

# Czech Republic

## The Ultimate Business Gateway



Czech Republic



**CzechTrade**  
Czech Trade Promotion Agency

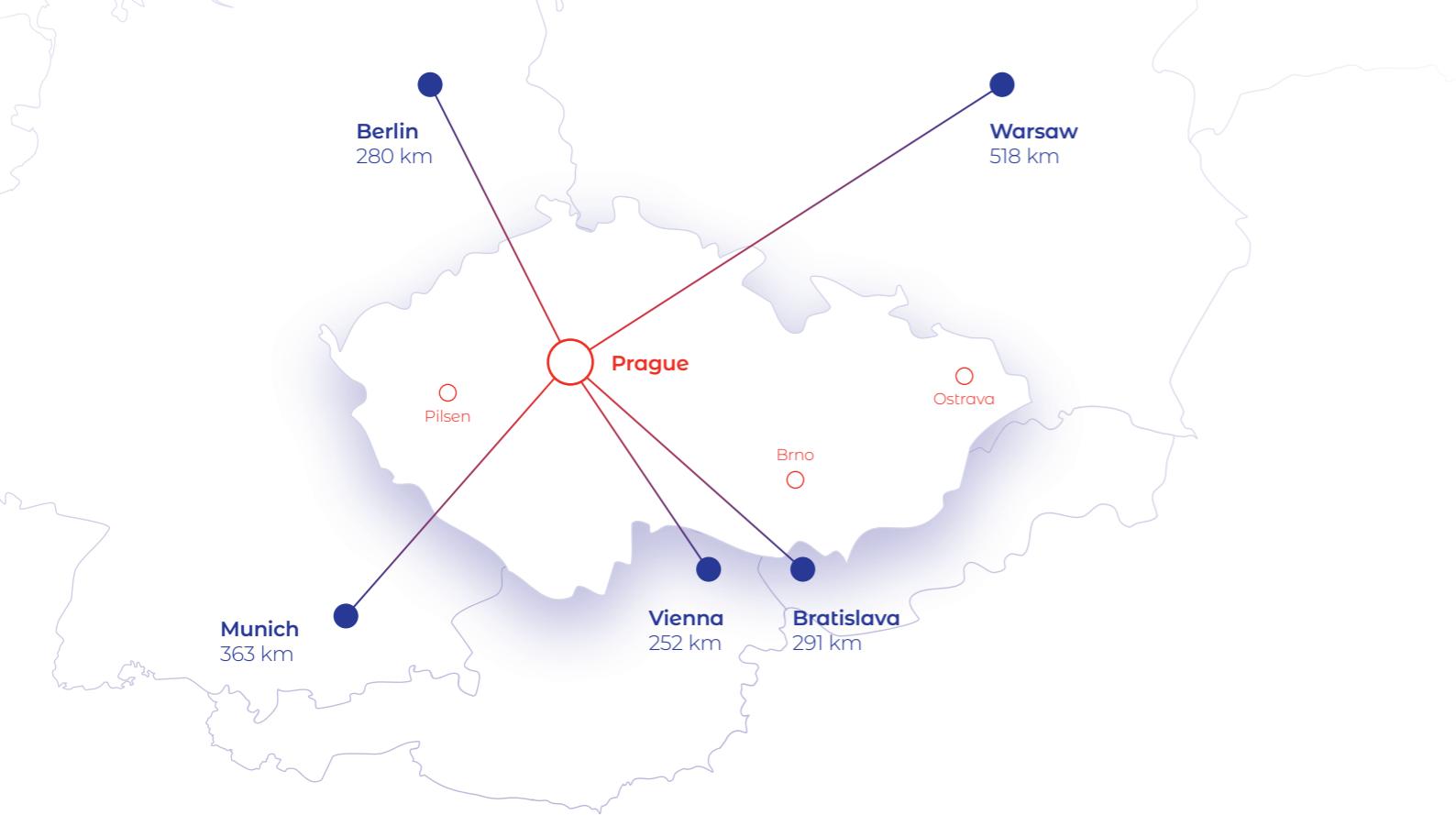


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# Did you know?





## General Information

Area  
**78,871 km<sup>2</sup>**

Population  
**10.9 million**

Capital  
**Prague (1.4 million inhabitants)**

Other large cities  
**Brno (402,739 inhabitants),  
Ostrava (283,187 inhabitants),  
Pilsen (187,928 inhabitants),**

Official language  
**Czech**

Neighbouring countries  
**Germany, Poland, Slovakia, Austria**

Currency  
**Czech crown, CZK**

VAT  
**Standard rate 21%, reduced rate  
12 % (from January 2024), zero tax  
(books)**

Time zone  
**GMT+1, Summer GMT+2**

Political arrangement:  
**Parliamentary republic  
with a multiple party system**

Administrative divisions  
**The Czech Republic is divided  
into 14 regions**

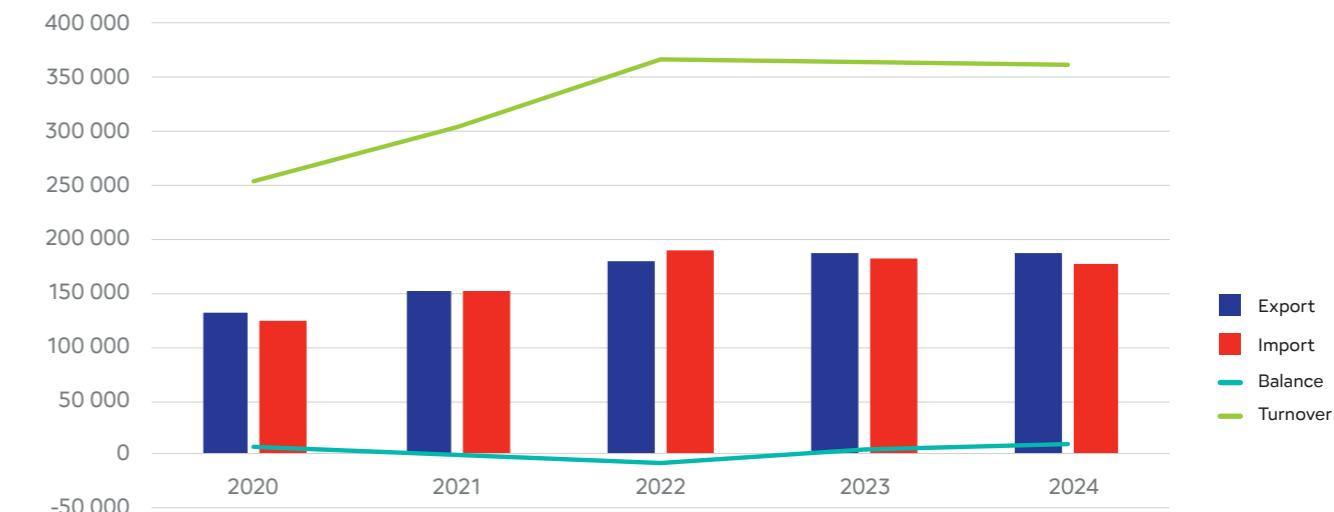
## Main Economic Indicators

Indicator	2018	2019	2020	2021	2022	2023	2024
Real GDP growth %	2.8	3.6	-5.3	4.0	2.8	0.0	1.2
Real GDP growth % EU 27	2.0	1.9	-5.6	6.4	3.5	0.4	1.1
Real GDP per capita (EUR)	21,320	22,050	20,980	21,830	21,910	21,680	21,910
Total unemployment rate %	2.2	2.0	2.6	2.8	2.2	2.6	2.6
Total unemployment rate % EU 27	7.4	6.8	7.2	7.1	6.2	6.1	5.9
Inflation rate (% r/r, average, HICP)	2	2.6	3.3	3.3	14.8	12.0	2.7
Inflation rate (% r/r, average, HICP) EU 27	1.8	1.4	0.7	2.9	9.2	6.4	2.6
CZK/EUR (average)	25.643	25.672	26.444	25.645	24.565	24.007	25.119
CZK/USD (average)	21.735	22.934	23.196	21.682	23.360	22.210	23.208
GDP per capita (current prices, USD) PPP	42,016	46,139	45,675	50,019	53,270	55,803	56,805
GDP per capita (current prices, USD) PPP, OECD avg.	45,362	47,277	46,413	51,021	56,068	59,020	61,050
GDP per capita (current prices, USD) PPP, EU avg.	44,965	48,546	47,486	51,932	57,502	59,045	62,433

Source: EUROSTAT, International Monetary Fund, The Czech Statistical Office, World Bank

## Foreign Trade of the Czech Republic

International trade in goods (change of ownership) in millions of EUR





## Czech Exports of Goods Main Countries in 2024

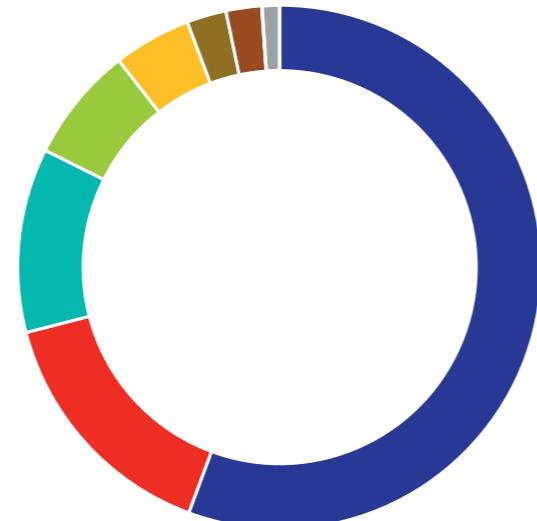
Germany 29%	Austria 4%
Slovakia 9%	Netherlands 3%
Poland 7%	Hungary 3%
France 5%	United States of America 3%
United Kingdom 5%	Others 28%
Italy 4%	

Source: The Czech Statistical Office, International trade in goods (change of ownership)

## Commodity Structure of Czech Exports in 2024 – Top 5 (SITC 1)

Machinery and transport equipment (56%)
Manufactured goods classified chiefly by material (15%) (products from metals, iron and steel, rubber, non-metallic mineral products, textile yarn, fabrics)
Miscellaneous manufactured articles (11%) (articles of apparel and clothing accessories, professional, scientific and controlling instruments, furniture, footwear, toys, articles of plastics)
Chemicals and related products (7%)
Food and live animals (5%)
Mineral fuels, lubricants and related materials (2%)
Crude materials, inedible, except fuels (2%)
Other (1%) (beverages and tobacco, commodities and transactions not classified elsewhere in the SITC, animal and vegetable oils, fats and waxes)

Source: Czech Statistical Office, International trade in goods (change of ownership)



# Business INFO.cz

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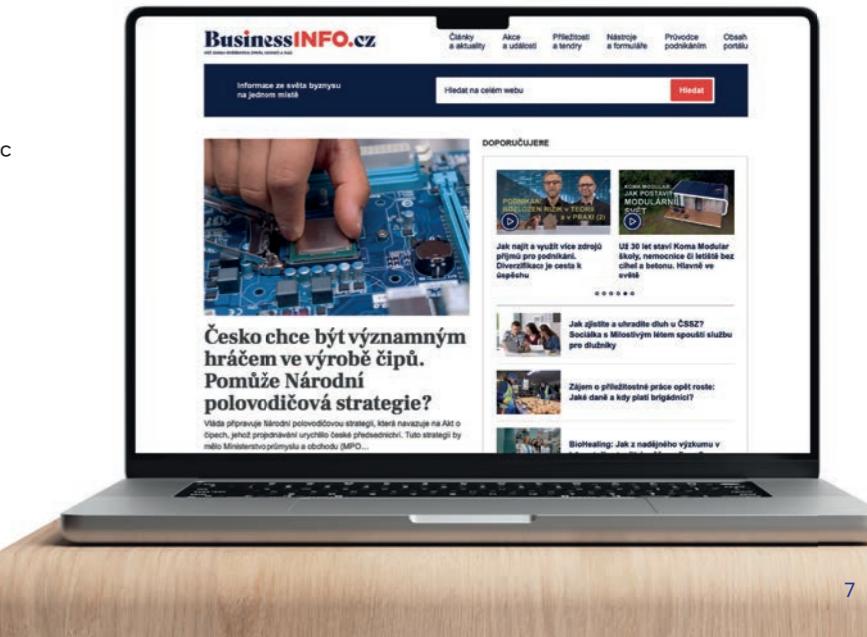
[www.businessinfo.cz/en](http://www.businessinfo.cz/en)

BusinessInfo.cz is a partner of the Single Digital Gateway project: your gateway to public administration services, assistance and legislation in the Czech Republic. Single Digital Gateway (SDG) is a European Union project aimed at creating a European-wide electronic point of access that will help to guide citizens and businesses to information, administrative procedures and assistance services necessary for their activities within the EU. BusinessInfo.cz not only provides foreign companies all the information relevant for business in the Czech Republic but also gives them access to current investment opportunities and much more.

**Businessinfo.cz offers valuable information from proven sources approved by experts:**

- how to start a business in the Czech Republic
- how to acquire a stake in a company
- how to find a business partner for expanding or establishing a new company in the Czech Republic
- how the tax system is set up in the Czech Republic
- what the investment climate is like here
- what current investment opportunities there are and much more
- useful links and institutions in the Czech Republic

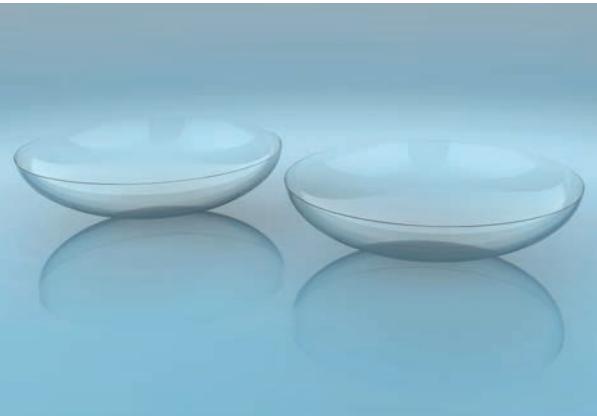
The portal was set up by the CzechTrade Agency. The project is coordinated by the Ministry of Industry and Trade. Štěpánská 567/15, 120 00 Prague 2, Czech Republic info@businessinfo.cz



# Famous Czech Inventions, Discoveries and Innovations

## Lightning conductor

It was invented by Prokop Diviš, who devoted himself to the idea of manufacturing a machine that would harness the accumulated electric charge from storm clouds. The first earth-connected lightning conductor in the world was made by Diviš in the garden of Přímětice near Znojmo.



## Contact lenses

They were invented by the Czech chemist Otto Wichterle in 1961. He built his first "lens machine" from parts of a Merkur building kit and a bicycle dynamo. A year later he manufactured around 5,000 lenses. In 1965 an American company called the National Patent Development Corporation bought the licence for contact lens production. Nowadays, contact lenses are used by millions of people all around the world.



## Screw propeller

The screw propeller was invented by the Czech constructor Josef Ludvík František Ressel, who was awarded a patent for this invention in 1827. He designed the screw propeller's optimal shape and placed it horizontally under the stern in front of the rudder; therefore, the screw propeller could be used both on the sea and on rivers. This invention substituted the previous paddle mechanism used in ship propulsion.

# Famous Czech Inventions, Discoveries and Innovations

## Sugar cube

The sugar cube press was invented in 1841 by Jakub Kryštof Rad, who was the director of the sugar refinery in Dačice. Mass production started in 1843 when the patent was approved and the licence was granted for sugar cube production.



## Kaplan turbine

Professor Viktor Kaplan invented a water turbine with adjustable circulating blades in 1913. It is used in particular in places where it is impossible to ensure permanent flow or drift. Big Kaplan turbines are individually designed for each spot for operation with the highest possible efficiency (usually more than 90%). Kaplan turbines are widely used in water power plants worldwide.



## Blood group classification

The four blood groups were first identified by the Czech physician, neurologist and psychiatrist Jan Janský in 1907. He did not label them with today's designations (A, B, AB and O) but assigned them Roman numerals (I, II, III and IV). The classification of blood groups in the system AB0 started to be used in the 1930s.

## Pilsner

It is a bottom-fermented pale lager beer made according to a recipe from the city of Pilsen. It differs from other beers primarily thanks to a more pronounced hoppy flavour. The first beer of this kind was developed after the founding of the Měšťanský Brewery in 1839 and was first brewed by Josef Groll in 1842.

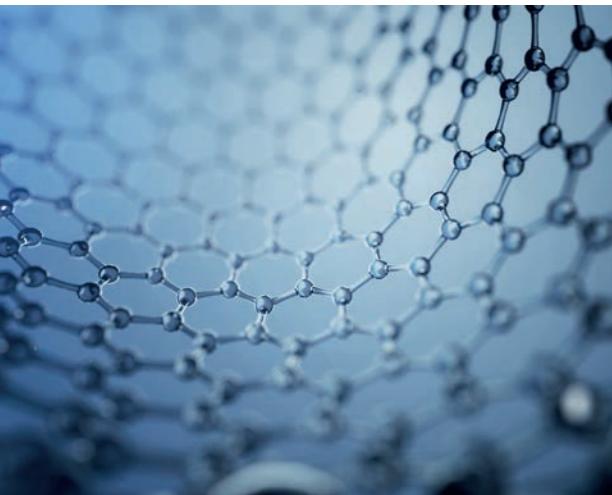
## Bladeless turbine – PROTUR\*

One of the most recent Czech inventions is the bladeless (rolling) turbine. The creator is Associate Professor Miroslav Sedláček from the Czech Technical University (ČVUT), who received a nomination for the European Inventor Award 2016 in the "Research" category for his invention. The turbine has many advantages, the most important being that it can handle different gradients. It can function with a gradient of 5 metres as well as one of 20 metres and more. Turbine construction is very simple, and efficiency is around 40–70%. Thanks to this invention, half of the potential hydropower that remained untapped until then could be harnessed.

\* Precession Rolling Turbine

## Nanospider™

This is a unique technology that makes the industrial production of unwoven textiles, nanofibres (textiles with a diameter 20–500 nm). It is a technology that was created thanks to the cooperation of Professor Jirsák's team and the engineer Mareš. Nanofibres may be used for filtering in many sectors, such as medicine, the car industry, energy industry, building industry, cosmetics, environmental protection, etc. Nanofibres are globally recognised as materials of the third millennium.



## Czech transplant medicine

Czech surgeons are at the top of European transplant medicine. The first successful transplant was performed by the oculist Eduard Konrad Zirm in 1905 in Olomouc when he performed a successful transplantation of eye corneas. Bohdan Pomaháč is currently a well-known Czech plastic surgeon who specialises in face transplants. With his team he performed the first complete face transplant in the United States; this surgery was simultaneously the third complete face transplant in the world.



## Pealock

An electronic lock that alerts the owners to the theft of or tampering with their equipment – skis, scooters, strollers or bicycles thanks to a motion sensor and integrated alarm. Besides the alarm, the lock sends a notification to a mobile phone via Bluetooth and, in case of a longer distance, switches to GSM mode and calls the owner. The smart lock is made of durable thermoplastic elastomer with steel cables and a wire that leads to the electronics, making it difficult to break it. The product won the prestigious Red Dot Award for design in 2020.

## Glass nail file

In 1997 the Czech company Blažek Glass invented the world's first glass nail file. Currently, the company exports these files around the globe. Customers of Blažek Glass include the most notable cosmetic companies. Glass for the nail file is made using the traditional methods of Bohemian glaziers, which gives the nail file a unique wear resistance.

## Computer program to help people with voice loss

Czech scientists have developed a computer program that gives people back their voice. The project was supported by the Technology Agency of the Czech Republic and many experts on the matter. The program is intended to help cancer patients who have to have their vocal cords removed. The app allows their voice to be recorded and saved before the medical intervention. The patient's voice is automatically saved, and then they can communicate using the app. A text is written onto the device, and the program reads it in the person's own voice.



## Polarography

In 1922, Jaroslav Heyrovský invented polarography, a method measuring electric current through a mercury droplet in solution to identify substances and their amounts. Together with Japanese scientist Masuzo Shikata, he built a polarograph to speed up measurements. For this discovery and development, Heyrovský received the Nobel Prize in Chemistry in 1959.

## Biodegradable stents

ELLA-CS is a Czech manufacturer of medical devices focusing on the gastrointestinal tract. This purely Czech company has developed world-unique biodegradable stents and holds a number of Czech and international patents. Its products are exported to 70 countries around the world, where they help improve the quality of life of thousands of patients.

# Branches of Industry

## Automotive industry

The automotive industry is the largest sector of Czech manufacturing, accounting for 34 % of the manufacturing industry and employing around 500,000 people (including related supplier industries).

In 2024, production reached 1.45 million road vehicles (+4 % year-on-year), of which over 1.35 million were exported.

Passenger cars dominate: Škoda Auto holds 62 % of production, Hyundai 23 % and Toyota 15 %.



- Innovative companies with unique products
- High quality production
- Experienced exporters with good references
- Skilled labour force
- Flexibility and financial stability
- Strategic geographical location
- Long-term industrial tradition

Source: AUTOSAP



## Aviation industry

The Czech Republic has an extensive aviation background and strong presence in aerospace, known for quality, reliability and innovation. The industry holds a respected international position, covering aircraft production, component manufacturing, engines and pilot training.

Aircraft production includes small regional and training aircraft, light combat, sport, agriculture, ultralight aircraft and gliders. Key producers include AERO Vodochody AEROSPACE, ZLIN AERO, Primoco UAV and AIR OPERATION TECHNOLOGIES (Skyleader), Evektor-Aerotechnik and Aircraft Industries. The country is a world-class manufacturer of ultralight aircraft and aerospace components and belongs to the few nations worldwide capable of manufacturing a complete aircraft entirely on its own territory.

Engines represent another advanced segment. Czech companies such as PBS Velká Bíteš and GE Aviation Czech develop and manufacture modern turboprop, turbofan and turbine engines for light aircraft, helicopters and UAVs,

making the Czech Republic one of the few countries with its own aircraft engine industry.

Component manufacturing covers parts for large transport and military aircraft and helicopters. Czech firms supply Airbus, Boeing, Embraer, Bombardier, Sikorsky, CASA and Eurofighter. They also lead in aircraft safety systems (STRATOS 07, GALAXY Holding).

Pilot training is another strong segment, with the Czech Republic ranking among the world's leaders, offering both basic and advanced training on aircraft and simulators of its own production.

## Engineering

The Czech engineering sector comprises around 70,000 companies, covering electronics and electrical equipment, machinery, motor vehicles, transport solutions, and more. Many of these companies specialise in energy engineering, transport engineering, production of machining and shaping tools, and metal structures and components.

Czech engineering firms supply complete industrial equipment, including turbines, machine tools, air-conditioning systems, construction machinery, agricultural equipment, food processing machines, and specialised machinery for the healthcare, chemical, and textile industries. The sector benefits from close cooperation with technical universities and the adoption of advanced technologies such as nanotechnology, mechatronics, robotics, and sophisticated electronics.

Key Czech manufacturers with strong export records include ŠKODA TRANSPORTATION (transport solutions), VÍTKOVICE (energy and heavy machinery), BONATRANS GROUP (wheelsets and railway components), TAJMAC-ZPS (high-performance machine tools), and TOS Varnsdorf, a global leader in the development and production of machine tools. In 2023, Czech machine tool production per capita ranked 8<sup>th</sup> in the world, highlighting the country's long-standing tradition in high-precision engineering.



## Technology for energy

The Czech Republic has a long industrial tradition in conventional power engineering and is home to globally recognised suppliers of energy technologies. Among the leaders is Doosan Škoda Power, renowned for its design and manufacture of steam turbines (10–1,200 MW) for fossil, nuclear, and renewable plants, with references across Europe, Asia, and the Americas.

ŠKODA JS specialises in nuclear engineering, while Sigma Group delivers high-capacity pumps for power plants. PBS ENERGO supply boilers and heat exchangers, and TEDOM is a major exporter of CHP units from small systems to multi-megawatt solutions.

Additional key players include EGEM, delivering complete energy facilities from substations and power plants to battery storage and electric boilers, and ZAT, a respected supplier of control systems for nuclear and conventional plants. ZPA Smart Energy and ZPA Ekoreg provide advanced instrumentation and control solutions, ensuring reliability and safety in energy operations. Cink Hydro-Energy develops turbines for small and medium hydro stations, while MetaPro, Mifre Energy, and Mega a.s. offer engineering and technology for biomass, nuclear, petrochemical, and wastewater projects. ŽDAS supports the sector with heavy machinery and metallurgical components for power generation.



## Environmental technologies

The Czech environmental technology industry has long been growing, offering domestic and global opportunities with innovative solutions.

In renewable energy, Czech companies develop technologies for solar, wind, and hydrogen energy. TEDOM produces cogeneration units relying on natural gas, LPG, and biogas. FARMTEC and MEZ focus on biogas plants, while CINK Hydro-Energy and Mavel provide hydroelectric equipment. SIAG CZ and Wikov supply components and towers for wind farms. Smart Heating Technology and Step TRUTNOV specialise in automated biomass and straw-fired boilers.

Czech firms also develop electrolyzers, pressure vessels, and hydrogen infrastructure. Vítkovice Cylinders produces transport and stationary tanks, while Škoda Electric delivers hydrogen buses. Grey hydrogen production is led by Orlen Unipetrol and Spolchemie.

Water treatment technologies are provided by ASIO, EKONA, and ENVI-PUR, united under the Czech Water Alliance. In waste processing, recycling, and sustainability, Green Future and ENRESS focus on plastics, while DEKONTA and GEOtest offer site remediation, waste management, and environmental consulting.



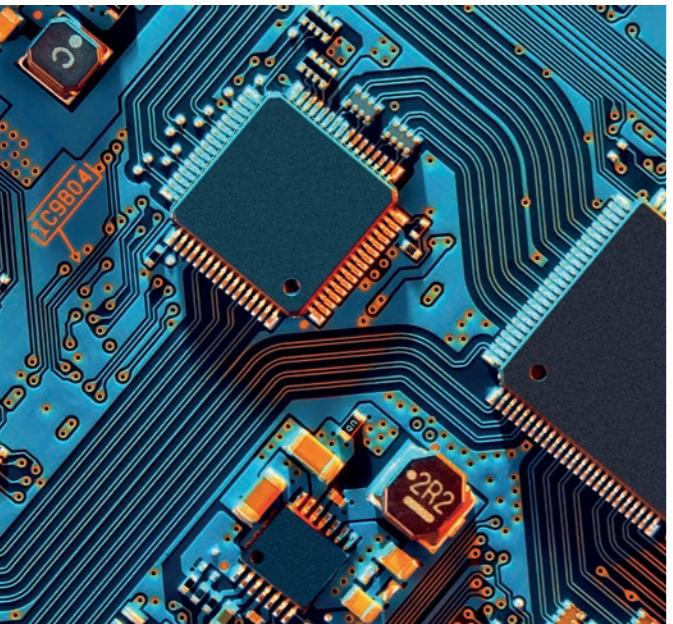
## Medical equipment

The manufacture and export of medical technology and equipment has strong potential in the Czech Republic at present. This sector has a high share of innovations, and many companies from this sector finance their own research and development, cooperating with scientific institutions and universities.

Therefore, many Czech companies have developed new solutions and innovative products.

The most significant companies in this sector include LINET (hospital beds), BMT Medical Technology (sterilising devices), ELLA-CS (biodegradable stents), MEDIN (medical instruments for surgery, C-NAIL calcaneal nail), BEZNOSKA (growing femur endoprostheses) and BLOCK (turnkey solutions in healthcare and clean rooms).

Top medical beds from LINET featured in the American series House of Cards or in the Bond film Casino Royale, among others. Czech companies also provide complex turnkey supplies of healthcare facilities and departments with projects already implemented in countries such as Laos, Papua New Guinea, Gabon and Georgia. Among new technologies, we can list Nanopharma, a producer of nanofibres for medical purposes. PARDAM NANO4FIBERS produces reusable nanofibre masks. The Czech Republic is also a major global producer of electron microscopes with companies like DELONG INSTRUMENTS and TESCAN GROUP, to name a few.



## Electronics and electrical engineering

The electronics and electrical engineering industry is one of the most important sectors of Czech manufacturing, contributing almost 14% of total output and ranking as the country's second-largest industrial branch. With over 12,400 companies employing more than 150,000 people, the sector benefits from a long-standing tradition, skilled workforce, and strong focus on high- and medium-technology products. Its output is largely exported to European Union markets.

Key areas of production include electrical equipment such as motors, generators, transformers, switchgear, cables, and wires, as well as electronics ranging from consumer goods and computer technology to automated systems, medical devices, and optical equipment. The industry also drives innovation by developing applications in blockchain, artificial intelligence, and 5G. Notable players include ABB, Elko EP, ATAS Elektromotory Náchod, MESING, TES Vsetín and Meopta.

## Construction industry

The construction industry is an important sector accounting for about 5.5% of the gross value added (GVA) of the total Czech economy. Construction also contributes significantly to employment and the share of this sector is by no means negligible, with an impact on the development of other sectors. The sector employs around 420,000 people, which is almost 8% of the active workforce. New construction projects are mostly focused on buildings with three or more apartments.

A wide range of quality products for the construction industry are manufactured in the Czech Republic. The main manufacturers in this sector are Wienerberger (building materials), KMBeta (roofing production), Moravia Containers (modular systems), Lasselsberger (ceramic tiles), MATEICIUC (profiles, slats, tubes), and Koma Modular (residential, sanitary and low-energy modules).



## Chemical, pharmaceutical and plastics industry

The chemical, pharmaceutical, and plastic industries are among the key pillars of the Czech economy, ranking third in the country's manufacturing sector. In 2023, they accounted for over 13% of total production, nearly 13% of gross value added, and around 11% of total employment. The sector produces a wide range of goods, including petrochemicals, plastics, rubber, pharmaceuticals, food chemistry, and general chemicals, supplying essential inputs to industries such as automotive, construction, electronics, food processing, textiles, civil engineering, and packaging.

Czech companies are strong producers of fertilizers, polyester fibres, plastic materials, and inorganic substances, with significant reuse of recycled plastics in car parts, furniture, textiles, footwear, and accessories. Leading players include SPOLCHEMIE, Lovochemie, SPOLANA, Synthesia, BorsodChem MCHZ, and Lučební závody Draslovka Kolín. Other notable firms are FATRA, SILON, and GUMOTEX in plastics and rubber, while the pharmaceutical industry is led by ZENTIVA, Bioveta, Teva Czech Industries, and VÚAB Pharma.



## ICT sector

The ICT sector is steadily increasing due to high investment and many opportunities emerging every day. In 2023, revenues generated in the ICT sector reached CZK 1 trillion (approx. EUR 41.7 billion), which represents 5.5 % of total business sector revenues. Currently, there are 200,000 people employed in the sector, 87% of them working in ICT services and the rest in the ICT industry.

The Czech ICT sector attracts significant foreign investment, particularly in development centres and IT outsourcing. Global companies such as Microsoft, DHL, SAP, Oracle, IBM, Honeywell, and Hewlett-Packard have established operations in the country, alongside internationally recognised Czech firms including AVAST (antivirus software), Bohemia Interactive (PC games), Y-SOFT CORPORATION (print solutions), ZONER (SSL certificates), Safetica (data protection) and the widely used internet platform Seznam.cz.

## Glass and ceramics industry

The Czech Republic is unique in glassmaking, preserving countless traditional techniques while advancing modern production. The industry includes around 129 companies with more than 18,500 employees (2024), with flat glass making up almost 40% of sales. Leading producers include AGC Flat Glass Czech, VETROPACK MORAVIA GLASS, SAINT-GOBAIN ADFORS CZ, and KAVALIERGLASS. Prestigious firms such as PRECIOSA – LUSTRY and LASVIT create chandeliers installed in luxury hotels, palaces, and museums worldwide. Crystal BOHEMIA and MOSER focus on fine table glassware, while PAS Jablonec and PRECIOSA BEAUTY are leaders in jewellery. In 2020, RAUTIS's handmade glass bead Christmas ornaments were added to UNESCO's Intangible Cultural Heritage list.

Czech glassmakers also shine on the world stage through Hollywood collaborations. KLIMCHI's Rosalin hobnail jug appeared in the Barbie movie, and PAČINEK GLASS crafted sculptures for Glass Onion: A Knives Out Mystery. These projects highlight the artistry and innovation of Czech glassworks. The most significant producers of porcelain in the Czech Republic are Thun 1794, Český porcelán, and G. Benedikt Karlovy Vary. In ceramics, Keramika Krumvíř and KERAMIA stand out, while LAUFEN CZ and Ideal Standard focus on technical and medical ceramics.



## Furniture industry

The Czech furniture industry thrives thanks to the reliable availability of sustainable materials such as chipboard, veneer, and timber. A distinctive feature of the sector is curved-wood furniture, which introduced new functional and aesthetic possibilities alongside innovative design elements like forging and clips. Collaboration between designers and studios also has a strong tradition, ensuring creativity and craftsmanship remain central to production.

Among the most notable companies is TON, renowned worldwide for its curved wooden furniture used in cafés, restaurants and hotels. Office furniture makers include HON and SilentLab, the latter known for its original cube-shaped office spaces that enhance acoustics and privacy. Dřevodílo Rousínov supplies wooden interior furniture, while Polstrin design and mminterier specialise in upholstered pieces. Outdoor furniture is represented by firms such as TODUS Outdoor and UNIKOV Steel, offering a range of high-quality metal designs.

## Industrial design

The Czech Republic combines craftsmanship with innovation, making industrial design a key strength across sectors. In healthcare, LINET, Libella and MZ Liberec set global standards with user-centred medical equipment, while mmcité and EGOE bring design excellence into urban life. Škoda Transportation, TATRA trucks and Festka redefine mobility, and companies such as Mikov, Tescoma, Fabini, Plastia and Alca demonstrate how Czech design transforms everyday living with precision, sustainability and style. Czech designers are regularly recognised with Red Dot and Good Design awards. The leading companies of Czech industrial design are brought together by the Association of Czech Industrial Design (AČPD). Through the [Designers Database CzechTrade](#), global partners can access Czech experts ready to export their creativity across industries worldwide.

## Food and beverage industry

The largest segment of the Czech food industry is the processing and preservation of meat and meat products, represented by companies such as Maso uzeniny Polička, Kostelecké uzeniny, RABBIT Trhový Štěpánov, Krahulík – Masozávod Krahulčí, Váhala, Vodňanská drůbež and Drůbežářský závod Klatovy. Other important sectors include dairy production (MADETA, OLMA, Mlékárna Hlinsko), mill and starch products (PENAM, Amylon, GoodMills Česko), as well as the processing of fruit and vegetables (Efko CZ, Alibona, ESSA).

The beverage industry is equally significant. It is driven above all by breweries, with world-renowned brands such as Plzeňský Prazdroj, Pivovary Staropramen, Budweiser Budvar, Pivovar Svijany and Rodinný pivovar Bernard. In 2024, Czech breweries set a new record, exporting almost 5.9 million hectolitres of beer. At the same time, non-alcoholic beer grew by nearly 14 % year-on-year, reaching around 10 % of total production – a clear sign of the industry's ability to adapt to changing consumer preferences. MATTONI 1873 leads in the production of mineral water and soft drinks under brands such as Poděbradka, Hanácká kyselka, Mattoni and Magnesia. Traditional Czech spirits are produced by distilleries including Jan Becher – Karlovarská Becherovka, RUDOLF JELÍNEK and STOCK Plzeň – Božkov. Viticulture is represented by leading producers such as BOHEMIA SEKT, Znovín Znojmo, Château Valtice – Vinné sklepy Valtice and Vinselekt Michlovský.

# New Technologies

## Cybersecurity

The Czech Republic stands at the forefront of cybersecurity in Europe, ranking among the top countries globally with an NCSI score of 98.33 as of 2024. This reflects the country's robust digital infrastructure, strong regulatory framework, and a thriving cybersecurity ecosystem.

The Czech cybersecurity landscape features a diverse array of companies excelling in multiple domains. Established leaders include Avast, a global antivirus software provider; Flowmon Networks, specialising in network traffic monitoring; and Safetica, focusing on data loss prevention. Innovative startups include Whalebone, offering DNS-layer security; Resistant AI, leveraging artificial intelligence for fraud detection; and Wultra, developing secure authentication solutions. These companies serve a broad range of sectors, including finance, healthcare, and critical infrastructure. In line with the EU's NIS2 Directive, the Czech Republic enacted a new Cybersecurity Act, effective from 1 November 2025. The legislation expands the number of organisations that must comply, including many in healthcare, energy, transport, food, and digital infrastructure. It introduces two regimes of obligations (higher and lower) depending on criticality, with requirements such as risk management, incident reporting, supply-chain security, and accountability of top management. The Act also strengthens state oversight and the National Cyber and Information Security Agency's (NÚKIB) powers, making cybersecurity compliance a priority for both public and private sectors.



## Hydrogen technology

The interest of companies and institutions in hydrogen technologies has increased rapidly. HYTEP, the national hydrogen platform, celebrated its 18<sup>th</sup> anniversary in 2025. It has developed from a small association made up of a few companies and universities to a full-blown platform that now has more than 80 members. Involvement in developing the hydrogen economy is increasing year after year as Czech companies have started to perceive hydrogen as one of the possible paths to the future. Orlen Unipetrol announced that the company plans to have 28 hydrogen fuelling pumps in the Czech Republic by 2030, clearly indicating the expected rise in interest in hydrogen.

According to updated government estimates, around 3,000 hydrogen cars are expected to be on Czech roads by 2030. The introduction of hydrogen will allow the Czech Republic to achieve its energy independence goals sooner along with fulfilling parts of the European Green Deal. Czech companies are beginning to excel on this market as well. The transportation of hydrogen in gaseous form can be provided by Vítkovice Cylinders, which specialise in the development of pressure cylinders, stationary and transport tanks of all categories. The use of hydrogen in transport has been showcased by Škoda Electric, which had a working prototype of a hydrogen bus in 2010. In the Czech Republic, the production of grey hydrogen is currently predominant mainly within the chemical industry, with Orlen Unipetrol from Litvínov and Spolchemie from Ústí nad Labem taking charge in production. However, Spolchemie has signed a contract with ČEZ ESCO, aiming to reduce the carbon footprint of its hydrogen production. Furthermore, a number of entities are planning the production of green hydrogen in the Czech Republic – Sev.en Energy, C-Energy Planá, Teplárny Brno, Veolia, Solar Global, FOR H2Energy, and ČEZ. In 2024, Solar Global launched the Czech Republic's first commercial green hydrogen electrolyser in Napajedla, marking a significant step towards using hydrogen for large-scale energy storage.

## Advanced manufacturing

Advanced manufacturing in the Czech Republic combines a strong engineering tradition with cutting-edge Industry 4.0 technologies. Manufacturing is a key pillar of the national economy, contributing over 25% of gross value added and making the country one of the most industrialised in the EU. Czech companies excel in fields such as automation, robotics, additive manufacturing, laser technologies, smart solutions and advanced materials. Their expertise is internationally recognised in areas like precision machinery, electron microscopy and nanofabrication technologies. Czech innovators are making global contributions: Prusa Research and Filamentum are internationally renowned for advanced 3D printing technologies and materials. In laser technology, research centres such as ELI Beamlines and HiLASE push the boundaries with high-power systems

applied in materials science, aerospace, and medicine, supported by specialised firms like BeamShape. Traditional engineering leaders such as Beneš a Lát and Ostroj combine decades of expertise with advanced manufacturing technologies. Beneš a Lát operates state-of-the-art 3D metal printing facilities enabling the production of complex moulds, components and hybrid repairs, while Ostroj develops and installs modern automation systems and automated production lines across multiple sectors. Companies like ELVAC and PSP Pohony drive innovation in control systems and smart manufacturing solutions. ZPA Pečky is also well known for advanced PLC and SCADA systems, and startups including Compteq.io and Cactux bring fresh approaches to industrial digitalisation.



## Electromobility

Electromobility is developing rapidly, and the Czech Republic is ensuring that it grasps all the opportunities available in this sector. The Electromobile Platform was created by entities from the automotive, energy and academic sector. It was established to solve and develop charging infrastructure, availability of vehicles, innovation and education, electromobility ecosystem and cooperation. The platform is represented by key actors in this sector: Škoda Auto, ČEZ, PRE, E. ON and ČVUT. In 2024, more than 150,000 electric and plug-in hybrid vehicles were produced in the Czech Republic. The number of registered electric cars increased to more than 36,000 in 2024, which is a 64 % increase compared to 2023. According to official estimates, up to a quarter of a million electric vehicles could be on the road by 2030. In addition to numerous new projects which are constantly being developed in this sector, the Ministry of Transport of the Czech Republic has stated its intention to invest up to 6 billion CZK into fast-charging port infrastructure.

In the next five years, Škoda Auto will also invest CZK 138 billion in electromobility with a plan for introducing three new e-car models by 2026. Another producer of electric cars in the Czech Republic is Hyundai. Moreover, there is a relatively strong base in charging systems and energy storage. The number of charging stations for electric cars in the Czech Republic increased by more than 20% last year and reached 2,950 stations and 5,234 charging points in 2024. Charging stations are produced by Olige Energy, VOLTDRAVE, EV Expert, DEL and OIG Power, to name a few. Furthermore, the Czech Republic is also home to a strong base of manufacturers of specialised electric vehicles: municipal electric vehicles are produced by Enviel, TPC Industry and ZEBRA GROUP, electric bicycles are produced by APACHE, CRUSSIS, Lectron, Lovelec and others, and electric off-road bikes are produced by Kuberg. SOR Libchavy, ŠKODA TRANSPORTATION and Iveco Czech Republic focus on the production of electric buses.

## Artificial intelligence

Artificial intelligence is a key driver of innovation in Czech industry, research, and public services. The Czech AI ecosystem is growing rapidly, supported by strong cooperation between academia, business, and government, and reflects the latest global trends.

Czech research institutions excel in machine learning, robotics, computer vision, and natural language processing. Notable initiatives include the CLARA Centre of Excellence, the AI-MATTERS project focused on industrial applications, and the LUMI AI Factory supercomputer network. The Czech Association for Artificial Intelligence, together with initiatives such as prg.ai, Brno.AI, Zlin.AI and the National AI Platform, supports collaboration, education and innovation across disciplines.

According to the Czech Statistical Office, more than 11% of Czech companies already use AI technologies, with adoption exceeding 40% among large enterprises. In 2024, private investment in AI projects reached over CZK 14.5 billion, complemented by European funding programmes such as Horizon Europe and Digital Europe.

Czech AI companies are active across diverse sectors, shaping innovation from healthcare to agriculture. In medicine, key players include Carebot, Aireen, MAIA Labs and Kardi Ai. Transport and logistics benefit from solutions by BringAuto and DataFromSky, while the energy and environmental fields are driven by Mycroft Mind and Perfectair Labs. Public services and smart cities are enhanced by Citymind and Eyedea Recognition, and in agriculture, Ullmannna showcases sustainable technologies. In manufacturing, Neuron Soundware and Inovec Technology demonstrate the Czech Republic's strength in industrial AI applications.

With strong research capabilities, an expanding base of innovative companies, and increasing international cooperation, the Czech Republic is establishing itself as a reliable European hub for artificial intelligence.

Take the companies listed in this brochure as a sample listing, which will help you to formulate a better picture of the specific field.

## Nanotechnology

The Czech Republic ranks among the world's leaders in nanotechnology, with strengths ranging from optics and biotechnology to energy and advanced materials. It is especially renowned for its breakthrough in nanofibres – the Nanospider™ machine developed in Liberec set a global standard for industrial nanofibre production. Another flagship success is electron microscopy: one third of all electron microscopes worldwide are made in Brno by companies such as TESCAN GROUP, Thermo Fisher Scientific and Delong Instruments.

Czech nanotechnology companies today cover a broad spectrum of applications. PARDAM NANO4FIBERS supplies nanofibre membranes for healthcare, filtration and protective equipment. FN-NANO, Nano4people and Advanced Materials-JTJ develop photocatalytic coatings for air purification. IQ Structures designs nano-optical structures, while NanoTrade,

nanoSPACE and Inotex innovate in functional textiles. Nafigate and Contipro are active in nanocosmetics, while Elmarco, Spur and ASIO bring solutions for water purification. Their products improve everyday life – from anti-allergenic bedding and medical dressings to advanced coatings that clean city air or extend the lifespan of buildings.

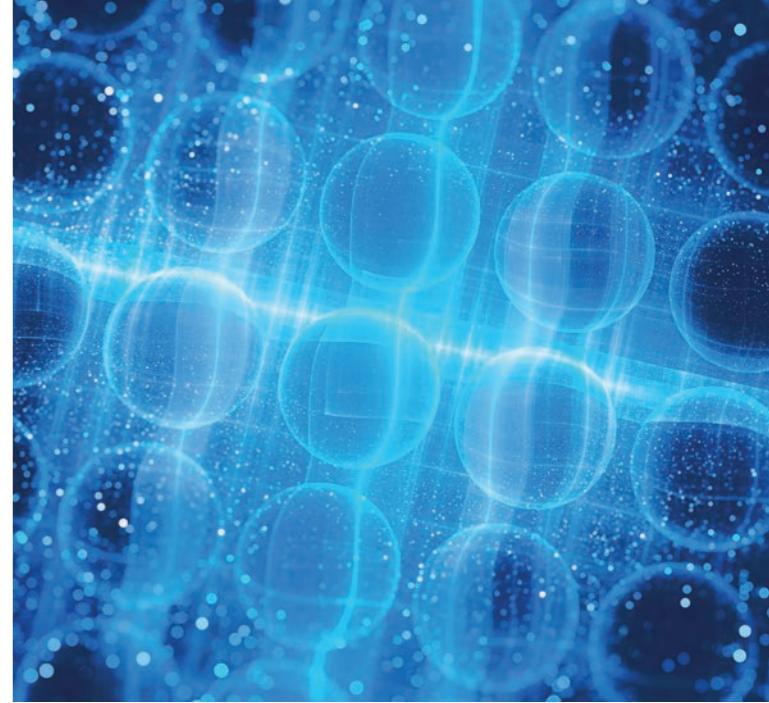
This dynamic ecosystem is driven by strong links between academia and industry, supported by world-class research centres such as the Institute for Nanomaterials, Advanced Technologies and Innovation in Liberec, CEITEC in Brno and the J. Heyrovský Institute of Physical Chemistry in Prague. With more than 250 companies and research centres active in the field, the Czech Republic has built a reputation as a true nano superpower: a country that ranks among the global leaders in turning cutting-edge nanoscience into practical industrial and consumer innovations.



## Fin Tech

The Czech Republic is a hub for fintech innovation, boasting a strong financial sector, stability, and openness to digital services. This dynamic ecosystem supports economic growth, skilled jobs, and financial market efficiency. Over 200 fintech companies operate in the country, doubling in five years. While banks still hold influence, fintech solutions such as BudgetBakers' Wallet app are making a global impact. The Czech Republic is among the world's leaders in contactless card payments, with fintech firms excelling in digital banking, payments, e-commerce, and blockchain.

Czechs lead in digital payment adoption, with 99% of domestic card transactions being contactless. Mobile and wearable payments are growing rapidly, and the country enables contactless ATM withdrawals. Innovative companies such as Roger, NFCtron, Monet+, or Qerko are driving these advancements. The fintech sector continues to merge finance and technology, with trends such as wealthtech and cryptocurrencies gaining momentum.



The Czech Republic has one of the highest e-commerce penetration rates in Europe. Companies like Dateio, Wultra, and Switchio are successfully expanding abroad, while infrastructure services such as risk management and claims handling present strong opportunities. Among the notable players in these areas are ThreatMark, Linksoft and Resistant AI.

Czech fintech firms actively participate in international events. In 2023, a delegation attended the Czech-Irish Fintech Forum in Dublin, engaging with Irish banking and ICT representatives. Mastercard data shows that 57% of Czech consumers prefer cashless payments, with mobile and wearable transactions on the rise.

Tokenisation is enhancing payment security, supporting the rapid growth of digital payments, and e-commerce innovations like Click to Pay streamline online payments. With a strong fintech sector and high consumer adoption, the Czech Republic is shaping the global financial landscape.

# The Perfect Way to find your Business Partners

## CzechTrade network services across 58 offices worldwide

CzechTrade is a governmental trade promotion agency of the Czech Republic established by the Ministry of Industry and Trade. Its main objective is to develop international trade and cooperation between businesses in the Czech Republic and around the world. Wherever in the world you are, the agency is your official contact partner in the search for qualified Czech-based manufacturers and service providers.



- More than 25 years of professional partnership
- Free, mainly customised services
- 58 offices operating worldwide
- Excellent overview of Czech manufacturers and their production potential

## Connecting Czech businesses with businesses around the world via

- Czech Business Partner Search
- Sourcing Days
- Trade Shows
- Private Showcases
- Networking Events

## SOURCING DAYS / Tailored events according to your needs

Specify your product/service requirements, define the qualifications required for your potential products and services supplier, and we will arrange one-to-one meetings followed by company visits in the Czech Republic. This service saves you time:

- Precise knowledge of Czech manufacturers and their production potential
- Custom market screening – we identify potential suppliers according to your requirements
- Suppliers shortlist – after reviewing each applicant's profile, you can select the companies you wish to meet
- All-inclusive package – from providing meeting rooms to accompanying you to companies premises, we cover it all.

## Czech business partner search

If you are looking for a partner to assist you with production or you need a service provider, you can approach our experts with your specific request. CzechTrade will gladly help you to get in touch with the relevant Czech companies.



Personal consultation with our representative abroad



Online form

## Czech Exporters Directory



Official online database of Czech exporters and the simplest tool to help you find potential business partners in the Czech Republic.

## Businessinfo.cz



The official business portal helps foreign businesses navigate the Czech business environment. Current information on its website about the conditions for business, investment and trade opportunities.

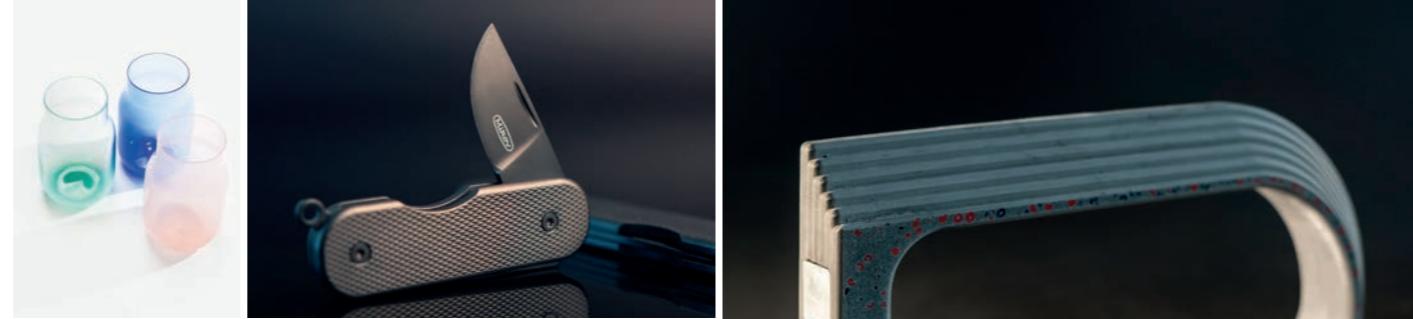


CzechTrade

# Design Center

The Design Center CzechTrade enables companies and designers to establish themselves abroad, whether by gaining foreign business partners, training companies in design and creative industries or promoting Czech industrial design at prestigious events, design exhibitions and festivals abroad. At the Design Centre CzechTrade London, you can explore Czech companies in interior design and technology in a dedicated showroom in London's Clerkenwell district.

- connecting the creative and commercial spheres aiming at international cooperation:  
[www.czechtrade.gov.cz/design-centrum-czechtrade](http://www.czechtrade.gov.cz/design-centrum-czechtrade)
- national platform for the state support of design and coordinator for design
- information, advisory and subsidy services within the cultural and creative sector
- individual cooperation with a designer of your choice from the Designers Database
- professional training in design management
- implementation in cooperation with the Ministry of Industry and Trade of the Czech Republic



Design Centre CzechTrade  
is a member of the Bureau  
of European Design  
Associations (BEDA).

## Designers Database CzechTrade

The Designers Database CzechTrade is one of the Design Center CzechTrade activities. Its main aims are to effectively connect the creative and commercial spheres and to promote design as a driving force of diversity and competitiveness. Last but not least, this project focuses on providing helpful information and assisting companies and professionals in navigating the landscape of cultural and creative industries with international cooperation as the main goal. All of the above is being executed while adhering to governmental strategies and in cooperation with the Ministry of Industry and Trade of the Czech Republic.

[www.designers-database.eu](http://www.designers-database.eu)



## Industrial Design Award

The Industrial Design Award of the International Engineering Fair promotes industrial design and presents it as a tool for creative solutions in the engineering and electrical engineering industries. An expert committee evaluates the exhibits of Czech exhibitors according to the quality of workmanship and application of industrial design.

[www.designers-database.eu](http://www.designers-database.eu)





## Head office

Czech Trade Promotion Agency  
Stepanska 567/15, 120 00 Prague 2  
Czech Republic

Phone: +420 224 907 820  
E-mail: [info@czechtrade.gov.cz](mailto:info@czechtrade.gov.cz)

Information and contacts for individual  
foreign offices can be found at  
[www.czechtradeoffices.com](http://www.czechtradeoffices.com)

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