



中信欧洲控股

CITIC Europe Holdings

ZDAS

COMPANY PROFILE





WHO WE ARE

The most complex heavy machinery supplier in Central Europe

Company name: ŽďAS, a.s.
Joint Stock Company

Owner: CITIC Europe Holdings (2016)

Address: Strojírenská 675/6
591 01 Žďár nad Sázavou
Czech Republic

ID No.: 46347160
VAT ID No.: CZ46347160

Production commenced: 27. 8. 1951

Premises area: 640 000 sqm

Turnover: approx. 112 000 000 EUR (2023)

Number of employees: approx. 1500



▲ Company premises at Žďár nad Sázavou

www.zdas.com

The uniqueness of the company

Wide production program

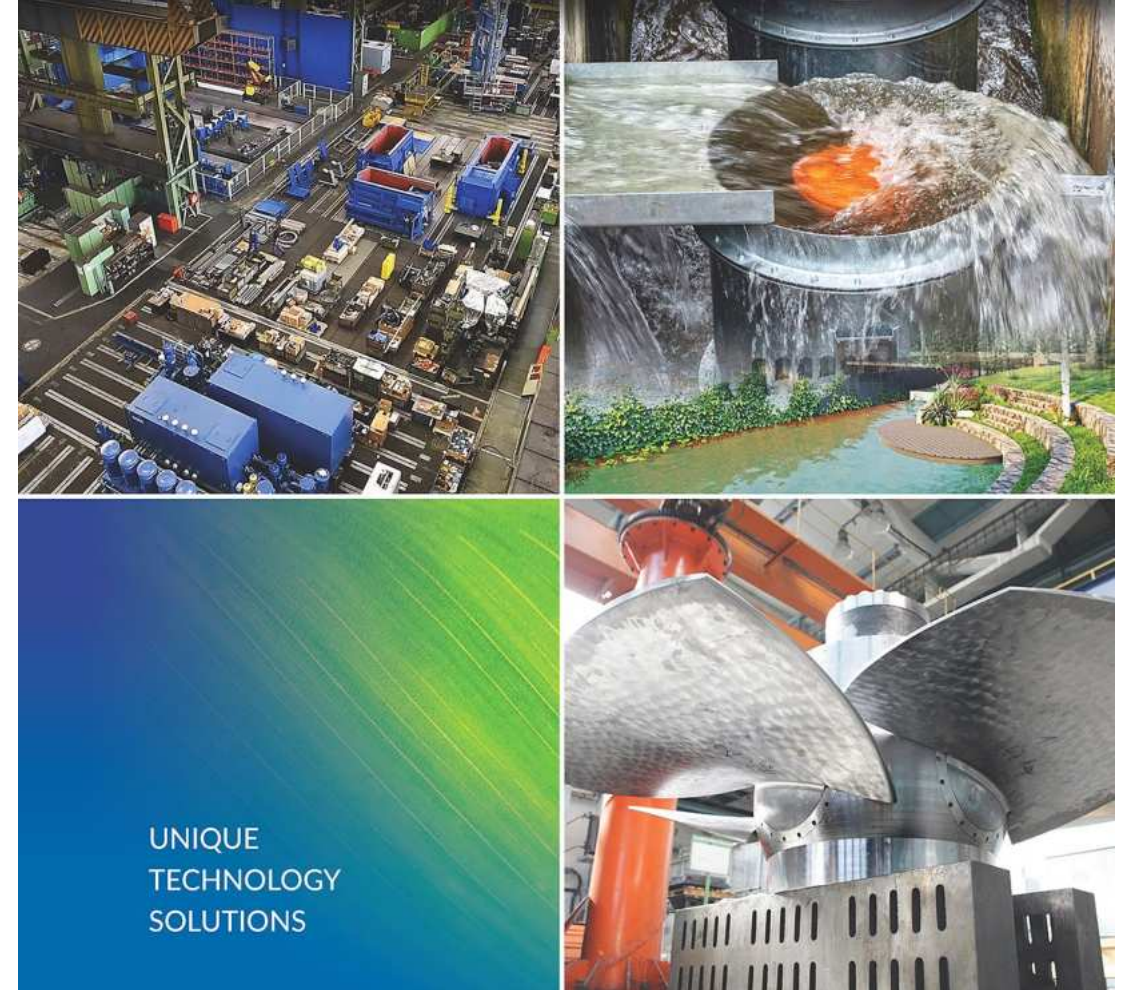
- Ingots (ESR)
- Machining
- Production lines
- Mechatronics
- Energy
- EPC projects

Top specialists

- Construction
- Technology
- Research
- **Authorization to carry out conformity assessment of new or modernized machinery according to directive 2006/42/ES - issuing CE certification**

Cooperation with top universities in the CR

We own several patents and utility models



ŽDAS, a.s. is a holder of the international certification within the Integrated Management System comprising:

- QMS
- EMS
- SMS
- Welding with regard to higher requirements for quality according to EN ISO 3834-2
- Product and material certification
- Ability to issue recertifications



INTERNATIONAL CERTIFICATION



▲ QMS certificate



▲ EMS certificate

ŽDAS, a.s. lays the **highest attention on health & safety**

Fire safety

- company fire department
- Cooperation with Fire rescue service of the CR

H&S

- Integrated system (SMS)
- Certification



METALLURGY

- Ingots - from 500 to 21 000 kg
- Forgings - from 20 to 15 000 kg
- Castings - from 200 to 65 000 kg
- Patterns
- Research & development



ENGINEERING DIVISION

- Forming Machines
- Rolled Product Processing Equipment
- Tooling
- Production Lines
- Customized Products



ENERGY PROJECT DIVISION

- Photovoltaics
- Conventional energy
- Hydropower
- EPC
- Research & development - PROTUR



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METALLURGY DIVISION

LIQUID STEEL MAKING



▲ Max ingot 20 000 kg, cca 31 000 tons/year

FORGINGS



▲ 50 – 15 000 kg, steel

CASTINGS



▲ 200 – 65 000 kg, steel, nodular iron

PATTERNS



▲ Wood, polystyrene, plastic

R & D Metallurgy division, main projects

Project	Customers, sectors
ESR	Defence, rolling of both ferrous and nonferrous metals, automotive, aerospace



▲ ESR Rolling mills



▲ ESR equipment



▲ ESR ingot

R & D main projects



▲ Pump Body Nuclear



▲ Pilger roll

Projects	Customers
Compressors	TERMODYN (A352LC3), SIEMENS (GX3CrNi13-4)
Pilger rolls	VTCH, including final machining
Nuclear sector	SIGMA (superduplex), SEZ, ČEZ

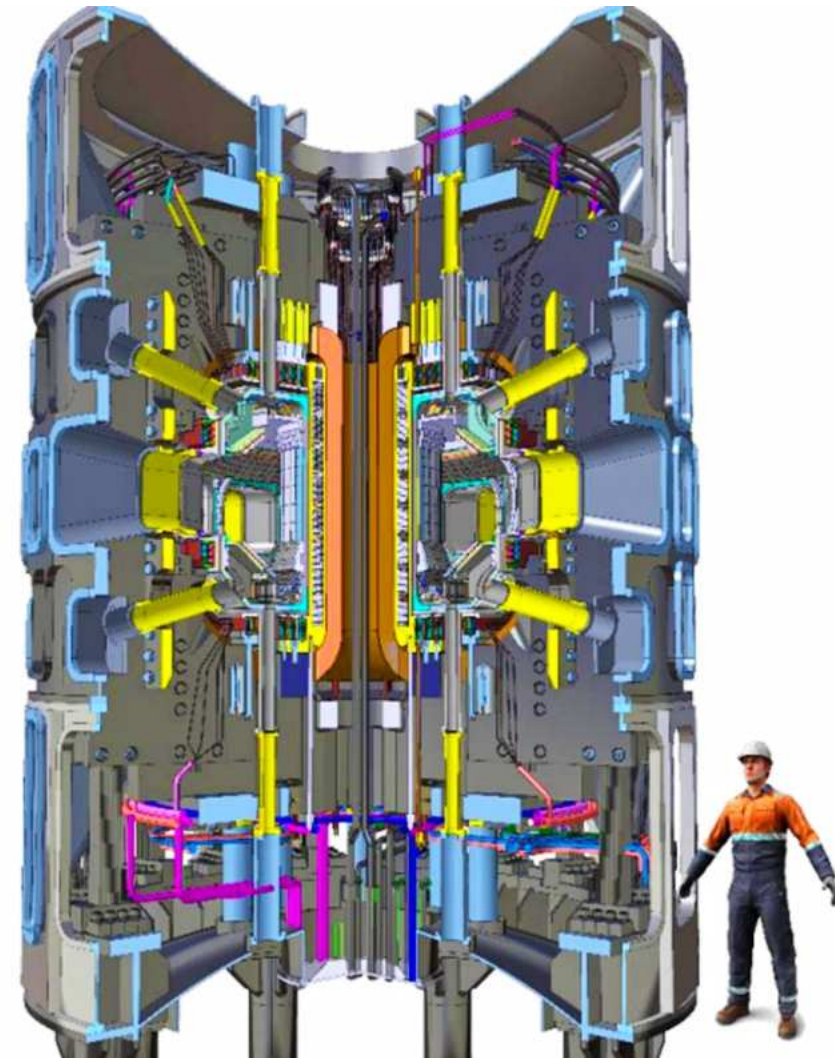


▲ Compressor

R & D main projects

Projects	Customers
TOKAMAK	AV ČR

TOKAMAK – fusion reactor ►



Main customers of Metallurgy Division



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ENGINEERING DIVISION

Manufacturing program

Engineering division provides complete delivery of the equipment starting from project solutions, turn key projects up to the individual jobs.

Forming machines

- Open die forging equipment, closed die forging equipment (integrated forging units)
- Hydraulic and mechanical presses
- Metal scrap processing equipment
- Hydraulic drives
- Tyre curing presses
- Lines for railway wheels and axles
- Lines for special (defence) production

Rolling mills

- Equipment for material straightening
- Inspection and straightening lines for bar finishing
- Saws for cutting of rolled material



Tooling shop

Automotive industry

- Transfer tools
- Transfer and cutting tools
- Tools for forming lines
- Dies for close die forging

Forming tools for other industrial branches

- Cutting tools for parts of impellers and stators of large generators
- For consumer, food and medical industry
- For forest, agricultural and civil technology

Power generation

- Impeller blades
- Stator blades
- Impellers for adjustable type blade and Francis turbine
- Pump impellers

Defence industry

- Serial tools for forming of shells of artillery grenades and special air bombs



▲ Cutting tool for internal rear door



▲ Impeller of Francis turbine



▲ Impeller of reverse turbine pump

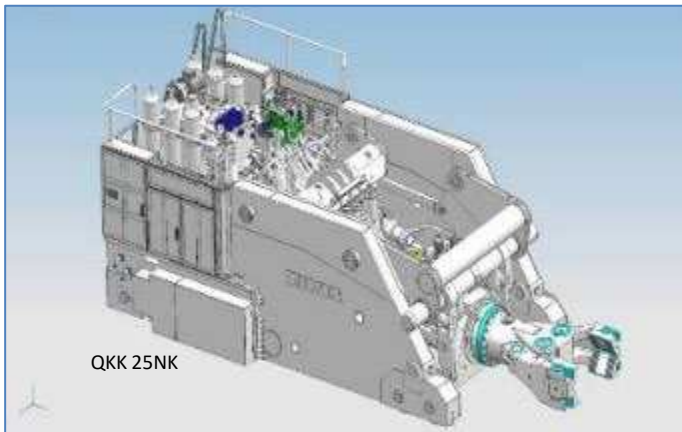


▲ Artillery grenade shell forming

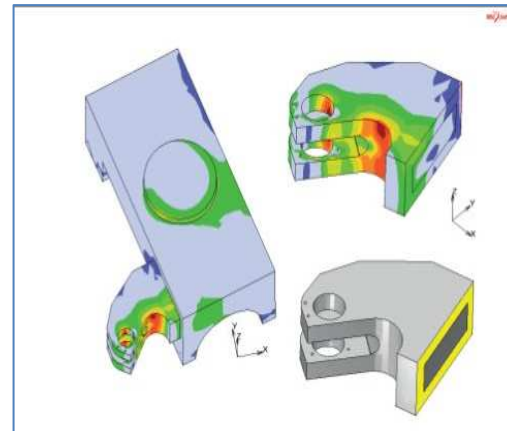
R&D, construction, technology and production of the equipment

The life cycle of the device originates in R&D, then continues with the creation of documentation in construction (mechanical, hydraulic and electrical design). Based on the drawing documentation, technological procedures are created in the technology department, and the production and assembly of the equipment begins. The final step is reviving and handing over the device to a satisfied customer.

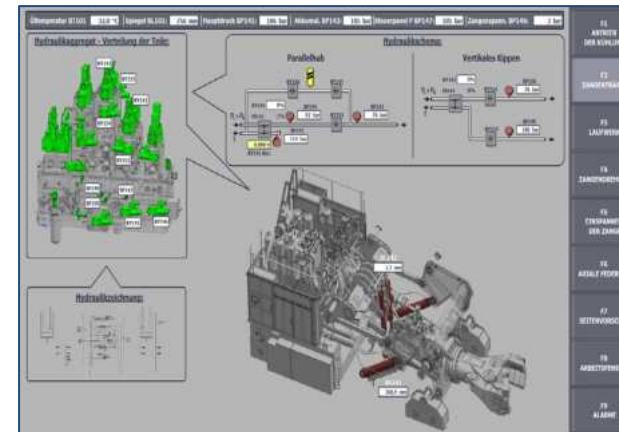
R&D equipment



Strength calculations



Digitalization

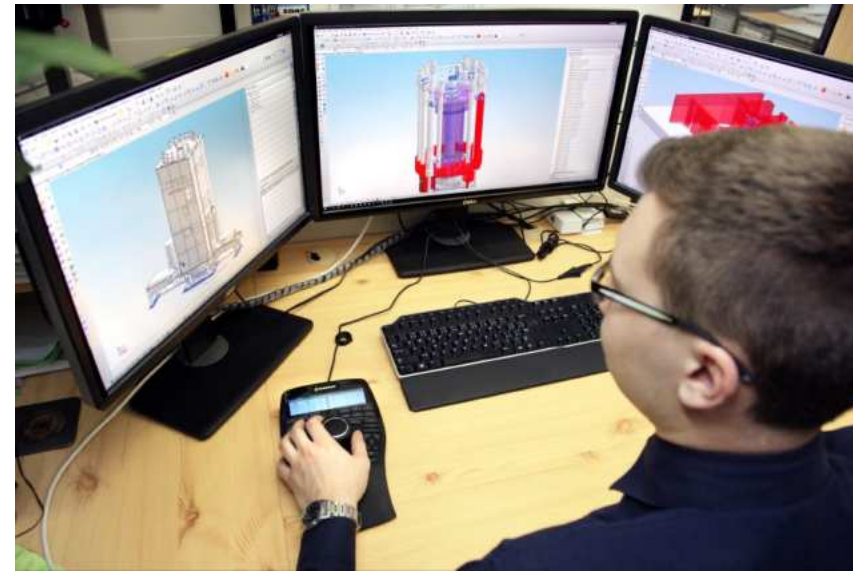


Equipment



Uniqueness and competitive advantage

- **Turnkey deliveries according to customers**
- Own design of projection, mechanical parts, hydraulic drives, electrical and control systems
→ Independence from other companies
- Development and implementation of modern applications → user-friendly
- Certificates and knowledge
- In house service



Main customers of Engineering Division

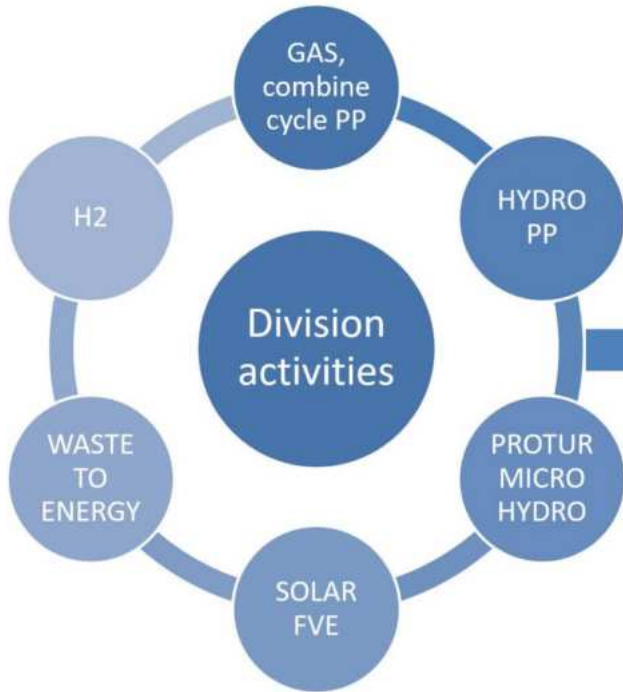


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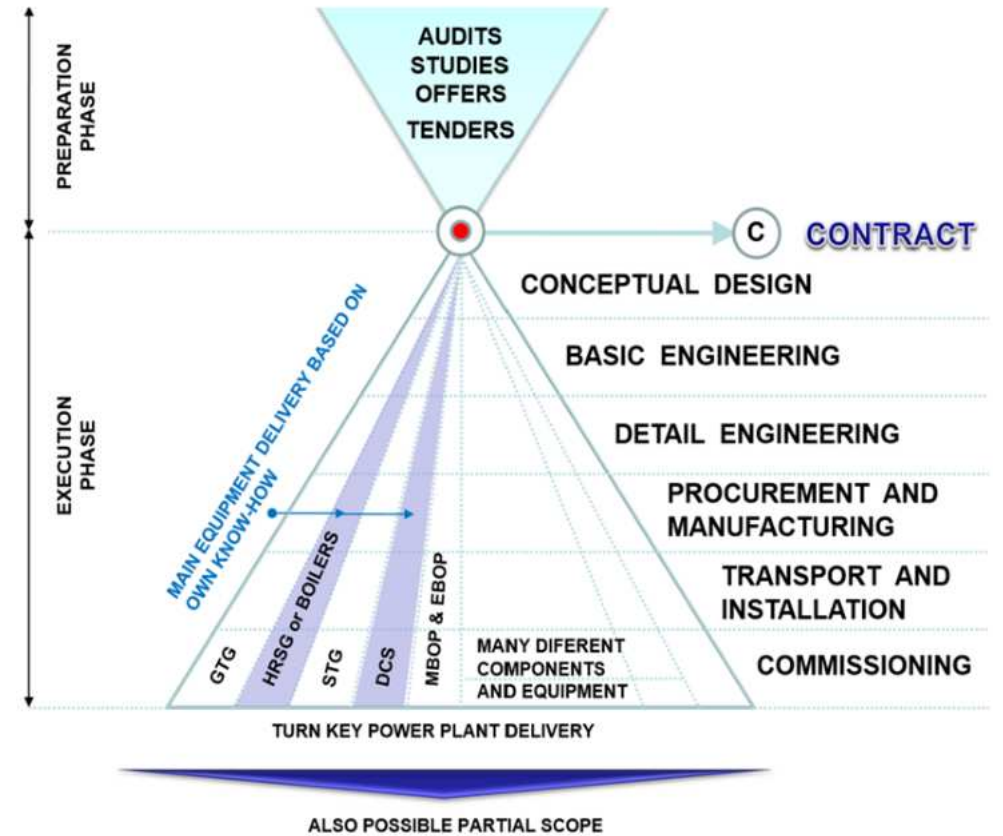
ENERGY DIVISION



FROM CONVENTIONAL TO RENEWABLE ENERGY, RESOURCES



SCOPE OF SERVICES



- MICRO HYDRO / PROTUR

- WASTE TO ENERGY UNIQUE SOLUTION / GASIFICATION / GENERATION OF SYNTHETIC GAS FROM WASTE
- Electricity, heat, H2 separation, CO2t



Basic variants

The PROTUR turbine is currently supplied in two series with all necessary electrical accessories including battery storage. It can be combined with solar panels and is ready to be connected to the grid.

PROTUR 300

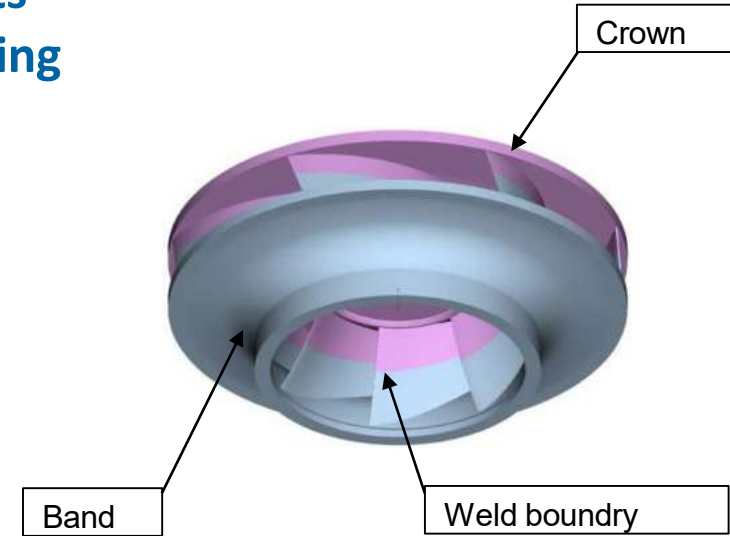
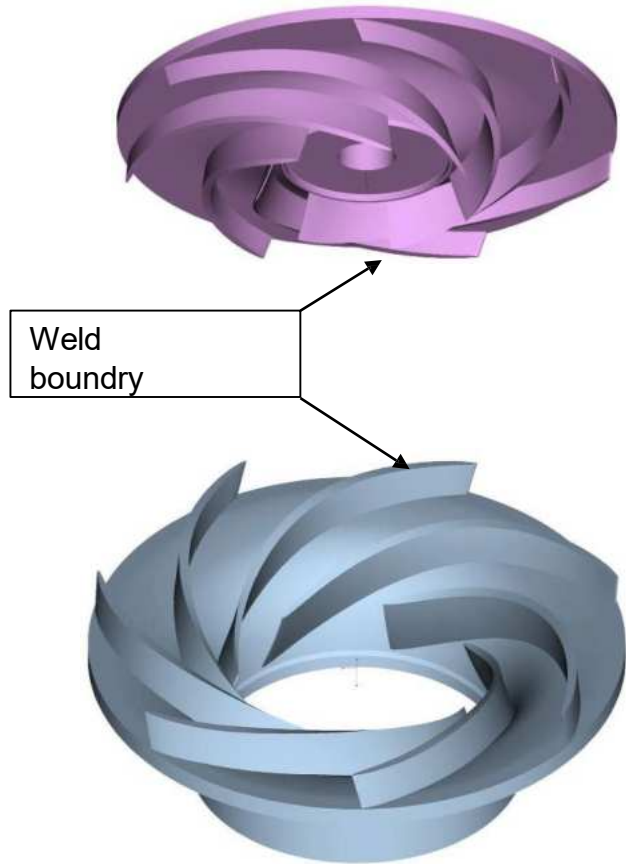
Working gradient from 0.6 m
Minimum required water flow from 35 - 40 l/s
Power 0,3 - 0,6 kW
Daily production of 7 - 14 kWh
Basic version + single or double jacketed version for gradients up to 2.2 m
Possible installation in the assembly in a horizontal plane using common overflow
Quick installation, minimum structural modifications
High mobility
High-quality finish
Minimal maintenance requirements

PROTUR 600

Working gradient from 1 m
Minimum required water flow from 80 - 100 l/s
Power 0,6 - 1,0 kW
Daily production of 14 - 24 kWh
Possibility to install the assembly in one horizontal plane using common overflows
Quick installation, minimum construction modifications
High mobility
High-quality finish
Minimal service and maintenance requirements for turbine operation



In-house production of turbine parts Francis / Pump Runner manufacturing



In-house production of turbine parts Kaplan Runner manufacturing



Reputation

- Promotion of local brand in region, regional activities
- Promotion of shareholder prestige
- Charity

Activities

- Open doors day
- Football Club, Hockey Club – sponsorship
- „Na kole dětem“, Collection for children from the Masaryk Oncology Institute – charity
- „Čistá Vysočina“ – environmental support
- Support of technical education (cooperation with schools and universities)
- Support of cultural events in region



Awards

- Exporter of 2023 in the export growth category
- The Czech TOP100 2023
- The Czech TOP100 2022
- The Czech TOP100 2021
- The second best HR project in the Czech Republic 2020
- „Inženýrská mechanika“

Membership

- Svaz průmyslu a dopravy České republiky / Confederation of Industry of the Czech Republic
- Asociace obranného a bezpečnostního průmyslu / Defence and Security Industry Association
- Svaz strojírenské technologie / Association of Engineering Technology
- Svaz sléváren ČR / Association of foundries of the Czech Republic
- Svaz kováren ČR
- Česká slévárenská společnost / Czech Foundrymen Society
- Česká svářečská společnost / Czech welding society
- Sdružení dodavatelů investičních celků / Association of Industrial Plants Suppliers
- Okresní hospodářská komora Jihlava / District Chamber of Commerce Jihlava

SPECIAL AWARDS FOR THE COMPANY



ČESKÁ
SVÁŘEČSKÁ
SPOLEČNOST



ZDAS



**OUR HEARTS
FORM THE FUTURE**

Thank you for your attention.