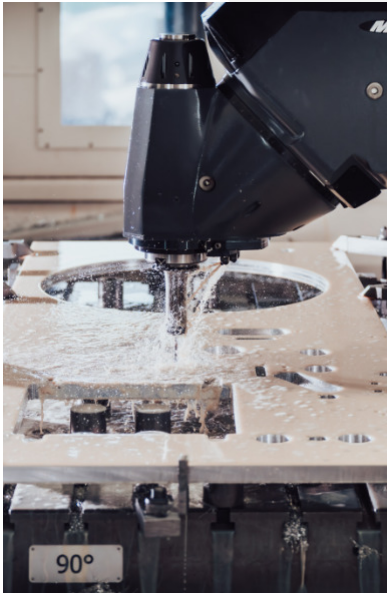
Key Added Value

- High manufacturing precision with tolerances measured in hundredths of a millimetre.
- Machining using 3- to 6-axis CNC machining centres, including 5-axis machines with pallet systems.
- Milling, turning, and combined machining operations in a single setup (multifunction machining centres).
- Experienced CNC programmers and machine operators focused on process optimisation, consistent quality, and efficiency.
- Quality control supported by advanced 3D measuring technologies.



Key Capabilities & Capacities

- **Digitalised production** using online manufacturing documentation and planning systems.
- **5-axis machining:** travel ranges up to 12,000 × 3,500 × 1500 mm.
- **CNC horizontal boring mills:** travel ranges up to 5,000 × 2,500 × 2,200 mm.
- **CNC turning:** diameters up to 720 mm and turning length up to 2,200 mm.
- **Conventional operations:** milling, turning, and surface grinding.



Surface Treatment Facility

Painting in Enclosed Booths

Two combined painting and drying booths measuring 7,000 × 4,000 × 3,500 mm enable both low-pressure and high-pressure coating applications.

Efficient Process Coordination

The paint shop is connected by an overhead conveyor system, allowing components to remain suspended throughout the entire process (phosphating, painting, and drying). Minimal handling reduces the risk of mechanical damage and increases overall efficiency.

Quality Control at Every Stage

Quality inspections are performed throughout the process and after completion. Upon request, we provide inspection reports, coating thickness and gloss measurement reports, and samples for testing.

Coating Systems

We use premium coating systems from leading manufacturers such as Freilacke, Mankiewicz, Tikkurila, PPG, and Hempel, as well as other systems according to customer requirements.

Complete Solution

Blasting, phosphating, painting, and other surface treatment processes are carried out directly within our facilities.

Durability and Aesthetics

A precisely finished surface ensures long service life and a professional appearance of the final product.



Key Capabilities & Capacities

- Complete surface treatment solutions in one place.
- In-house quality control, including coating thickness and gloss measurements.
- Logistics and packaging of finished products.
- Durable and aesthetically finished products meeting European quality standards.



Assemblies

We deliver fully functional assemblies – from component manufacturing to final assembly, commissioning, and final inspection.

Fully assembled, tested, and ready-to-use units

- **One supplier** means less coordination and lower risk of errors.
- **Assembly in accordance with technical documentation:** mechanical, electrical, and functional integration of complete assemblies.
- **Complete solution:** engineering & design, component manufacturing, assembly, testing, and documented handover.
- Tailor-made measurement and testing reports, including 3D metrology.
- **Standard lead times:** 6–12 weeks, depending on project complexity.



Key Capabilities & Capacities

- **Assembly** of light and medium-duty machinery units.
- **Assembly dimensions** up to 2,500 × 8,000 mm and weights up to 10 tonnes.
- **Assembly operations:** precision fitting, assembly, final integration, electrical installation, and commissioning
- **Quality control:** 3D measurements, functional testing, and final inspection reports.

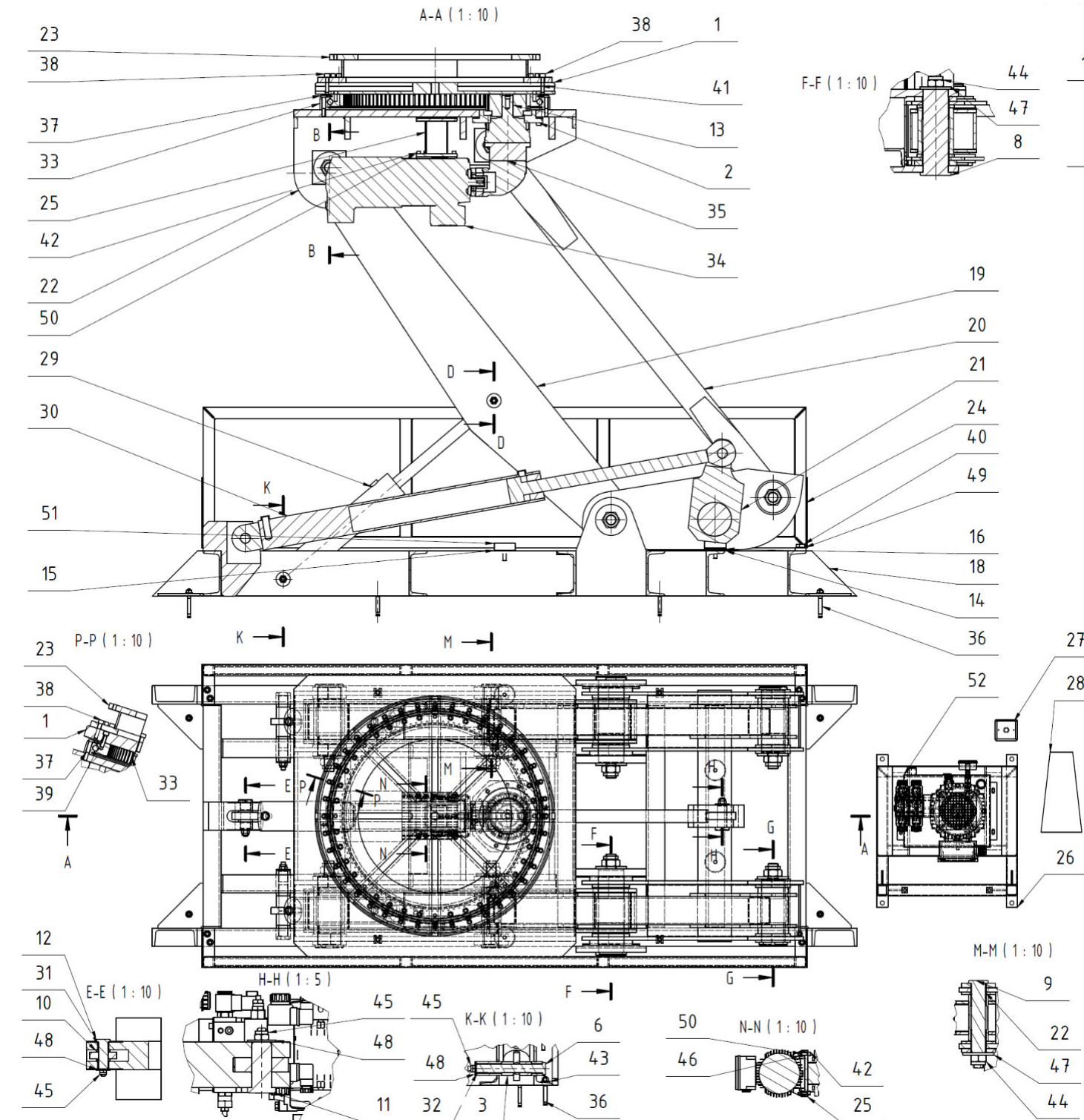


Engineering & Design

We design every solution with a focus on manufacturability, assembly efficiency, and functionality.

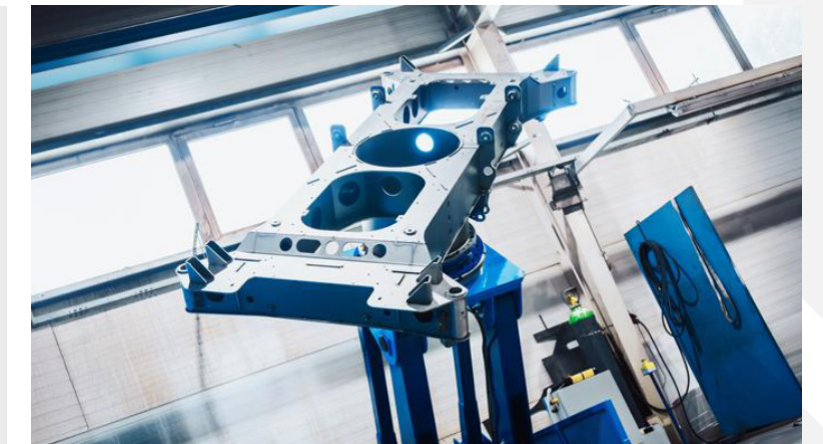
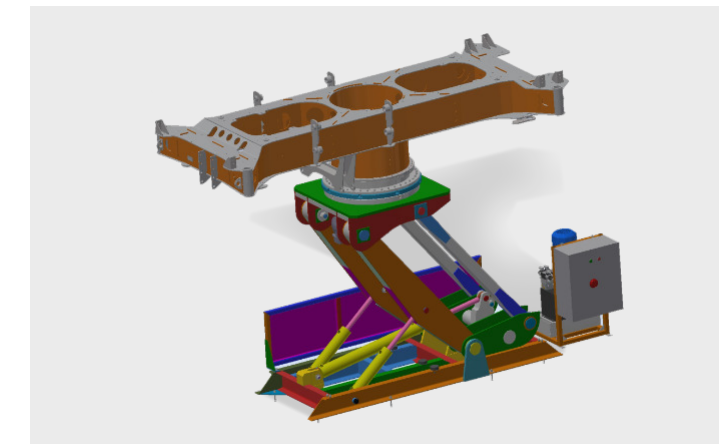
Key Added Value

- ▀ Solutions developed in line with the latest trends in materials and manufacturing technologies.
- ▀ We develop 3D designs and production documentation ready for manufacturing.
- ▀ Close cooperation between our in-house engineering team and production enables us to quickly optimize design solutions and transfer them directly into production.
- ▀ Designs are optimized and refined for manufacturing, eliminating unnecessary modifications and complications.
- ▀ First articles are manufactured in-house and immediately verified for functionality and design accuracy.



Key Capabilities & Capacities

- ▀ **In-house manufacturing:** prototypes are produced directly within our facilities, allowing immediate testing and optimisation of designs.
- ▀ **Experienced engineering team:** specialists with extensive expertise across various industrial sectors.
- ▀ **Fast communication:** engineering, production, and assembly operate as one integrated process, without unnecessary intermediate steps.
- ▀ **Innovation and modern software:** continuous investment in technology and training, supported by the latest CAD systems and simulation tools.
- ▀ **Efficiency and cost optimisation:** every design is optimised with regard to materials, production costs, and assembly requirements.



Machinery and Equipment

Our machinery and equipment include advanced CNC machining centres, lathes, boring mills, conventional milling machines, and specialised tool presetting workstations. This enables us to manufacture everything from small precision components to large assemblies.

Capacity Overview

- Extensive range of 3-axis to 6-axis machining technologies, including 5-axis machining centres with pallet systems.
- Capability to manufacture both large components and high-precision small-batch production parts.
- Complex machining operations completed in a single setup.
- Stable production capacity supported by a broad portfolio of CNC machines across multiple categories.
- Robotic welding capabilities.

Main Equipment and Technologies

Welding & Fabrication

- robotic and manual welding
- MIG, MAG, TIG, MMA, FCAW, laser, and resistance spot welding
- pressing, grinding, and drilling operations
- specialised welding positioners

Metalworking

- gantry machining centers
- CNC turn-mill centres
- 6-axis CNC machining centres
- 5-axis CNC machining centres
- CNC horizontal boring mills
- vertical CNC machining centres
- CNC lathes
- conventional milling machines
- in-house tool presetting facility

Surface Treatment Facility

- two painting and drying booths
- phosphating pre-treatment for coating applications
- overhead blasting machine
- heat treatment furnace

Material Cutting and Preparation

- conventional and fully automatic band saws
- sheet metal guillotine shear
- automated storage system for metal stock

Quality Control

- 3D measurements using high-precision coordinate measuring machines (CMM)
- weld quality verification through magnetic particle, penetrant, and visual inspections
- scanning systems

Type (name)	Qty.	Technical Specifications
Metalworking		
Gantry Machining Centre		
Uniport 6000-HV	1	Travels [X–Y–Z]: 12,000 × 3,500 × 1,500 mm
CNC Turn-Mill Centres		
Hyperturn Powermill 2400	1	Turning diameter: 720 mm, turning length: 2,200 mm
GAMMA CTX 2000	1	Turning diameter: 620 mm, turning length: 2,000 mm
6-Axis CNC Machining Centre		
RT 3000	1	Travels [X–Y–Z]: 3,000 × 1,200 × 2,000 mm
5-Axis CNC Machining Centres		
ASM1612+APC	1	Travels [X–Y–Z]: 1,600 × 1,250 × 1,050 mm
Tiltenta 7	1	Travels [X–Y–Z]: 3,200 × 750 × 695 mm
MCG 1000 5XT	1	Travels [X–Y–Z]: 1,200 × 1,000 × 700 mm
DMU 105	1	Travels [X–Y–Z]: 1,400 × 1,240 × 690 mm
DMU 85	1	Travels [X–Y–Z]: 1,200 × 1,040 × 650 mm
MCV 1220 POWER	1	Travels [X–Y–Z]: 1,000 × 1,800 × 600 mm
CNC Horizontal Boring Mills		
WHQ 13 CNC	1	Travels [X–Y–Z]: 5,000 × 2,500 × 2,200 mm
TKP 6511B	1	Travels [X–Y–Z]: 2,500 × 1,500 × 1,200 mm
Vertical CNC Machining Centres		
MCFV 2080	2	Travels [X–Y–Z]: 2,030 × 810 × 810 mm
MCFV 1270 POWER	1	Travels [X–Y–Z]: 1,270 × 610 × 720 mm
MCFV 840-1060	4	Travels [X–Y–Z]: up to 1,020 × 600 × 600 mm
CNC Lathes		
CLX 750	1	Swing diameter: 950 mm, max. turning diameter: 640 mm
SL 403 BMC / 800	1	Swing diameter: 650 mm, turning length: 800 mm
CTX 420 linear	1	Swing diameter: 420 mm, turning length: 500 mm
Goodway GS 280	1	Swing diameter: 400 mm, turning length: 600 mm
Goodway GLS 200	1	Swing diameter: 320 mm, turning length: 500 mm
SPR 100	1	Swing diameter: 550 mm, turning length: 500 mm
Conventional Milling Machines		
Conventional Milling Machines	3	
Tool Presetting Facility		
Automated Tool Storage System	1	Load capacity: 34 t, 45 shelves with a total storage area of 120 m²
Haimer Vio Linear Tool Presetter	1	Tool measurement up to Ø 400 mm and height 700 mm; automatic tool measurement and transfer of measured values directly to machine tools
Welding		
IGM Welding Robot	1	7-axis welding robot for components up to 4 t and 6,000 mm in length
3 kW Laser Welder	1	
MagicWave 230i	2	230A TIG welding machine
TPS 320i-500i	18	320–500A MIG/MAG welding machine
TransSteel 350	2	350A MAG welding machine
TransTig 1700-1750plus	2	170A TIG welding machine

Type (name)	Qty.	Technical Specifications
Welding & Fabrication		
Press Brake	2	Pressing force: 170 t, max. bending length: 4,000 mm
Eccentric and Hydraulic Presses	3	
Conventional Lathes	2	Swing diameter: 350 mm, turning length: 1,000 mm
Surface Grinders	2	
VS-32 Column Drills	8	
VR-4 Radial Drills	2	
3D Welding Positioners	5	
Surface Treatment Facility		
Painting and Drying Booths	2	Internal dimensions: 7,000 × 4,000 × 3,500 mm
PG 20X30/4TR Overhead Blasting Machine	1	Max. diameter: 2,000 mm, max. length: 3,000 mm
Degreasing and Phosphating Booth	1	Internal dimensions: 7,100 × 4,100 × 3,500 mm
Heat Treatment Furnace	1	Internal dimensions: 1,500 × 1,500 × 2,000 mm, with heat treatment recording system
Quality Control		
Measuring Equipment		
CMM - DEA Alpha Performance	1	Travels [X–Y–Z]: 2,000 × 5,000 × 1,500 mm
CMM - DEA Global Performance	1	Travels [X–Y–Z]: 1,200 × 2,200 × 1,000 mm
CMM - DEA Global	2	Travels [X–Y–Z]: 700 × 1,000 × 700 mm
CMM - Zenith too	1	Travels [X–Y–Z]: 1,000 × 1,500 × 600 mm
Romer Arm RA-7535	2	Measuring range: 3,500 mm
Scanners	3	
Weld Testing		
Logistics		
MAN	2	Payload capacity up to 10 t
Renault	1	Payload capacity: 10 t
Toyota	3	Payload capacity: 1,3 t
Citroen	1	Payload capacity: 0,6 t
Material Cutting and Preparation		
Band Saws		
Bianco MOD370 Automatic CNC Band Saws	2	Cutting capacity: Ø 300 mm
BTMZ 620 Automatic CNC Band Saw	1	Cutting capacity: Ø 360 mm
Bomar 240 Conventional Band Saws	4	Cutting capacity: Ø 240 mm
Guillotine Shear		
DURMA CNC HGM 3006	1	Cutting length: 3,000 mm, sheet thickness: 5 mm
Other Equipment		
Automated Metal Stock Storage System	1	Load capacity: 305 t, storage capacity: 61 shelves, each with an area of 6.5 m²



Quality & Certifications

Quality is a cornerstone of our manufacturing processes. Every component undergoes inspection throughout all stages of production to ensure full compliance with technical drawings, applicable standards, and customer requirements.

Upon request, we provide:

- **Certificate of Conformity 2.1**
- **Measurement Reports**
- **Material Certificate 3.1**
(confirming the quality of incoming materials)

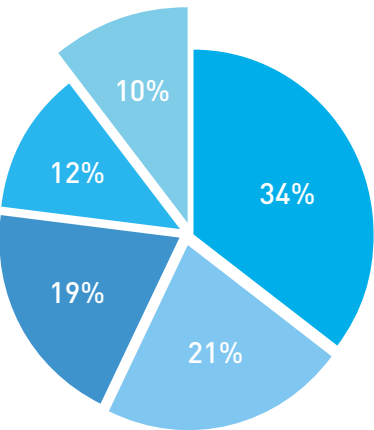
Quality Control Processes

- Incoming inspection and in-process inspection of critical dimensions.
- Final inspection of finished components and assemblies.
- Documentation, measurement reports, and full traceability in accordance with customer requirements.
- Certified in accordance **EN ISO 9001**, **EN ISO 3834-2**, **EN 15085-2 CL1**, and **DIN 2303 Q2**, demonstrating the high standard of our manufacturing and quality processes.

3D Measurement & Reporting

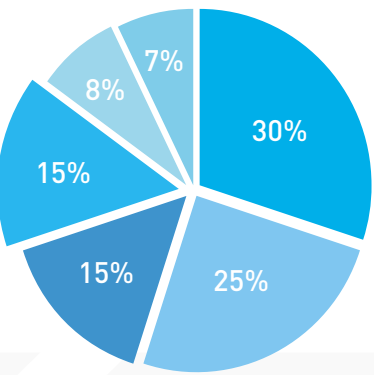
- To verify dimensional accuracy, we utilise advanced coordinate measuring machines (CMM), 3D scanning systems, and other calibrated measuring equipment.
- Upon request, we provide measurement reports, material certificates, and additional quality documentation.

Statistics



Export Markets

- Austria 34%
- Czech Republic 21%
- Germany 19%
- Netherlands 12%
- Sweden 10%



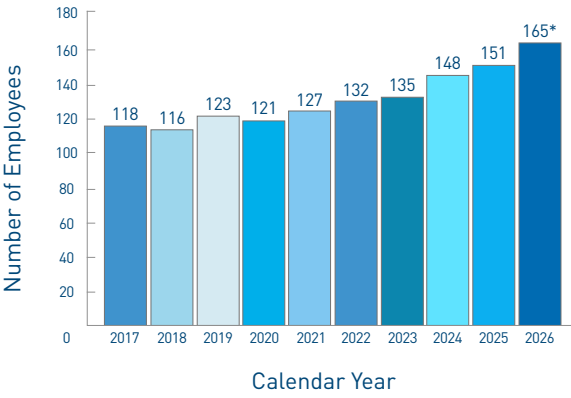
Key Industries

- railway industry 30%
- defence industry 25%
- material handling equipment 15%
- food & pharmaceutical industry 15%
- machinery & equipment manufacturing 8%
- energy industry 7%

Production Facilities

Březnice 9 000 m²
Provodov 3 500 m²

Our Employees



Revenue



* Projected employee headcount / projected revenue



History & Milestones

1996

Company founded

1999

Acquisition of the Březnice facility

2008

Acquisition of the Provodov acility

2022

New paint shop and assembly hall in Provodov

2026

Doubling of production capacity in Březnice



Paint shop and receiving and dispatch area – historical photo (2009)



Assembly hall, receiving and dispatch area, and paint shop (2023)



Growth of the Company and Production

- Consistent growth in revenue.
- Nearly 80% of production exported to Austria, Germany, the Netherlands, Sweden.
- Five core areas of expertise: Welding & Fabrication, Metalworking, Surface Treatment, Assemblies, and Engineering & Design.

Growth in Workforce and Capacity

- Steady increase in the number of employees to more than 160.
- Expansion of production facilities and logistics infrastructure.
- Continuous investment in digitalisation, automation, and advanced CNC technologies.



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