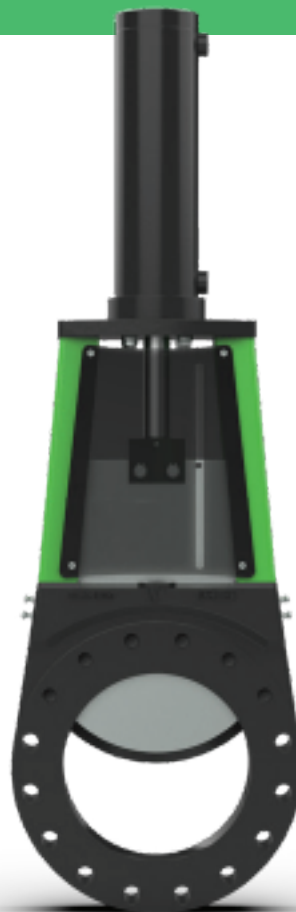


We develop and manufacture industrial valve solutions through constant, orderly and structured innovation.

We believe that progressing is taking the step, being the first, from the perseverance and creativity of a professional, ingenious and motivated team.

Innovation in movement, easily adapting and overcoming every single obstacle.

## Flowing innovation



Engineering services to determine flow coefficient and capacity for valves.



Finite Element Analysis for components and assemblies, including a wide variety of loads, pressures, temperature distributions, etc...



Valve sizing and selection.



Customized special designs.



Component replacements and special parts.



NDE tests such as VT, RT, PT, MT and UT.



Equipment start-up supervision.



Maintenance works.

## Quality

Our Quality Management System ensures every product is delivered with the required quality level and comply with all the established requirements. It conforms to the quality management ISO 9001:2015 standard, as well as the following directives:

- | Pressure Equipment Directive PED 2014/68/UE.
- | Machinery Directive 2006/42/EC.
- | Explosive Atmosphere Directive 2014/34/UE.



# Roosevelt XR

## Guided shear gate knife valves

our company ,every development has in-house engineering and manufacturing facilities for a wide range of industrial applications anywhere in the world.

We work from the delivery and dedication,from the person.Always open to any need,project,industry and customer.With the proactivity and intelligence necessary to face any challenge proposed to us. An engineering and manufacturing team that goes hand in hand with the customer,to always offer a reliable product,with high performance and durability.

Our Roosevelt XR Type guided shear knife gate valves are clasified as following,depending on face to face and design pressure:

XRS MODEL GUIDED SHEAR KNIFE GATE VALVES

XRH MODEL HIGH PRESSURE GUIDED SHEAR KNIFE GATE VALVES

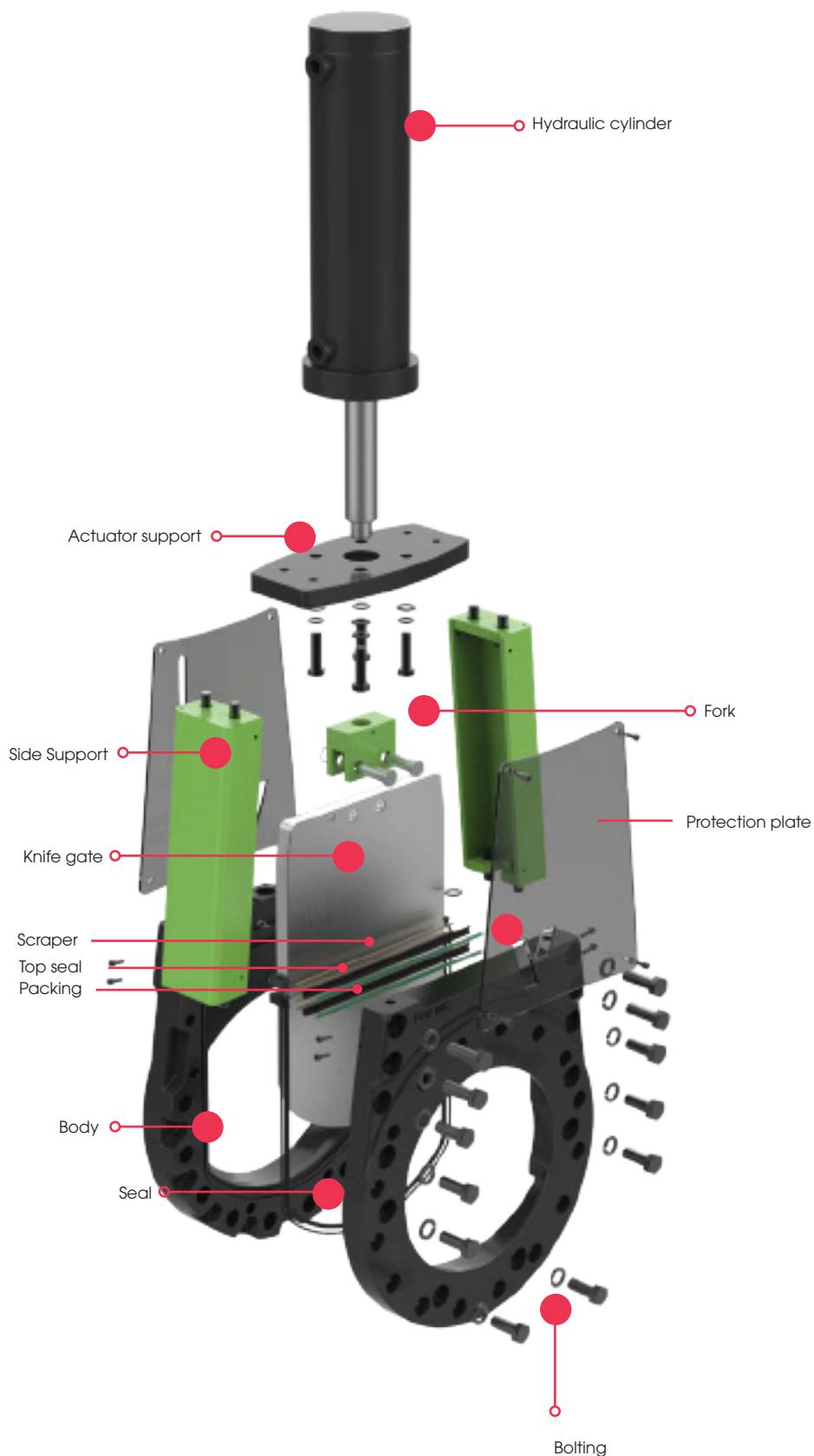
XXR MODEL EXTREME PRESSURE GUIDED SHEAR KNIFE GATE VALVES

## Beyond the valve

Roosevelt XR Guided shear knife gate valves are engineered and built to handle extreme working conditions in any media. In addition, our XR Type valves are guided during their entire open-close operation,removing any deflection when solids are encountered.

The main characteristic of the guided shear knife gate valve is that it provides a full continuous flow.Thanks to the combination of its specially designed shearing tip,when fitting the primary seal zero-leakage is enabled. Installation of this equipment is done between pipeline flanges,which flange drilling can be made according to customer specifications or our standard.





## Main features

---

Working pressures up to 50bar.

---

High flow rates and low pressure drops.

---

Tailor-made solutions.

---

Epoxy coating for carbon steel components.

---

Sizes up to DN600.

---

Bi-directional leakproof design.

---

Rising or non-rising stem design.

---

On/Off service.

---

ISO 5210 drillings for interchangeable actuators.

---

Pneumatic, Hydraulic, Electric or manual actuation.

---

Working temperatures up to 200°C.

---

Flange drillings to most standards.

---

Special materials or treatments on request.

---

Robust and reliable design.

---

Flushing cover included.



SIZE

UP TO  
**DN600**

DESIGN  
PRESSURE

UP TO  
**50bar/  
725psi**

WORKING  
TEMPERATURE

UP TO  
**200°C**

ON  
REQUEST

**CUSTOMED  
DESIGN**

## Specially designed shearing tip

### shear any solid, avoid any problems

The combination of the internal gate guides and the shearing tip removes any option of deflection when solids encountered. Any solid hit by the shearing tip is sheared and shifted out, preventing any warping or deflection that could result in atmospheric leakage.

## Double seal for zero leakage ensurance

### designed to avoid atmosferic leakage

Thanks to the material shearing and ensuring material cleaning ensures a zero-leakage rating when primary seal meets the gate. The main function of the secondary seal is to avoid any possible atmosferic leakage.

In order to allow this low discharge rate, the precision manufacturing creates a metal-to-metal seat between the gate and the body when closed.

## Engineered to last

### even for extreme working conditions with abrasive fluids.

From optimized parametric design 3D modeling tools, to Finite Element Analysis (FEA) and Computational Fluid Dynamics (CFD) systems, our reliable guided shear knife gate valves are ready to be manufactured with confidence.

Every component is designed and validated by top-notch softwares by the Roosevelt engineering team.

---

## Mining and minerals processing

The Mining and mineral processing Industry has hundreds of different critical processes, from the grinding circuit through to the refined or smelted products, that require reliable and cost-effective engineered valve solutions. Knife gate valves are engineered and built to handle extreme working conditions for abrasive fluids and high pressure services. In addition, our Slurry knife gate valve Series provide a bubble tight shutt-off and extended service life for the most demanding mining and mineral processing applications.

Slurry transfer • Cyclones • Coal Transport • Ore Processing • Filter Tanks • Thickeners • Tailings • Pelletizing • Sand and Silica Reduction • Dewatering Systems Mud Washing • Acid Leaching • Grinding Circuit • Ball Mills

---

## Pulp and paper

Finding innovative ways of increasing production yields while lowering operating costs is mandatory to succeed in the pulp and paper applications. Our Knife gate valves are the ideal solution for the pulp and paper industry.

Cyclone Discharge • Recycled Paper • Kraft Fiberline • Hydrocyclone • pH Addition Black Liquor • Green Liquor Lime • Paper Additives • Batch Digester Gas Relief • Brown Stock Rejects • Boiler Feedwater

---

## Power generation

Plant availability can be affected by unplanned downtime, unpredictable power generation, high maintenance costs, and adherence to changing environmental and safety regulatory requirements. Knife gate valves solutions are flexible and can be specially-made to fit customer needs.

Coal Handling • Incineration Plants • Bottom Ash • Wet Lime Scrubbers • Co-Generation • Dewatering Pump Isolation • Hydro-cyclone Feed • Coal Combustion Residuals • Filter Feed Tank Isolation

---

## Water treatment

Valves for waste water applications require an excellent flow characteristic and be able to withstand the media settling. Roosevelt XR type push-through knife gate valves incorporate unique design features to provide a reliable operation able to cut through difficult dry media.

Wastewater Treatment • Sewage Treatment • Effluent treatment plant • Equalization tank mixing systems • Salt Crystallization • Raw Water Inlet • Influent Flow Equalization • Grit Removal Systems • Scum Control • Waste Activated Sludge • Lime Slurry and pH Control