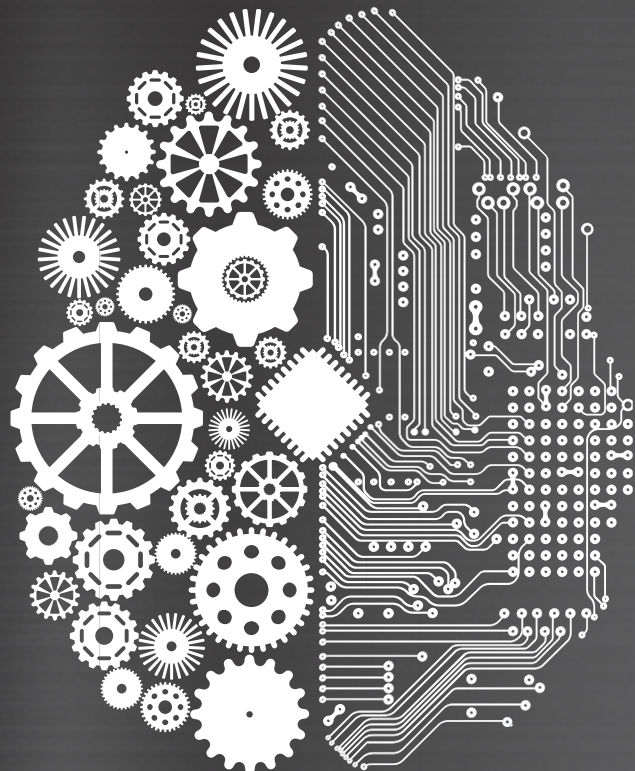


**I FEEL
SLOVENIA**

Green. Creative. Smart.

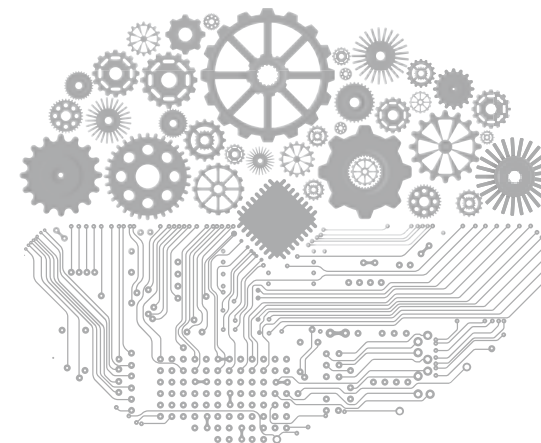


Slovenian Pavilion

MOULDING EXPO 2019

Stuttgart, Germany

May 21-24



**Meet the industry leaders from
Slovenia to celebrate innovation**

Expand your market footprint by partnering a Slovenian company

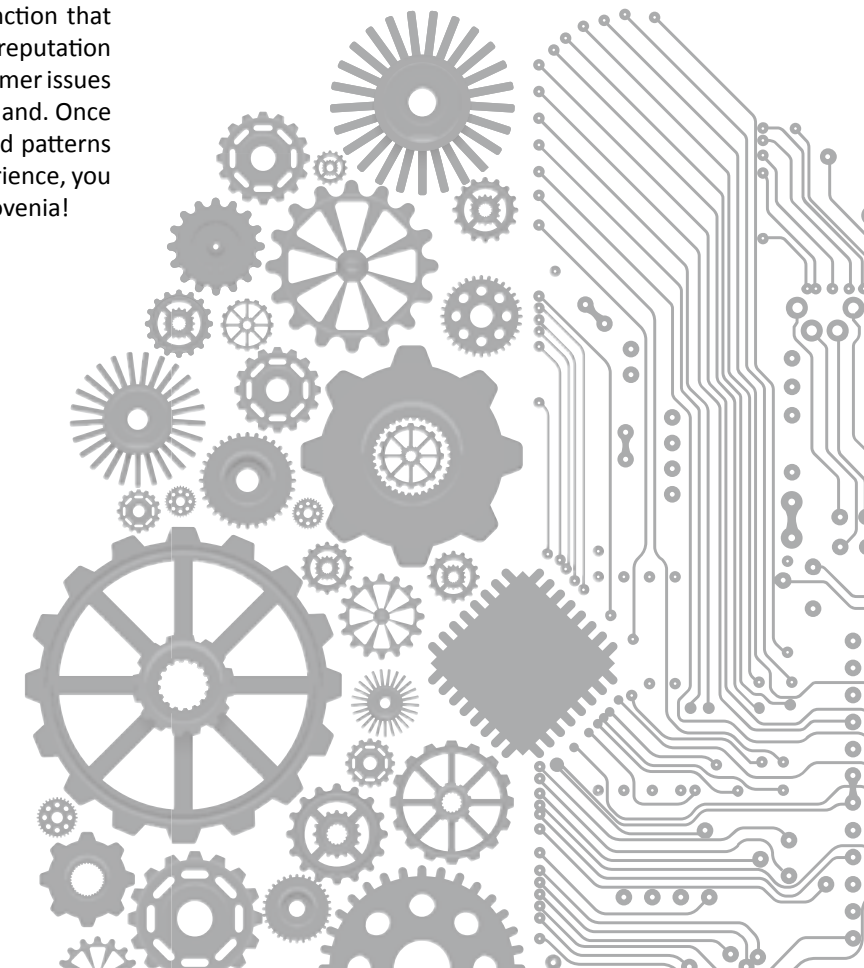
The tool, die, and mould industry is undergoing structural changes as the Fourth Industrial Revolution is spreading across industries and shop floors. Decreasing machine downtime and increasing machine up-time, automated quality control, and energy efficiency represent opportunities for the European tool industry in general and for Slovenian toolmaking companies in particular, thanks to the country's long industrial tradition combining experience and knowledge with innovation and creative thinking.

For Slovenian exhibitors at the 2019 Moulding Expo, innovation goes beyond engineering and production technologies, as they take tool construction and pattern and mould making to a new level thanks to the new business logic and strategic positioning. Ensuring technology-enabled process optimisation and developing equipment that enhances accuracy while increasing quality and productivity are some of the challenges on the road to raising competitiveness in the marketplace. Time-consuming mould and pattern manufacturing, costly fixtures, extended changeovers, and possibilities for human error can be overcome to a significant degree by enabling a single setup for several machining processes and allowing operations to be performed on all four sides of a workpiece – just to mention some of the potentials of utilising high-performance machines engineered to provide users a cutting edge. This year's Moulding Expo is a perfect platform for OEMs to meet CEMs and share experiences and opinions about the challenges and future trends of the industry. Slovenia boasts many tier one and development

suppliers thanks to people capable of turning futuristic concepts into reality. Another competitive distinction that has earned Slovenian tooling companies a good reputation is their speed in responding to and resolving customer issues – even by anticipating them and reacting beforehand. Once you add in data helping companies to understand patterns and trends and to deliver a better customer experience, you need look no further than the exhibitors from Slovenia!

We are future ready!

Ajda Cuderman
Acting Director
SPIRIT Slovenia, public agency



Toolmaking in Slovenia

Toolmaking is one of the key strategic industries in Slovenia.

Slovenian toolmakers generate about EUR 320 million of revenue per year, and on average, as much as 75 percent of the tools are exported. The tool sector, which is justifiably our national pride, boasts a long tradition and demonstrates its quality as a development partner for domestic and foreign clients of international dimension. Slovenian toolmakers possess top-level technical knowledge, highly professional education, mobility and excellent equipment, which, together with the fact of occupying a leading position in all subsequent industrial production, is an excellent starting point for achieving higher growth rates and increased added value of all companies involved in the manufacturing chain. It is true that the tool industry reaches only a low share of GDP, less than 1%, but 42% of the entire manufacturing industry depends on quality tool support, and it is estimated that the multiplier effect of the tool industry is at least 100 times its input. In Slovenia, around 3,500 - 4,000 toolmakers are employed in 170 companies, which generate around EUR 320 million annually.

The most important advantages of Slovenian toolmaking, which is constantly being perfected, are:

1. Technical talent, quality and a long tradition in the tool industry (in Slovenia there are tool companies with over a century of tradition)
2. Great flexibility and rapid response (most Slovenian tool companies are small, and such companies are extremely flexible and responsive),
3. Geographic location (proximity value is very important in the toolmaking business, as buyers, in the event of tool work, repair of damage or refurbishment of tools, expect the participating partner (tool company) to eliminate unexpected bottlenecks in the production line as quickly as possible)
4. Good machinery and ability for very precise machining.
5. Specialisation for individual technologies (plastic injection moulding, sheet metal forming, reaction moulding, forging, cold-working, etc.) and visibility in many global OEM manufacturers
6. Strengthening and expanding of new areas and diversifying products.

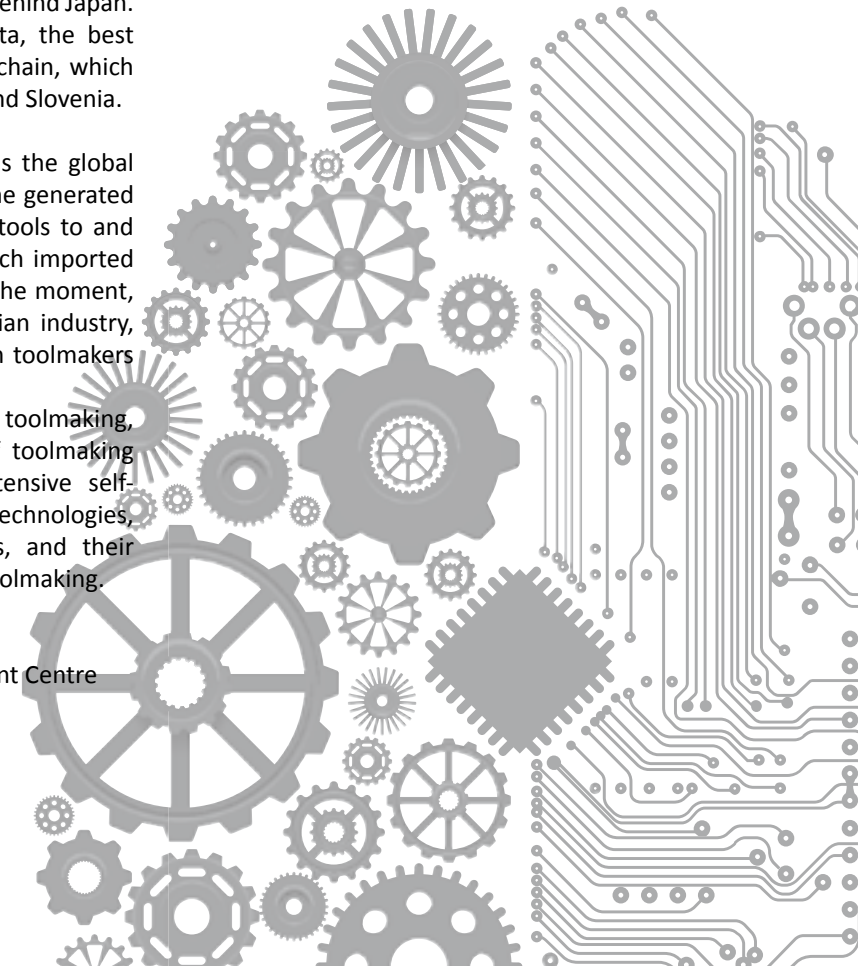
On the basis of the ratio between the number of toolmakers and the number of inhabitants, Slovenia holds the first place in

Europe and the second in the world, immediately behind Japan. In addition, in Europe, according to general data, the best quality toolmaking is concentrated in the Alpine chain, which consists of Switzerland, Germany, Austria, Friuli, and Slovenia.

According to the share of tool export, Slovenia is the global frontrunner and accounts for more than 2/3 of the generated traffic. The ratio between import and export of tools to and from Slovenia is 1 to 3, which means that for each imported tool, we export as many as three of our own. At the moment, the tool sector is one of the flagships of Slovenian industry, since by the end of 2018, practically all Slovenian toolmakers recorded reaching full capacity.

As one of the key development pillars of Slovenian toolmaking, TECOS is a well-known company in the field of toolmaking in Slovenia. TECOS is distinguished by its extensive self-development and use of the most advanced technologies, numerous scientific and research achievements, and their translation into industrial practice in the field of toolmaking.

Prepared by:
Dr Aleš Hančič, Slovenian Tool and Die Development Centre





Facts about Slovenia

Official name: Republic of Slovenia.

Capital: Ljubljana.

Surface area: 20,273 km2.

Population: 2.07 million.

Currency: euro.

International calling code: +386

Time zone: GMT/UTC +1.

Member of the EU since 1 May 2004.

Adopted the euro (€) as the national currency on 1 January 2007.


Schengen area member state since 21 December 2007.


Member of the OECD since July 2010.



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COMPANY PROFILE & KEY COMPANY BUSINESS ACTIVITIES

DAG d.o.o. is a family business with more than 35 years of tradition. We have already produced over 1,000 tools for thermoplastic injection moulding. We offer a comprehensive range of solutions for toolmaking: injection moulding simulation, design, tools manufacturing, injection moulding, and measurements.

AVERAGE NUMBER OF EMPLOYEES IN 2018: 24.5

TOTAL TURNOVER IN 2018: EUR 1.5 mil.

PRODUCTION PROGRAMME

Tools for thermoplastic injection moulding.



TECHNOLOGY

- ▶ Tools for thermoplastic injection moulding
- ▶ Tools for 2K technology
- ▶ Multi-cavity tools
- ▶ Prototype tools
- ▶ Tools for precise small parts

MACHINERY

- ▶ CNC milling
- ▶ CNC turning
- ▶ CNC erosion
- ▶ Injection moulding machines
- ▶ Measuring laboratory



MAIN SUPPLIERS

Meusburger, Hoffman, Thermoplay, Boehler

MAIN CLIENTS

Titus Group, BSH, Plastika Skaza, Inoutic/Deceuninck

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CONTACT PERSON

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Ivan Maras, Director

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COMPANY PROFILE & KEY COMPANY BUSINESS ACTIVITIES

We are proud of our 50-year family tradition in the production of heating elements for industry.

GRELCI MARAS offers high quality products, flexibility, and customisation in line with the needs of clients.

We provide our clients high quality products made in the European Union by means of the latest precision technology.

AVERAGE NUMBER OF EMPLOYEES IN 2018: 12

TOTAL TURNOVER IN 2018: approx. EUR 1.0 million



PRODUCTION PROGRAMME

Production of industrial electric heaters, temperature sensors, digital temperature controls, etc.

MACHINERY

- ▶ CNC laser cutting machine
- ▶ CNC bending machine
- ▶ CNC winding machines



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KOLEKTOR

COMPANY PROFILE & KEY COMPANY BUSINESS ACTIVITIES

Kolektor Orodjarna is part of the international group Kolektor. With its services, Kolektor Orodjarna supports the production companies within the group that produce components and systems for the automotive industry as well as external clients from various industries.

AVERAGE NUMBER OF EMPLOYEES IN 2018: 215

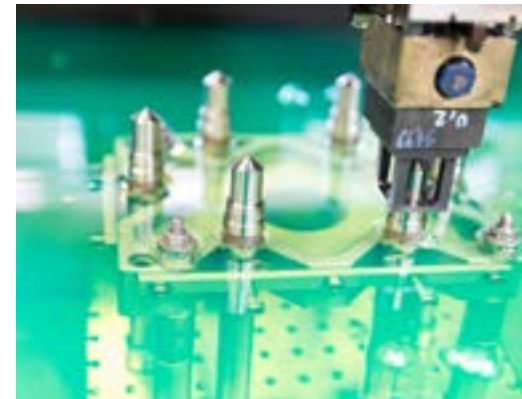
TOTAL TURNOVER IN 2018: EUR 23 mil.

PRODUCTION PROGRAMME

“From mould to top-notch product” – This expression well describes the volume of our product portfolio, covering toolmaking, machine construction, automation, and the delivery of turnkey machine vision solutions that reliably inspect production line products before being shipped to clients.

PLASTIC INJECTION MOULDING TOOLS

► Tools for injection moulding of thermoplastic, thermosets, and bonded magnets



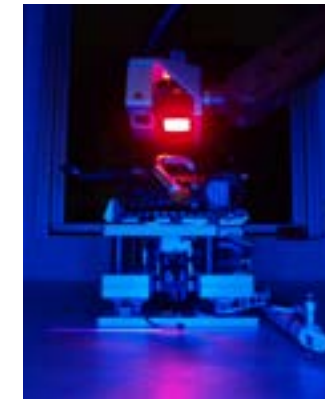
- GIT tools
- Multi-component injection moulding tools
- Multi-level tools
- Contact overmoulding tools

SHEET METAL FORMING TOOLS

- Cutting and bending tools for BIHLER technology (GRM machines)
- Progressive modular precision cutting tools for stamping contacts
- Multi-cavity forming tools with turntables

AUTOMATION AND MACHINE CONSTRUCTION

- Automation of sheet metal forming processes
- Automation of injection moulding processes
- Customized processing machines
- Machines for automated assembly of products
- Automation of bonding technologies
- Machines for EOL testing
- Palletizing machines



MACHINE VISION SOLUTIONS

- Quality control of components and products
- 2D and 3D optical measurement of dimensions and tolerances
- Object identification
- Process monitoring and control
- Vision-guided robotics

CERTIFICATES


ISO 9001, ISO 14001, TS 16949


MAIN CLIENTS

Kolektor Group, Mahle Group, Odelo, Continental AG




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 tomaz.sijanec@orkoplast.si

COMPANY PROFILE & KEY COMPANY BUSINESS ACTIVITIES

Orkoplast is a medium-sized manufacturing company with its own tool shop, having started as a family tooling business in 1979. The company is active in the production of small and large series of components for the automotive and other industries, with the support of product development.

AVERAGE NUMBER OF EMPLOYEES IN 2018: 65

TOTAL TURNOVER IN 2018: EUR 5.4 mil.

PRODUCTION PROGRAMME

- ▶ Products made of sheet metal and non-ferrous metals
- ▶ Tools for sheet metal shaping

CERTIFICATES

ISO 9001:2015 and ISO 14001:2015

TECHNOLOGY

- ▶ Deep drawing
- ▶ Progressive sheet metal forming
- ▶ Transfer sheet metal forming
- ▶ Blocking tools for sheet metal forming
- ▶ Assembly devices

MACHINERY

- ▶ Eccentric presses up to 5000 kN
- ▶ Hydraulic presses up to 6300 kN

MAIN CLIENTS

Eti, Glutz, Hydac, Odelo, Raycap, Siliko

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SOFIMAX

COMPANY PROFILE & KEY COMPANY BUSINESS ACTIVITIES

Sofimax acts as a representative of the Dutch company Novotec, a global concern specialising in the supply of EDM consumables and spare parts. We work with a large number of toolmakers on a daily basis; we are aware of their production capabilities and of the function of individual machine parts in various processes, including the following: construction, turning, milling, tempering, grinding, WEDM and EDM, plasma and laser cutting, welding, etc. On the basis of this knowledge and experience, we receive orders from production companies in Slovenia and abroad, especially from Austria and Germany.

AVERAGE NUMBER OF EMPLOYEES IN 2018: 2

TOTAL TURNOVER IN 2018: approx. EUR 890,000

PRODUCTION PROGRAMME

Construction, turning, milling, tempering, grinding, WEDM, EDM, plasma and laser cutting, welding, soldering, blasting, polishing, etc.



TECHNOLOGY

We use state-of-the-art technology,

- ▶ 3D construction
- ▶ 5-axis machining centres, etc.

THE MAIN ADVANTAGES

- ▶ 24 years of practical experience with clients and production
- ▶ continuous availability
- ▶ rapid response
- ▶ short delivery times
- ▶ consistent supply of top quality products

- ▶ professionalism and reliability
- ▶ flexibility and creativity
- ▶ the ability to connect theoretical knowledge with problems arising in practice
- ▶ production consulting
- ▶ design consulting
- ▶ advice on the technology for manufacturing machine parts
- ▶ low price.

Tecos

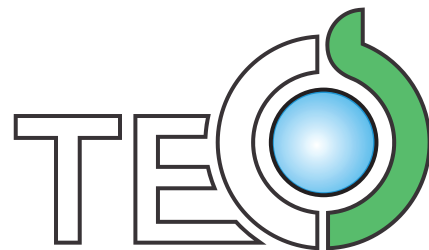
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COMPANY PROFILE & KEY COMPANY BUSINESS ACTIVITIES

A well-known company in Europe, TECOS Slovenian Tool and Die Development Centre is one of the key developmental pillars of Slovenian toolmaking. It was founded in 1994 on the initiative of Slovenian toolmakers, whose goal was to modernise production and increase added value. TECOS is distinguished by its extensive in house research and development and use of the most advanced technologies, numerous scientific and research achievements, and the transfer of these into industrial practice in the field of toolmaking.

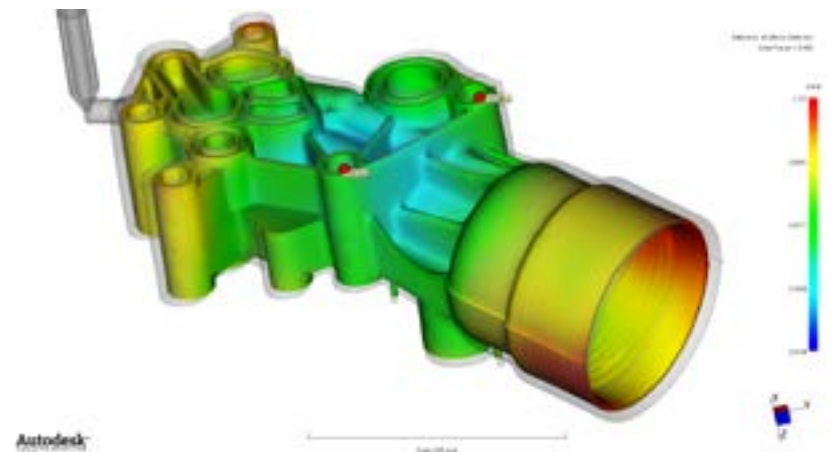
At TECOS, we offer our clients high-quality and fast assistance in developing high value-added products and technologies. We can take pride in our reputable reference projects for both domestic and foreign companies. Our clients are successful large and small companies who want a long-term partner that can offer concrete solutions in the field of the development and production of semi-finished plastic and metal products, or a combination of both. TECOS also acts as a Slovenian tool cluster and as the official representative of Slovenian toolmakers, thus representing an entry point for all potential clients.

CONTACT PERSON

Aleš Hančič, Director

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AVERAGE NUMBER OF EMPLOYEES IN 2018: 20

TOTAL TURNOVER IN 2018: EUR 1.4 mil.

PRODUCTION PROGRAMME

- Development of tools and products
- Simulation of plastic injection moulding
- Structural simulations
- 3D scanning, measurements, and reverse engineering
- Prototyping, 3D printing of metals and plastics
- Manufacturing of plastic products

CERTIFICATES

MoldFlow certified partner

TECHNOLOGY

- Plastic injection moulding
- 3D printing of metals and plastics
- development and simulation

MACHINERY

Plastic injection moulding machines (16 tons to 80 tons)

MAIN CLIENTS

Bosch, Gorenje, Mahle, Hella, Kolektor

Tehmetal

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COMPANY PROFILE & KEY COMPANY BUSINESS ACTIVITIES

Tehmetal developed from a small handicraft workshop founded in 2002. Its main activity has always been to provide support for toolmaking and the tool industry.

Part of its capacity is dedicated to the serial machining of metals on CNC machining centres, which is one of its major production programmes.

Tehmetal's clients are mainly based in the EU market and are active in the automotive industry, electronics, household appliances, and electrical engineering. Their number is constantly increasing, thus reflecting the quality of Tehmetal's products, the constant modernisation of its fixed assets and production processes, and reliable delivery within the agreed time limits.

AVERAGE NUMBER OF EMPLOYEES IN 2018: 15

TOTAL TURNOVER IN 2018: EUR 1.3 mil.



PRODUCTION PROGRAMME

- ▶ CNC machined tool panels according to blueprints
- ▶ CNC machined tool bodies
- ▶ Engraving plates and tool inserts to the agreed level of processing
- ▶ CNC deep drilling
- ▶ Flat-surface grinding
- ▶ Tool production

TECHNOLOGY

- ▶ CAD system Solidworks
- ▶ CAM system Solidcam



MACHINERY

- ▶ 3-axis CNC Centre Hartford PRO 1000
- ▶ 3-axis CNC Centre Hartford MVP-16
- ▶ 3-axis CNC Centre Hartford MVP-1060
- ▶ 4-axis 2-pallet horizontal CNC centre Hartford MVH-5
- ▶ Machine for flat-surface grinding

MAIN SUPPLIERS

Oro Met, Meusburger, Bohler, HASCO

MAIN CLIENTS

Rexroth Bosch group, Hidria, LTH Castings, Polycom, Sibo Group



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SLOVENSKA
POSLOVNA
TOČKA



REPUBLIC OF SLOVENIA



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND