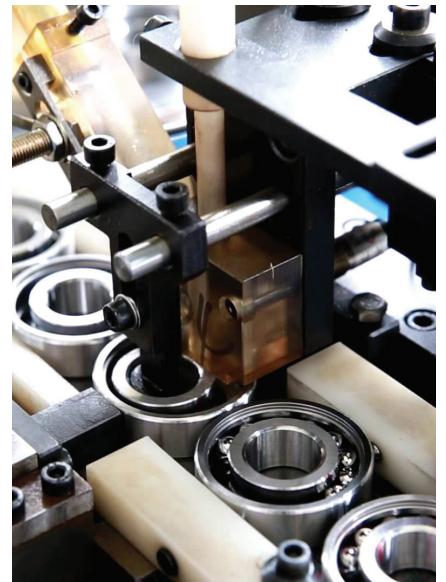
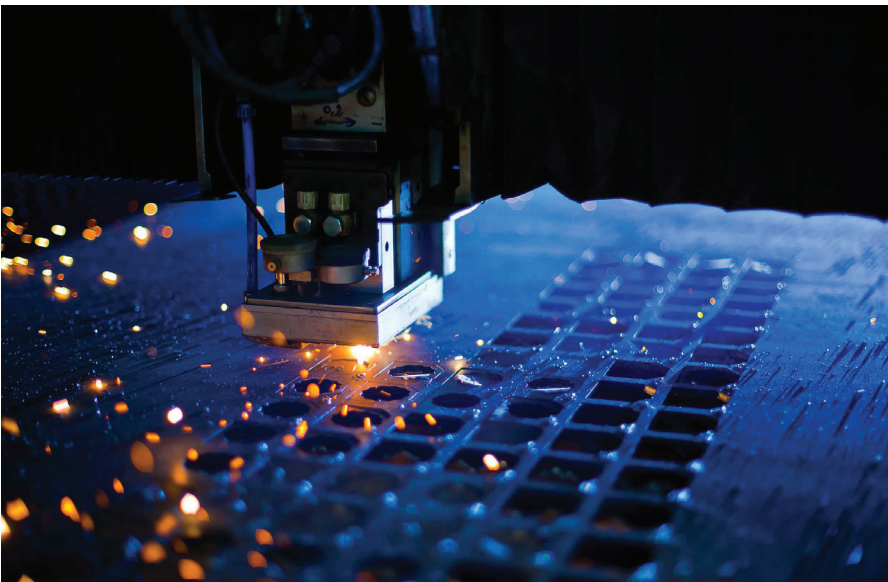
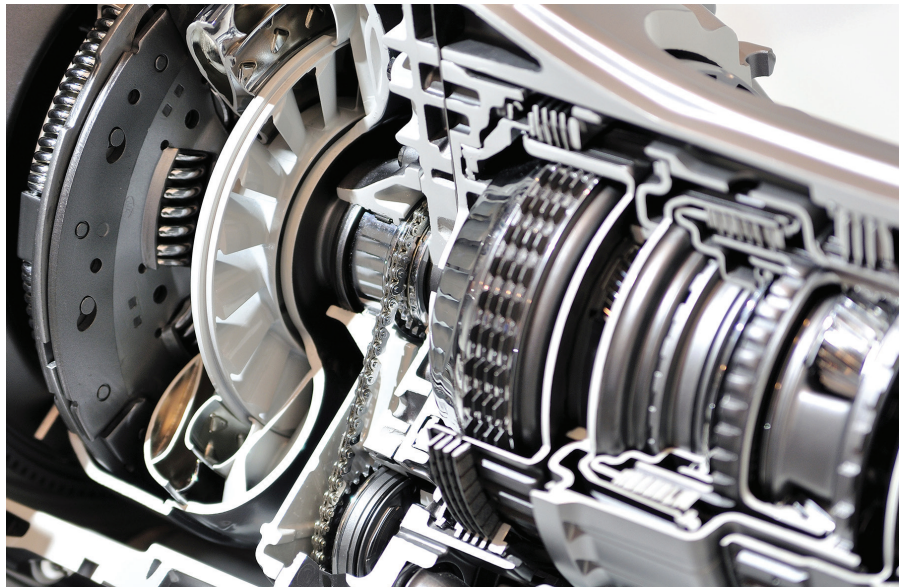
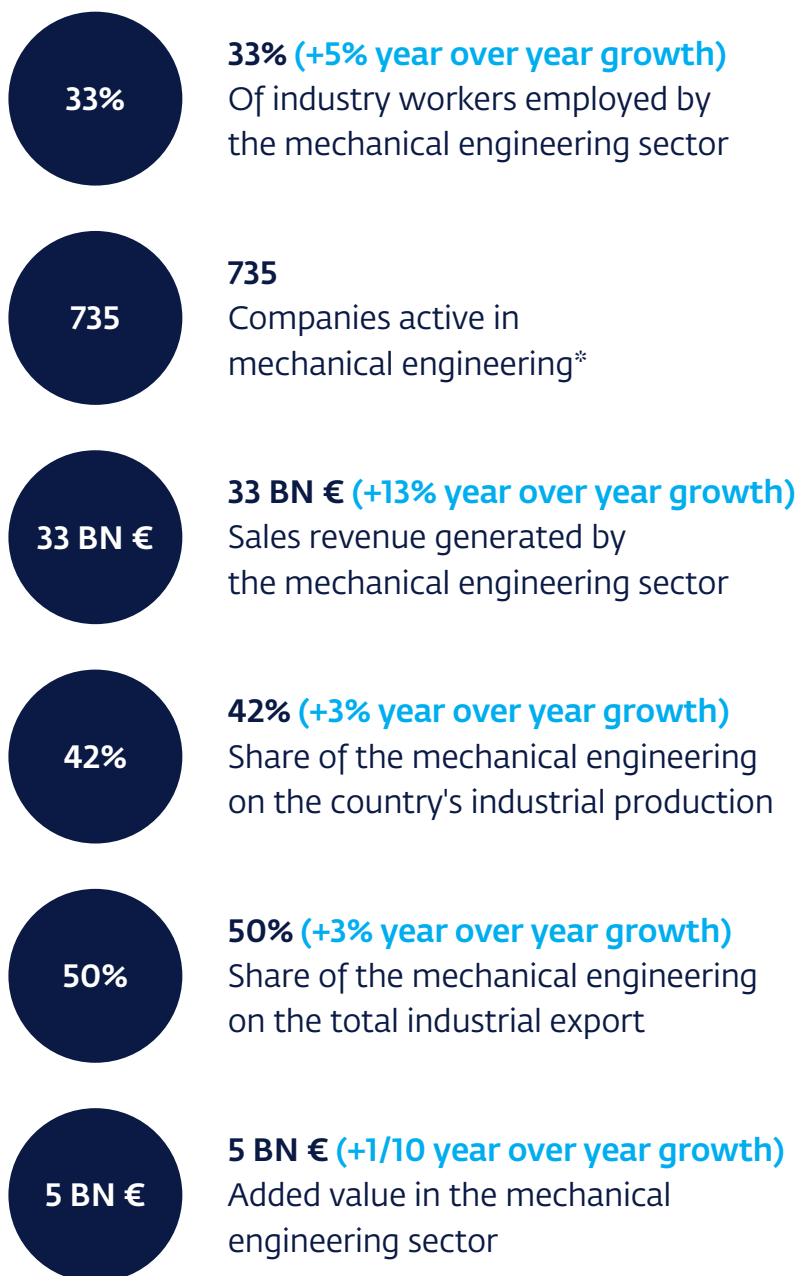


Mechanical Engineering in SLOVAKIA



Mechanical Engineering in Slovakia — Key Facts

The sector of mechanical engineering represents one of the key pillars of the Slovak economy. It has a strong historical background and maintains its stable position in the Slovak industry. It is a sector of crucial importance, not only because of its contribution to the GDP and foreign trade balance, but also for its potential to create jobs, boosting the overall employment.



Top 10 Reasons to Invest in Mechanical Engineering in Slovakia

- 1 Highest labour productivity in CEE region
- 2 Cost-effective & skilled labour force
- 3 Strong automotive industry as a driving force of mechanical engineering
- 4 Strategic location in Europe with great export potential
- 5 Political & economic stability
- 6 Attractive investment incentives for industry
- 7 Euro currency as one of the few in CEE
- 8 Fastest growing Eurozone member within the last 10 years
- 9 Large selection of industrial real estates
- 10 Well-developed infrastructure

Source: Statistical Office of the Slovak Republic, Trend
*includes companies with over 20 employees

Strong Tradition in Mechanical Engineering

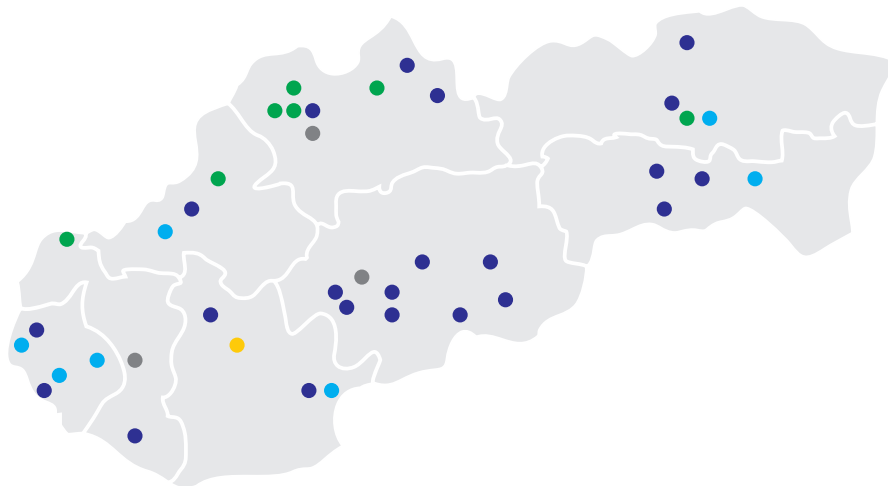
Slovakia has a long tradition in mechanical engineering. Although many activities transformed over the years, some merging into the automotive industry, the traditional engineering products created a strong skill driven environment and still maintain an important share on the entire Slovak manufacturing sector.



Before the year 1989, heavy and specialized engineering belonged to the key sectors of Slovak economy. Thanks to the successful transition into the market-oriented economy, massive development of the automotive industry and entry of strategic foreign investors, mechanical engineering has transformed into a modern and internationally recognized segment.

EXAMPLES OF HOLDINGS FROM THE PAST

Industrial companies established before 1989 represented significant holdings, carrying out their own R&D and employing thousands of people throughout various locations in Slovakia. After 1989, many plants were closed or heavily downsized. However, the infrastructure of vocational schools and overall manufacturing heritage these companies developed, still have significant impact on the industrial landscape of the region.

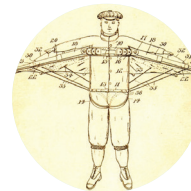


NETWORK OF COMPANIES AT THE PEAK OF THEIR EXISTENCE

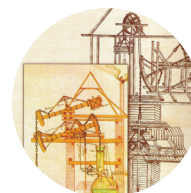
- ZTS (Závody ťažkého strojárstva) — military equipment (since 1937)
- ZVL (Závody valivých ložísk) — bearings (since 1968)
- Strojstav — construction machinery (since 1951)
- ŽOS (Železničné opravovne a strojárne) — reparation of motor locomotives (since 1952)

Famous Mechanical Engineering Inventions from the Past

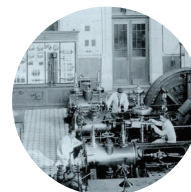
Slovak scientists stand behind number of great inventions



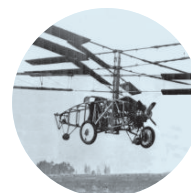
Parachute
Štefan Banič



Water Pump Machine used in Mining
Jozef Karol Hell



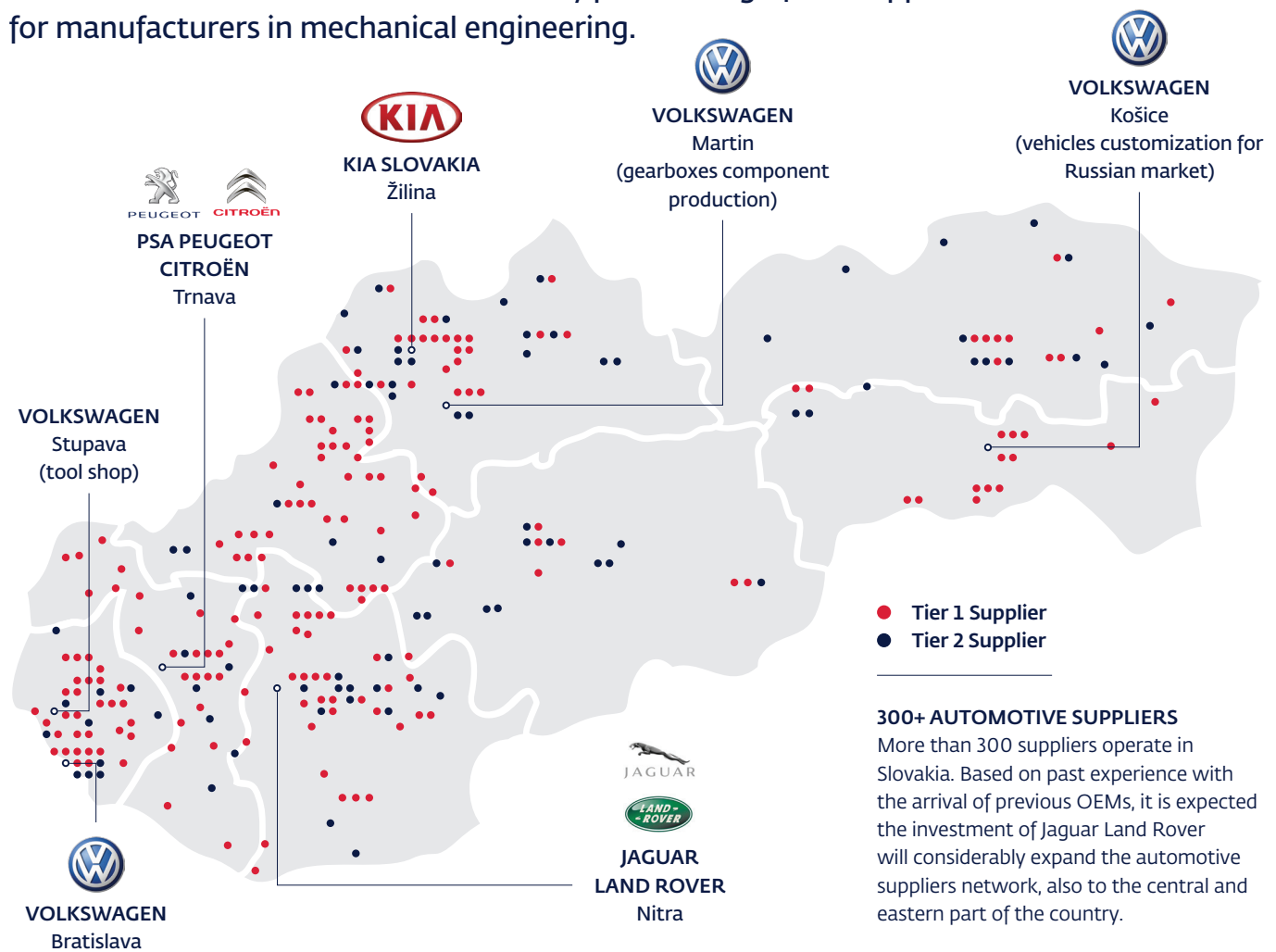
Steam & Gas Turbine
Aurel Stodola



Helicopter
Ján Bahýľ

Automotive Industry – The Strongest Branch of Mechanical Engineering

Mechanical engineering in Slovakia is closely linked to the automotive industry, which is the highest accelerator of investments in Slovakia. Increasing volume of investments into the automotive industry provides significant opportunities for manufacturers in mechanical engineering.



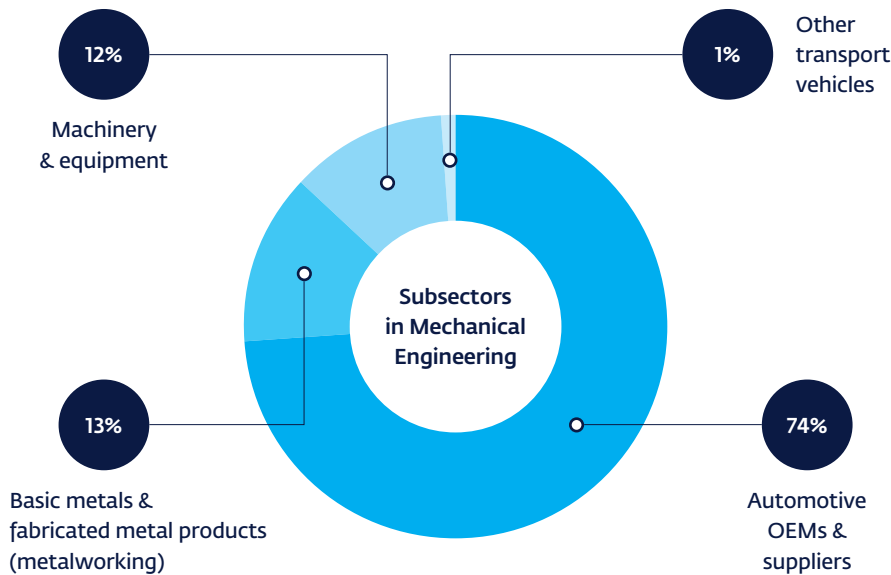
EXAMPLES OF AUTOMOTIVE ENGINEERING COMPONENTS & MAJOR MANUFACTURERS

 <p>Engines & Engine Parts Mobis, Pankl, Miba Sinter, Nemak, Getrag, Ford Transmissions</p>	 <p>Door Systems & Modules Brose, PHA Slovakia, Dura Automotive, U-Shin, Faurecia</p>	 <p>Air-conditioning Hanon Systems, Delphi</p>	 <p>Bearings Schaeffler, PSL, Omnia KLF, KINEX, ZVL Auto, MAHLE</p>	 <p>Brake Systems Continental, Akebono, Europalt, TI-Hanil, Mobis</p>	 <p>Body & Body Stampings ArcelorMittal, Gonvarri SSC, Benteler, Farguell, Matador, Gestamp</p>
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Source: Online Matchmaking Fair for Automotive Slovakia, GLOBAL Slovakia, 2016, Automotive Industry Association of the Slovak Republic (ZAP SR), SARIO

Different Subsectors of Mechanical Engineering

The mechanical engineering in Slovakia is not only connected to the automotive industry. There is also a variety of other industrial segments in demand of production capacities.



Examples of Companies Producing Other Transport Vehicles in Slovakia



ULTRA LIGHT AIRCRAFTS
Aerospool, Aeroopro, Tomark

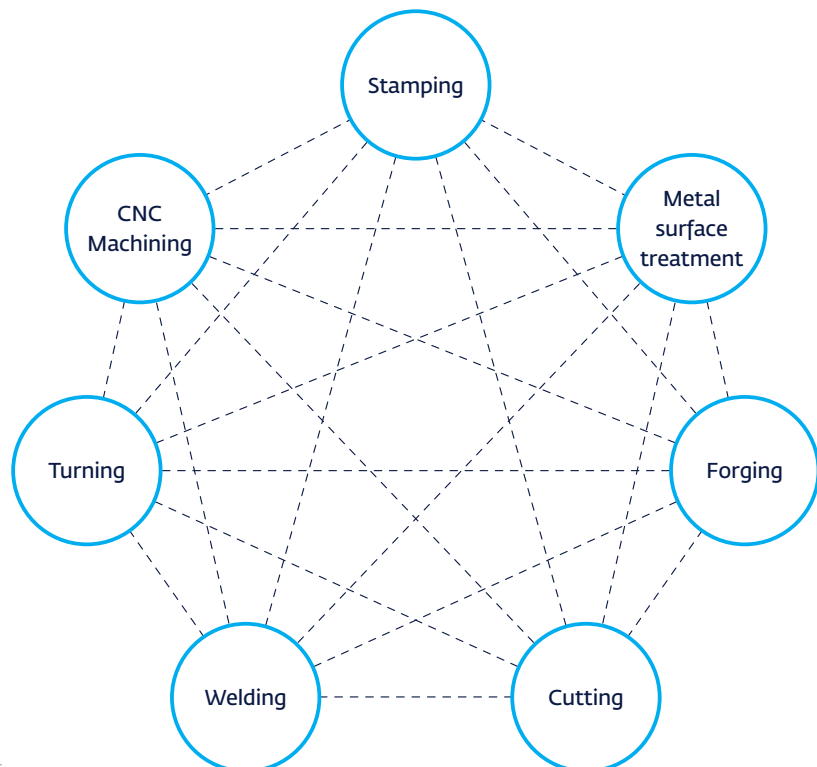


BUSES
Troliga Bus

METALWORKING INDUSTRY

Along with dynamic car production, metalworking is on the rise as well — representing one of the most significant economic sectors. In Slovakia, companies are active in a wide range of metalworking activities, usually performing combination of various processes.

- 396** Companies active in metalworking industry*
- 29 600** Estimate of all workers employed in metalworking industry*
- 4.8%** Share of the metalworking industry on the country's industrial production



Source: The Statistical Office of the Slovak Republic
Note: Examples of the most common metalworking operations.
*companies over 20 employees

Examples of Engineering Products & Major Manufacturers in Slovakia



DEFENSE SYSTEMS

DMD Group, Way Industries,
MSM Martin, Konštrukta Defence,
ZTS Metalurgy



HEATING BOILERS

Vaillant Industrial Slovakia,
Protherm Production,
Hoval



RAIL WAGONS

Tatrvagónka,
ŽOS Trnava, ŽOS Vrútky,
Lokotrans



HYDRAULIC SYSTEMS & COMPRESSORS

Embraco, Secop, Danfoss
Power Solutions



FOOD PROCESSING MACHINES

TOMRA Sorting, IMC, Marel,
Rademaker, PSS Svidník



METAL FORMING MACHINERY

MicroStep, Trens, LVD S3, Kabelschlepp —
Systemtechnik, Konštrukta,
H.M. Transtech, Matador Industries



PRODUCTION LINES EQUIPMENT

Energycy, VUKOV Extra, Manz,
MAKS-D, MTS, Glunz & Jensen, KUKA



GEARBOXES

Bauer Gear Motor, Spinea,
Hriňovské strojárne,
ZTS Sabinov



COOLING & VENTILATION EQUIPMENT

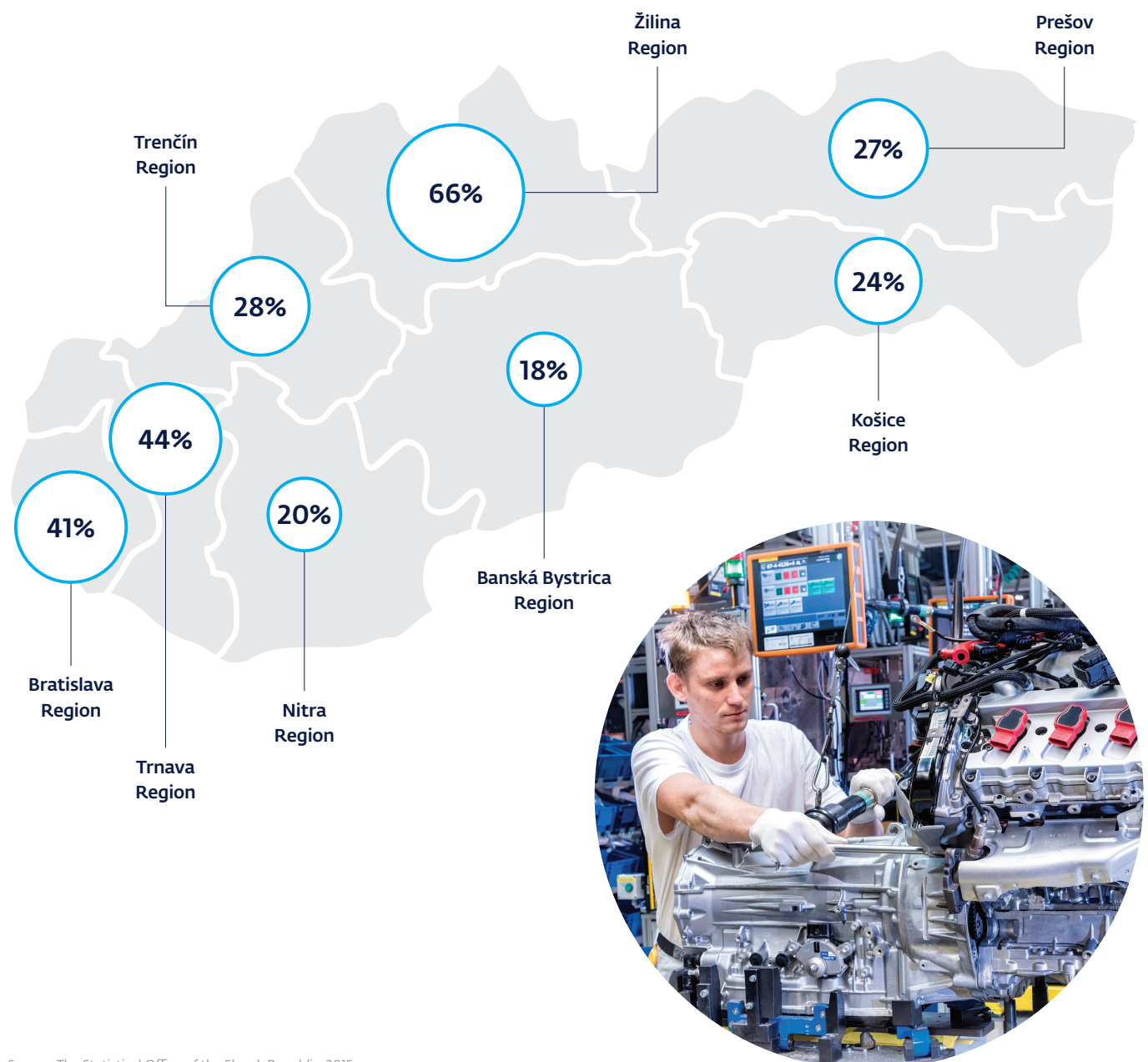
Hanon Systems, Vertiv (Emerson), Danfoss,
Camfil, Nissens, IMOS-Systemair

Source: Global Slovakia, 2016

Regional Distribution of the Mechanical Engineering Sector

Mechanical engineering companies are located across Slovakia. Some regions have a historically strong tradition in this sector, due to the former presence of large engineering holdings. The automotive industry, as the strongest branch of mechanical engineering, is mostly concentrated in the regions of Western Slovakia.

Regional share of Mechanical Engineering in Industrial Production



Source: The Statistical Office of the Slovak Republic, 2015

THE LARGEST COMPANIES IN MECHANICAL ENGINEERING (EXL. AUTOMOTIVE OEMS)

COMPANY NAME	COUNTRY OF ORIGIN	LOCATION	REVENUES (THS. EUR)	NUMBER OF EMPLOYEES	CORE BUSINESS
Mobis Slovakia	South Korea	Gbefany	1 260 731	1 830	axle & control panel production, brake systems
Schaeffler Slovensko	Germany	Kysucké Nové Mesto/ Skalica	965 350	9 109	bearings
Johnson Controls International	USA	Bratislava	626 148	2 743	Interior systems
Faurecia Slovakia	France	Bratislava	611 998	1 966	interior systems & emission control technology
SAS Automotive	Germany	Bratislava	611 495	463	assembly of control panels
ZF Slovakia	Germany	Trnava/Levice	382 253	2 298	powertrain modules, chassis components. suspension technology
Magneti Marelli Slovakia	Italy	Kechnec	375 541	604	dashboards, engine components
Yura Corporation Slovakia	South Korea	Lednické Rovne	314 209	2 787	cable harnesses
Hanon Systems	South Korea	Ilava	295 677	529	air conditioning
Vaillant Industrial Slovakia	Germany	Skalica	294 723	628	modules for heating units
Inteva Products Slovakia	USA	Lozorno	266 676	848	roof windows
Continental Automotive Systems Slovakia	Germany	Zvolen	254 683	971	brakes and brake callipers for the automotive industry
Getrag Ford Transmissions (Magna)	Germany (Canada)	Kechnec	246 896	833	gearboxes and transmissions
Embraco Slovakia	Brazil	Spišská Nová Ves	237 324	2 043	hermetic compressors & condensing units
Matador Holding	Slovakia	Púchov	214 326	1 276	body stampings, exhaust systems
Tatragavónka	Slovakia	Poprad	211 283	1 958	rail freight wagons & chassis
Sungwoo Hitech Slovakia	South Korea	Žilina	197 976	744	metal body parts
U-Shin Slovakia	Japan	Košice	193 290	1 723	door lockers
Secop	Germany	Zlaté Moravce	189 365	833	hermetic compressors
Sejong Slovakia	South Korea	Lietavská Lúčka	185 237	172	exhaust systems
Protherm Production	Czech Republic/ Germany	Skalica	178 427	460	boilers, heaters
HBPO Slovakia	Germany	Lozorno	170 157	144	modul front ends
Leoni Slovakia	Germany	Trenčín	161 702	2 331	cable harnesses
Plastic Omnium Auto Exteriors	France	Lozorno	158 989	691	plastic bumpers
Seoyon E-HWA Automotive	South Korea	Dubnica nad Vahom	157 498	631	plastic components
Lear Corporation Seating	USA	Prešov	156 494	988	steel frames
ŽOS Trnava	Slovakia	Trnava	155 569	2 450	rail wagons

Source: Trend Top, 2016

Qualified, Productive & Cost-Effective Labour Force

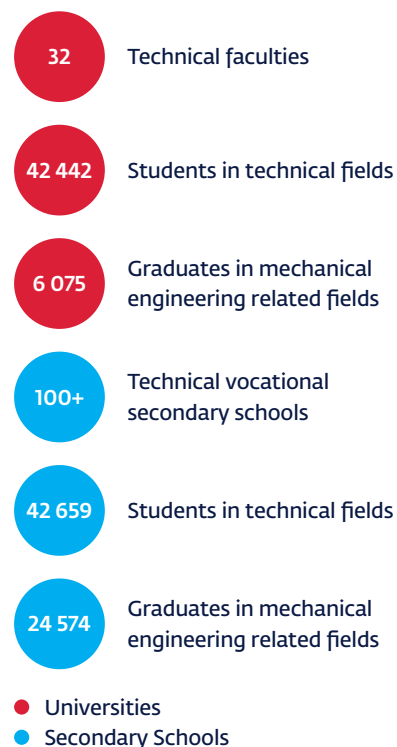
For investors active in mechanical engineering, availability of a skilled workforce is a key factor for successful site selection. Slovak labor force combines an outstanding level of productivity and qualification, while still remaining cost-competitive on regional as well as European levels.

Almost 140 companies and 1 400 students joined the dual education in academic year 2016/2017

DUAL EDUCATION

The Slovak Government fully implemented a new dual education framework facilitating shared theoretical education in schools and practical training in companies. The companies joining the new scheme have the advantage of not only benefiting from a prepared and qualified labor force, but also from the possibility to utilize a related tax relief.

Education in Slovakia



AVERAGE GROSS MONTHLY SALARY IN MECHANICAL ENGINEERING (SELECTED POSITIONS/EUR)

POSITION		BRATISLAVA	TRNAVA	NITRA	TRENČÍN	ŽILINA	BANSKÁ BYSTRICA	KOŠICE	PREŠOV
Non-qualified Worker	Min.	600	500	500	500	500	450	550	500
	Max.	750	650	650	650	650	550	700	650
Welder	Min.	800	700	700	700	700	650	750	700
	Max.	1300	1200	1200	1200	1200	1100	1300	1200
Quality Controller	Min.	900	800	800	700	800	650	900	800
	Max.	1100	950	950	900	950	850	1100	1000
CNC Machine Operator	Min.	900	800	800	800	800	700	900	800
	Max.	1500	1400	1400	1400	1400	1200	1500	1400
Technician	Min.	1100	1000	1000	1000	1000	1000	1000	1000
	Max.	1600	1600	1600	1600	1600	1500	1600	1600
Production Supervisor	Min.	1400	1200	1200	1200	1200	1000	1300	1200
	Max.	2 000	2 000	2 000	1900	1900	1800	2 000	1900
Production Manager	Min.	2 500	2 200	2 200	2 200	2 200	1900	2 300	2 100
	Max.	4 000	3 500	3 500	3 500	3 500	3 000	3 700	3 500

Source: ADECCO Slovakia, 2016 — The member of the Investment Support Association. Employer's contributions (35.2%) are not included.

Growing R&D & Innovation Network

Suitable conditions for establishing R&D in terms of highly qualified workforce at affordable costs, presence of technology clusters and established cooperation between companies and domestic universities, motivate companies to establish their R&D divisions in Slovakia.

EXAMPLES OF SLOVAK R&D SUCCESS STORIES



SPINEA
Development of high precision reduction gears



MICROSTEP
Development of CNC cutting machines



CEIT
Innovative solutions for industrial companies



PRVÁ ZVÁRAČSKÁ
Development of welding technologies

EXAMPLES OF R&D SUCCESS STORIES OF FOREIGN COMPANIES IN SLOVAKIA

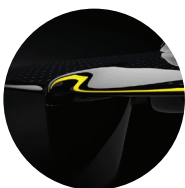


EMBRACO
Development of compressors

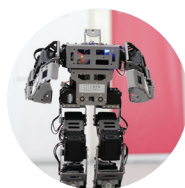


KUKA SYSTEMS
Development of robotized production lines

EXAMPLES OF R&D SUCCESS STORIES OF SLOVAK UNIVERSITIES



SOLAR POWERED VEHICLE
University of Žilina & Academy of Fine Arts & Design



THE NATIONAL ROBOTICS CENTER
Slovak University of Technology

R&D Infrastructure Related to Mechanical Engineering

- 35 Centers of excellence
- 9 Science parks and research centers
- 3 Centers of competence

RIS3 – NATIONAL R&D SPECIALIZATION STRATEGY

RIS3 is national R&D strategy focused on innovation support through cooperation between companies and research institutions. This strategy defines **material research and nanotechnology** as one of the priorities linked to R&D funding.

30% of all material research outputs in the international scientific journals originates in Slovakia

Slovak Academy of Science



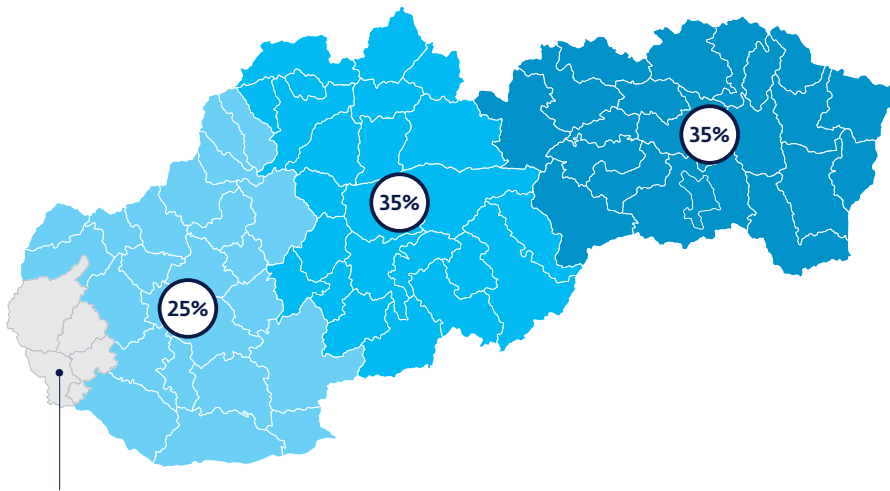
INSTITUTE OF MATERIALS & MACHINE MECHANICS
Applied research institute within the Slovak Academy of Sciences.

Source: Slovak Organization for Research & Development Activities, 2013, Yearbook of Science & Technology in the Slovak Republic 2014, Research & Innovation Strategy for Smart Specialization of the Slovak Republic, 2013

Investment Incentives

The primary role of the investment incentives is to motivate investors to place their new projects in regions with higher unemployment and to attract projects with higher added value. The positive impact of a new investment shall be proved by job creation, improved chances for the graduates to get a job, as well as by creation of new entrepreneurial opportunities for local companies.

MAXIMUM REGIONAL INTENSITIES OF INVESTMENT AID IN SLOVAKIA for SMEs additional 10 to 20 %



Bratislava region excluded

INDUSTRY

Minimum investment amount, number of newly created jobs and share of new technology are subject to the unemployment rate in the selected district and forms of aid required.

If applying for income tax relief, the following criteria have to be met in regards to particular districts category:

- 6 mil. EUR and 60% share of new technology
- 3 mil. EUR and 50% share of new technology
- 1,5 mil. EUR and 40% share of new technology
- 0,2 mil. EUR and 30% share of new technology
- Expansion includes minimum increase in the production volume or turnover by at least 15%.

Other forms of aid are subject to different requirements.

TECHNOLOGY CENTERS

- Minimum investment of 200 ths. EUR on fixed assets in all regions
- Minimum of 20 newly created jobs
- Minimum 1,7 fold of average salary in the district paid to new employees

SHARED SERVICES CENTERS

- Minimum of 50 newly created jobs
- Min 1,5 fold of average salary in the district paid to new employees

*Conditions differ for projects from 'Priority areas'. Please contact us at invest@sario.sk for more information.



ELIGIBLE PROJECTS

The Act on Investment Aid divides the projects which may be supported into four categories:

- Industry
- Technology Centers
- Combined Projects of Industrial Production and Technology Center
- Shared Services Centers

ELIGIBLE COSTS

- Costs of land acquisition
- Costs of buildings acquisition & construction
- Costs of new technological equipment and machinery acquisition
- Intangible long-term assets — licences, patents, etc.
- Rent of new land/building

OR

- Wage costs of new employees for the period of 2 years

FORMS OF INVESTMENT INCENTIVES

- Tax relief
- Cash grant
- Contributions for the newly created jobs
- Rent/Sale of real estate for a discounted price

SARIO Profile

Slovak Investment and Trade Development Agency (SARIO) is a governmental investment and trade promotion agency of the Slovak Republic. The agency was established in 2001 and it operates under the Ministry of Economy of the SR.

INVESTMENT SERVICES

SERVICES FOR POTENTIAL INVESTORS

- Investment environment overview
- Assistance with investment projects implementation
- Starting a business consultancy
- Sector and regional analyses
- Investment incentives consultancy
- Site location and suitable real estate consultancy

SERVICES FOR ESTABLISHED INVESTORS

- Identification of local suppliers, service providers
- Assistance with expansion preparation and execution
- Relocation assistance, work/stay permits
- Support of innovation and R&D activities
- Social networking

FOREIGN TRADE SERVICES

IF YOU ARE LOOKING FOR

- Slovak supplier or subcontractor
- Information about Slovak export/trade environment
- Sourcing opportunities
- Forming a joint venture, production cooperation or other forms of partnership with a Slovak partner

SERVICES FOR EXPORTERS

- Information on foreign territories
- Customized search for foreign partners
- On-line database of business opportunities
- Export Training Centre
- Subcontracting assistance

INNOVATION SUPPORT

- Support activities for development and popularization of Slovak innovations and R&D environment
- Establishment of relations with domestic and foreign well-established innovative companies
- Interconnection of Slovak R&D capacities with industrial production and investors' needs in order to transfer leading innovative technology processes closer to production praxis
- Encouragement to foreign investors to bring investments with substantial R&D components to the SR
- Ecosystem analysis of local investment opportunities as well as domestic and foreign investors in order to support acquisitions and joint ventures projects
- Specific information from the field, in order to obtain capital and foreign markets penetration

To find out more about the Slovak investment environment visit our website sario.sk

468

Number of SARIO Investment Projects from 2002 – 2016

170

Number of SARIO Mechanical Engineering Projects 2002 – 2016

Our Award



2014 Global Best to Invest 2013 Selection Site magazine

ALL OUR SERVICES ARE FREE OF CHARGE!



SARIO is your one-stop shop for investment and trade in Slovakia. Talk to us today!

INVESTMENT SERVICES

We will take your investment plans in Slovakia to success from A through Z. We provide in-depth information about the Slovak business environment, industry opportunities, complex information on setting up a business, site selection assistance, as well as real estate consultancy and complex aftercare services for established investors.

FOREIGN TRADE SERVICES

SARIO ensures identification of potential suppliers and subcontractors by matching your sourcing and procurement needs with the potential of Slovak producers. Business networking and matchmaking events bring Slovak partners closer to your company.

SARIO IS THE OFFICIAL GOVERNMENTAL AGENCY PROMOTING SLOVAK INVESTMENT OPPORTUNITIES AND BUSINESS POTENTIAL.

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SARIO Business Link



Slovak Investment and Trade Development Agency brings you a series of one of a kind cooperation international business-to-business events under the name **SARIO Business Link** — Slovak Matchmaking Fair promoting business potential of Slovakia through Slovak companies looking for foreign partners and presenting business offers, tenders, available production capacities, joint venture proposals and partnership offers in a whole range of industries.

AGENDA

- all day filled with **prescheduled individual B2B meetings**
- panel discussions on the **latest trends** in the industry
- **free consultations and networking** in various industry sectors

ADVANTAGES

- get to know your future business partners in advance through their company profiles
- invite your prospective partner for a meeting, accept or deny any meeting invitations you get
- find out about the latest trends and signals of various industry sectors
- whole day filled with networking and fruitful negotiations
- get to know Slovakia's business potential at first hand

Two largest SARIO Business Link Events

SLOVAK MATCHMAKING FAIR NITRA (spring)

The **Slovak Matchmaking Fair Nitra** takes place as a part of the International Engineering Fair in Nitra giving you the opportunity to see even more Slovak companies present in this sector in one place and in one day.

SLOVAK MATCHMAKING FAIR BRATISLAVA (autumn)

The **Slovak Matchmaking Fair Bratislava** is annually the largest international B2B matchmaking event in Slovakia. Besides your scheduled bilateral meetings, you may attend accompanying program of the fair and enjoy the Gala evening with attractive cultural and gastronomic experience.

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