The Best Under Pressure

Konwell


Konwell

Konwell is a specialist in industrial valves, gas systems, process automation field equipment and end-to-end solutions.

The foundation of our business consists of high-quality products, extensive technical know-how and a flexible approach to customer service.

These principles have guided us since the founding of our family-owned company in 1982.

We are a full-service solutions provider. Our expertise, service offering, and products from well-known manufacturers cover a wide range of industrial processes.

Choosing the Right Products

Focus on your core business by allowing us to choose the right solution for your process. When sizing and selecting the proper valve type, our goal is to achieve the best usability and lowest valve life cycle cost.

Saving Energy

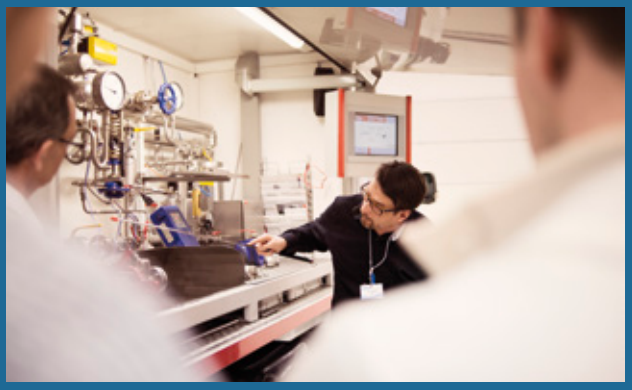
Inspecting steam traps and reviewing entire steam & condensate system is a big part of our daily work. A well-maintained steam and condensate system provides safety and energy efficiency. Our comprehensive audit provides a straightforward plan to improve your facility's energy efficiency.

Technical Consultation

Backed by over 200 years of combined field experience, we provide technical consultation on designing equipment as well as enhancing processes, always aiming for the most energy-efficient system possible.

Longevity with Maintenance

Our lifecycle approach dictates that equipment should be cost-effective to maintain. Our dedicated maintenance team covers both mechanical and automation equipment. We operate with flexibility and efficiency across Finland and the Baltics to keep your operations flowing uninterrupted.

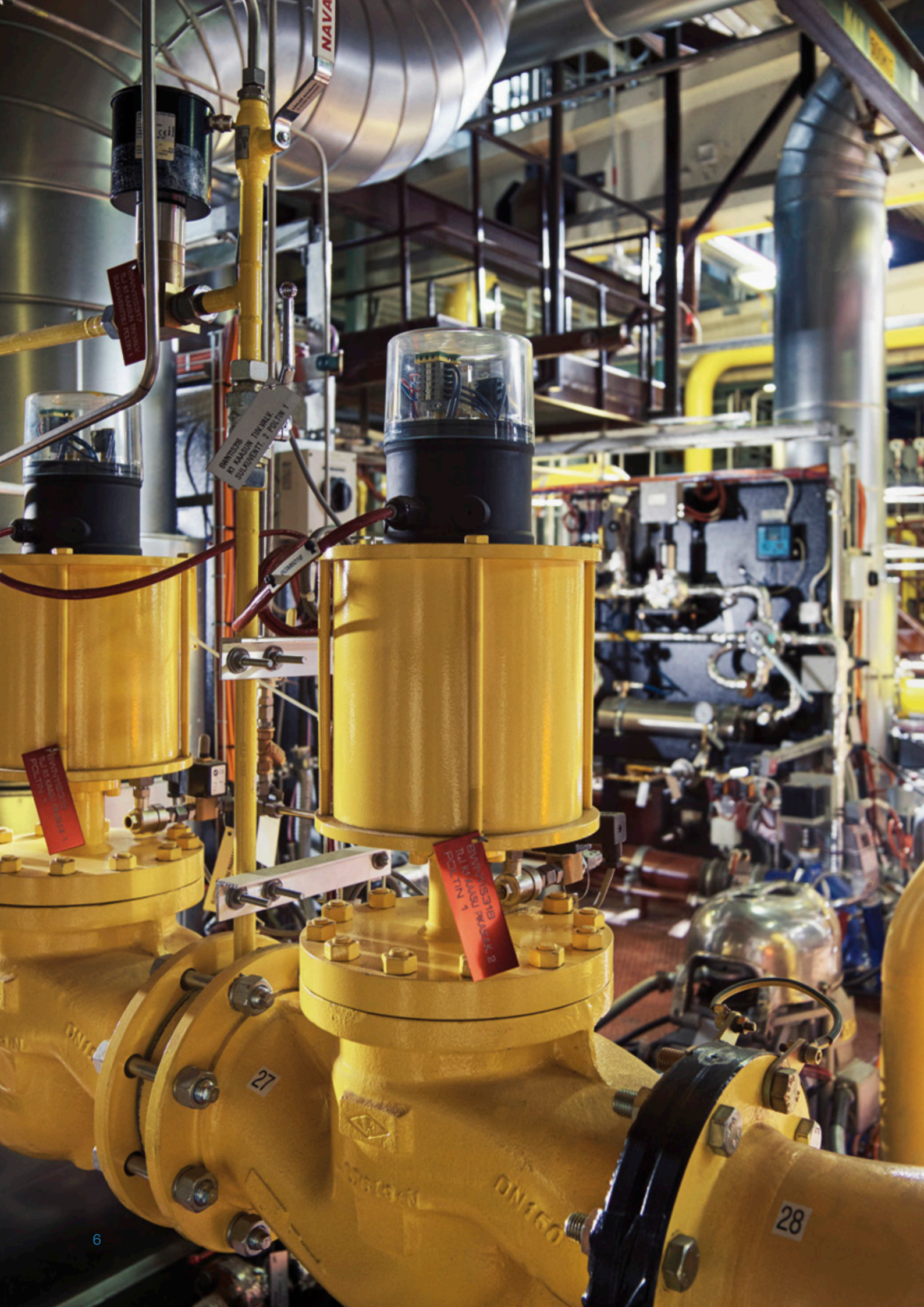


Quick Deliveries

Our warehouses located in Helsinki (Finland) and Tallinn (Estonia) enable rapid delivery of standard products, often within less than 24 hours. Quick deliveries are an integral part of our comprehensive service offering.

Sharing Knowledge

We want to share the knowledge that our extensive expertise has brought us. It is our mission to build upon existing steam and energy gas knowledge, and to maintain the industry's best practices and know-how. We offer training modules for various industrial sectors, skillsets, and roles.


27
28

Shut-off and Check Valves

Globe Valves

• Bellows seal, gland seal
• Three-way valves

Our range includes globe valves for shut-off and control use, covering a wide range of materials, pressure ratings and sizes.

Gate Valves

• Bellows seal, gland seal
• With bypass for high pressure use

The gate valve is a two-way tight shut-off valve. Gate valves with high pressure covers are used in power plants as the main shut-off for steam.

Knife Gate Valves

• Rim Sealed, O-ringed, through-cutting

The knife gate valve is at its best with slurry media. As a cut-through, it is excellent for feeding pulp to a biogas reactor. The sharp gate easily slices any fibers in the pulp.

Ball Valves

• Soft and metal seals
• With a floating or supported ball
• Three-way valves

Our selection covers ball valves from basic models with soft seals to special valves with metal seals.

Butterfly Valves

- Soft seals or lined
- Double and triple eccentric valves with metal seals

A rubber-lined butterfly valve is an affordable and functional solution for shutting off water lines. More advanced double and triple eccentric valves are suitable, for example, for district heating and chemical applications.

Plug Valves

- Soft seals or lined
- Multi-way valves

Plug valves are at their best when used with difficult media, such as crystallizing, corrosive, or toxic media.

Check Valves

- Axial or lined check valves
- Single flap or dual plated check valves
- Globe, piston and ball check valves

With proper selection and sizing of a check valve, we can minimize flow resistance and maximize the valve's lifespan.

Control valves

Globe Valves (2-Way & 3-Way Valves)

- With equal percentage or linear adjustment curve
- Parabolic, V-port, pressure balanced or perforated plug

A control valve sized by our professionals achieves the desired control properties and excellent control performance.

Ball Valves

- With a V-shaped ball

When used with liquids, the V-shaped ball valve can reach minimal pressure drop and a high KVS value.

Butterfly Valves

- Soft seated and lined
- Metal seated double and triple eccentric valves

A butterfly valve is shorter than other valves in terms of structural length and therefore an affordable option in large sizes.

Plug Valves

- Soft seated and lined
- With equal percentage or linear adjustment curve

Lined plug valves are at their best in difficult control applications, for example, when controlling crystallizing media.

Control Valves with Radial Stage Nozzle

• For large pressure differences

With the stepwise pressure drop of the radial stage nozzle valve, we can maintain reliable control functions at high pressures and large, up to 560 bar, pressure differences.

Steam Conditioning Stations

• Steam conditioning stations with direct injection
• Steam conditioning stations with injection into expanded output
• Pin and venturi cooling nozzles

High pressure steam can be turned into low pressure steam at a steam conditioning station.

Actuators and Accessories

Electric Actuators

• Linear and rotational

Electric actuators are high precision devices that can be controlled with milliampere current or an analogue signal.

Pneumatic and Hydraulic Actuators

• Linear and rotational

A pneumatic actuator is fast-acting. It is also more resistant to vibration than an electric actuator. A hydraulic actuator provides a lot of power in small size, even in demanding conditions.

Accessories

• Positioners
• Position indicators
• Limit switches
• Solenoid control valves
• Partial stroke test device

We equip actuators with the necessary accessories based on your needs.

Remote Control Equipment

• Manually operated remote-control devices

A remote-control device consists of two control stations connected by a cable. One station is installed on top of the valve. The valve can then be operated from the second station, located at a safe and convenient location.

Steam Traps

Steam Traps and Steam Trap Testing Equipment

- Bimetallic steam traps
- Thermostatic steam traps
- Ball float steam traps
- High-capacity steam traps
- Steam Trap Testing Equipment

A properly selected steam trap takes care of dewatering the steam system without wasting steam.

Automatic Drainage Valve

Automatically discharges condensate from a steam system on start-up. Also drains residual fluid when the system is shut-down. The valve closes as soon as the operating pressure increases to the predetermined pressure.

Steam Powered Condensate Return Units

- Condensate return unit working with auxiliary steam
- Steam traps with pump function

A condensate return unit allows condensate to be moved against a back pressure, for example, up an ascending condensate line.

Steam Separators

The advantage of using a centrifugal force rotary technique is low pressure loss (< 0.01 bar) as well as an extra dry final product where the steam is 99.8% dry.

Steam and Condensate Manifolds

Steam and condensate manifolds are available for both vertical and horizontal installation. Length and valve spacing can be customized.

Self-Acting Valves

Pressure Reducing Valves

The function of a pressure reducing valve is to drop the system pressure to a predetermined level. The valve maintains a constant pressure on the outlet side regardless of the pressure on the inlet side.

Pressure Maintaining Valves

Pressure maintaining valves ensure that the pressure before the valve is maintained at a predetermined level. If the pressure is about to rise above this level, the valve opens and releases excess pressure to the outlet side.

Temperature Control Valves

- 2-way and 3-way valves
- For heating and cooling

Self-acting temperature control valves monitor the temperature of the process behind the valve. The valve moves between open and closed positions depending on how close the temperature is to the desired value.

Strainers

- Dirt separators
- Basket type strainer
- Self-cleaning strainers

The right type of strainer protects your equipment from possible contaminants in the piping.

Steam Boiler Equipment

Level Control and Monitoring

- Dry boiler sensors, i.e., low level sensors
- Wet boiler sensors, i.e., high level sensors
- High water level limiters
- Level switches

Our product range includes components according to EN 12953 (24h) and TRD 604 (72h) safety classifications. In terms of safety integrity, you can reach up to SIL3. Components also approved for maritime applications.

Continuous Surface and Bottom Blowdown Valves

- Manual and actuated
- Stage nozzle valves for surface blowing
- Quick-acting bottom blowdown valves

Surface blowdown is used in a boiler for removing salts from the surface of the water. Using bottom blowdown, solids that have sunk to the bottom of the boiler can be removed.

Conductivity Measurements

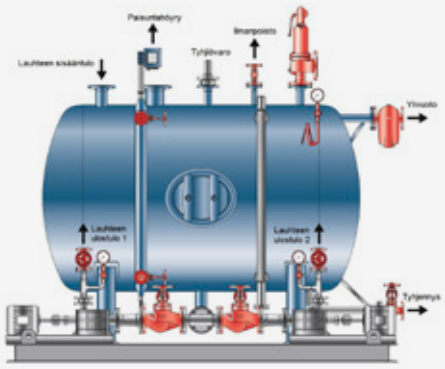
- Conductivity sensors and controllers

Conductivity measurements control the quality of a boiler's water or condensate. The results are typically used for controlling a surface blowdown valve.

Tanks and Equipment

Automated Condensate Recovery Units

The condensate from a steam process is collected into a condensate tank, from which it is automatically pumped to a feed water tank.

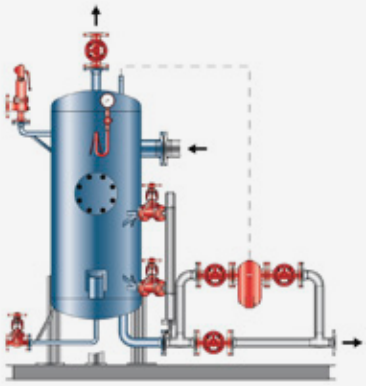


Feedwater Tanks and Deaeration

A feed water deaeration system consists of a feed water tank and a deaeration dome. The device removes non-condensable gases that have dissolved in the medium, such as oxygen and carbon dioxide.

Flash Vessels

Flash vessels are designed for all applications where flash steam is produced, for example, from condensate, boiler blowdown or hot water.

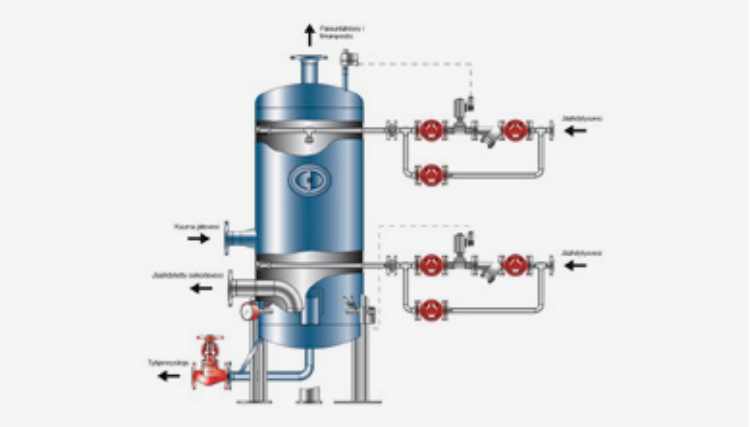


Desuperheaters

A desuperheater consists of a vessel with a built-in nozzle arrangement for injecting and cooling superheated steam using a water bath. The system is suitable for all applications where an effective conversion of superheated steam into saturated steam is required.

Mixing Cooler

Hot bottom blowdown water is collected into the tank.
Mixing coolers are then used to cool down the water before it is discharged into a wastewater drain.



Field Equipment and Instruments

Measurement of Density and Viscosity

- Density meters based on vibration
- Viscosity measurement for Newtonian fluids

A density meter measures the density and concentration of liquids, liquid mixtures and multiphase liquids. A viscosity sensor continuously measures the viscosity (mPas, cSt) of the process.

Pressure and Temperature Measurement

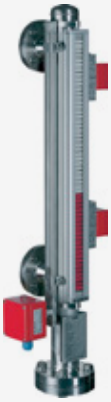
- Pressure and differential pressure transmitters
- Pressure gauges
- Temperature sensors
- Temperature gauges

For measuring pressure and temperature, our product line-up includes mechanical local meters as well as transmitters for transferring the results to a controller or to an automation system.

Level Measurement

- Capacitive and conductive electrodes
- Differential pressure transmitters
- Magnetic level indicators
- Float switch level indicators
- Magnetic float transmitters

Based on the user's needs, we will choose the optimal solution from our comprehensive product line-up, which covers a wide range of different surface level measurement methods.



Flow and Energy Meters

- Vortex, ultrasonic, magnetic, mechanical and Coriolis meters
- Differential pressure meters
- Calculation and compensation units

For measuring steam volume, our selection includes vortex meters. Differential pressure-based measurements are used for billing in accordance with SFS EN 5167. You can find PD volume meters and mass meters for liquid substances.

Controllers and Signal Converters

A variety of controllers is needed to control a process. Unit controllers are perfectly suited for pressure, temperature, and level control.

Turbidity and Oil Concentration Measurement

- After detecting a change in condensate cleanliness, the detector immediately relays the information to a control room, e.g., giving a signal to open a valve to remove dirty condensate to a reserve tank."

Safety Devices

Safety Valves

• Spring-loaded safety valves

The function of a safety valve is to release pressure from a process if the pressure rises higher than the safety valve's set pressure.

Rupture Discs

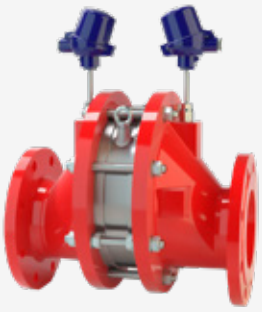
• Metal and graphite rupture discs
• Rupture disc holders and break detectors

When installed into a pipeline, a rupture disc is completely sealed as long as the burst pressure limit is not exceeded. If the pressure is exceeded, the rupture disc breaks, releasing the pressure out of the system.

Flame Arresters

• Deflagration and detonation flame arresters
• Inside the pipeline or at the end of the pipeline
• For resisting short-term or continuous fire

A flame arrester absorbs the energy of a flame passing through it, thus extinguishing the flame. A properly selected and installed flame arrester prevents fire from spreading to critical areas.



Tank Pressure and Vacuum Relief Valves

• Pressure and vacuum relief valves with or without flame arresters

An over/under pressure valve installed on top of a tank protects the tank from pressure fluctuations. Also known as a vent valve, it can include an integrated flame arrester, thus preventing ignitions from entering the tank.

Quick-Action Line Blinds

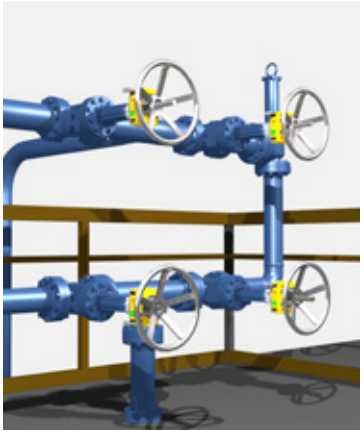
- Quick-action blinding devices installed into the pipeline
- Large quick-action line blinds with actuators

With the quick-action blinding device, a single person can quickly and safely blind a pipeline up to nominal size DN 1200 by turning a single lever or handwheel.

Valve Safety Locks

- Interlock security locks, sequence locks

Interlocks can be used to create valve sequences, i.e., systems where valves can only be operated in a pre-determined order.



Operating Tools

- Pneumatic, hydraulic, and battery powered operating tools

With the help of a portable operating tool, you can use a machine to operate manual valves. This is especially useful in situations where many heavy valves have to be operated in a row.

Steam Heat Exchanger Assemblies

- Domestic water heating
- Condensation of saturated steam that has passed through a turbine
- Economizer systems

Factory-made valve systems are complete all-in-one packages. A heat exchanger and all the necessary peripherals are built into the unit before delivery.

Special Valves

Valves for Hazardous Media

Safe handling of hazardous media can be ensured by using high quality plug valves and bellows globe valves made of special materials.

Radial Stage Nozzle Valves

Large steam pressure drops inside valves can cause cavitation and produce flash steam.To control this, pressure is lowered stepwise with a radial stage nozzle.

Knife Gate Valves for Polymers

Knife gate valves are excellent with mushy and crystallizing media. The valve is available with a cutting gate. A rim seal ensures that no pockets of media can form around the gate.

Oxygen Valves

Using a clean valve made of non-sparking materials results in a high level of safety when handling gaseous oxygen.

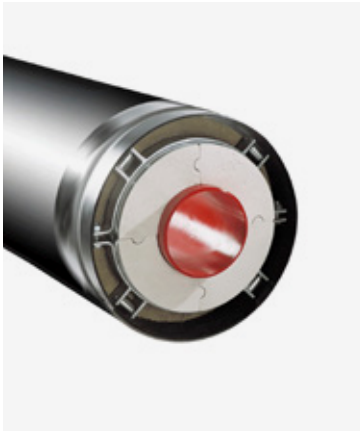
Sampling Valves

With well-designed sampling valves you can always get fresh samples even of hazardous media without risk to the valve operator.

Energy Solutions

Steel-Cased Pipe-in-Pipe with Vacuum Insulation

Creating a vacuum between pipelayers provides excellent insulation, making the steel casing pipe a great way to transport hot or extremely cold media, including steam and LNG.



Microturbine

A microturbine can create energy from small streams of steam. It’s suitable for small heating plants, processes with large steam pressure drops, and other facilities using steam.

Emergency Shut-Off Valves and Gas Trains

Emergency Shut-Off Valves

- Type-approved valves with actuators for fuel lines
- Self-powered safety shut-off valves

In the event of a malfunction, the emergency shut-off valve closes the pipeline quickly without needing external energy. Our catalogue includes approved emergency shut-off valves in accordance with EN 161, EN 16678 and EN 23553-1 standards.

Gas Mixing Valves

- Double-acting
- Injection type valves

A mixing valve mixes two different gases. With a double-acting valve, it is possible to achieve mix ratios from 50:50 to 20:80, as well as total flow control up to 1:30 flow rate.

Gas Trains

- Customized or factory-made gas trains

Valves, actuators, positioners, filters, measuring devices, safety devices and a control cabinet are built into the gas train before delivery.

Cryogenic Solutions

Globe Valves

• Shut-off, control, and emergency shut-off valves

Globe valves for cryogenic use are made of cold-resistant materials, for example, stainless steel. They feature an extension spindle to prevent the seal from freezing.

Gate Valves

• Intermediate space can be emptied

The emptying of the intermediate space of cryogenic gate valves is done by drilling.

Ball Valves

• Soft and metal seals
• With a floating ball or a supported ball

We offer soft-sealed and metal-sealed valves with both floating and supported structure, and with a full or reduced opening. Body structure can be top-entry or side-entry.

Butterfly Valves

• Triple eccentric butterfly valves with a maintenance hatch

A top-entry butterfly valve is installed in the pipeline by welding. The hatch at the top of the valve ensures convenient serviceability.

Non-Return Valves

- Piston, swing, or disc-type non-return valves

The task of non-return valves or backflow valves is to prevent the flow of media in a certain direction. Our product range also covers non-return valves for cryogenic applications.

Safety Devices

- Safety valves, rupture discs, flame arresters, vent valves and cold protection systems

Our product range covers a wide selection of system safety devices and security devices for cryogenic use.

Level Measuring

- Magnetically controlled level indicators

The level of liquid in a tank can be seen on an indicator as an easy-to-read red column. In addition to local indication, a surface pointer can also send signals to your system.

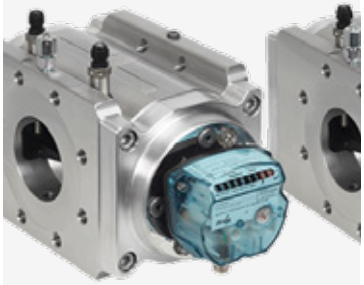
Gas Appliances

Turbine Meters

For measuring medium or large quantities of gas. The TZ meter is a MID EN approved model for taxable billing applications. Pulse output as a standard, bus output as an option.

Rotary Meters and Bellows Meters

For measuring small and medium gas quantities. Pulse output as a standard, bus output as an option.



Gas Volume Converters

Gas volume converter approved for measuring gas flow for taxable billing. Pressure and temperature compensation guarantees accurate measurements.

Pressure Regulators

Self-powered and pilot-operated pressure regulators for natural and liquid gas. Also available with integrated safety lock and safety valve. Multiple pressure and adjustment ranges.

Safety Devices

- Upper and/or lower limit safety shut-off valves
- Spring-loaded safety valves

Filters

- Cellular filters for natural gas
- Cartridge filters for natural gas
- Heat exchangers
- Liquid separators/coalescers
- Filter cartridges

Vaporizers and Gas Cylinder Filling Stations

- Electric heated and hot water heated liquefied gas vaporizers
- Gas cylinder filling scales and fully equipped filling stations
- Pumps, piping equipment, valves, filters

Safety Devices

- Threaded safety valves for both cold gases and liquid media (CO_2, LNG, Nitrogen, Hydrogen)
- Safety valve accessories, for example, changeover valves and "Candy Cane" connections before the safety valve.

LPG & LNG Tanks and Regasification Solutions

- LNG tanks and vaporizers
- LPG tanks

LPG & LNG Filling Stations

- LPG dispensers, pumps, hoses, nozzles
- LNG tank and filling equipment for heavy vehicles

LPG & LNG Tank Equipment

- Float meters for measuring liquefied gas tank level
- In addition to attached display, also sends signals to your system via pulse or current
- Multiple material options allow use with many different liquified media

Our Principals

AIRTEC
ALFA Valvole
Aplisens
ARAKO
ARI-Armaturen
ARMATURY Group
AS-Schneider
AWH Armaturenwerk
AZ-Armaturen
BEP E-rational
Bopp&Reuther Messtechnik
Bollin
Descote
Dresser Utility Solutions
Edward Flowserve
Elis
FAS Flüssiggas-Anlagen
FEMA
FW-FERNWÄRME-TECHNIK
Garlock
gAvilar
GESTRA
G.T. Attuatori
G-Team
HEROSE
HOAF Infrared Technology
Itron
KÜHME Armaturen
LDM
MAPRO
Marchel
Mark Climate Technology
Max-Air (Emme Technology)
MEDENUS
METRA Energie-Messtechnik
Niezgodka
NORIS Armaturen
Nuova Fima
OMB Valves
ONIS
Penta
PROTEGO
REGO
Rochester Sensors
RTK
RT Valvole
SART Von Rohr
Schünemann
SIME
Sistag Wey
Sofis
TAG SRL
Tecofi
Thielmann Energietechnik
Unitecno
VAF Instruments
Valvosider
ZOOK


LDPE
TA-
2015
Konwell

Contact Information

Finland

Oy Konwell Ab
www.konwell.fi/en

Helsinki

Ruosilantie 10
00390 Helsinki
Call: +358 9 894 6480

konwell@konwell.fi
www.konwell.fi

Oulu

Yrttipellontie 1 D
90230 Oulu

Nokia

Pirkkalaistie 1
37100 Nokia

Kouvola

Kauppalankatu 24 B 17
45100 Kouvola

Kotka

Kankitie 3B, hallli 21
48400 Kotka

Kuopio

Viestikatu 3
70600 Kuopio

Baltics

OÜ Konwell ES
www.konwell.ee

Tallinn

OÜ Konwell ES
Liimi 6/1
EE11911 Tallinna
Call: +372 6 217 820
Fax: +372 6 217 829

konwell@konwell.ee
www.konwell.ee

Riga

Brīvības iela 403
Rīga, LV-1024
Call: +371 232 08454

konwell@konwell.ee
www.konwell.fi/en/