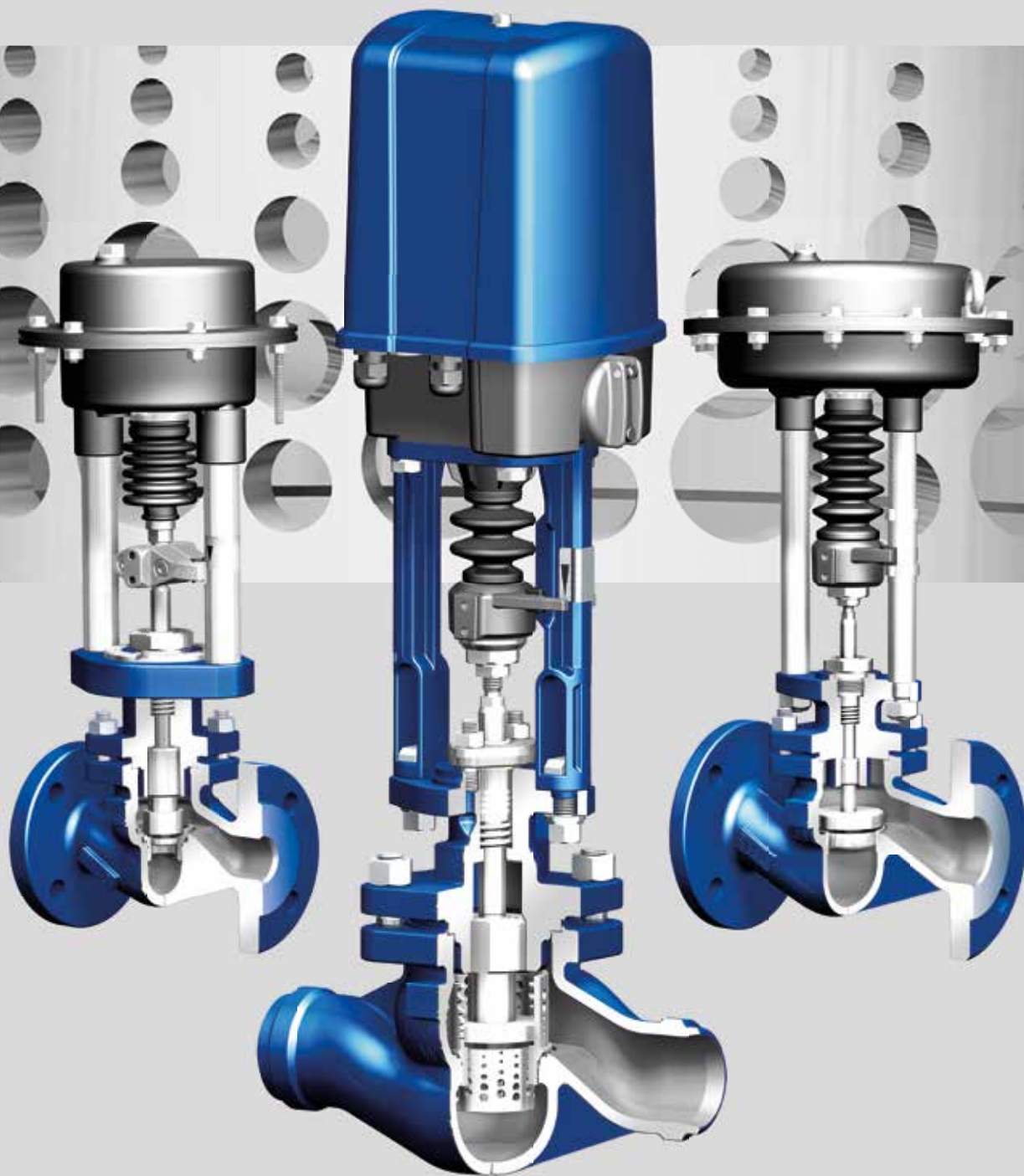


# STEVI®

## Expert control

INDIVIDUAL. PRECISE. DURABLE



# STEVI® Pro (straightway valves, Series 470/471/422/462)

The high-performance control valve for professional control and critical applications



Series 470



Series 471

- Precise and high performance: optimised flow characteristic quality.
- Variable: at least 5 reducible Kvs values.
- Variable: stem seal options (PTFE V-ring unit, PTFE packing, graphite packing, stainless steel bellows seal, EPDM sealing).
- Variable: changeable trim.
- Minimal noise: multi-stage trim (optional).
- Safe: blow-out proof stem.
- Safe: shaft guided plug.
- Safe: two-ply bellows seal (optional).
- Long life: precision stem guiding.
- Precise: even better control accuracy (optimised flow paths).
- Flexible: wide range of applications (very high differential pressures up to max. nominal pressure).

**Plug design:** Parabolic plug, optional V-port or perforated plug (each optional: pressure balancing)

**Nominal diameter:** DN 15-250 / NPS 1"-8"

**Nominal pressure:** PN 16-40 / ANSI 150/ANSI 300

**Actuators:** Electric or pneumatic

**Body materials:** e.g. EN-JL1040, EN-JS1049, 1.0619+N, SA216WCB, 1.4581

**Flow media:** e.g. hot water, steam, gas, refrigerant, brine, etc.

# STEVI® Vario (straightway valves, Series 448/449)

The variable, compact control valve



Series 448



Series 448

- Long life: stem seals already proven millions of times over, service life now further extended (PTFE V-ring sealing units and EPDM linings).
- Optimum handling: actuator can be rotated 360°.
- Flexible: changeable, variable trim (at least 4 Kvs values as well as multiple flow characteristics and plug designs).
- Precise and durable: vibration is prevented even at high differential pressures (stable shaft guiding).
- Easy handling: small footprint and reduced weight (low height).
- Economical: very low air consumption (smaller pneumatic actuators possible).

**Plug design:** Parabolic plug / perforated plug

**Nominal diameter:** DN 15-100 / NPS ½" – 4"

**Nominal pressure:** PN 16-40 / ANSI 150

**Actuators:** Electric or pneumatic

**Body materials:** e.g. EN-JL1040, EN-JS1049, 1.0619+N, 1.4408, SA216WCB, SA351CF8M

**Flow media:** e.g. warm water, hot water, saturated steam, overheated steam, gas, coolant, cooling brine, refrigerant, thermal oil, etc.



Safe even under exacting conditions (blow-out proof stem / shaft guided plug).



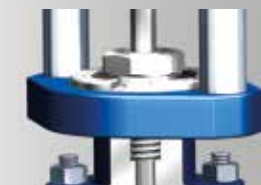
Flexibility: variable in situ replacement of the trim – stem, plug (here: perforated plug) and seat ring.



High performance due to double guiding (V-port plug and perforated plug).



Stable shaft guiding for precision and durability.



Rotatable upper part for optimum handling.



Screwed seat ring provides flexibility.



# STEVI® Smart

(straightway valves, Series 440/441/425/426)

The classic standard valve for universal applications

# STEVI® Smart

(3-way valves, Series 450/451/423/463)

Precision mixing/diverting



Series 440



Series 441



Series 450



Series 451

- 50:1 rangeability for precision and high performance (inherent rangeability 40:1).
- Variable: stem seal options (PTFE V-ring unit, PTFE packing, graphite packing, stainless steel bellows seal, EPDM sealing).
- Long life: precision stem guiding.
- Safe: two-ply bellows seal (optional).

**Plug design:** Parabolic plug, optional V-port plug (each optional: pressure balancing DN 65) / equal-percentage or linear characteristic

**Nominal diameter:** DN 15-500

**Nominal pressure:** PN 16-40

**Actuators:** Electric or pneumatic

**Body materials:** e.g. EN-JL1040, EN-JS1049, 1.0619+N, 1.4408

**Flow media:** e.g. cooling water, brine, warm water, hot water, steam, gas, refrigerant, thermal oil, etc.

- 30:1 rangeability for precision and high performance.
- Variable: reducible Kvs values.
- Variable: stem seal options (PTFE V-ring unit, PTFE packing, graphite packing, stainless steel bellows seal, EPDM sealings).
- Variable and economical: two screwed seat rings (optional).
- Long life: stable plug guidance.
- Long life: precision stem guiding.
- Safe: two-ply bellows seal (optional).

**Plug design:** Mixing plug / diverting plug

**Nominal diameter:** DN 15-300

**Nominal pressure:** PN 16-40

**Actuators:** Electric or pneumatic

**Body materials:** e.g. EN-JL1040, EN-JS1049, 1.0619+N, 1.4408

**Flow media:** Cooling water, brine, warm water, hot water, refrigerant, thermal oil, etc.



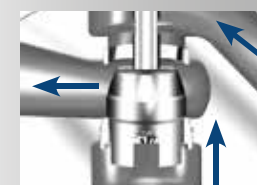
Stem seal options for flexibility (here: PTFE V-ring units).



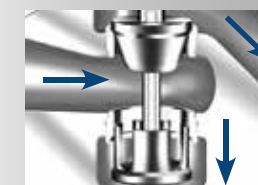
Economical due to rolled seat ring.



Optional pressure balancing plug reduces the required actuator forces and enables increased efficiency.



Variable: mixing plug.



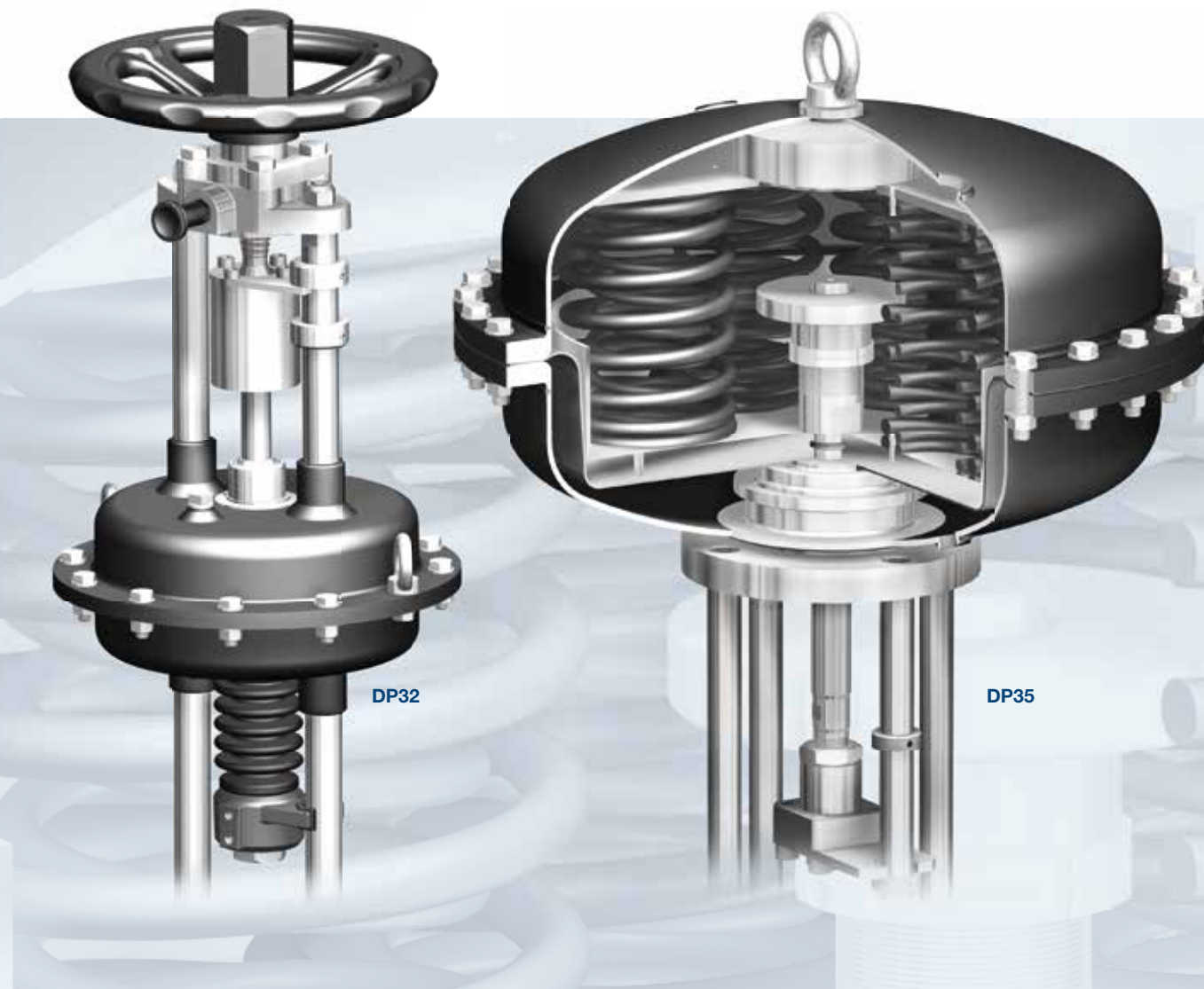
Variable: diverting plug.



Safe: two-ply bellows seal (optional).



# ARI-DP pneumatic actuators



## High performance, practical, economical

- High performance: broad spring rangeability (higher closing forces).
- Practical: reversible operating direction.
- Economical: favourable size / performance ratio.
- Variable: wide range of accessories (positioners, solenoid valves, limit switches, etc.).
- Sizes up to 2800 cm<sup>2</sup> diaphragm area (DP 35).
- Durable even in aggressive environments: corrosion-resistant design (optional).
- Added safety through manual override (optional).

**Nominal diameter:** Diaphragm area 80-2800 cm<sup>2</sup>  
**Actuating force:** 490-83,000 N  
**Max. permitted air supply pressure:** 6 bar  
**Operating modes:** Spring closes / air supply pressure closes body seat

# ARI-PREMIO® and PREMIO® Plus 2G electric actuators



## Reduced power consumption, optimised handling, extended lifetime

- Optimal safety and reliability: high operating temperature protection in duty types S3 80% ED / max. 1200 c/h (+70°C) acc. to EN 60034-1.
- High performance: optimised gear transmission and improved load cut-off.
- BLDC motor: significantly reduced power consumption, exceptionally smooth and quiet running due to circular rotating field, high duty classification (ED) even at high actuating forces because self-heating of the motor is restricted to a minimum.
- Variable control speeds.

### Added value with PREMIO®-Plus 2G:

- Self-initialisation feature.
- User friendly operator panel.
- Positioner: Freely selectable analogue control signal (0 to 10 V or 4 to 20 mA).

- Economy Function for even better durability with more efficient, low-wear conversion of control signals.
- Variable speed control for extended gear lifetime.
- High durability and precision because small positional deviations are approached at low speed.
- Optional: Version with fail-safe function.

**Actuating force:** 2.2 kN, 5 kN, 12 kN, 15 kN, 25 kN  
**Permissible ambient temperature:** -20°C to +70°C

Compatible with a wide voltage range from 110 to 240 VAC 50/60 Hz (PREMIO®/PREMIO® Plus)

**Other actuators available on request!**



# “Even more STEVI® diversity ...”



## STEVI® 453

Feedwater control valve with integrated pump spill-back

- Permanently reliable because the pump is protected (guaranteed supply of feedwater – integrated pump spill-back).
- Variable: Kvs values adapted to the quantities required.
- Long life: trim optimised for critical operating conditions.

Applications: Boiler construction / plant manufacturing



## STEVI® 415

Automatic blow-down valve – e.g. for steam boilers or autoclaves

- Optimum handling: compact design.
- Flexible: accessories adapted to the blow-down process (e.g. limit switches, solenoid valve, time delay relays, etc.).
- Optional: operation by means of a separate lever (for quick and easy manual control).

Applications: Boiler construction

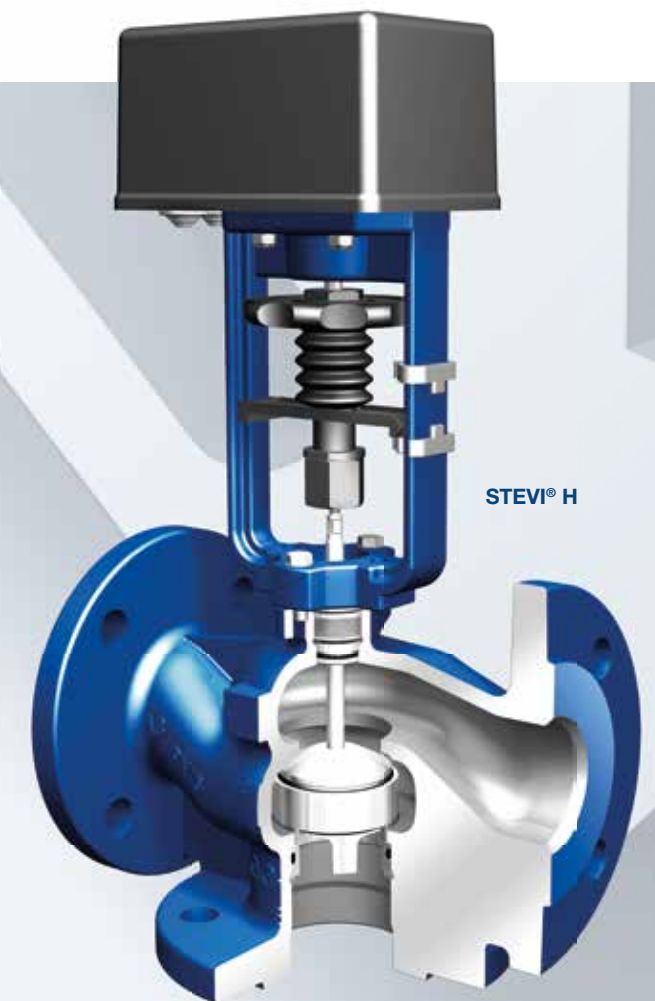


## STEVI® 405/460

Automatic stop valve (with electric or pneumatic actuator)

- Long life: precision stem guiding.
- Safe: two-ply bellows seal (optional).
- Variable: stem seal options (PTFE V-ring unit, PTFE packing, graphite packing, stainless steel bellows seal, EPDM sealings).

Applications: Industry, chemicals, shipbuilding



## STEVI® H

Lightweight, compact valve

- Precise: optimised control accuracy even at low flow rates (rangeability 30:1).
- Economical: maintenance-free, frictionless EPDM sealing.
- Variable: available with cast iron flanges or red brass sockets.
- Flexible: intelligent PACO® electric actuators.

Applications: HVAC and industry (for low differential pressures and low flow velocities)

# STEVI®

Reliable, precise, individual for more than 40 years ...



## ... Control valve technologies for control and mixing/diverting

- More than forty years experience in the development and sale of advanced control valve technologies.
- Your strong service partner – with 16 branches and sales partners in more than 60 countries worldwide.
- A sharp focus on our customers, competent advice and short delivery times.
- All ARI products are developed in keeping with the very latest design standards, tested under the most rigorous conditions on our in-house experimental facilities, manufactured with the highest possible precision and subjected to continuous in-process quality controls.
- Comprehensive design know-how, for example through ARI-myValve®, our user-friendly sizing software.
- ARI products are manufactured at three different locations – all of them in Germany. Benefit for you: quality “Made in Germany” – certified acc. to DIN ISO 9001. Numerous product approvals, e.g. Det Norske Veritas and Lloyd’s Register Quality Assurance.
- High degree of vertical integration for flexibility, speed and professionalism.
- What sets us apart: all valves AND all electric and pneumatic actuators are developed and manufactured in-house.

- We make it as simple as possible for you to order – by recommending valve-actuator combinations tailored to your individual needs.

If you too would like to profit from ARI’s extensive know-how and experience, just give us a call. You are also welcome to visit one of our regular training events in Germany or abroad!

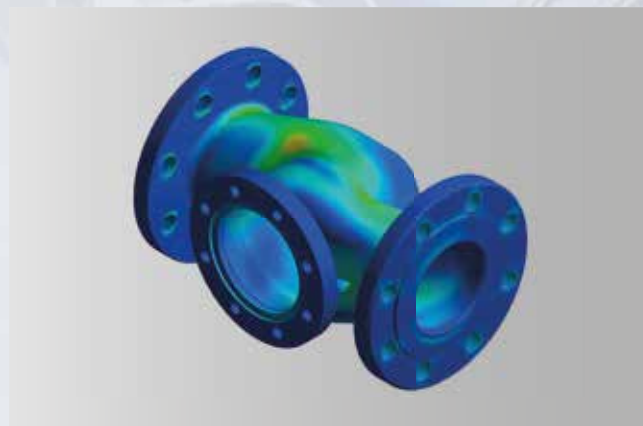
**Expert control made by ARI – profit from a wide array of services and a strong partnership!**



# Modern development methods, tested in our own experimental lab

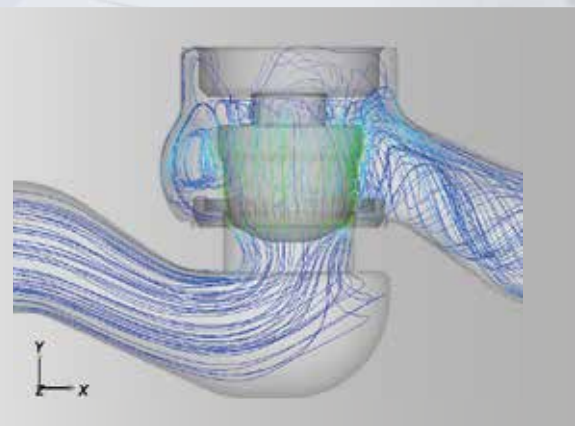
# High-precision manufacturing

ARI's own test bench.



## Finite element analysis

The finite element analysis (FEA) is a numerical calculation technique that is used to simulate stresses and their distribution. The aim is to achieve the required strength at pressure load levels in combination with an optimal weight and a flow friendly shape.



## State-of-the-art flow simulations

The twofold objective of uniform flow and high flow capacity is realised with the aid of special flow software. The software simulations enable the flow velocity, flow direction and pressure distribution to be visualised. Due to the optimised geometry, turbulences and pressure loss are reduced to a minimum.



Optimum handling: easy start-up of the PREMIO® / PREMIO®Plus 2G.

## Modern technologies

are the key to optimal safety and reliability. Our products are manufactured at three different locations – all of them in Germany – promptly and according to rigorous quality criteria.

High performance machining centres, automated assembly cells, programmable assembly robots and a highly qualified team of staff are vital prerequisites of top-quality product solutions specially tailored to your individual requirements.

**The benefit for you: Optimal reliability and efficiency.**



# For control – isolation – safety – steam trapping – system engineering.

Your strong partner – in more than 60 countries worldwide



## Technology is our life

Highly qualified ARI engineers develop products for tomorrow's world using the very latest techniques. Our suppliers are selected according to the strictest possible criteria, to ensure that only premium quality materials are used. Our state-of-the-art production technologies leave no room for mistakes.

Thanks to our dense sales network, expert advice is available from a sales partner close to you in more than 60 countries worldwide as well as from ARI branches in Austria, Denmark, the UK, France, Spain, Italy, Russia, Finland, the USA, Brasil, India, China, Malaysia, Singapore and Dubai.

Are you a professional user of high-quality, heavy-duty valves? Would you like to reap the benefits of a strong partner? Our mission is to help you maximise your profit.

## Tailor-made solutions

20.000 products in more than 200.000 variants mean almost unlimited possibilities depending on your application, with solutions specially tailored to your individual requirements.

Control valves, pressure reducing valves, pressure regulators, temperature controllers without auxiliary power, butterfly valves, globe valves, safety valves, steam traps, measuring technologies and accessories such as pressure reducing stations, heat exchangers, condensate return systems and condensate pumps – your key to maximum flexibility and efficiency.

## Quality that pays off

Our continuous quality monitoring throughout all phases of the production process is documented in some twenty system approvals from acceptance bodies and classification societies like Det Norske Veritas, Lloyd's Register Quality Assurance, German Lloyd, SELO (China), CCS (China), the Korean Register, the Russian Maritime Register of Shipping, TR CU (EAC), Rostechnadzor (Russia) and many more.

**Quality made by ARI – your key to reliability, durability and guaranteed safety.**





# ARI product diversity

## Control



**Control valves**  
STEVI® Pro  
(Series 422/462, 470/471)



STEVI® Vario  
(Series 448/449)



STEVI® Smart (Series 423/463,  
425/426, 440/441, 450/451)



**Control without auxiliary power**  
PREDU® / PREDEX® / PRESO® /  
TEMPTRON®

## Isolation



**Process valves**  
ZETRIX®  
**High performance-Valves**  
ZEDOX®



**Butterfly valves**  
ZESA®/GESA®/ZIVA®



**Bellows sealed valves**  
FABA® Plus, FABA® Supra I/C



**Stop valves with gland seal**  
STOBU®

## Safety



**Safety valves**  
(DIN/EN)  
SAFE



**Safety valves**  
(DIN/EN)  
SAFE TCP



**Safety valves**  
(API 526, ASME)  
REYCO® R



**Safety valves (ASME)**  
REYCO® RL

## Steam trapping



**Steam traps CONA®**  
(mechanical ball float /  
thermostatic bimetallic and  
membrane / thermodynamic),  
**monitoring systems**  
CONA® Control



**Manifolds**  
CODI® for collecting  
and diverting purpose



**Steam trap with multi-  
valving technology CONA®**  
“All-in-One” (incl. stop valve,  
inside strainer, back-flow  
protection, drain valve)



**Mechanical pump systems**  
CONLIFT®, CONA® P

**Profit from diversity made by ARI.**  
**Please don't hesitate to ask for more information!**



[www.ari-armaturen.com](http://www.ari-armaturen.com)