

Czech Power Plants Suppliers

2016



ALLIANCE OF CZECH SUPPLIERS FOR NUCLEAR POWER PLANTS

POWER OF ALLIANCE



CZECH POWER INDUSTRY ALLIANCE z.s. (CPIA)

CPIA was established in September 2015 as a non-exclusive partnership of companies, who are active in design, manufacturing, deliveries and installations in nuclear power plant projects. Czech industry has a long record of activities in nuclear sector, in history 90% of NPP equipment were produced domestically. The know-how and craftsmanship remained, so the companies are capable of deliveries of various commodities for NPP worldwide.

CPIA is lead by ŠKODA PRAHA, a leader with unique experience of being the EPC contractor of all domestic nuclear units. CPIA is also supported by Czech government as it meets the official requirements from National Action Plan for development of nuclear power.

Content:

ARAKO spol. s r.o.	16	I.B.C. Praha spol. s r.o.	21	SDIC	C3
ARC-Heating s.r.o.	38	INVELT SERVIS, s.r.o.	40	SIGMA GROUP spol. s r.o.	27
ARMATURY Group a.s.	17	ISH PUMPS OLOMOUC a.s.	40	ŠKODA JS a.s.	28
CHEMCOMEX Praha, a.s.	19	KE-ARM, s.r.o.	41	ŠKODA PRAHA a.s.	29
ČKD Blansko Engineering, a.s.	18	Kovosta-fluid, a.s.	22	SMP CZ, a.s.	30
ČKD PRAHA DIZ, a.s.	5	KRÁLOVOPOLSKÁ RIA, a.s.	13	SOLEK HOLDING SE	31
CPIA	C2	MEGA a.s.	23	TOS VARNSDORF a.s.	32
Doosan Škoda Power	7	MODŘANY Power, a. s.	24	ÚJV Řež, a. s.	33
EGAP	39	MPOWER Engineering, a.s.	25	VÍTKOVICE POWER ENGINEERING a.s.	34
EGEM s.r.o.	40	MSA, a.s.	15	ZAT a.s.	35
Ekol, spol. s r.o.	9	Omega-Teplotechna Praha a.s.	41	ZK - TERMOCHEM s.r.o.	36
Elektro Kroměříž a.s.	20	OSC, a.s.	41	ZPA Pečky, a.s.	42
EVECO Brno, s.r.o.	40	Provyko s.r.o.	42	ZVVZ GROUP, a.s.	37
FANS, a.s.	11	PSP Engineering a.s.	26		



Company	EPC contractor	Boiler	Turnkey boiler plant	Turbine	Turnkey turbine hall	Generator	Condenser	Waste gas cleaning	Fans	Pumps	Electric Actuators	Valves	Connecting piping
ARAKO												X	
ARC-Heating													X
ARMATURY Group												X	X
CHEMCOMEX Praha													X
ČKD Blansko Engineering				X						X			
ČKD PRAHA DIZ	X	X	X	X	X	X	X	X	X	X	X	X	X
CPIA		X	X	X	X	X	X	X	X	X	X	X	X
Doosan Škoda Power	X			X	X	X	X			X	X	X	X
EGEM													
Ekol	X	X	X	X	X	X	X	X	X	X	X	X	X
Elektro Kroměříž													
EVECO Brno	X		X					X					
FANS	X	X	X	X	X		X		X	X	X	X	X
I.B.C. Praha												X	
INVELT SERVIS	X	X	X		X								
ISH PUMPS OLOMOUC										X		X	
KE-ARM												X	
Kovosta-fluid	X	X	X		X			X					
KRÁLOVOPOLSKÁ RIA	X	X	X	X	X	X	X	X	X	X	X	X	X
MEGA													
MODŘANY Power	X												X
MPOWER Engineering												X	
MSA												X	
Omega-Teplotechna Praha													
OSC													
Provyko	X	X	X				X	X				X	X
PSP Engineering													
SDIC	X	X	X	X	X	X	X	X	X	X	X	X	X
SIGMA GROUP	X									X			X
ŠKODA JS	X												
ŠKODA PRAHA	X	X	X	X	X	X	X	X	X	X	X	X	X
SMP CZ	X												
SOLEK HOLDING SE	X												
TOS VARNSDORF													
ÚJV Řež													
VÍTKOVICE POWER ENGINEERING	X	X	X	X	X	X		X	X	X			X
ZAT													
ZK - TERMOCHEM	X	X		X		X	X	X	X	X		X	X
ZPA Pečky											X		
ZVVZ GROUP	X	X	X					X	X				

High voltage wiring			MaR (Measurement and Regulation)		Water treatment plant	Coal and limestone processing			Air conditioning	Cooling towers	Chimneys	Nuclear power	Nuclear Decommissioning	Water Power Plant	Renewable energy	Machine Tools for Power Machinery	Page
Unit power output	HV and LV substations	Cables	Field instrumentation	Control systems		Feeding	Bunker	Crushing and grindig									
					x							x		x			16
												x		x			38
												x		x	x		17
			x	x	x							x	x				19
														x			18
x	x	x	x	x	x	x	x	x	x	x	x	x			x		5
x	x	x	x	x				x	x			x					C2
x		x	x	x								x					7
x	x	x															40
x	x	x	x	x	x	x	x	x	x	x	x				x		9
	x			x								x		x	x		20
				x											x		40
				x	x				x	x	x	x					11
												x		x	x		21
x	x			x													40
					x							x		x	x		40
																	41
															x		22
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	13
					x							x			x		23
												x	x	x	x		24
			x									x		x	x		25
												x					15
										x	x						41
				x								x		x	x		41
			x	x		x	x	x							x		42
						x	x	x									26
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	C3
					x	x	x	x	x	x	x	x	x	x			27
												x	x				28
x	x	x	x	x	x	x	x	x	x	x	x	x			x		29
										x	x	x		x			30
															x		31
																x	32
									x	x	x	x	x	x	x	x	33
			x	x		x	x	x	x	x	x	x		x	x		34
	x	x	x	x								x	x	x	x		35
					x	x	x	x	x	x		x		x	x		36
												x		x	x		42
				x					x		x	x					37



ČKD PRAHA DIZ a.s. is a traditional company with inventive thinking. We provide complete turn-key solutions for our clients' plans

ČKD PRAHA DIZ, a.s. is an EPC supplier of complete industrial plants and their parts, including modernization and reconstruction. Its focus is on the provision of complete technological investment projects and technological nodes for the following main segments: Power, Waste Treatment, Oil and Gas, and Infrastructure. ČKD PRAHA DIZ, a.s. is a Czech export-oriented company. We are currently developing its export activities through subsidiaries in Russia, Kazakhstan, Ukraine, and Slovakia, as well as through a global network of branches and sales representatives. The long-term goal of ČKD is to strengthen its position as a strong and reliable European EPC supplier. We are an experienced turn-key supplier of power generation projects, related solutions and packages, with the emphasis on high-efficiency power generating units. In our projects we can apply "state of the art" technologies or offer "off the shelf" modular system solutions. ČKD PRAHA DIZ, a.s. has a wide range of experience and references in power and heat generation, biomass and waste utilization, and the reconstruction of existing

units and key equipment, to obtain the best and the most effective solution. A big part of our work is the greening of existing units, by decreasing fuel consumption and reducing harmful emissions. We have experience in implementing projects in the Czech Republic, Syria, Russian Federation, Slovakia, and Kazakhstan. For the power segment, we have successfully carried out the construction of a steam boiler with fluidized bed combustion for a biomass power plant in Pilsen, construction of a CFB boiler in a heat power plant in Tábor, extensive repair of boilers in a power plant in Třebovice, and the complete civil part for 8 compressor halls for the Portovaya compressor station in the Russian Federation. We are currently implementing more than 20 projects in the Czech Republic, Turkey, Hungary, Russian Federation, Uzbekistan, and Slovakia, such as an incinerator with cogeneration power output in Pilsen, the delivery of a 2 x 145 MW machine room for the Yunus Emre - Adularya power plant in Turkey, and deliveries for a diesel-generator in the Mochovce Nuclear Power Plant.

For the Power Segment our focus is on:

- Combined cycle power plants
- Cogeneration units
- Coal-fired power plants
- Simple-cycle power plants
- Waste incineration plant
- Biomass units
- Boilers & boiler houses
- Machine halls and power blocks
- Diesel-electric power plants
- Optimization of existing units (increased efficiency and decreased environmental impact)
- Boiler reconstruction

Our certified professional engineers cover all necessary specializations for EPC projects, from process engineer to control system specialist. They assess the best solution, the type of technology and materials, for proper design and safety. Our reference and ongoing projects provide the best training and support our highly skilled employees. Safety and quality are our priorities: our results prove it.



FOTO 1 – COGEN BRATISLAVA WEST: Installation of two cogeneration unit 4,3 MWe + 4,3 MWt. Deliveries and work on VVN, VN, NN section. Supply and installation of complex technological part, **FOTO 2** – SYNTHOS KRALUPY: Installation of new gas-fired combustion turbines and exhaust gas will be channel to the existing K1 boiler. The STG700 combustion turbine with an output of 35 MWe, **FOTO 3** – POWER STATION TŘEBOVICE – EXTENDED REPAIR BOILERS: Extended repair boilers K-13, K-14 (220 t/hod, 10, 9 Mpa, 545° C), **FOTO 4** – BIOMASS COGENERATION UNIT PLZEN CZECH REPUBLIC: extension of heating plant by power generating block comprising K7 boiler (nominal capacity 45 t/h) TG3 turbo-generation unit with output of 11,5 MWe and related equipment, SNCR Denitrification

We offer our customers comprehensive service in the construction of power units:

- Project Management
- Engineering Services: Feasibility Studies, Basic Design, Detail Design, As-built Documentation
- Financing
- Procurement Services: Tendering, Purchasing, Inspection, Expediting
- Site Activity: Site Management, Installation, Supervision, Testing
- Start Up Activity: Pre-commissioning, Commissioning, Start-up, Training of Operation Personnel

TECHNICAL INFORMATION ABOUT THE COMPANY

- Year founded: 1990
- Number of employees: 242
- Certifications: ISO 9001, ISO 27001, ISO 14001, ISO 3834 – 2:2006, OHSAS 18001.
- Focus: supplies for Power, Waste Management, Oil & Gas, and Infrastructure.
- Technology applied by ČKD: construction and modernization of power plants and industrial facilities, such as combined heat and power plants, flue gas desulphurization, flue gas denitrification, cogeneration, biomass power plants, municipal waste-fired boilers, waste-gasification plants, combined-cycle sources of heat and electricity, waste incinerators, turbines and machine halls, steam generators and boiler houses.
- One of the largest suppliers of power plant solutions and services in 2013 – List of the seven largest industrial suppliers in the Czech Republic. (Source: Ekonom, roč. IX, č. 16, 16.-22.4. 2015, vyd. Economia, ISSN 1210-0714)
- The Company won the Best Innovator Award for the second-best entry in the “Large Companies” category.

Name of company:	ČKD PRAHA DIZ, a.s.
Street:	Kolbenova 942/38a
City:	Prague
Postcode:	190 00
Tel.:	+420 266 054 010
Fax:	+420 283 890 156
E-mail:	info@ckddiz.cz
Website:	www.ckd.cz



With superior products, we have managed to maintain the status of one of the five strongest manufacturers of steam turbines in the world

Our company has a very good long-term position in the EU market. Namely in the area of supply of industrial steam turbines for biomass power plants, municipal waste or combined cycle power plants, especially in the Nordic countries, Germany or Poland, and for combined cycles in Turkey. Nevertheless, we have experienced the largest business growth in Latin America. India is also a traditional territory for us. However, all emerging markets, namely in the Southeast Asia, are of great challenge to all of us.

We are currently implementing more than 30 projects with new turbines and nearly 20 upgrades or retrofitting of older turbines worldwide. We have made contracts to supply two 110 MW turbines for solar power plants in Chile. Those projects will be the largest solar power plants in South America and, at the same time, the first solar power plants in the world equipped with the "Tower & Storage" technology. Our major projects also include 300 MW turbines for the combined cycles in Mexico. We have prepared a basic design of the non-OEM turbines (i.e. competitive machines), in-

cluding the introduction of new technologies essential for implementation of such projects. These include for instance unique machining technology of turbine parts directly on the site, application of reverse engineering for steam turbine components or scanning the layout of turbine rooms.

To maintain our technology at the highest level, we heavily invest into research&development, engineering SW and new manufacturing equipment. Thanks to years of experience and our know-how which is currently utilized also by the parent company in Korea, we have become the global centre of research and development of steam turbines for the entire Doosan group. The developers in Pilsen primarily focus on new materials for use at high temperatures, and on development of long blades for the turbine output stages and optimization of their shape. We also permanently tend to cut down the costs and increase efficiency of the heat cycle. Given the large number of sources connected to the distribution network while the requirements for flexibility, speed of starts and changes in per-

formance have dramatically shifted, the increase of flexibility of operation is a topic of growing importance.

Besides the quality of our product which ranks among the world top products, we also have a great team of technicians who know how to get into accord with the customer and their requirements and thus offer a significant amount of technical flexibility of their solutions. At the same time, our company is able to take patronage over larger delivery units and provide complete equipment of the turbine room. The worldwide network of Doosan sales offices allows us to work globally in the area of energy equipment supplies, and take full advantage of the capacity of our parent company as the EPC contractor.

About Doosan

Doosan Skoda Power is part of a powerful combination of companies united under the Doosan Group to deliver complementary technologies, skills and value to customers the world over.



FOTO 1 – The single-casing steam turbine of large output with reheating in the Indian market and one of the largest turbines of this design in the world – 180 MW turbine of the OPG coal block in the Tamil Nadu state in operation, **FOTO 2** – Combined IP/LP part of 110 MW steam turbine for CSP (concentrated solar plant) prepared for transport, **FOTO 3** – Condensing steam turbine 3x275 MW of modern double-casing design during installation at the plant, **FOTO 4** – Steam turbine of 64 MW with extraction for industrial purposes, Sweden

TECHNICAL INFORMATION ABOUT THE COMPANY

Other dates:

- As part of the Korean Doosan Heavy Industries & Construction Group we belong from 2009 to the Doosan company.
- We have been manufacturing steam turbines according to own know-how for over 111 years.
- During this impressive period of our history, our products have been exported to nearly 67 countries around the world.
- Our portfolio contains steam turbine in the power range from 10 to 1,200 MW for all kinds of applications - from fossil power plants, including supercritical and nuclear power plants, through steam-gas cycles, to power plants generating electricity and process steam for industrial use and heating, or steam turbines in concentrated solar power plants.
- Almost all large Czech and Slovak power industry is based on our turbines. 100% of our production is exported.

- The product portfolio is supplemented with complex services plus retrofitting and modernization of our design as well as the equipment of other manufacturers.
- Thanks to massive investments in research and development, and continuous upgrade of our production base, our company has maintained its leading position in this field and ranks among the five most successful manufacturers of steam turbines in the world.
- Focus: Supplies for: power, petrochemical, chemical, metallurgic, etc.
- Principal products: Construction and modernisation of power plants, such as: from turbines to the machine halls for combined heat and power plants, cogeneration, biomass power plants, combined-cycle sources of heat and electricity, waste incinerators, nuclear power plants and CSP. Cooling equipment such as, steam condensers and heat exchangers.

Name of company:	Doosan Škoda Power
Street:	Tylova 1/57
City:	Plzeň
Postcode:	301 28
Tel.:	+420 378 185 939
Fax:	+420 378 185 910
E-mail:	doosanskodapower@doosan.com
Website:	www.doosanskodapower.com



EKOL Focuses its Attention on Biomass - Customer Tailored Solutions

EKOL has strategic goals - to increase the prestige of the company in global power industry. It can boast the title of reliable supplier of steam turbines in the power range up to 70 MW and steam and hotwater boilers up to 200 t/h burning various fuels, with focus on bio fuels. EKOL also has gas turbine specialists. This combination allows the company to focus on delivering turn-key power plants. Fundamental is that EKOL draws up a general project where optimises thermodynamic parameters to achieve maximum efficiency while the project's main components are also the company's own products.

EKOL holds several references for EPC for heat and power plant projects in the Czech Republic and abroad. One of the first EPC projects was complete Wood Chip **Biomass Power Plant Sviadnov /CZ/**, which EKOL as the general contractor delivered in less than 12 months. Contract involved a biomass power plant with an electrical output 5.8 MW and thermal output 18 MW supplying heat to the municipal network. The annual average efficiency is 70.5%. Nominal efficiency in the backpressure operation mode is 87%.

EKOL has business partners in Germany, Poland, Ukraine, Kazakhstan, Romania, Egypt, Mexico, Thailand and other countries. 90% of EKOL production is exported.

In 2015 was signed a contract **Jizan /SA/** for the delivery basic components of a sugar refinery power plant to Saudi Arabia. The delivery will include boilers and back-pressure turbines with an output of 2 x 7 MW. This project from the Saudi Arabia demonstrates once more the trust in EKOL and confidence in its products as an experienced world-wide leader in steam plant technology.

Among the next successful references of this exporter is the delivery of 2 condensing steam turbines with an output of 14 MW to drive feed water pumps for a power plant in Kazakhstan, in the area of power plants a delivery of two steam back-pressure turbines to drive a generator with an output of 10 MW. This application was intended for the newly built sugar refinery in **Babylon in Iraq**. This was followed by a further delivery of a complete Wood Chip Biomass Power Plant with a electrical output of 7.5 MW

and a thermal output of 6.7 MW, this time for the **Loučovice Heating Plant /CZ/**.

Most countries now concentrate on energy acquired from renewable sources. EKOL is also focusing now on the surrounding countries such as Poland, Romania, Bulgaria, Serbia and Croatia where energy acquired from the burning of biomass is supported by the state.

In 2015 strategic foreign partner Shaangu entered into EKOL. One of the fundamental points of future cooperation is to expand Innovation programmes. EKOL heavily invests in the Research & Development Centre specialising in the development of TOP steam turbines, compressors, boilers and energy equipment.



FOTO 1 – View in Machine Hall of Biomass Power Plant Sviadnov (CZ) 5,8 MWe and general view (big photo on opposite page), FOTO 2 – Wood Chips Storage and Drying in Biomass Power Plant Loučovice (CZ) 7,5 MWe, FOTO 3 – View on EPC Project Etihad Sugar Refinery (IRQ) 10 MWe, FOTO 4 – Condensing Steam Turbine 14 MW for Kazakhstan

TECHNICAL INFORMATION ABOUT THE COMPANY

Ekol is Specialized in Following Activities:

- Turn-Key Heat and Power Plants
- Incineration Plants
- Steam Turbines up to 70 MW
- Engineering, Design, Customer Tailored Optimization for Maximum Efficiency, Retrofits
- Gas Turbines Equipments
- Boiler and Boiler Houses, Boiler Modernization and Ecologization
- Service, General Overhaul, Complete Renovation
- Cogeneration Units

References Last EPC Projects:

- Etihad Sugar Refinery /IRQ/10 MWe/2015/
- Biomass Power Plant Loučovice /CZ/7,5 MWe/2014/
- Biomass Power Plant Sviadnov /CZ/5,8 MWe/2013/
- Chemical Plant Soligorsk Belarus /BLR/7,2 MWe/2011/
- Nile-Sugar Company /ET/2 x 8 MWe/2010/

Significant Turbines References:

- Pulp and Paper Industry Bukoza Hencovce /SK/ 25 MW Condensing Steam Turbine /2016/
- Chemical Plant Wanhua Yantai /CHN/9 MW Condensing Steam Turbine /2016/
- Chemical Plant Shchekino Azot/RU/2,4 MW Condensing Steam Turbine/2015/
- Sugar Refinery Etihad Babylon/IRQ/2 x 10 MW Back-Pressure Steam Turbines/2015/
- Chemical Plant Soda Polska Ciech Inowroclaw/PL/10 MW Back-Pressure Steam Turbines /2015/

- Incineration Plant Szczecin /PL/14,5 MW Condensing Steam Turbine /2014/
- Lovochemie Lovosice /CZ/25 MW Double-Pressure Condensing Steam Turbine /2013/
- Chemical Plant SCS Proyctos /MEX/4 MW Back-Pressure Steam Turbine /2013/

Pilot Boilers References:

- Chemical Plant Shchekino Azot/RU/ Steam Boiler for Nature gas 60 t/h/2015/
- Thermal Plant Oradea Elsaco /RO/ HRSG 52 MW + 2 x Hot Water Boilers 116 MW /2015/
- Chimcomplex Borzesti /RO/ HRSG 12 MW + Hot WaterExchanger /2014/
- Etihad Sugar Refinery /IRQ/ 2 x Steam Boiler for Nature Gas 75 t/h/2014/
- Biomass Power Plant Loučovice /CZ/ Steam Boiler for Biomass Burning 29 t/h /2014/

Name of company:	Ekol, spol. s r.o.
Street:	Křenová 65
City:	Brno
Postcode:	602 00
Tel.:	+420 543 531 710
Fax:	+420 543 242 912
E-mail:	ekolsro@ekolbrno.cz
Website:	www.ekolbrno.cz



FANS, a.s. is a company with clear plans and a professional approach to customers. We can find the optimal solution for customers the world over in terms of investment, application, output and climate

FANS, a.s. is an experienced supplier of investment complexes and services for the power and other industries. We focus on turn-key supplies for power plants and on construction and modernisations of power plants and industrial facilities. FANS, a.s. was founded in 1992 and is currently developing its export activities through subsidiaries in Russia, Poland and India, and through a global network of branches and sales representatives. Since 1997, the company has had its own manufacturing plants in the Czech Republic (Hlinsko and Chrudim). Since its beginnings, FANS, a.s. has been involved in manufacturing and modernising of cooling towers made of steel, concrete, FRP and circulation cooling circuits from design to implementation and operation. Over the years, our product range of forced and natural draft cooling towers has expanded to include dry coolers and steam condensers. Besides our activities in the field of industrial cooling, we are also expanding our portfolio of complete plants and equipment for

power plants and industry focused on combined production of heat and electricity, cogeneration, biomass and combined-cycle power plants, incinerators, wind power plants, turbines, machine halls, steam generators and boiler houses, etc. FANS, a.s.'s competitiveness is further boosted through its own research and development, which results in original cooling tower components, such as low-speed fan unit drives, spray nozzles, pultruded fan units. The company now has a firm technical, manufacturing and administrative base such that we can fully and professionally secure everything as a 'turnkey' project, and always with a responsible and individual approach to each customer.

Why cooperate with FANS – main benefits of cooperation with us:

- We are a team of qualified and experienced experts

- We focus on modern technologies and technically advanced solutions optimised for each customer
- We are competitive and our offer is always designed to suit individual needs
- We provide comprehensive consultancy in the field of industrial cooling and water purification
- We provide support in providing financial projects and contracts
- We cooperate only with reliable and proven suppliers
- We offer innovative components that bring financial, energy and environmental savings to our customers
- We respect environment, care about ecology and focus on emission reduction
- We truly enjoy our work and we are always happy to help our clients meet their goals.



FOTO 1 – HEP PROIZVODNJA d.o.o., Croatia, Delivery, supervising and mounting of hybrid cooling tower for thermal plant TE-TO Osijek, **FOTO 2** – AO «SSGPO», Rudnyj, Kazakhstan, Delivery and supervision of cooling towers 4 pcs. CTF 250/II and 250/IVH, **FOTO 3** – EKOKEM OY AB, Finland, Supply of 5pcs. dry coolers with total heat rate 27 MW and 2 pcs. dry coolers with total heat rate 11 MW, including supervision, **FOTO 4** – TE ELEKTROPRIVREDA, Kakanj, Bosnia and Hercegovina, Reconstruction of a 180/XII concrete cooling tower for a power plant TE ELEKTROPRIVREDA in Kakanj, Bosna and Hercegovina generating 230 MW power in total, **FOTO 5** – OAO "Mosenergo" TEC-26, Russia, Delivery and supervision of the cooling tower CTF 300/V, **FOTO 6** – Orient Power Company (Pvt.) Ltd., Balloki, Pakistan, Design, delivery and supervision of assembly of 7-cell concrete cooling tower.

TECHNICAL INFORMATION ABOUT THE COMPANY

- Year founded: 1992
- Number of employees: 210
- Turnover in 2015: 34.5 m EUR
- Export: 96 %
- Member of: Cooling Technology Institute, Eurovent, SDIC, Confederation of Industry of the Czech Republic
- Certifications: TÜV ISO 9001+14001, OHSAS 18001, CTI STD-201, Eurovent Certified Performance, Eurovent Certified Performance, EAC, EU Certifications, ATEX
- We speak: English, Russian, German, Czech, Slovak, Hungarian, Polish, Ukrainian, Serbian, Croatian, Spanish, Arabic, Hindi
- Focus: Supplies for: power, petrochemical, chemical, metallurgic, pharmaceutical, mechanical engineering, construction and food industries.
- Principal products: Construction and modernisation of power plants and industrial facilities, such as: combined heat and power plants, cogeneration, biomass power plants, combinedcycle sources of heat and electricity, waste incinerators, wind power plants, turbines and machine halls, steam generators and boiler houses. Cooling equipment such as forced and natural draft cooling towers, dry coolers, steam condensers, air coolers, cooling tower components.

Name of company:	FANS, a.s.
Street:	Na Kvetnici 17
City:	Prague
Postcode:	140 00
Tel.:	+420 234 718 970
Fax:	+420 234 718 918
E-mail:	info@fansct.com
Website:	www.fansct.com



20 years of KP RIA

KRÁLOVOPOLSKÁ RIA is the engineering and supply company. The activities of KRÁLOVOPOLSKÁ RIA are focused on the realization of sophisticated deliveries and the provision of comprehensive services to companies, especially in the sector of power engineering, chemical and petrochemical industries and water management.

KRÁLOVOPOLSKÁ RIA, a. s. participated in the construction of nuclear units in the Czech Republic and Slovak Republic. Company has a highly qualified team of experienced designers, specialists, technical engineers and business managers. The number of employees is more than 170.

The company also provides other key professional engineering services. They include, without limitation, the preparation of:

- implementation project documentation,
- manufacturing documentation,
- assembly documentation,
- documentation for function testing and commissioning,
- documentation proving the sturdiness and tightness of machinery and equipment in relation to their operating life,
- quality documentation.

The company's long and rich history is also reflected in its current condition supported by references from domestic clients and, increasingly, also foreign clients.

Main current projects:

POWER ENGINEERING

- NPP Temelín – Maintenance of Reactor hall
- NPP Dukovany – Lifting crane emergency brake
- Synthesia, Zelená louka – New energy source, delivery of boiler
- Lovochemie, a.s., Lovosice – Ecologization of power source – delivery of new steam turbine and power lead out
- Natural gas regulativ station Počerady – Ensuring the maintenance of gas management system
- Chvaletice Power Plant – Reconstruction of Units 3 and 4
- ŠKODA AUTO, a.s. – Natural Gas HP Regulating Station

INDUSTRY

- Lovochemie, a.s., Lovosice – Supply of calcium nitrate production unit
- Severočeské doly, a.s. – Sorted coal warehouse

WATER TREATMENT PLANTS

- WTP Plav Nejdek – Supply of the technological part of the project
- WTP Svatá Trojice, Kutná Hora – Reconstruction and upgrade of Water Treatment Plant
- WWTP Vlastějovice – Sewerage and WWTP Vlastějovice
- WWTP Zaječív – Sewerage system and WWTP Zaječív
- Jedovnicko Region – The WWTP Intensification and Sewerage
- WWTP Ivanovice na Hané – Reconstruction and intenzification of Ivanovice na Hané WWTP
- Velký Beranov – Sewerage and WWTP



FOTO 1 – Nuclear Power Plant, FOTO 2 – Conventional Power Plant, FOTO 3 – Chemical and Petrochemical Industry, FOTO 4 – Water Management Facility

TECHNICAL INFORMATION ABOUT THE COMPANY

The **subject of business** of the company includes preparation and implementation of the higher level deliveries, deliveries of structural units, technological investment units or complex „turn – key“ projects in the following fields:

Power engineering

- Nuclear
- Classic

Industry

- Petrochemical
- Chemical

Water Management Units

Waste Water Treatment Plants

- Municipal
- Industrial

Water Treatment

- Purification Plants
- Portable Industrial
- For special purposes

Name of company:	KRÁLOVOPOLSKÁ RIA, a.s.
Street:	Okružní 875/19a
City:	Brno
Postcode:	638 00
Tel.:	+420 532 149 500
E-mail:	inforia@kpria.cz
Website:	www.kpria.cz



MSA, a.s. – world manufacturer of industrial valves with more than 100 years of history supplied valves in the amount of 8 billion CZK during last 6 years

Company MSA, a.s. from Dolní Benešov, Opava Region, ranks among the leading manufacturers of industrial valves with strong position in the international market. Company main production program consists of ball valves, gate valves, swing check valves, globe valves and special valves for nuclear power plants. Production of the company is designed for production and distribution of oil and natural gas as well as water industry, heating industry and nuclear power industry. The most important customers in domestic market are companies RWE, ČEZ, NET4GAZ, Královopolská RIA, TRANSPETROL, EUSTREAM, Slovenské elektrárne or Modřany Power. World class of the company MSA is supported by a great interest of foreign clients. Approximately 89 % of the production is exported to more than 80 countries of the world: starting with natural gas projects in Saudi Arabia, Indonesia and South Korea followed by nuclear power plants projects in Europe and Asia up to new markets in South America. However, South Korea, Near East, Russia and Europe including Turkey undoubtedly are the key markets of the company.

Extensive reconstruction and modernization of the company ongoing during 2012 – 2015 became a highly significant moment of company history. Objectives of this extensive reconstruction were improvement of quality and workflow, expansion of manufacturing capacities, simplification and optimizing of workflow, decrease of manufacturing costs and also installation of new modern technologies replacing the older ones and centralization of manufacturing processes.

Installation of the latest paint shop in the amount of 26 million CZK was executed in terms of the New manufacturing hall opening. New machines for valve manufacture in amount of 100 million CZK were put into operation and also latest ultrasonic tanks, high grade manipulation set and new automatic welder were purchased as well. The last step in the first part of modernization and reconstruction of company premises was construction of new cryogenic testing room in the amount of 36 million CZK. Cryogenic valves designed for working temperatures up to -196°C will be tested in the cryogenic testing room.

Internal part of the cryogenic testing room is the high pressure testing room, where water and air testing for pressures up to 630 bar will take place. Such a testing room is undoubtedly unique and immensely expands possibilities of the company MSA.

"I am convinced that our new manufacturing capacities and modern technological base will help MSA, a.s. while entering new markets and winning new clients. We successfully continue in valve supplies not only for our traditional customers – Saudi Arabian company Saudi Aramco or South Korean KOGAS, Russian GAZPROM, ROSNEFT, Indonesian PETROMIY or French TOTAL, BORAS from Turkey, but we also have success with the new clients. For example company PEMEX from Mexico, PETROBRAS from Brazil, BOTAS from Turkey. We also successfully finished orders in Australia or Thailand. Continuous goal of our business strategy is to take part in African market, where our valves are operational for example in Chad oilfields, Kenya and Ivory Coast as well." describes geography of MSA supplies sales director of MSA, Mr. Roman Baláž.



FOTO 1 – Ball valves nominal size 40", Class 600 designed for Turkish project, **FOTO 2** – Ball valves nominal size 40", Class 600 with extension

TECHNICAL INFORMATION ABOUT THE COMPANY

- year of establishment: 1890
- number of employees: 535
- production: ball valves, gate valves, globe valves, special valves for nuclear power
- application field of MSA valves: transport and processing of oil; transport, distribution and processing of natural gas including liquefied gas; nuclear and conventional energy, heating and water industry, chemical industry
- sales: 1,6 billion CZK
- number of produced valves in 2015: 6 590 pieces
- export share: 89 %
- customers: all continents except Antarctica
- largest manufactured valve: ball valve 56" (pipeline diameter 1,4 m), pressure class 2500

Name of company:	MSA, a.s.
Street:	Hlučinská 641
City:	Dolní Benešov
Postcode:	747 22
Tel.:	+420 553 881 111
Fax:	+420 553 881 200
E-mail:	sales@msa.cz
Website:	www.msa.cz



ARAKO - traditional Czech manufacturer

INTRODUCTION

ARAKO spol. s r.o. in Opava is a traditional Czech manufacturer of industrial valves. ARAKO began to produce valves more than 60 years ago, it was at the birth of the first production of valves for the energy industry in former Czechoslovakia. Also in the new millennium, the company ARAKO offers a wide range of products as well as a development, production and service of flow management solutions to the most demanding industries - for nuclear and thermal power engineering, chemical and petrochemical plants. It is a part of Atomenergomash,

belonging to the Russian group Rosatom State Atomic Energy Corporation.

REFERENCES

ARAKO products can be found in 25 countries on four continents. The major customers include ČEZ, Enel, Siemens, Shell, ORLEN, Alstom, Gazprom and other companies. In recent years, the share of exports has made about 90 %, including successful and large deliveries for nuclear power plants in the Russian Federation (Rostov NPP, Leningrad NPP, Novovoronezh NPP, Kalinin NPP etc.) as well as supplies for the project completion of blocks III and IV of the

Mochovce Nuclear Power Plant in the Slovak Republic, where ARAKO became a major supplier of valves for the project.

PRODUCTS

The ARAKO product range includes gate valves, globe valves, swing check valves, lift check valves, strainers, ball valves, blow-down and continuous blow-down valves, energy reducers and special valves for nuclear power appliances. The goal of ARAKO is to provide the customers with high quality and proper solutions for reliability and safety of their piping systems.

TECHNICAL INFORMATION ABOUT THE COMPANY

- location: Opava, Czech Republic
area: 25 181 m²
number of employees: 198
- latest development projects:
high-pressure gate valves
gate valves for nuclear power engineering
discharge valves for nuclear power plants
- capabilities and services:
design, development & production
machining services
service / valve repairs



FOTO 1 – Mochovce NPP (Unit 3 & 4), Slovakia, 2011-2016,
(source: Slovenské elektrárne, company of the Enel Group)

FOTO 2 – High-pressure gate valves for US Steel Košice, Slovakia, 2015

Name of company:	ARAKO spol. s r.o.
Street:	Hviezdoslavova 18
City:	Opava
Postcode:	746 01
Tel.:	+420 553 694 111
E-mail:	arako@arako.cz
Website:	www.arako.cz



ARMATURY GROUP - experienced manufacturer of valves

ARMATURY Group a.s. is the significant manufacturer and supplier of industrial valves, piping and accessories. The company produces a wide range of **BALL VALVES, BUTTERFLY, CONTROL GLOBE VALVES, HIGH PRESSURE VALVES, VALVES FOR NUCLEAR POWER, SPECIAL AND METALLURGICAL VALVES**. The products are used by satisfied customers in more than 65 countries around the world in the following industries: power and nuclear power industry, oil and gas industry, chemical and petrochemical industry, water supply, metallurgy. The company participates in major

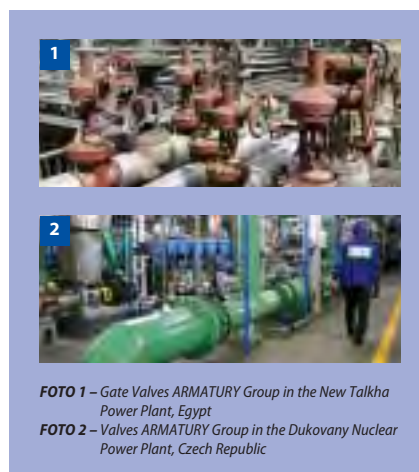
projects and implements deliveries of technological turn-key projects, where ensures assembly of valves, actuators, pipes and accessories, including installation, commissioning and customer service. Our pride is the development and manufacture of special valves that are supplied according to specific customer requirements. These valves operate in extreme conditions. For example: stainless steel ball valves DN 1400, gate valve DN 1400 with fabricated body, butterfly valve DN 3500 operated by special self-operating actuator or metallurgical valves used for temperature up to +1 500°C.

We use the latest technology and modern technical equipment. During the last two years, we have built a new manufacture plant with an area of 20 000 m². Effective management of warehouses often helps to solve urgent needs of our customers.

Our major business partners are large industrial companies such as Siemens, ABB, Alstom, RWE, Gazprom, Lukoil, Orlen, Gaz-System, AE, CEZ, ENEL, Rosatom, ArcelorMittal, Doosan Škoda Power, Brødrene Dahl, U.S. Steel, GE, OMV.

TECHNICAL INFORMATION ABOUT THE COMPANY

- Turnover in 2015: 66 mil. EUR
- Number of employees: 500
- International standards: EN, DIN, API, ANSI, BS, GOST
- International certificates: EN ISO 9001:2008, EN ISO 14001:2004, OHSAS 18001:2007, PED 97/23/EC, API Spec 6D, GOST-R, TA-Luft, ATEX, Fire safe, SIL
- Advantage: own development, own production, wide range of valves, warehouse stock, service and repair of valves and actuators, customers in 65 countries



Name of company:	ARMATURY Group a.s.
Street:	Nádražní 129
City:	Dolní Benešov
Postcode:	747 22
Tel.:	+420 553 680 111
Fax:	+420 553 680 333
E-mail:	agroup@agroup.cz
Website:	www.armaturygroup.cz



We offer solutions for hydro power plants & pump stations

ČKD Blansko Engineering, a.s., is an engineering – supply company, whose main activities consists in complete supplies of mechanical equipment and technology of hydropower and pump-storage hydropower plants, i.e. hydraulic turbines of all types and sizes, pump turbines and pumps, incl. elaboration of outline and detail design documentation, hydraulic design, model tests in our own laboratory, erection and guarantee measurements at site. Furthermore, our company is not focused only to supplies of new equipment, but also on rehabilitations, uprating and overhauls of existing

machines. We are also a member of international organizations IAHR, IHA, EuroPump, IEC, Czech calibration association and Association of pump producers of the Czech Republic. We continue a long-time experience in research and fabrication of hydraulic turbines in Blansko. Great emphasis is laid on high quality hydraulic and mechanical design of our machines conforming to the latest world trends. The state-of-the-art CFD and FEM computation methods are applied to optimize particular components and complete hydraulic machines to assure high efficiency and lifetime without

any operation problems. Modern, cavitation-proof and environment-friendly materials are applied in the machine design.

In the field of hydropower plants we could support our activities with many realized projects all over the world.

TECHNICAL INFORMATION ABOUT THE COMPANY

Fields of activity:

Standard hydraulic turbines and pumps:

- Pelton turbines – unit output up to 300 MW
- Kaplan turbines – unit output up to 100 MW
- Low head turbines – unit output up to 20 MW
- Francis turbines – unit output up to 300 MW
- Pump turbines – unit output up to 500 MW
- Large pumps – unit output up to 150 MW
- Valves – butterfly, hollow cone, cone, spherical, knife valves
- Steel structures for hydro works

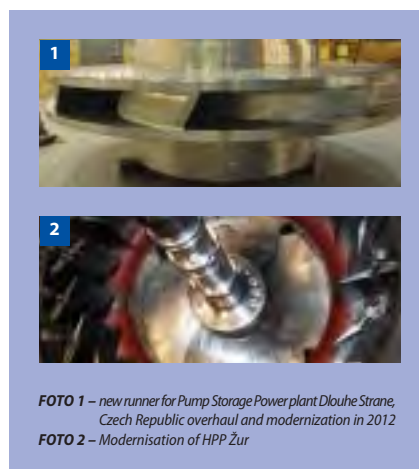


FOTO 1 – new runner for Pump Storage Power plant Dlouhé Stráně, Czech Republic overhaul and modernization in 2012

FOTO 2 – Modernisation of HPP Žur

Name of company:	ČKD Blansko Engineering, a.s.
Street:	Čapkova 2357/5
City:	Blansko
Postcode:	678 01
Tel.:	+420 515 554 561
Fax:	+420 515 554 588
E-mail:	info@cbeng.cz
Website:	www.cbeas.com



CHEMCOMEX Praha, a.s. “Delivering service excellence”

CHEMCOMEX specializes in design and delivery of multidisciplinary technological projects for power generating industry focusing mainly on areas related to nuclear energy and power generation. We have long-term experience gained in numerous projects successfully implemented in the Czech Republic, Slovakia, and other EU countries. Our qualified employees deliver tailor-made solutions to our clients' needs. Services in **Decontamination, Dismantling and Decommissioning (D&D) of Nuclear Facilities** represent the principal services **CHEMCOMEX** offers. We have broad experience in dismantling, decommissioning and disposal of technological units; we have designed and delivered systems for mechanical and chemical decontamination as well as equipment for fragmentation and classification of technologies to be dismantled. **CHEMCOMEX**'s division of **Radioactive Waste Management** has developed geopolymer and geocement matrices for solidification technology used in waste treatment. Our technological systems are designed for handling, modification and treatment of liquid as well as solid radioactive waste. We also provide systems designed for compacting

and storage of processed radioactive ion-exchanging resins and sludges. Together with our daughter company **VF, a.s.** we design and deliver equipment and systems for radiation protection and monitoring. Over the years, **CHEMCOMEX** has successfully delivered complex technological systems, machinery equipment, pipeline systems for nuclear island and turbine halls of power generating units, pressurized tanks and special on-line measurement and control systems for both the nuclear and conventional power industry.

TECHNICAL INFORMATION ABOUT THE COMPANY

- Member of the CCE Group
- Established in 1990
- Number of employees: 750 (250 full-time, 500 external)
- Turnover in EUR: 24 million (2013), 35 million (2014), 39 million (2015)
- Certification: ISO 9001, ISO 14001, OHSAS 18001, ISO 3834-2 certificates
- Licenses for activities in nuclear energy sector, waste management, conducting geological survey services and production of special metering devices
- Operating in the CZ, SK, HU



FOTO 1 – Project realization NPP Dukovany, Dukovany, 2015
FOTO 2 – Automated solidification unit, NPP Mochovec, 2013

Name of company:	CHEMCOMEX Praha, a.s.
Street:	Elišky Přemyslovny 379
City:	Praha 5 – Zbraslav
Postcode:	156 00
Tel.:	+420 226 259 111
Fax:	+420 271 750 456
E-mail:	chemcomex@chemcomex.cz
Website:	www.chemcomex.cz



Elektro Kroměříž – switchboards for demanding area

Elektro Kroměříž a.s. was established in 1992. The main core of company is production, assembly, repair, maintenance, refurbishment and testing of switchboards LV up to 1 000 V and 6 300 A. One of the main part of production consists of deliveries of electrical devices for nuclear power plants- type VVER 440 and VVER 1000. According to requests the switchboards are qualified and adapted to EMC and seismic resistance. The company participates on building realization, reconstruction of power sources, automotive industry, metallurgical, construction, chemical

and mine industry. In engineering there are especially deliveries of switchboards for turbine's controle. The company also produces energetic and technological container buildings of distant construction, mining platform etc. Design solution takes account of dimensions, using, statics and dynamical impact, air conditions, gas-tightness and water-resistance, coefficient of fire-resistance, inner operating temperature etc. The company has the quality system and is certificated for ČSN EN ISO 9001:2008 and 14001:2004.

The company is located in its own areal. This consists of 3 production halls and hall for heavy assembly. The manufacturing area is 4 x 1 100 m² with complete technological and logistic facilities including testing and handover area. The actual month production is 180 equipped switchboards with possibility of volume raising. 70% of production goes to abroad. Elektro Kroměříž a.s. has 63 employees, 42 of them are working in production. In 2015 the turnover was 7 500 000€.

TECHNICAL INFORMATION ABOUT THE COMPANY

- Industrial switchboards up to 6 300 A
- Specific switchboards for power and nuclear engineering
- Production of e-houses for sea platforms
- Switchboards for oil platforms
- Switchboards for turbine and generator's control
- Nonexplosive and seismic resistant switchboards
- Switchboards for automotive industry and track vehicles
- Technological switchboards for automation
- Specific switchboards for working machines



FOTO 1 – E-house with controll centre, gas platform in Azerbaijan, Caspian Sea, 2014

Name of company:	Elektro Kroměříž a.s.
Street:	Kaplanova 2066/2B
City:	Kroměříž
Postcode:	767 01
Tel.:	+420 573 501 811
Fax:	+420 573 340 101
E-mail:	ekm@ekm.cz
Website:	www.ekm.cz



I.B.C. Praha - reliable supplier of industrial valves

I.B.C. Praha, Ltd. was established in 1994 by delimitation of the sales and service activities of the IBC, Ltd. Krnov, founded as a successor to the privatized plant Armaturka Krnov, originally a part of SIGMA Group. At present, I.B.C. Praha, Ltd. and its manufacturing branch Armaturka Krnov, Inc. are a capital-linked group of companies involved in the design development and manufacturing of industrial valves for nuclear and conventional power, petrochemical, chemical, heat and gas industries. We have great experience in the supply of valves and supplies for other demanding

branches of industry guaranteeing a high degree of safety, quality and reliability of the valves. We also develop, manufacture, and supply valves for demanding industrial applications according to the client's specific requirements. The IBC Group resources provide individual, customer tailored, friendly approach, complete after-sales and post-warranty customer service, professional consulting services, training and emergency service calls. In the best tradition of the IBC professional culture, company principles and philosophy, the IBC Group remains committed to provide

flexible, customer-oriented, top quality service and reliable products to its clients at reasonable prices. This tradition carried the IBC Group successfully through the past two decades and its continuous dedication to further improvement and perfection have provided a fine base for the future.

TECHNICAL INFORMATION ABOUT THE COMPANY

- Company is part of a strong Czech engineering group which also includes the companies Armaturka Krnov and ARPO.
- Company is member of CZECH POWER INDUSTRY ALLIANCE (CPIA)
- Design-Manufacturing-Sales-Service-Engineering
- Certification ISO 9001: 2008, Modul H, CE, EAC
- Ball, Gate, Globe, Check, Butterfly, Special valves, Filters
- DN 6-1000(1/2-40"), PN 6-400(CLASS 150-2500)



FOTO 1 – Ball valve for transit of oil
FOTO 2 – Ball and Gate valves

Name of company:	I.B.C. Praha spol. s r.o.
Street:	Karlštejnská 9
City:	JINOČANY
Postcode:	252 25
Tel.:	+420 251 006 150
Fax:	+420 251 006 222
E-mail:	ibcp Praha@ibcp Praha.cz
Website:	www.ibcp Praha.cz



Feature-proof your investment in energy production

Kovosta-fluid is leading supplier of smart energy solutions using our own design of multi-fuel bubbling fluidized bed BFB boiler technology. We meet the demand of the market through development, design, supply, construction, commissioning, maintaining and operation of new multi-fuel BFB boilers, power plants, CHP plants or incinerator plants as well as reconstruction and modernization of existing plants with respect of environment sustainability. Our smart energy solutions bring high efficiency, flexibility, cost effectiveness and durability to the customer.

Our BFB technology, constantly innovated by our own patented solution as a result of our research and development, represent the most efficient and cost-effective way how to turn a wide range of conventional fuels and waste (forestry, agricultural, industrial or household) to clean energy. Various type of coal, woodchips, bark, peat, pellets from cereal, maize, rape straw, olive cake, grain chaff, DDGS, lignin, rice and sunflower husks, sewage and paper sludge; poultry manure, coconut shells, TDF, sorted MSW, etc. can be utilized as fuel.

Capability to burn three different fuels simultaneously in any ratio at any time together with other significant features as fuel independence, efficiency over 92%, low emission and significant carbon footprint reduction makes from our multi-fuel BFB boilers future-proof energy solution which represents the best way how to solve the energy needs not only of first and second generation bioethanol producers; breweries; coal mines; agriculture waste, sewage sludge and wood producers; poultry and camel farms, wool combing plants but also other energy consumers/producers.

TECHNICAL INFORMATION ABOUT THE COMPANY

- More than 20 years of experience
- Focusing on quality improvement and new technology development
- Technology protected by own patents and utility models
- Products and processes are continuously controlled/certified by TÜV NORD
- Technology supplied according to EU standards. GOST R or ASME can be offered as well
- The high quality of services achieved by ISO 9001:2008 QMS certified by TÜV NORD



Name of company:	Kovosta-fluid, a.s.
Street:	Vápenka 4
City:	Brno
Postcode:	636 00
Tel.:	+420 580 582 951
Fax:	+420 580 582 950
E-mail:	kovosta@kovosta.cz
Website:	www.kovosta.cz



Ultra pure water by MPure™ electro-deionization

For more than 30 years, MEGA has been dedicated to electro-membrane separation. MEGA's technologies include electro-dialysis and electro-dialysis reversal for water desalination, wastewater treatment and food applications. All of these products incorporate in-house developed and manufactured RALEX® ion-exchange membranes providing outstanding properties resulting in low electrical resistance and extended lifetime. These advanced membranes are also at the heart of MPure™ electro-deionization stacks. In electro-deionization, ultra pure water is produced by combining

ion-exchange resin and membranes inside a stack. Ions are removed from the water by applying a direct current. The electricity also regenerates the ion-exchange resin without using chemicals. The custom MPure™ stacks are engineered and manufactured in a state-of-the-art ISO certified manufacturing facility in the Czech Republic. MPure™ builds on MEGA's extensive electro-separation expertise and stack manufacturing capability. The advanced MPure™ stacks can be interconnected into modular high-flow blocks to produce the desired volume of ultra pure water for your

application. We provide these stacks in the RALEX® HPWU range of pre-engineered units covering flow rates from 5 to 135 m³/h. For higher flow rates or redundancy, more units may be deployed. These units are mounted on a rugged skid, factory assembled and tested to minimize installation and start-up costs. RALEX® HPWU units use premium components and are delivered complete with rectifier, instrumentation and controls. Units produce high resistivity water with low silica levels consistently.

TECHNICAL INFORMATION ABOUT THE COMPANY

- 30+ years of experience with electro-membrane processes.
- In-house research, development and manufacturing of membranes, modules and units.
- Experience with Power and Oil & Gas solutions around the world.
- Custom EDI MPure™ stacks and the complete HPWU units.
- Scalable solution from 5 to 135 m³/h per HPWU unit.
- High resistivity water 16+ MΩ
- ISO 9001, 14001, 18001, GOST R (EAC)



FOTO 1 – RALEX® HPWU unit with 9 EDI stacks by MEGA

Name of company:	MEGA a.s.
Street:	Pod Vinicí 87
City:	Stráž pod Ralskem
Postcode:	471 27
Tel.:	+420 487 888 111
Fax:	+420 487 888 102
E-mail:	sales@mega.cz
Website:	www.mega.cz



Piping systems for power engineering and petrochemistry

MODŘANY Power, a. s., is traditional Czech engineering company specialized in production and services in the area of piping systems for the power engineering and petrochemical industry.

The company is one of the most experienced European suppliers of critical piping. Throughout its history, the company has supplied, using its previous names (SIGMA Modřany and Modřanská potrubní), complete piping systems for more than 330 power plant units in 30 countries around the world.

The company is specialized in supply of piping systems, pipe components and valves for the highest operational parameters and for primary circuits of nuclear power plants. We offer our customers comprehensive deliveries of complete systems that include design, manufacture, installation and commissioning. Each of these services we also provide separately. The company has experience in construction of various types of power plants starting with coal, gas, CCGT up to supercritical coal and nuclear.

In Czech Republic we also provide on the LTSA basis maintenance of nuclear power plants Dukovany 4 x 500 MW and Temelin 2 x 1000 MW. Company's special experience is in induction pipe bending which is implemented for more than 60 years. In our workshop we provide induction bending up to diameter 1020 mm and wall thickness 125 mm with radiuses starting at 1,5D.

TECHNICAL INFORMATION ABOUT THE COMPANY

- More than 70 years in power engineering
- Turn-key supply of piping systems
- Induction bending up to DN 1000
- Automatic orbital TIG welding
- Prefabrication according to EN, DIN, ASME and GOST
- ISO 9001, ISO 14001, KTA 1401, PED module G, DIN EN 3834-2, EN 13445, ADM 2000-HP 0 / TRD 100, TRD 201, ASME Stamp U and S

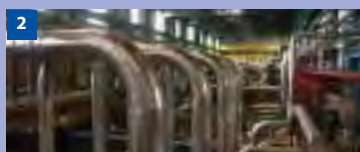
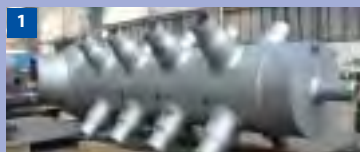


FOTO 1 – Piping Collector
FOTO 2 – Turbine Island Piping, NPP Dukovany

Name of company:	MODŘANY Power, a. s.
Street:	Komořanská 326/63
City:	Praha 4
Postcode:	143 14
Tel.:	+420 296 781 490
Fax:	+420 730 181 443
E-mail:	obchod@modrany.cz
Website:	www.modrany.cz



MPOWER Group Valves for Conventional & Nuclear Power

ABOUT US

MPOWER Group integrates companies in the area of development, technology, engineering, production and maintenance of valves for conventional and nuclear power and wide range of industries including chemical, petrochemical and metallurgical. Group's ambition is to continue to develop its position in the segment of high pressure and nuclear valves. The company's long-term objective is to provide complex supply solutions for power engineering companies, covering design, construction and calculation works, a comprehensive range of valves, modern manufacturing base followed by services at the customers premises. Within MPOWER Group, MPOWER Engineering, a. s. especially provides the following activities: Development and design of industrial fittings for power engineering; Trading with the above-mentioned products; Providing comprehensive engineering services to Czech and

foreign customers; Servicing; Production coordination. On a continuous basis, the products of MPOWER Engineering, a.s. are developed and the product range supplemented with new product lines. A guarantee of the Company's dynamic development is a clear vision and responsibility of its management supported by a team of experts. Satisfied and motivated employees are one of the main priorities of the management.

Products & Services

We supply a wide range of **industrial valves**, our specialisation is in High Pressure primarily: **Gate valves, Globe and Control valves, Check valves, Swing Check valves, Butterfly valves and Ball valves**. We strongly emphasise on the quality and we provide warranty and post warranty services tailored to customers' needs.

TECHNICAL INFORMATION ABOUT THE COMPANY

- MPower Engineering is here for you **since January 2009**.
- We are certified by TÜV NORD Czech and have quality certificate according to **EN ISO 9001:2008** and **CSN EN ISO 3834-2**.
- We have developed our own technical and production **know-how**.
- Our production sites are situated in Vranova Lhota and Ostrava certified to respond to current standards.



FOTO 1 – Andritz Pöls, Austria, year 2015
FOTO 2 – Tashkent TEC, Uzbekistan, year 2015

Name of company:	MPOWER Engineering, a.s.
Street:	Pod viničí 2028/20
City:	Praha 4 - Modřany
Postcode:	143 00
Tel.:	+420 225 371 300
Fax:	+420 225 371 325
E-mail:	info@mpowergroup.eu
Website:	www.mpowergroup.eu



PSP Engineering a.s. - more than 60 years of experiences

PSP Engineering a.s. is a leading supplier of specialized products, process systems and entire processing plants for Aggregates, Power industry, Cement plant, Lime plant and Mining. More than 60 years of history, experience, achievements and supplies. In-house development,

production and close relationship with the customer are what define us. For the Energy field we supply equipment for the processing of fuel (coal, lignite) for all types of boilers (fluidized, powder etc.). Also, we can meet the processing requirements of slag, bottom ash for both, wet

and dry seal boiler. Finally successfully participates with technology for desulphurization (limestone grinding) of thermal blocks. As well disposes of its own laboratory and testing equipment for pilot tests used to verify the offered technologies.

TECHNICAL INFORMATION ABOUT THE COMPANY

PSP Engineering offers:

- Crushing and screening
- Grinding
- Pyroprocessing
- Material handling
- Modernization and upgrading of existing plants
- Customer service
- Supply of spare parts

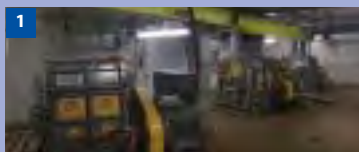


FOTO 1 – Coal Hammer crusher KMri 0808, ArcelorMittal, Czech, 2016
FOTO 2 – Coal Roller crusher DVR 10, Planá nad Lužnicí, Czech, 2015

Name of company:	PSP Engineering a.s.
Street:	Kojetínská 3186/79
City:	Přerov
Postcode:	750 53
Tel.:	+420 581 231 111
Fax:	+420 581 203 184
E-mail:	info@pspeng.cz
Website:	www.pspeng.cz



SIGMA GROUP, Reliable Supplier For Power Generation

The company SIGMA GROUP is a modern and dynamically motivated engineering company which is the most significant producer of pumping machinery in the Czech Republic. Today the company concentrates on researching, developing and producing mid-size, heavy and one-off specialized pumps and pumping sets for industrial applications. In this sector the company ranks among the best in the world successfully continuing the almost 150-year tradition of pump production. Our key customers consist of both domestic and foreign industrial companies working in light and heavy engineering,

the nuclear and non-nuclear energy industries, petrochemical industry, oil exploration, mineral mining and processing and water management. The success of SIGMA pumps in power plants is borne out by hundreds of installations in the Czech Republic, Slovakia, Poland, Egypt, India, Turkey, China, Syria, Romania, Bosnia and Herzegovina, Yugoslavia, Bulgaria, Russia, Ukraine, Argentina, Brazil, Mexico, Iran, Pakistan, Bangladesh, Hungary and Cuba. Many years of application, combined with its own research departments, production plants with latest equipment and its extensive service

facilities, SIGMA GROUP is able to offer its customers the best and most comprehensive packages involving pumping technology on a turnkey basis. SIGMA GROUP is a bearer of the Quality Certificates according to EN ISO 9001 (including EN ISO 3834-2), EN ISO 14001 (EMS) and EN ISO 18001 (OHSAS). Further, SIGMA GROUP is the leader of the Czech Pump Manufacturers' Association and member of EUROPUMP, the European Association of Pump Manufacturers.

TECHNICAL INFORMATION ABOUT THE COMPANY

- company established 1868
- headquarters and production plant in Lutín, Czech Republic
- Foreign subsidiaries: SIGMA SLOVAKIA (Banska Bystrica), SIGMA POLSKA (Gliwice), SIGMA UKRAINE (Odessa), SIGMA RUS (Moscow)
- today 750 employees
- annual turnover (2014): 48 000 000 EUR
- sales structure (2014): 70% export, 30% domestic
- Top 5 export countries (2014): Russia, Poland, Slovakia, India, Uzbekistan



FOTO 1 – Pump SIGMA 200-QVD, Emergency Sprinkler System, Dukovany NPP, Czech Republic, 2014

FOTO 2 – Pump SIGMA 2000-BQDV, Cooling Water Pump, Kozyńskie 11 Thermal PP, Poland, 2014

Name of company:	SIGMA GROUP spol. s r.o.
Street:	Jana Sigmunda 79
City:	Lutín
Postcode:	783 49
Tel.:	+420 585 651 102
Fax:	+420 585 944 258
E-mail:	info@sigma.cz
Website:	www.sigmagroup.cz



60 years for nuclear power industry

ŠKODA JS a.s. is a long-term reliable supplier of technologies for nuclear power industry. Its main business activities include engineering, production of components and provision of services for nuclear power plants. ŠKODA JS a.s. has participated significantly in the projects in the Central and Eastern Europe, Scandinavia, France, Germany, USA and the Far East. ŠKODA JS a.s. has produced and supplied a total of 21 complete VVER 440 reactors and 3 VVER 1000 reactors. At present, ŠKODA JS a.s. has more than 1,100 employees.

Main current projects: Instrumentation and Control System Refurbishment at Dukovany NPP (Czech Republic) – the project will extend the lifetime of the power plant at least until 2025 and meet the increasing requirements for the safety and reliability of NPP's. Completion of Units 3 and 4 at Mochovce NPP (Slovak Republic) – ŠKODA JS a.s. is a supplier of the plant's crucial operating systems – the primary circuit, transport and technology part, connecting piping, intermediate cooling circuits, a part of the control system and the maintenance workshops.

Instrumentation and Control System Refurbishment at Paks NPP (Hungary) – this is a turnkey project where the outdated analogue system from the original Russian supplier will be replaced with a new, digital one, project implementation in 2016 – 2020.

Production of Linear Stepper Drives for Zaporozhye NPP (Ukraine) – ŠKODA JS a.s. has been realizing the delivery of 65 pcs of LKP-M/2 drives. Spent nuclear fuel casks for the Temelín NPP (Czech Republic) – ŠKODA 1000/19 type, project implementation in 2018 – 2035.

TECHNICAL INFORMATION ABOUT THE COMPANY

Main business activities:

- Engineering for nuclear power plants
- Service for operated nuclear power plants
- Production of equipment for VVER, PWR and BWR type of nuclear power plants
- Equipment for spent nuclear fuel transport and storage
- Production of equipment for research and development centers
- Engineering and production of equipment for oil refining, petrochemical and gas industry

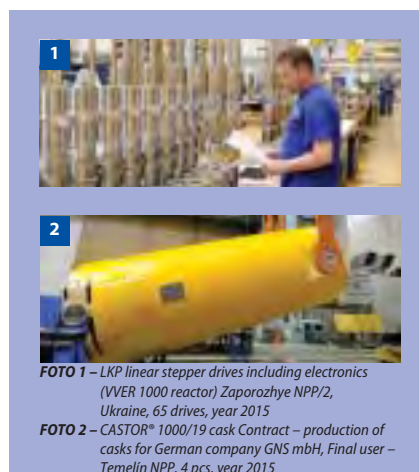


FOTO 1 – LKP linear stepper drives including electronics (VVER 1000 reactor) Zaporozhye NPP/2, Ukraine, 65 drives, year 2015

FOTO 2 – CASTOR® 1000/19 cask Contract – production of casks for German company GNS mbH, Final user – Temelin NPP, 4 pcs, year 2015

Name of company:	ŠKODA JS a.s.
Street:	Orlík 266/15, Bolevec
City:	Plzeň
Postcode:	316 00
Tel.:	+420 378 041 111
Fax:	+420 377 520 600
E-mail:	info@skoda-js.cz
Website:	www.skoda-js.cz



ŠKODA PRAHA is a traditional Czech EPC Company

TURNKEY SUPPLIES

ŠKODA PRAHA is an EPC contractor of power plants on turnkey basis. Our portfolio of services also includes technologies for environmental protection such as power plant desulphurization, denitrification and dust removal. We provide rehabilitation of existing plants to increase their efficiency, extend lifetime and improve safety.

EXPORT OF POWER PLANTS

Over many years ŠKODA PRAHA has built excellent experience with construction of power

plants that is proven by extensive list of international reference projects. Our mission is to continue the long term tradition of being the integrator of important Czech manufacturers exporting power plant systems and equipment.

ENGINEERING AND CONSULTANCY SERVICES

Serving our clients as owner's engineer, we support and advise the project owner during all stages of project. As design engineer we provide to our customers overall engineering as well as specific design activities. Specific

know-how of ŠKODA PRAHA includes consultancy and owner's engineering services for nuclear power plants. As EPC contractor of nuclear power plants in Czech Republic and Slovakia, we have maintained our competency for supplies of conventional island and balance of plant.

EXPORT FINANCING

Supporting our customers to cover all aspect of the power project, ŠKODA PRAHA offers assistance with various alternatives of export financing always being structured individually to meet our customer's expectation.

TECHNICAL INFORMATION ABOUT THE COMPANY

- EPC - Engineering/Procurement/Construction
- EPCM - Engineering, Procurement and Construction Management
- DESIGN ENGINEER
- OWNER'S ENGINEER
- CONSULTANT
- ŠKODA PRAHA is a member of CPIA

OUR STRENGTHS

- 62 years of history
- 25 countries
- 100 power units
- 40 000 MW of installed capacity



FOTO 1 – Tušimice II power plant, Czech republic
FOTO 2 – Počerady combined cycle power plant, Czech republic

Name of company:	ŠKODA PRAHA a.s.
Street:	Duhová 1444/2
City:	Prague 4 - Michle
Postcode:	140 00
Tel.:	+420 211 045 242
E-mail:	info@skodapraha.cz
Website:	www.skodapraha.cz



Industrial and technology facilities – our core speciality

SMP CZ is a construction company operating in the Czech Republic and Slovakia. We are part of the VINCI Group, which is present in more than 100 countries around the world.

SMP CZ is involved in a broad range of industrial facility projects, supply of complete process facilities, post-mining landscape reclaiming, as well as water management and transport infrastructure projects.

The industrial facilities segment is characterised by exceptional demands on coordinating a large number of specialised activities and subcontractors and on project execution documentation.

SMP CZ has dedicated and experienced project teams for both of those areas. We also carry out refurbishment projects during shutdowns of operated process parts of facilities.

Between 2006 and 2011, SMP CZ was the main contractor for the civil part of the Tušimice Power Station Retrofit project (approximately CZK 3 billion). We have also participated, as a contractor, in the Prunéřov Power Station Retrofit project, conveyor belt construction projects for ČEZ and Severočeské doly and refurbishment of mine water treatment plants for Severočeské doly.

FREYSSINET CS worked on the rehabilitation of concrete structures in the Tušimice and Prunéřov power stations, reinforcement (circular pre-stressing) of cooling towers, and dismantling and re-installation of the boilers in the Prunéřov power station. SMP CZ is currently involved in several individual projects that are part of the Dukovany nuclear power plant's security enhancements. ARKO TECHNOLOGY has participated in several process equipment supply projects for mine water treatment plants.

TECHNICAL INFORMATION ABOUT THE COMPANY

In the Czech Republic and Slovakia, SMP CZ is part of the SMP Group together with PRŮMSTAV, STAVBY MOSTOV SLOVAKIA, ARKO TECHNOLOGY, FREYSSINET CS, OK Třebestovice and PREFA PRO. This group of companies generates a yearly turnover of approximately CZK 5 billion and has more than 1,000 employees. The SMP Group has expertise to cover almost all types of construction projects.



FOTO 1 – Dismantling of boilers in the Prunéřov Power Station

FOTO 2 – Comprehensive renovation of the Tušimice II Power Station

Name of company:	SMP CZ, a.s.
Street:	Pobřežní 667/78
City:	Praha 8
Postcode:	186 00
Tel.:	+420 222 185 111
E-mail:	ou@smp.cz
Website:	www.smp.cz



Solek Group - truly global PV from East Europe

SOLEK GROUP, with headquarters in Prague, Czech Republic, aims to maximize the utilization of the investment potential of the global renewable energy sources market. Since its foundation in 2010 the company has implemented dozens of projects, mostly in the field of photovoltaic power stations with an overall own investment of almost 20 mil. Eur. With current present in the Czech Republic, Romania, Chile and Iran we are truly a global player with focus on countries and locations that meet the criteria of long-term sustainable safe investment with high returns. The main advan-

tage in comparison to other players is a deep bottom-up knowledge of the engineering, planning the construction of the plants and also the operation and maintenance. This creates a solid base for assessment of the opportunities within the whole project lifecycle. Within 2015 - 2017 we focus on Chile and Iran. In Chile we have a Spanish speaking office already for 2 years and we have gained a supreme local knowledge in:

identifying the land/plot for the future PV plant construction, assuring necessary permits, authorisations and licenses for PV plant

construction and operation; in-house and localised engineering practice; project management; construction of the projects including the AC connection line, so we can support investors in performing the investment into our wide portfolio of PV project rights, operation and asset management of photovoltaic power stations.

In Iran - as a country in a quick need of renewables - we have initiated a start of PV developments and we focus on large projects over 50 MW each.

TECHNICAL INFORMATION ABOUT THE COMPANY

- Established: 2010
- Export: 100 %

Activities in:

- Iran
- Chile
- Romania
- Czech Republic



FOTO 1 – The substation, FVE Solek Project Gamma, county OLT, location REDEA, Romania

FOTO 2 – FVE Solek project Alpha – county Arges, location Stefanesti – Golesti, Romania

Name of company:	SOLEK HOLDING SE
Street:	Spálená 21
City:	Prague 1
Postcode:	110 00
Tel.:	+420 702 274 931
E-mail:	info@solek-group.cz
Website:	www.solek-group.cz



TOS VARNSDORF – horizontal boring and milling machines

The company was established in 1903 as a manufacturer of all types of machine tools. Subsequently, it has specialized in horizontal milling and boring machines, and horizontal machining centres. The company exports a substantial part of its production to all industrialized countries.

The horizontal floor type milling and boring machines WRD 170/180/200 (Q) and WRD 130/150 (Q) are intended for universal flake machining of non-rotating dimensions and heavy workpieces.

The WHN(Q) 13/15 CNC is the most successful

machine from the company's range and is highly sought after worldwide. The machine is intended for precise milling, coordinated drilling, boring and threading of cabinet, board and difficultly shaped workpieces. The WHR 13 (Q) is machine with a ram headstock.

The WHtec 130 machining centre achieves high productivity using the most modern technology. It is a modern machine from a new series of machining centres.

All the machines are available for power machinery engineering, mining machinery engineering, transport machinery engineering, etc.

The production program includes horizontal table and floor type milling and boring machines, milling centres, special machines and special machining accessories (milling heads and devices, clamping elements, etc.). The company also provides a full range of services from inspections to overhauls and upgrades, both for its own and other products.

TECHNICAL INFORMATION ABOUT THE COMPANY

- Located on a site larger than 30 Football Pitches
- Number of employees is 510
- Annual turnover in 2014 is 73.9 mil €
- 10 subsidiaries companies around the world
- 19,401 machines sold between 1941 and 2015
- Machine accuracy is 0.01 mm

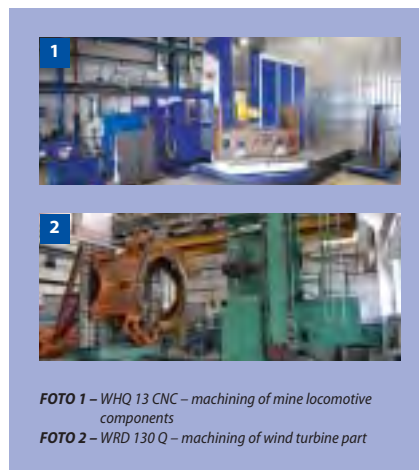
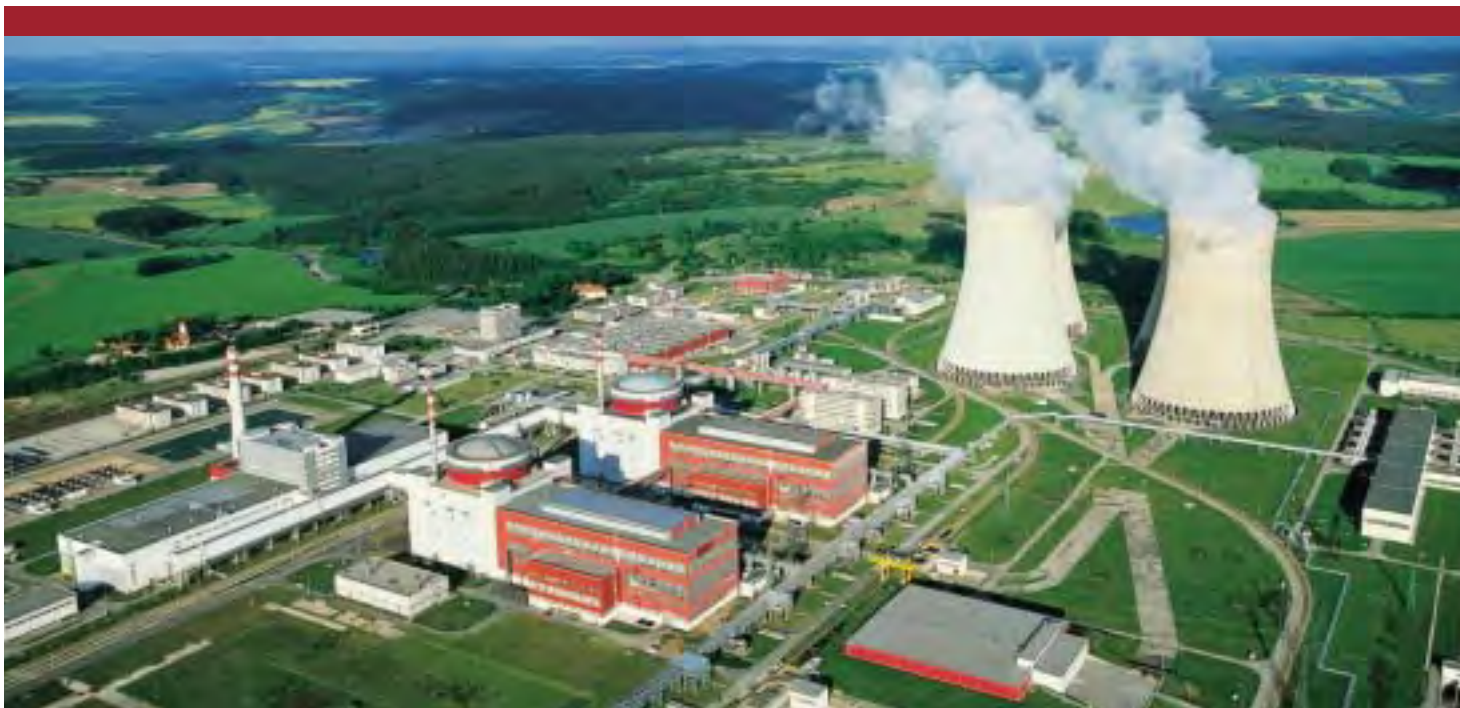


FOTO 1 – WHQ 13 CNC – machining of mine locomotive components

FOTO 2 – WRD 130 Q – machining of wind turbine part

Name of company:	TOS VARNSDORF a.s.
Street:	Říční 1774
City:	Varnsdorf
Postcode:	407 47
Tel.:	+420 412 351 203
Fax:	+420 412 351 269
E-mail:	info@tosvarnsdorf.cz
Website:	www.tosvarnsdorf.com



ÚJV Řež, a. s. – Your Professional and Reliable Partner

For over the sixty years ÚJV Řež, a. s. represents one of the best state of the art workplace in the energy industry in the Czech Republic. Our services cover safety, reliability and efficiency support for nuclear and conventional power plant operations and heating stations. Substantial part of our service portfolio includes fuel cycle chemistry, complex services for radioactive waste management and construction design and engineering support. Company is comprised of five divisions which follow main areas of provided services: Nuclear Safety and Reliability, Integrity and Technical

Engineering, Fuel Cycle Chemistry and Waste Management, ENERGOPROJEKT PRAHA and Radiopharmaceuticals.

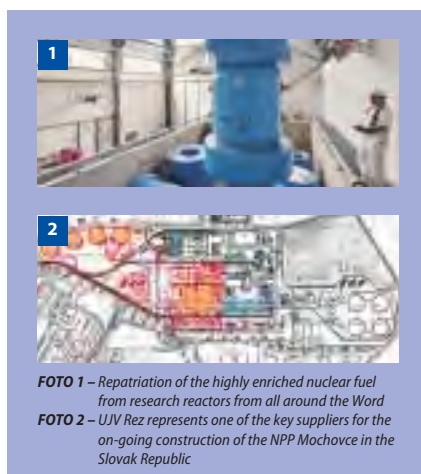
Our professional services include technical concept development of power plants, elaboration of design documentation and serves as General Designer for the construction of power resources, including technical coordination of the Project. In the field of Nuclear Power Engineering also offers elaboration and assessment of all degrees of safety documentation of nuclear installations. An integral part of the provided services is the support of the existing power

plants and heating plants operations, elaboration of EIA documentation and activities in research and development.

Our product and services portfolio is strengthened by four subsidiaries which together with ÚJV Řež, a. s., represent UJV Group. Our 100 % owned subsidiaries are: Institute of Applied Mechanics Brno, s.r.o., Výzkumný a zkušební ústav Plzeň s.r.o., EGP INVEST, spol. s r.o. and Research Center Rez s.r.o.

TECHNICAL INFORMATION ABOUT THE COMPANY

- **Designing/Engineering**
Conceptual studies, site, construction permit IPPC, EIA, Basic, Detail, as built Design Greening, modernization studies
- **Operation Support**
Lifetime and efficiency improvement
Safety, reliability, diagnostics, equipment qualification
- **Radioactive Waste**
RAO mgmt, repositories, spent fuel transportation
Decommissioning, fragmentation, decontamination



Name of company:	ÚJV Řež, a. s.
Street:	Hlavní 130, Rez
City:	Husinec
Postcode:	250 68
Tel.:	+420 266 173 427
E-mail:	sales@ujv.cz
Website:	www.ujv.cz/en



VÍTKOVICE POWER ENGINEERING a.s.

In the area of EPC projects, we implement projects from the stage of considerations about determining the project concept to running these new energy resources. In response to customer requirements, we are able to provide the projects, production, delivery, assembling and putting power plants into operation, including coal mining, fuel storage and processing, boiler house, machine hall, dedusting, desulphurization, processing of energy by-products, directing the output power to the external distribution network, construction and civil part, technological steel structures,

limestone preparation, cooling circuit including cooling towers and other associated technologies, state diagnostics of energy devices components, remote monitoring system and guarantee and post-guarantee servicing. We deal with comprehensive reconstructions of power plants reaching the end of their operation with regard to finishing the lifecycle of a power plant, prolonging its life time, improving the technical-economic operation data and the greening of these plants. In this area, we provide comprehensive services from creating the conceptual design of power plant renewal,

through the project documentation to production, disassembling, assembling and putting into operation.

We are also specialized in greening of power plants, especially concerning NO_x and SO_x emitted during combustion. In the area of denitrification we apply the latest technologies within primary and secondary measures (catalytic and non-catalytic methods). We offer all the major desulfurization methods (wet, half-dry, and dry one).

TECHNICAL INFORMATION ABOUT THE COMPANY

SUPPLY OF THERMAL POWER PLANTS, RENEWAL OF ENERGY SOURCES, SUPPLY OF COAL POWDER BOILERS, GREENING OF ENERGY SOURCES, SUPPLY OF PRESSURE/NON-PRESSURE PARTS

- Pressure Steam Drums, Steam Generators
- Pressure Heaters, Turbine Components
- Duct Systems & Piping, Membrane Walls
- Economizers, Pressure Heat Exchangers
- Technological Boiler Steel Structures
- Road/Foot Bridges, Industrial Halls
- Cranes

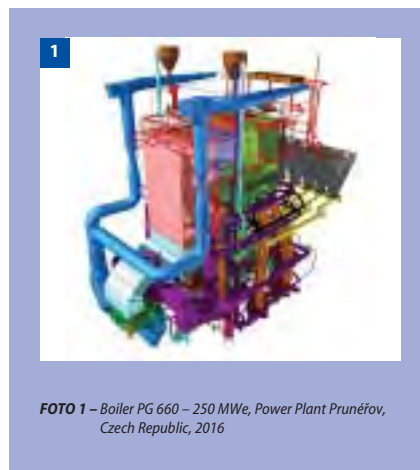


FOTO 1 – Boiler PG 660 – 250 MWe, Power Plant Pruněřov, Czech Republic, 2016

Name of company:	VÍTKOVICE POWER ENGINEERING a.s.
Street:	Ruská 1142/30
City:	Vítkovice
Postcode:	703 00 Ostrava
Tel.:	+420 595 952 660
Fax:	+420 595 954 060
E-mail:	karel.polak@vitkovice.com
Website:	www.vitkovice.com



Hi-tech Czech control system SandRA for power engineering

Czech company ZAT is a supplier of complex solutions in the field of power engineering, mineral mining, transportation and industry. It supplies its own control systems as well as the systems of other producers for demanding technologies with a long lifecycle and high demands on reliability and safety. Yearly investment in the amount of 1,5 mil. EUR into the development ranks ZAT among the most successful producers of the specialized control systems in Europe. At the same time, the company belongs among four companies in

the European Union that supply their own control systems to primary circuits of nuclear power plants. „We apply Know-how in nuclear power engineering with maximal requirements for safety and reliability to control systems for classical power engineering and industry. Since the introduction of the fourth generation of the SandRA control system in the market in 2011 we have applied it in nuclear and classical power plants, in heating plants and other technological operations in fourteen countries of the world,“ states Ivo Tichý, the member of the

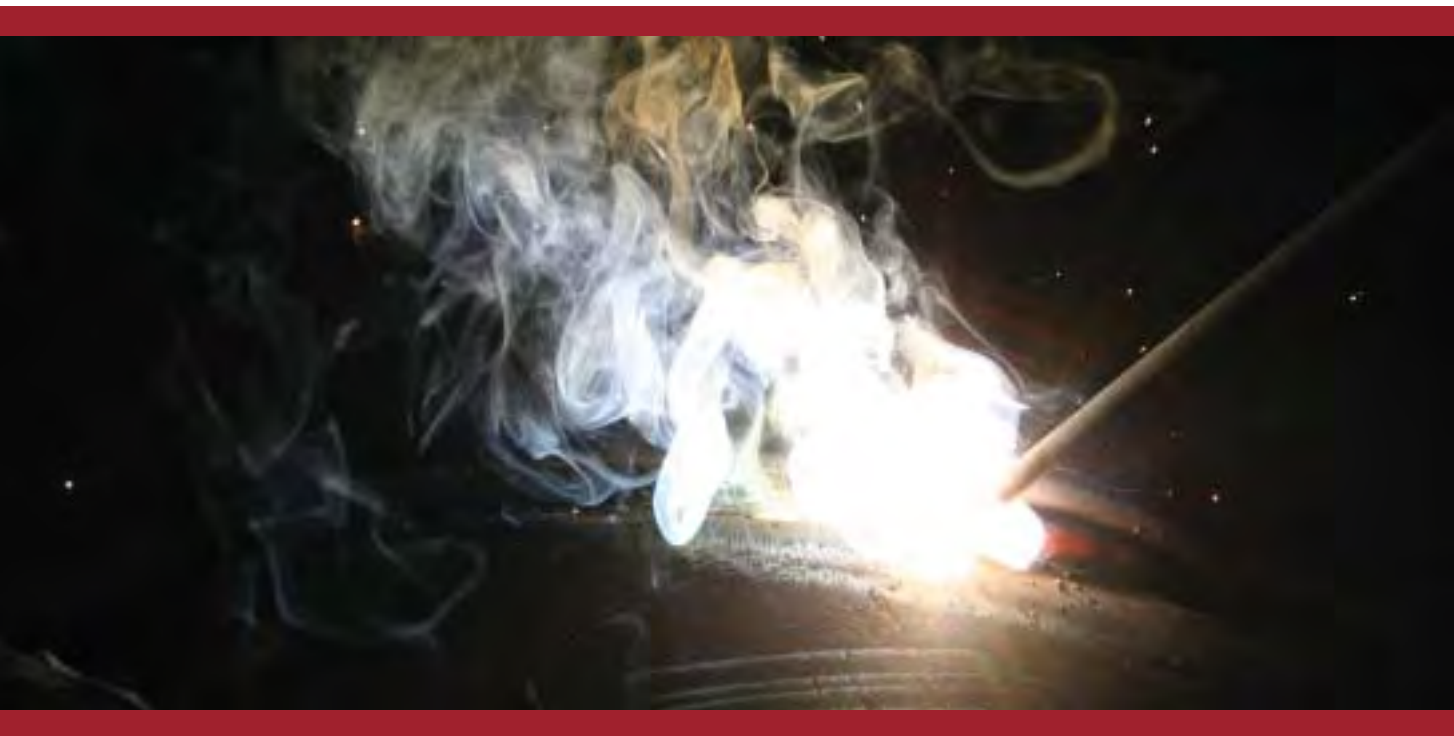
Board of Directors of the ZAT company. The SandRA control system has proved itself to such extent that the company grants a ten-year guarantee on it. The ZAT control system is in great demand in the world. Last year the company concluded new contracts in the amount of 45 mil. EUR. ZAT, as one of few companies in Central Europe, has its own development, design, production, installation and service of electronic equipment, control systems and their components.

TECHNICAL INFORMATION ABOUT THE COMPANY

- SandRA control system: SandRA is a modern control system of the Distributed Control System (DCS) class, designed for demanding industrial branches, requiring high reliability and long period of the lifecycle of the control system. A broad range of offered technical means and possible arrangement of the system architecture enable to use it to control extensive technological units as well as to control small technologies.
- ZAT has two business offices - one in the Slovak Republic and the other one in Cuba.



Name of company:	ZAT a.s.
Street:	K Podlesí 541
City:	Příbram IV.
Postcode:	261 80
Tel.:	+420 318 652 111; +420 377 438 111
Fax:	+420 377 438 104
E-mail:	zat@zat.cz
Website:	www.zat.cz/en/



Just that simple

ZK-TERMOCHEM Ltd., is a Czech company engaged in Czech Republic and EU since 1993, focuses on complete realization of industrial facilities. Main activities are deliveries of turn key projects including detail design, delivery of material, assembly and mechanical works in thermal and nuclear power plants, chemical and other industrial facilities in construction, manufacturing, supply, repair, maintenance, overhaul, renovation, including pressure vessels of all categories; supply, installation and prefabrication of piping systems of all material types,

steel structures for all kinds of boilers, heating systems for industrial buildings; engineering activities in investment projects. ZKT provides full service on projects, including supplies, scaffolding, mechanization, coating and insulation using up to 300 highly skilled welders and locksmiths and 50 engineering staff. Production program covers supply, installation and prefabrication of all types of pipelines and steel structures of all kinds; supply, manufacturing and installation of spare parts for chemical and power industry, heat exchangers, coolers, pres-

sure vessels, tanks and manifolds; prefabrication and erection of pipelines; production of steel structures, boilers, tanks and vessels. ZKT has manufacturing halls in Czech and Serbia. All the activities are carried out according to following standards: ISO 9001, ISO 14001, OHSAS 18001, ISO 3834-2:2006, AD 2000-Merkblatt HP 0 and EN ISO 3834-2 according to PED 97/23/ES, PED 97/23/ES according to EN 13 480 and EN 12 952, EN 1090-2:2009, to EXC 2, SCC 2008:5-1, EN 12 952-5 Pressure cold bending of pipes.

TECHNICAL INFORMATION ABOUT THE COMPANY

- Last 10 years involved in installation of more than 10 000 tons of high pressure piping from materials P92, P91, 15NiCuMoNb4-5-6, 10CrMo9-10 at various thermal power plants in Germany (Moorburg, Mannheim, Neurath, Köln, Knapsack, Irsching), Czech Republic (Tušimice, Ledvice and Prunéřov), Slovenia (Šoštanj) and Serbia (Nicola Tesla).
- Main customers: Hitachi Zosen Inova AG, Alstom Power, Siemens, EPS Belgrade, Polimex Mostostal, Voest Alpine Montage, ČEZ, Česká Rafinérská and others.



Name of company:	ZK - TERMOCHEM s.r.o.
Street:	Podvinný mlýn 1418/2
City:	Libeň (Praha 9)
Postcode:	190 00 Praha
Tel.:	+420 284 682 152
Fax:	+420 284 687 237
E-mail:	info@termochem.cz
Website:	www.termochem.cz



Traditional czech supplier of enviromental equipment

The company ZVVZ was founded in 1948, and early it became the biggest manufacturer of air handling equipment in Czechoslovakia, with established network of installation and service centres. Its production program was at the very beginning focused on the supplies of air handling equipment such as fans, separators and dust collecting filters, dryers, and equipment for pneumatic haulage of bulk materials. The basic manufacturing program was gradually extended through development of new, more efficient equipment, and the company has become the most important manufacturer and

supplier in the following fields:

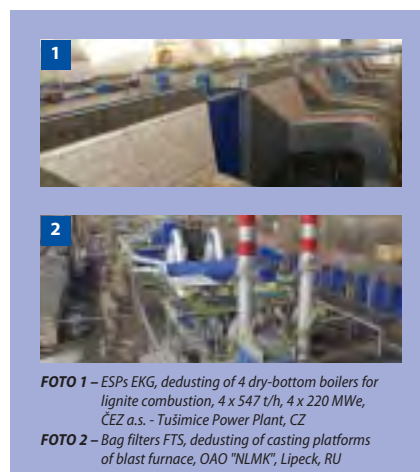
- Plants for treatment of waste gases to remove solid and gaseous pollutants (dedusting, FGD systems, DeNO_x etc.) and following ash handling systems
- Equipment for air-conditioning and ventilation of nuclear power stations
- Equipment for air-conditioning of buildings and ventilation of industrial workshops, mines, tunnels and undergrounds
- Industrial radial and axial flow fans and unique flow fans for wind (aerodynamic) tunnels

- Semitrailers for transport bulk materials and fluids, special containers, pressure valves etc.
- Other manufacturing according to own or customer's drawing documentation.

The team of designers, developers, draftsmen and other specialists of ZVVZ are able to meet the client's requirements and develop and design even new and non-traditional products in all fields of manufacturing and supply program of the company.

TECHNICAL INFORMATION ABOUT THE COMPANY

- Established: 1948
- Number of employees: 800
- Annual Turnover 2014: 88 000 000 Euro
- Export: 32%
- Member of Associations: Czech Power Industry Alliance, Association of Industrial Plants Suppliers, Kermet



Name of company:	ZVVZ GROUP, a.s.
Street:	Sažinova 888
City:	Milevsko
Postcode:	399 01
Tel.:	+420 382 551 111
Fax:	+420 382 521 341
E-mail:	zvvz@zvvz.cz
Website:	www.zvvz.cz

ARC-Heating s.r.o. specializes in providing metal heat treatment services. We are based in the Czech Republic and have several subsidiaries and partners in Finland, Poland, Portugal, Slovakia and Sweden.

We provide local heat treatment on sites such as power plants, chemical plants, etc. We also provide heat treatment processes in furnaces. With over 50 mobile annealing units and more than 40 operators we are able to reach most places that require heat treatment. Our equipment allows us to work on projects with over 5,000 welds.

In addition to our services we also manufacture HTT 40 mobile heat treatment units equipped with the newest control systems specially designed for heat treatment.

Our services:

- Stress relief annealing after welding, machining and cutting
- Soft annealing, normalizing, homogenization and solution annealing
- Preheating before welding, post-weld heat treatment, hardening - tempering
- Determining technological processes of heat treatment
- Renting mobile annealing units and modular furnaces
- Selling new mobile annealing units and all equipment necessary



HTT 40 mobile unit

- Six channels for regulation and six channels for extra measurement
- Operated via PC, connected by USB, radio or Wi-Fi
- Lockable smart box for a laptop or documents
- Indicator light and alarm for predefined statuses

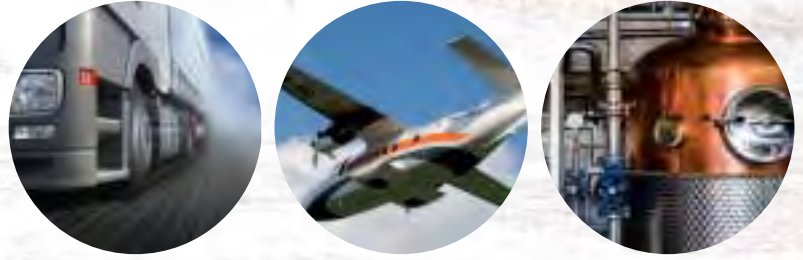
- Connection-voltage 63 A/400 V/3 phase/50 Hz
- Heating-power 40 kW, ED 100 %
- Dimensions 975 x 850 x 506mm (height x length x width)
- Weight 195 kg

Head Office

Domažlická 168f
318 00 PLZEŇ
CZECH REPUBLIC

info@arc-heating.cz
+420 377 222 068



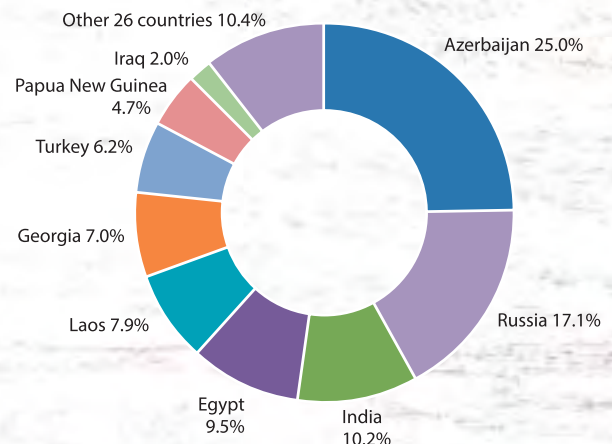


Reliable partner of Czech exports

Exportní garanční a pojišťovací společnost, a.s. (Export Guarantee and Insurance Corporation; EGAP) was founded in 1992 and it has insured export worth more than CZK 750 billion for the 24 years of its existence. It is export that would most likely not have arisen without EGAP insurance. The sole shareholder of EGAP is the state; it controls the company through four ministries (the ministries of finance, trade and industry, foreign affairs, and agriculture). Its products cover all the phases of business cases and it offers exporters competitive conditions comparable to foreign credit insurance companies. This allows them to withstand strong international competition.

- **EGAP insures in the Czech Republic approximately 10 % of all exports going outside the European Union.**
- **EGAP cooperates with all the banks on the Czech market.**
- EGAP has products designed especially for small and medium-sized enterprises.

Insurance products that EGAP offers within insurance with state support ensure clients complex credit insurance protection for the duration of export contracts. Without them, Czech exporters would have practically no chance to obtain any middle- or long-term bank credits or guarantee particularly at the moment when they are searching for business opportunities on markets with increased territorial as well as commercial risk which, however, are simultaneously dynamic and attractive. **Only in 2015, EGAP insured Czech export to 35 countries in the world.**



**EGEM s.r.o.**

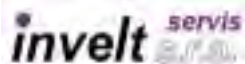
Novohradská 736/36
370 08 České Budějovice
Tel.: +420 387 008 240
Fax.: +420 387 008 280
E-mail: egem@egem.cz
www.egem.cz

Company founding year:	1995
Number of employees:	350
Turnover in 2014 in Euros:	54 000 000
Share of export in production:	
Union/association membership:	Confederation of Industry of the Czech Republic
Certificate:	ISO 9001:2008 ISO 14001:2004 OHSAS 18001:2007
Products and services:	Design, installation, reconstruction, rehabilitation and maintenance of power systems for electricity

**EVECO Brno, s.r.o.**

Březinova 42
616 00 Brno
Tel.: +420 544 527 231
Fax.: +420 544 527 231
E-mail: eveco@evocabrno.cz
www.evecobrno.cz

Company founding year:	1996
Number of employees:	21
Turnover in 2014 in Euros:	3 104 044
Share of export in production:	15 %
Union/association membership:	
Certificate:	
Products and services:	Waste-to-Energy plants, Flue gas cleaning, Burner systems, Biomass Boilers

**INVELT SERVIS, s.r.o.**

U Školky 357/14
326 00 Plzeň
Tel.: +420 271 960 935
Tel.: +420 271 961 31
E-mail: invelt.praha@invelt-servis.cz
www.invelt.cz

Company founding year:	1994
Number of employees:	60
Turnover in 2014 in Euros:	20 549 000
Share of export in production:	30 %
Union/association membership:	
Certificate:	
Products and services:	Steam / hot water boilers. Gas / black oil / coal / biomass / HRSG / domestic waste boilers

**ISH PUMPS OLOMOUC a.s.**

Hybešova 1282/16
779 00 Olomouc - Hodolany
Tel.: +420 585 111 800
Fax.: +420 585 312 567
E-mail: sales@cerpadla.cz
www.cerpadla.cz

Company founding year:	1907
Number of employees:	104
Turnover in 2014 in Euros:	6 819 524
Share of export in production:	62,5 %
Union/association membership:	
Certificate:	EAC RU C-CZ.GB08.V.00888 EAC RU C-CZ.AT15.V.00235
Products and services:	Centrifugal pumps horizontal and vertical, single and multi-stage


KE-ARM, s.r.o.

Pekařská 1639/79A
747 05 Opava
Tel.: +420 555 440 200
Fax.:
E-mail: info@kearm.cz
www.kearm.cz

Company founding year: **1991**
Number of employees: **19**
Turnover in 2014 in Euros: **1 660 000**
Share of export in production: **60 %**
Union/association membership:
Certificate: **PED 97/23/EC,
EAC TR CU 010/2011 + 012/2011 + 032/2013**
Products and services: **Industrial valves for power engineering, heat transfer,
chemical and petrochemical industries.**

Production is focused on:
- ball valves up to DN 250, PN 250, for temperature up to +500°C
- check valves for pump protection up to DN 400, PN 400
All products are designed, manufactured and tested in the Czech Republic.

Omega-Teplotechna Praha a.s.

Velehradská 26
130 00 Praha 3
Tel.: +420 222 728 681-2
Fax.: +420 222 728 680
E-mail: cerny@ot.cz
www.ot.cz

Company founding year: **1991**
Number of employees: **45**
Turnover in 2015 in Euros: **7 330 000**
Share of export in production: **40 %**
Union/association membership: **NMC (National Mirror Committee), CICIND**
Certificate: **ISO & OHSAS**
Products and services: **Industrial chimneys, Reinforced concrete constructions,
Refractory works, Full Design works**

Omega-Teplotechna Praha a.s. is internationally active chimney construction company. It is the professional and technical leader in the Czech Republic as well as in many other countries.

FREQUENT EXPORT DESTINATIONS: INDONESIA, MALAYSIA, POLAND, SLOVAKIA,
THE NETHERLANDS, EGYPT, LITHUANIA, ESTONIA.


OSC, a.s.

Staňkova 557/18a
602 00 Brno
Tel.: +420 541 643 111
Fax.: +420 541 643 109
E-mail: osc@osc.cz
www.osc.cz

Company founding year: **1994**
Number of employees: **55**
Turnover in 2014 in Euros: **5 500 000 000**
Share of export in production: **3 %**
Union/association membership: **Czech Power Industry Alliance**
Certificate: **ISO/IEC 27001 - Information security management**
Products and services: **SIMULATION SYSTEMS, CONTROL SYSTEMS,
DATA TRANSFER AND PROCESSING, HYDROPOWER**

Development and delivery of simulation and technology trainer systems, up to replica type training simulators. Operational adjustment and optimization of power plants. Technical assistance during commissioning. Preparation of power plants to provide ancillary services provided electricity producers for Transmission system operators including certification measurement. Development of real-time applications for remote monitoring and control of electricity production. Power flow management systems. Service and technical customer support for delivered systems and equipment. Time synchronization for computer networks and control systems. Measurements and other services for hydro power plants and water supplies. Development, implementation and deployment of special electronic modules.



Provyko s.r.o.

Vinařská 3a
603 00 Brno
Tel.: +420 602 745 042
Fax.:
E-mail: provyko@provyko.cz
www.provyko.cz

Company founding year: **2011**
Number of employees: **40**
Turnover in 2014 in Euros:
Share of export in production:
Union/association membership: **Association for the District Heating of the Czech Republic**
Certificate:

Products and services: **We design, deliver and reconstruct Boilers and Heat exchangers for Power and Heating Plants.**

We design, deliver and put into operation:

- Coal, Oil and Gas Boilers, HRSG
- Boiler Retrofits, Emission Reduction
- Low NOx Burners, Firing Systems, SCR, SNCR
- Coal Milling Circuits
- Heat Exchangers, Heaters and Condensers
- Technical Consultancy Services



ZPA Pečky, a.s.

Třída 5. Května 166
289 11 Pečky
Tel.: +420 321 785 141
Fax.: +420 321 785 165
E-mail: zpa@zpa-pecky.cz
www.zpa-pecky.cz

Company founding year: **1992**
Number of employees: **243**
Turnover in 2014 in Euros: **21 065 200**
Share of export in production: **5 398 181**
Union/association membership:

Certificate: **EN ISO 9001:2008;**
ČSN EN ISO 3834-2:2006

Products and services:

- ELECTRIC ACTUATORS – development, production, sale, service
- VALVES – development, production, sale, service
- SETS – deliveries of valves with actuator
- GEARBOXES – development, production, sale, service
- ROOTS BLOWERS – development, production, sale, service
- SHEET METAL PARTS – custom production of parts and assemblies
- CNC MACHINING – custom production
- WELDED CONSTRUCTIONS – custom production
- CASTING – gray and ductile iron, aluminium and magnesium alloys



Every detail is significant, we use details to create working units.

- SDIC strives to maintain key know how essential for implementing big technology and industrial plants in the Czech Republic and abroad in energy, chemicals and the food industry.
- SDIC actively searches for export opportunities in prospective markets, establishes contacts with foreign partners and contributes to the efficiency of commercial relationships.
- SDIC protects the interests of its members when negotiating with state authorities and takes an active part in shaping export policies.

