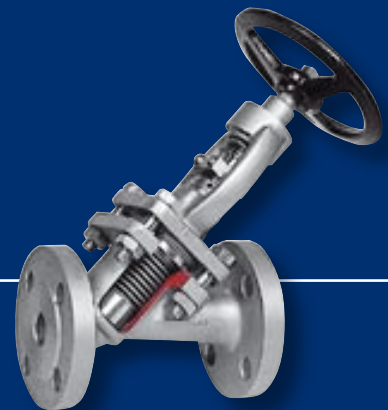
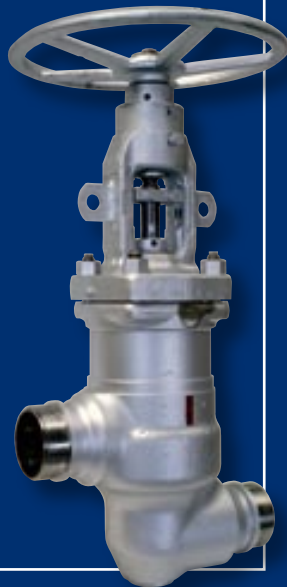




## COMPANY PROFILE



Manufacturer of high quality industrial valves

## ABOUT US

ARAKO spol. s r.o. is a manufacturer producing industrial valves in accordance to the worldwide quality standard ISO 9001. Our valves are used for power engineering and nuclear power engineering, chemical and petrochemical industry and other industrial plants. The production is firmly rooted in tradition lasting for fifty years of development and production closely connected with the enterprise SIGMA. The experience – gained in the course of that time – assures our customers of the completion of their eider standard or special demands.



## OUR PRODUCTS AND SERVICES

### PRODUCTS

#### INDUSTRIAL VALVES PRODUCTION

- Globe valves PN 16 - 630
- Bellows sealed globe valves PN 10 - 40
- Gate valves PN 10(6) - 160
- Check valve PN 16 - 100
- Swing check valves PN 10 - 630
- Ball valves PN 10 - 63
- Strainers PN 10 - 160
- Energy reducers PN 160 - 400
- Valves for aggressive media and acids
- Valves for high temperatures up to 650 °C
- Engineered valves acc. to your request

#### INDUSTRIAL VALVES PRODUCTION

- Shut-off/regulating, bellows sealed valves
- Quick acting valves
- Solenoid control valves
- Lift check valves
- Regulating cocks



ARAKO's service team

### SERVICES

- **ADVANCEMENT AND ALTERNATIONS OF THE PRODUCT AS REQUIRED BY THE CUSTOMER**
- **RELIABLE SERVICE**
- **OVERHAULING OF THE PRODUCT**
- **CONSULTANCY**
- **SPARE PARTS SUPPLIES**

### OUR PRODUCTS ARE DESIGNED FOR FOLLOWING INDUSTRY AREAS

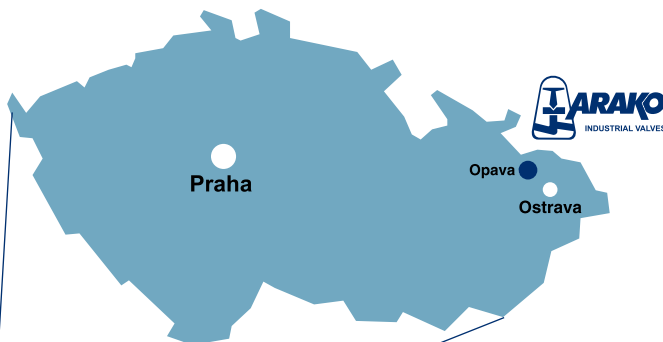
- Power Engineering
- Nuclear Power Engineering
- Nuclear Waste Processing
- Gas Manufactures
- Chemical industry
- Petrochemical industry
- Heating Plants





## VALVES EXPORTED WORLDWIDE

ARAKO industrial valves are operating all over the world. Our customers abroad value our products for their reliability and long service life in the most various environments and climate conditions.



## THE COUNTRIES OF EXPORT

Armenia  
 Bangladesh  
 Brazil  
 Bulgaria  
 China  
 Egypt  
 Netherlands  
 India  
 Iran  
 Japan  
 Lithuania  
 Hungary  
 Mexico  
 Germany  
 Poland  
 Austria  
 Russia  
 Slovakia  
 Slovenia  
 Switzerland  
 Ukraine  
 USA  
 Uzbekistan  
 Great Britain  
 Venezuela

# WHAT WE CAN DO FOR YOU...?

Suggest an optimal solution of your demands and carry out its realization using long time experience, modern technology and professional approach of ARAKO employees.



## TURNKEY SOLUTION OF YOUR PROJECT

### COMPREHENSIVE COUNSELLING

We offer comprehensive counselling - based on our long-standing experience - focused on floating and uncomplicated engineering solution meeting the customer's needs.

We floatingly elaborate offer and its alternation in accordance with customers' needs eliminating their costs and time needed for the project realization.

### PROMPT PRODUCTION PROCESS

The quality product production and fast-paced production process are determined by the hi-tech approach employing modern construct, computerized and mechanical equipment.



Computerized machine tools



Expedition

### COMPLETE SUPPLY

We conduct completed valves supply - respecting our customers' demands concerning price, reliability, service and schedule.

### QUALITY CONTROL SYSTEM (ISO 9001:2000)

The Management System has functioned in compliance with the standard ISO 9001:2000. Certification was performed by the reputable organization TÜV SÜD Management service. TÜV CERT issued the certificate.

Due to our long tradition of using Quality Control System assures the customers of quick, professional performance of their requirements. The quality of our products is of high importance for us.

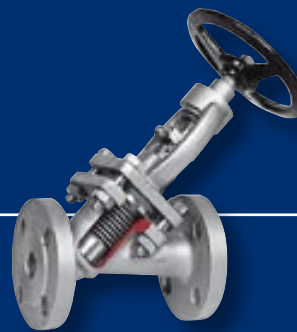


Interoperating check

### RELIABLE SERVICE AND VALVES RENOVATION

Service has been an inseparable item tied together with the attention to the customer of ARAKO Ltd. Our systematically rising service team is always prepared to take in and solve the emergency arisen or to help with planned servicing. Our aim is to eliminate the stand time of equipment and to mineralize reparation costs.



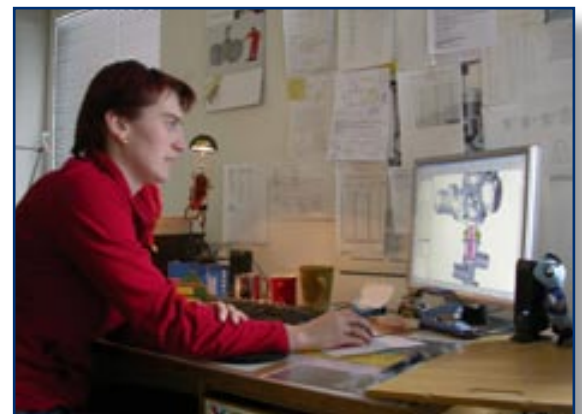
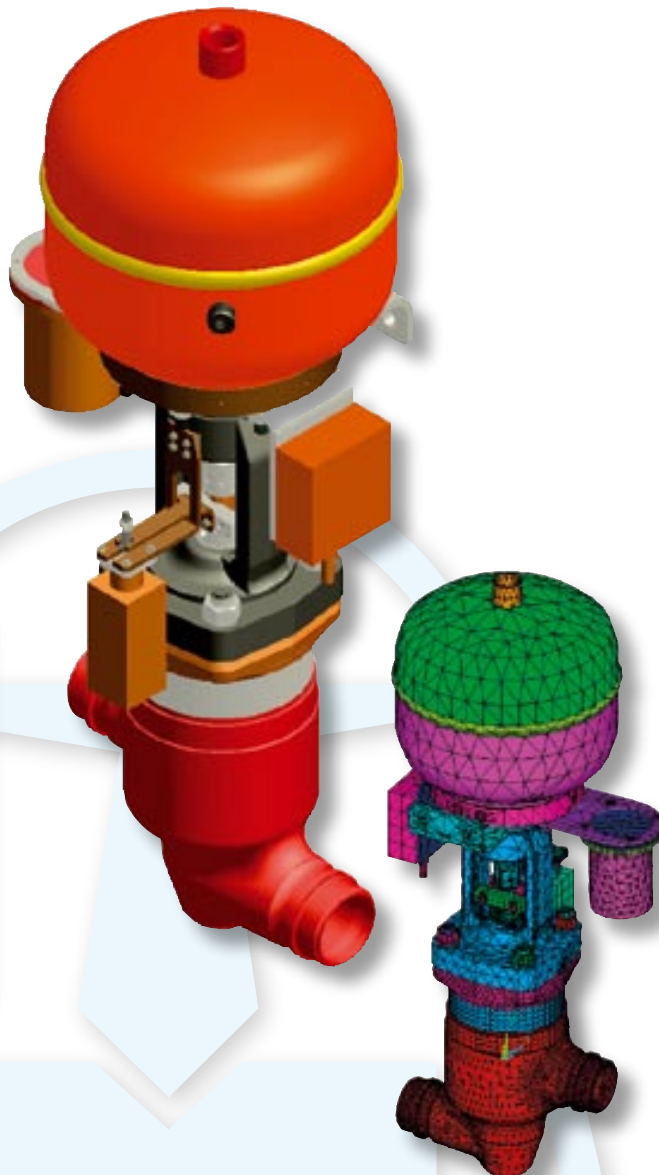


## PROMPT PRODUCTION PROCESS

ARAKO itd. takes pride in the progressive development of its products conformable with ever-rising demands of customers on the construction solutions, reliability of equipment and supply promptness. Therefore, the utilization of modern technologies significantly underlines both processes of development and production.

### UTILIZATION OF THE LATEST TECHNOLOGIES

- Investment of 8 % from the company turnover
- Modern mechanical equipment (CNC vertical lathes, machining centres, etc.)
- Build-up and welding automatic machines
- Electron beam welding in the vacuum ( Certification for aircraft industry)
- Testing laboratories operating with modern diagnostic equipment
- State of the art production planning system



3D CAD development department

### MODERN METHODS APPLIED TO PROCESSES OF DEVELOPMENT AND PRODUCTION

- 3D CAD systems application
- Calculation verification on basis of final element method in SW ANSYS
- Cooperation with external research centres upon experimental verifications of designed structures

## QUALITY CONTROL SYSTEM (ISO 9001:2000)

### PRODUCT QUALITY IS IN CONFORMITY WITH PED 97/23/EC

The quality of our products underlines the present profile of our company. The verification has been performed on the part of our customers and of worldwide-accredited organizations. Our company has implemented and certified system of the complex Quality Control - modulus H in compliance with PED 97/23/EC. The product line used at nuclear engineering plants is carried out in compliance with public notice No. 309/2005 Sb., 132/2005 Sb., No. 132/2007 Sb. and valid Legislatura of destination country.

### PRODUCTION PROCESS QUALITY CONTROL

The quality production is assured by the numerous control systems operating during all stages of the production

- Check-in of material and purchased valves
- Visual and dimensional check
- Mechanical and laboratory tests
- Non-destructive testing (RTG and gamma radiography, ultrasonic test and dye-penetrant testing, tightness test using Helium)
- Interoperating check and final checkout of single parts
- Montage supervision and hydraulic pressure test of valves
- Check-out



RTG check



Measurement accuracy check

### PRODUCT CERTIFICATION

Valves production is assured and verified by organizations such as TÜV SÜD Industrie service and TÜV Nord in accordance with the standard:

- AD 2000-Merkblatt HP 0, AD 2000-Merkblatt A4,
- AD 2000-Merkblatt HP 100 R - TRD 201, TRD 110,
- EN ISO 3824-2 (DIN EN 729-2 - TA Luft, part 3,1,8,4+VDI 2440.

We issue declaration of conformity for our products according to the law 22/1997 as amended, NV 26/2003 Coll. and with Pressure equipment directive 97/23/EC; the conformance assessment process performed in cooperation with TÜV SÜD Czech, branch office Ostrava – by authorized body AO 211 and notified place NB 1017.

The valves exported to Russian Federation are certified according to the system GOST R performs the certification of the nuclear valves in accordance with the system OIT.

The company ARAKO is entitled to apply closing valves and regulating valves for power engineering and nuclear power engineering in Belorussia (Resolution f Promatomenergo).



## RELIABLE SERVICE AND VALVES RENOVATION

### SERVICES

- Service operations not only in the Czech Republic but also in neighbouring European states within 24 hours including spare parts supplies
- Spare parts supplies complementing the product line of ARAKO or its predecessor
- Elaboration of the technologic procedures on valves maintenance and renovation
- Pressure tests including formation of records
- Valves design alternations
- Grinding and lapping of tightening surfaces
- Set-up of actuators

### VALVES RENOVATION

#### We profess valves renovations of

- Wide range of industrial valves
- Valves designed for Nuclear Power Plants incl. quick-acting valves in accordance to 76/1989 Coll.



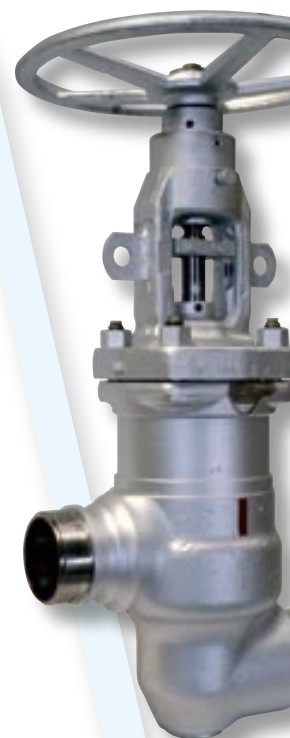
Tightness check with Helium

### LONG SERVICE LIFE AND RELIABILITY

When designing product its service life conforms with the service life of equipment where our product will be applied. We are able to prolong the service life of the product by renovating the valve - saving your time and minimizing your costs.

#### We offer

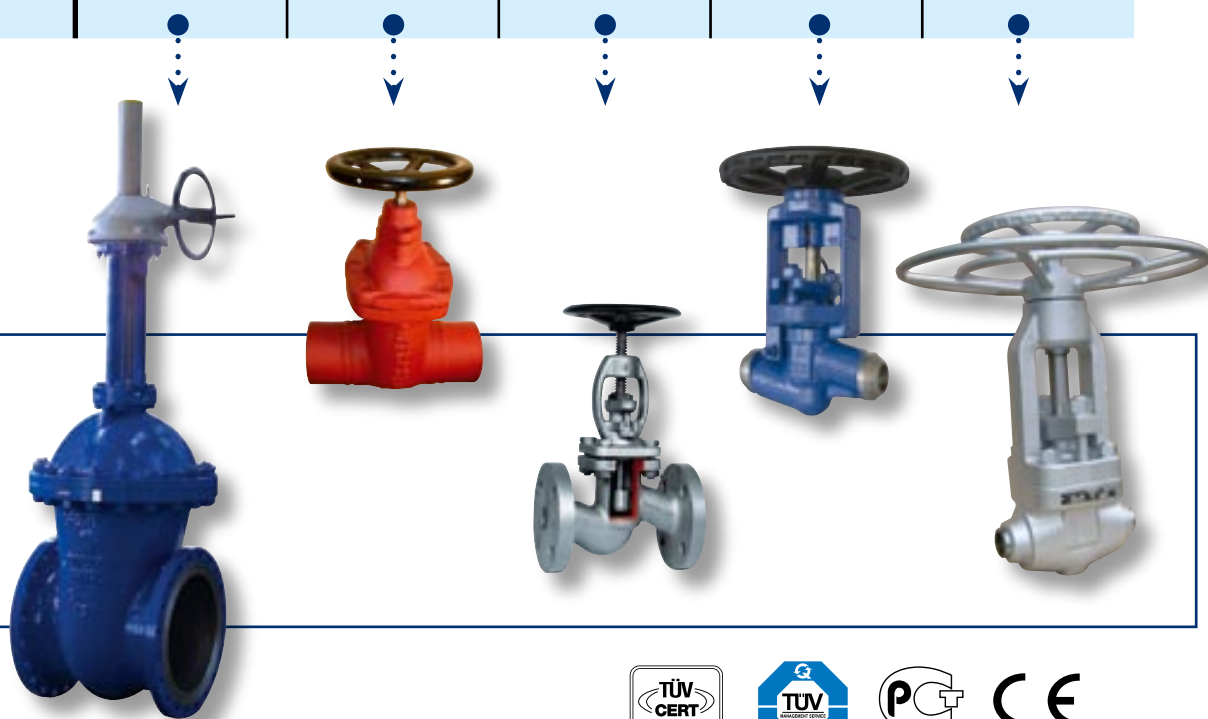
- Two years guarantee period applied to the whole product line
- Extension of guarantee period comfortably to customer



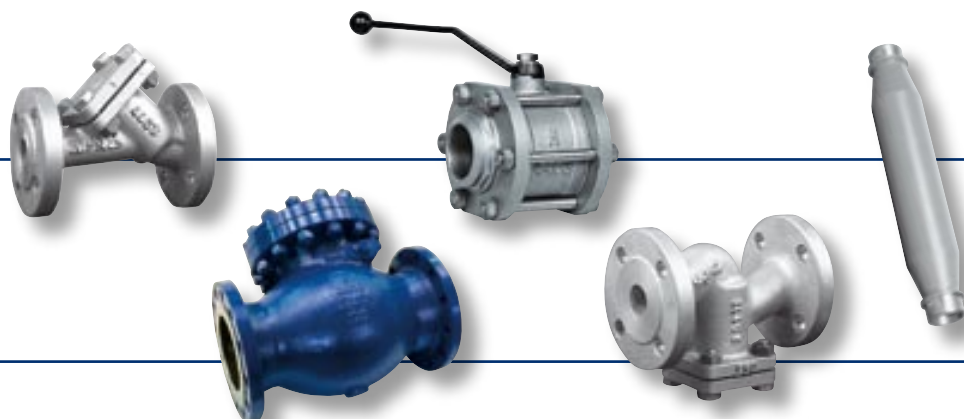
# PRODUCTION PROGRAMME

VALVES FOR POWER ENGINEERING, CHEMICAL, PETROCHEMICAL INDUSTRY, HEATING PLANTS, ETC.

	Gate valves	Resilient seated gate valve	Globe and control valves with gland packing or bellows	High pressure globe valves	Blow-down and continuous blow-down valves
<b>DN</b>	40-500	50-400	15-200	10-150	10-50
<b>PN</b>	10(6)-160	16	10-40	63-630	63-500
<b>Min. oper. temp. [°C]</b>	- 105	-10	(-196) -50	- 196	(-196) - 10
<b>Max. oper. temp. [°C]</b>	540	50	400	650	580
<b>Standards</b>					
ČSN/DIN/EN	✓	✓	✓	✓	✓
ANSI					
<b>Body materials</b>					
carbon steel	✓	✓	✓	✓	✓
stainless steel	✓		✓	✓	✓
alloy steel	✓		✓	✓	✓
<b>Packing</b>					
non-asbestos	✓	✓	✓	✓	✓
bellows sealed			✓	✓	
<b>Connection</b>					
flanged	✓	✓	✓	✓	✓
welded	✓	✓	✓	✓	✓
other				✓	
<b>Application</b>	gas, steam, water, oil, crude oil products, non-corrosive and corrosive liquids, other	gas, water, other	gas, steam, water, oil, crude oil products, non-corrosive and corrosive liquids, other	gas, steam, water, oil, crude oil products, non-corrosive and corrosive liquids, other	steam, waste water



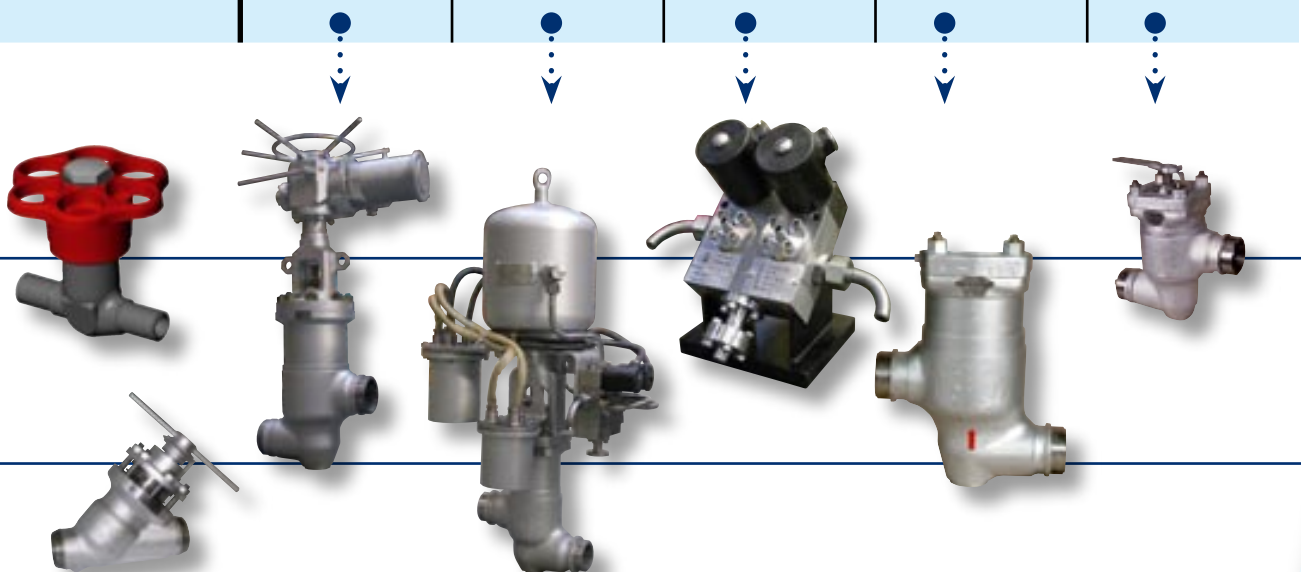
	Lift check valves	Swing check valves	Ball valves	Strainers	Energy reducers
<b>DN</b>	10-200	50-400	10-150	10-150	40-150
<b>PN</b>	10-630	16-100	10-63	10-160	160-400
<b>Min. oper. temp.</b>	- 196	- 105	- 196	- 196	- 10
<b>Max. oper. temp.</b>	600	540	200	550	450
<b>Standards</b>					
ČSN/DIN/EN	✓	✓	✓	✓	✓
ANSI					
<b>Body materials</b>					
carbon steel	✓	✓		✓	✓
stainless steel	✓	✓	✓	✓	
alloy steel	✓	✓		✓	
<b>Packing</b>					
non-asbestos	✓	✓	✓		
bellows sealed					
<b>Connection</b>					
flanged	✓	✓	✓	✓	✓
welded	✓	✓	✓	✓	✓
other					
<b>Application</b>	gas, steam, water, oil, crude oil products, non-corrosive and corrosive liquids, other	gas, steam, water, oil, crude oil products, non-corrosive and corrosive liquids, other	gas, steam, water, oil, crude oil products, non-corrosive and corrosive liquids, other	gas, steam, water, oil, crude oil products, non-corrosive and corrosive liquids, other	steam



# PRODUCTION PROGRAMME

## NUCLEAR VALVES

	Globe, regulating valves including quick acting valves with electric actuator	Quick acting valves with pneumatic actuator	Solenoid pilot valves	Lift check valves	Regulating cocks
<b>DN</b>	10-150	50-150	6-25	10-100	50-150
<b>Max. oper. pres p<sub>p</sub> [MPa]</b>	20	20	4,5	20	4
<b>Max. oper. temp. [°C]</b>	350	350	60	350	150
<b>Standards</b>					
OTT 87/91	✓	✓	✓	✓	✓
ASME/RCC					
Seismic resistance	✓	✓	✓	✓	✓
<b>Body materials</b>					
carbon steel	✓	only sleeves		✓	✓
stainless steel	✓	✓	✓	✓	✓
alloy steel					
<b>Packing</b>					
non-asbestos	✓	✓			✓
bellows sealed	✓	✓			
<b>Connection</b>					
flanged			✓		
welded	✓	✓		✓	✓
other					
<b>Application</b>	gas, steam, water, oil, non-corrosive liquids, other	gas, steam, water, oil, non-corrosive liquids, other	air, nitrogen	gas, steam, water, oil, non-corrosive liquids, other	gas, steam, water, oil, non-corrosive liquids, other



## REFERENCES

### POWER ENGINEERING:

ČEZ, Inc., Czech Republic  
 Slovenské elektrárne Inc., Slovakia  
 Slovenské energetické strojárne Inc., Slovakia  
 Dalkia Morava, Inc., Czech Republic  
 ŠKODA HOLDING Inc., Czech Republic  
 Plzeňská teplotárenská, Inc., Czech Republic  
 ALSTOM Power, Ltd., Czech Republic  
 Michelin, heating plant, Great Britain  
 Blackburn, heating plant, Great Britain  
 Iranshahr, power plant, Iran  
 Shen Tou, power plant, China

### CHEMICAL INDUSTRY:

PROCHEM S.A. Warszawa, Poland  
 ZAKŁADY CHEMICZNE "POLICE" S.A., Poland  
 Borsodchem Rt., Hungary  
 ALIACHEM Inc., Czech Republic  
 Chemoprojekt, Inc, Czech Republic  
 Chepos Engineering Ltd., Czech Republic  
 Linde – KCA – Dresden GmbH, Germany  
 KSB AG, Germany  
 Krupp Uhde GmbH, Germany  
 KSB AG, Germany  
 Fergana, Uzbekistan

### GAS MANUFACTURES:

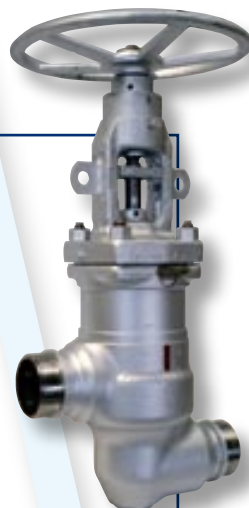
Plynostav Pardubice holding Inc., Czech Republic  
 Transgas, Inc., Czech Republic  
 ODS B.V, Holland

### PETROCHEMICAL INDUSTRY:

PKN "ORLEN" S.A., Poland  
 PETRO REMONT Sp. z.o.o. Płock. Poland  
 NAFTOREMONT Sp. z.o.o., Poland  
 Moravské naftové doly, Inc., Czech Republic  
 MiRO Mineraloelraffinerie Oberrheim GmbH & Co. KG, Germany  
 Shell & DEA Oil GmbH, Germany  
 ÖMV AG, Austria

### NUCLEAR POWER ENGINEERING:

ČEZ .a.s., Czech Republic  
 Slovenské elektrárne a.s., Slovakia  
 GUP Koncern Rosenergoatom, Russia  
 NAEK Energoatom, Ukraine  
 Nek Energoatom, Bulgaria  
 OAO Turboatom, Ukraine  
 Jaslovské Bohunice NPP, Slovakia  
 Mochovce NPP, Slovakia  
 Paks NPP, Hungary  
 Kozlodui NPP, HBulgaria  
 Temelín NPP, Czech Republic  
 Dukovany NPP, Czech Republic  
 Rovno NPP, Ukraine  
 Zaporozhye NPP, Ukraine  
 South-Ukraine NPP, Ukraine  
 Khmelniyskiy NPP, Ukraine  
 Kursk NPP, Russia  
 Novovoronezh NPP, Russia  
 Leningrad NPP, Russia  
 Smolensk NPP, Russia  
 Kalinin NPP, Russia  
 Balakovo NNP, Russia  
 Ignalina NPP, Lithuania  
 Kudankulam NPP, India  
 Kaiga NPP, India  
 Rajastan NPP, India





WHERE YOU FIND US ...

[www.arako.cz](http://www.arako.cz)



## Arako spol. s r.o.

Hvezdoslavova 18  
746 01 Opava  
Česká republika  
tel.: +420 553 694 111  
fax: +420 553 694 777  
email: [arako@arako.cz](mailto:arako@arako.cz)  
[www.arako.cz](http://www.arako.cz)

