



# ORBINOX



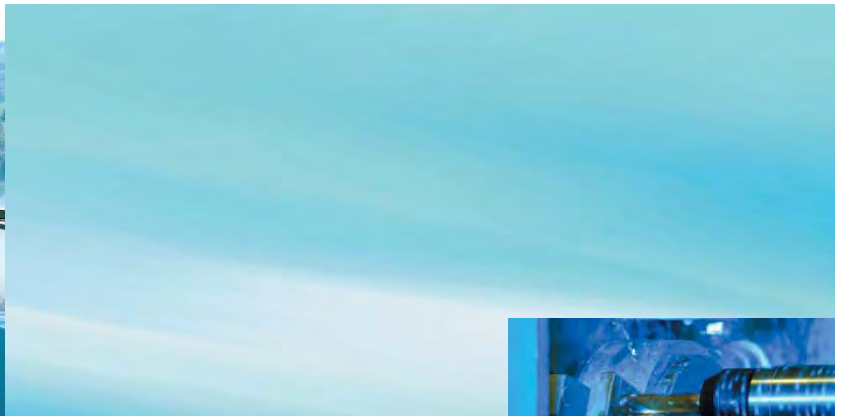
PRODUCT RANGE



Anoeta, Spain

#### Company Profile:

**Orbinox** was founded in Tolosa (northern Spain) during the late 60's as a manufacturer of knife gate valves servicing the local pulp and paper industry. Recognizing that success is built on understanding customers' processes and by finding innovative solutions for difficult applications, we focused on increasing our engineering capabilities and developed many engineered valves for diverse industrial sectors. In the early 80's the company introduced the knife gate valve line in North America and other parts of the world. Today we have manufacturing plants in Spain, Canada, and India, sales and distribution centers in the USA and the UK with agents worldwide.

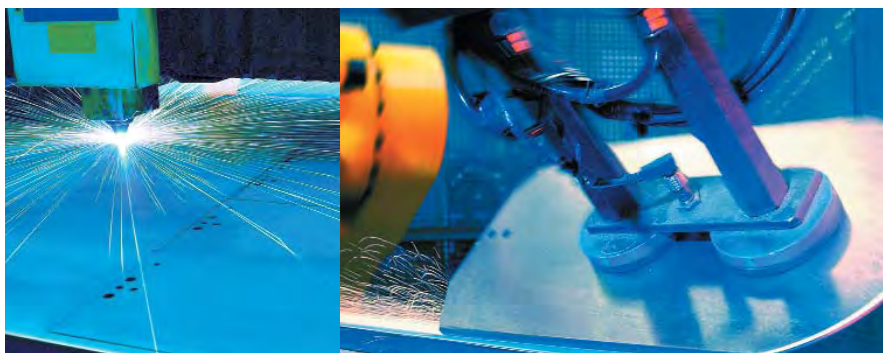


ORBINOX offers a wide range of knife gate valves for handling diverse applications in the water, wastewater, bulk handling, pulp & paper and other process industries. With more than 40 years experience in the industrial market worldwide, we have become a well-known innovative knife gate manufacturer responding to new industrial developments.



Our dedicated engineering staff continues to respond to our customers' needs with new and competitive products including custom engineered valves that effectively solve problems in many industrial sectors.

Our state-of-the-art manufacturing facilities and advanced technology assures accuracy, durability, and reliability of our products, which enhances customer profitability and satisfaction. With representation covering the five continents, we are committed to the demanding critical needs of our customers who keep us in the forefront of technology.







Laval, Canada



Coimbatore, India

#### Quality Management System For Superior Performance:

ORBINOX'S ISO 9001:2000 certification ensures high standards of design and process capability. Thanks to our experienced and dedicated employees' participation in all fields of the organization, we continue to provide a superior quality product and a high performance service.

Our engineering department uses the latest technology of CAD software in the design stage of the product and also analyzes critical components with Infinite Element Analysis software.



ORBINOX production plants utilize modern machining centers and automation technology enabling us to handle large production runs and customized orders. With our international manufacturing and distribution network, we offer quick access to our products worldwide.

#### Company Philosophy:

Our mission is to meet the needs of our customers and to continue improving our products and services through teamwork, training and performance. The company's growth is balanced on years of experience from research, design, production and marketing with a firm determination to maintain recognition of its quality and service on the market and to remain competitive in the knife gate valve industry.



# KNIFE GATE VALVES

## EX

Wafer knife gate valve

## ET

Knife gate valve  
acc. to MSS SP-81



|                  | EX   | ET   |
|------------------|--|--|
| APPLICATION      | General service (solid loaded fluids)<br>pulp & paper, waste water, solids,...   | General service (solid loaded fluids)<br>pulp & paper, waste water, solids,...   |
| SIZES            | DN 50 to DN 1200 (2" to 48")   | DN 50 to DN 750 (2" to 30")  |
| WORKING PRESSURE | DN 50 - 250 (10 bar)/2"-10" (150 psi)<br>DN 300 - 400 (6 bar)/12"-16" (90 psi)<br>DN 450 (5 bar)/18" (75 psi)<br>DN 500-600 (4 bar)/20"-24" (60 psi)<br>DN 700-1200 (2 bar)/28"-48" (30 psi) | DN 50 - DN 600 (10 bar)<br>2" - 24" (150 psi)<br>DN 750 (7 bar)<br>30" (100 psi) |
| FLANGE DRILLING  | PN10<br>ANSI 150 BST D<br>Other on request   | PN10<br>ANSI 150<br>Other on request   |



# TL

Through conduit  
knife gate valve



# CR

Round & Square port  
knife gate valve



# DT

Double gate  
knife gate valve



|                     | TL  | CR   | DT   |
|---------------------|---|--|--|
| APPLICATION         | Solid loaded fluids (concentration > 5%)<br>pulp, rejects, solids,...   | Contaminated pulp and difficult<br>conditions (junk traps, cleaners,...) | Contaminated pulp or very high<br>concentration (pulp, rejects,...)  |
| SIZES               | DN 50 to DN 800 (2" to 32")   | DN 50 to DN 600 (2" to 24")  | DN 100 to DN 600 (4" to 24")   |
| WORKING<br>PRESSURE | DN 50 - 250 (10 bar)/2"-10" (150 psi)<br>DN 300 - 400 (6 bar)/12"-16" (90 psi)<br>DN 450 (5 bar)/18" (75 psi)<br>DN 500-600 (4 bar)/20"-24" (60 psi)<br>DN 700-800 (2 bar)/28"-32" (30 psi) | DN 50 - 600 (10 bar)/2"-24" (150 psi)                                    | DN 50 - 250 (10 bar)/2"-10" (150 psi)<br>DN 300 - 400 (6 bar)/12"-16" (90 psi)<br>DN 450 (5 bar)/18" (75 psi)<br>DN 500-600 (4 bar)/20"-24" (60 psi) |
| FLANGE<br>DRILLING  | PN10<br>ANSI 150<br>Other on request  | PN10<br>ANSI 150<br>Other on request                                     | PN10<br>ANSI 150<br>Other on request   |

## KNIFE GATE VALVES

# EB

Bi-directional  
knife gate valve

# VG

Rubber sleeve  
knife gate valve



|                  | EB   | VG  |
|------------------|--|---|
| APPLICATION      | General service (solid loaded fluids)<br>waste water, sludges,...  | Abrasive slurries<br>(mining, petrochemical,...)  |
| SIZES            | DN 50 to DN 1200 (2" to 48")   | DN 50 to DN 600 (2" to 24")   |
| WORKING PRESSURE | DN 50 - 250 (10 bar)/2"-10" (150 psi)<br>DN 300 - 400 (6 bar)/12"-16" (90 psi)<br>DN 450 (5 bar)/18" (75 psi)<br>DN 500-600 (4 bar)/20"-24" (60 psi)<br>DN 700-1200 (2 bar)/28"-48" (30 psi) | DN 50 - 150 (6 bar)/2"-6" (90 psi)<br>DN 200-250 (5 bar)/8"-10" (50 psi)<br>DN 300 (4 bar)/12" (60 psi)<br>DN 350-400 (3 bar)/14"-16" (45 psi)<br>DN 450-600 (2,5 bar)/18"-24" (38 psi) |
| FLANGE DRILLING  | PN10<br>ANSI 150<br>Other on request   | PN10<br>ANSI 150<br>Other on request  |





# XC

Hopper shape  
knife gate valve



# BC

Square port  
knife gate valve



|                  | XC   | BC  |
|------------------|--|---|
| APPLICATION      | Bulk handling (powder, pellets,...)<br>silo outlet applications  | General service (solid loaded fluids)<br>bulk handling  |
| SIZES            | DN 50 to DN 600 (2" to 24")  | 200x200 to 600x600 (other on request) (8"x8" to 24"x24")  |
| WORKING PRESSURE | Seat opposite pressure<br>DN 50 - 250 (3 bar)/2"-10" (45 psi)<br>DN 300 - 400 (2 bar)/12"-16" (30 psi)<br>DN 450 (1,5 bar)/18" (23 psi)<br>DN 500-600 (1 bar)/20"-24" (15 psi) | 200x200 (2,5 bar)/8"x8" (38 psi)<br>250x250 and 300x300 (2 bar)/10"x10" and 12"x12" (30 psi)<br>350x350 and 400x400 (1,5 bar)/14"x14" and 16"x16" (23 psi)<br>450x450 (1,25 bar)/18"x18" (19 psi)<br>500x500 and 600x600 (1 bar)/20"x20" and 24"x24" (15 psi) |
| FLANGE DRILLING  | PN10<br>ANSI 150<br>Other on request   | ORBINOX Standard  |

# ACTUATORS

Handwheel  
(rising stem)



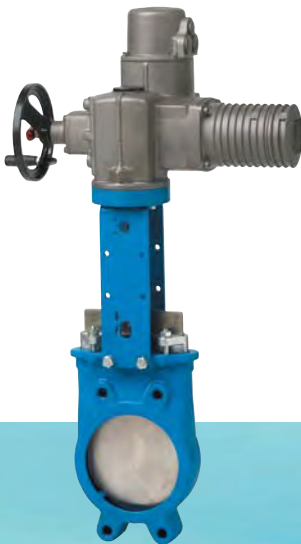
Handwheel  
(non rising stem)



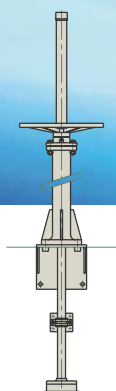
Pneumatic  
double acting



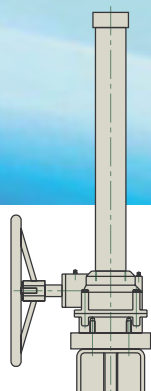
Electric



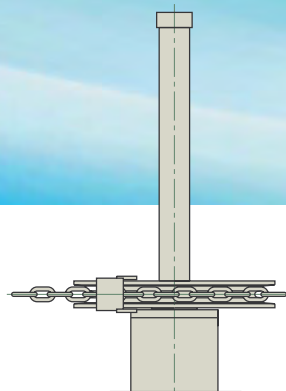
Lever



Stem extension  
Floorstand



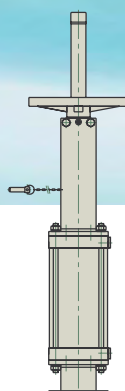
Bevel Gear



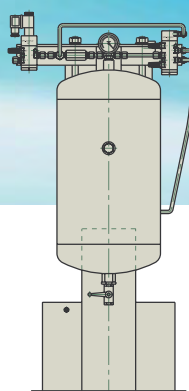
Chainwheel



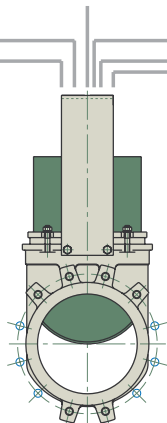
Pneumatic  
single acting



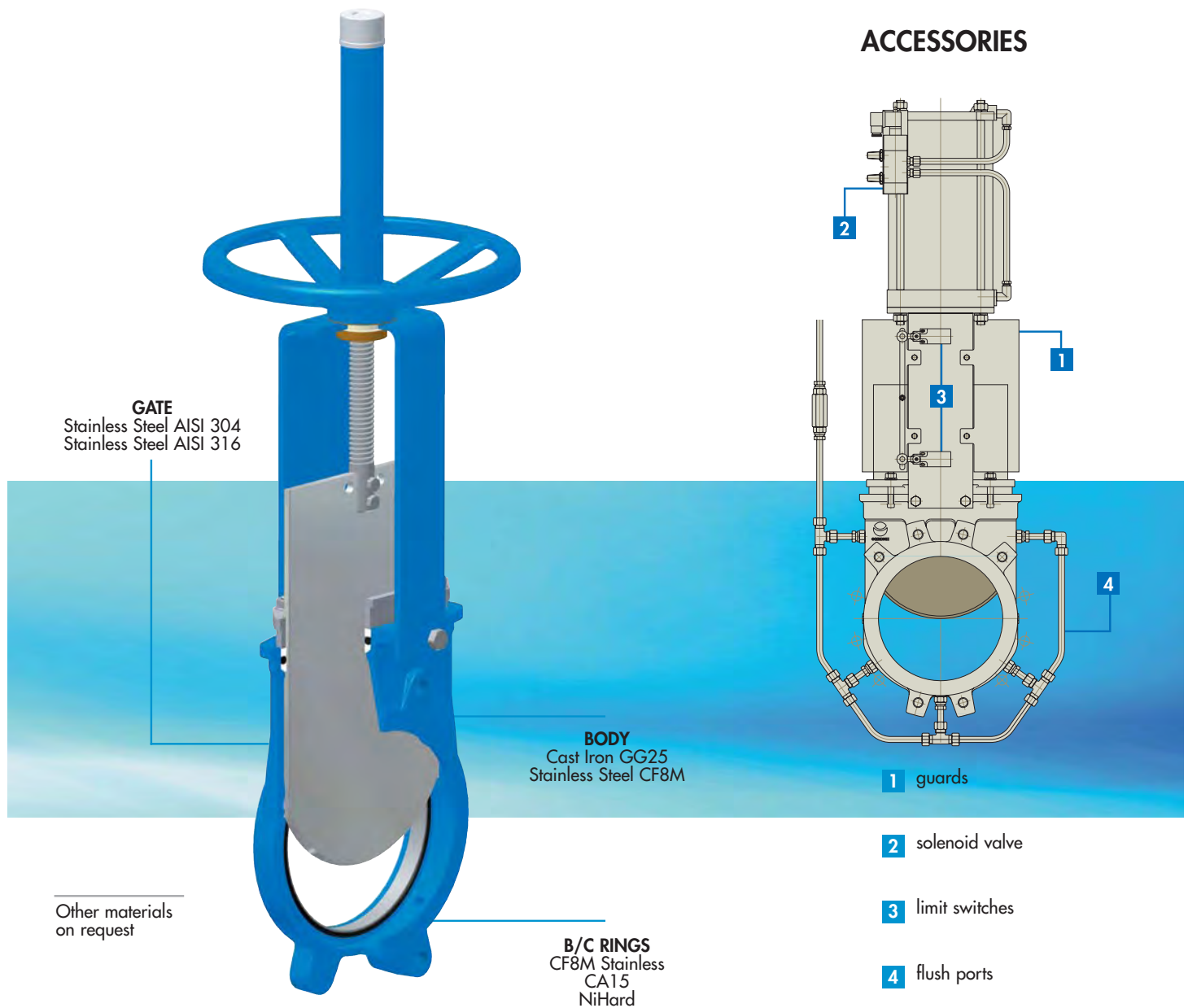
Handwheel emer-  
gency actuator



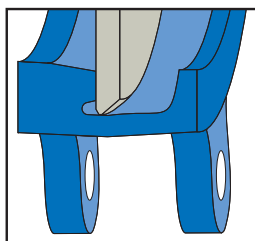
Pneum. emergency  
actuator



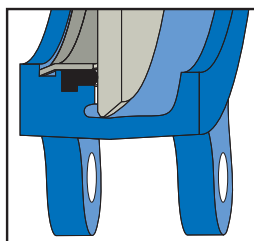




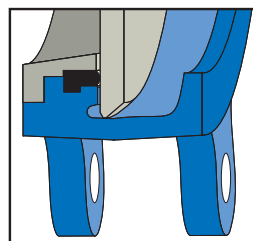
## SEATING OPTIONS



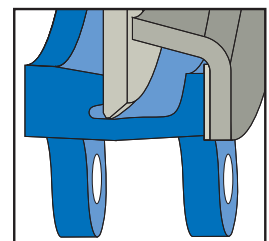
metal to metal



resilient A type (standard)



resilient B type (reinforced)



deflecting cone C type

## OTHER STANDARD VALVES

# RM

Tilting disc  
check valve



# AT

Split body  
knife gate valve



# VP

Split body bi-directional  
knife gate valve



# 3/4V

3 / 4 way  
valve



# TP

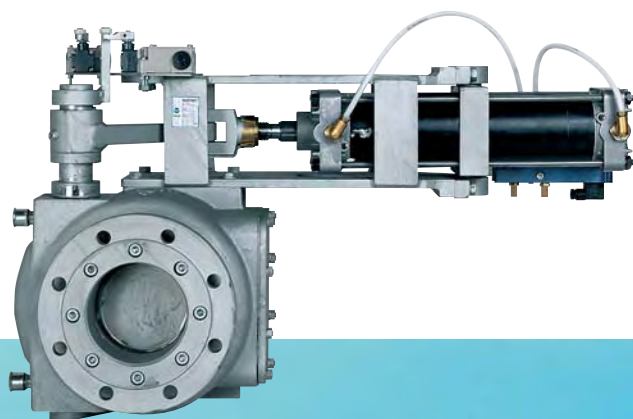
Sampling valve



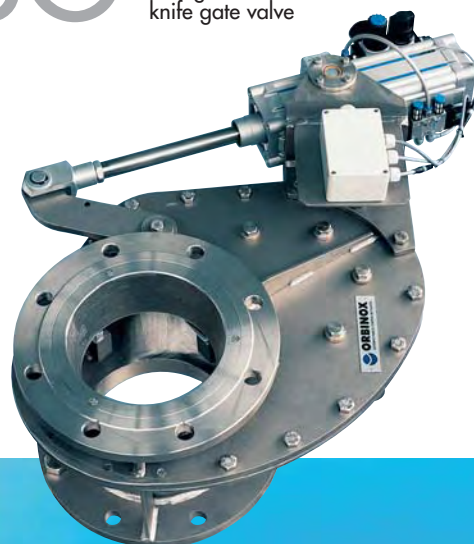
|                     | RM   | 3/4V                           | AT  | VP  | TP                |
|---------------------|--|--------------------------------|---|---|-------------------|
| APPLICATION         | Solid loaded fluids<br>pulp & paper, waste water | Pulp & paper                   | Demanding applications<br>pulp & paper, food industry,... | Demanding applications<br>bi-directional    | Pulp & paper      |
| SIZES               | DN 40 to DN 900<br>(1 1/2" to 36")               | DN 80 to DN 300<br>(3" to 12") | DN 50 to DN 1000<br>(2" to 40")                           | DN 50 to DN 600<br>(2" to 24")              | DN 40<br>(1 1/2") |
| WORKING<br>PRESSURE | Up to 25 bar (375 psi)<br>depending on size      | 10 bar (150 psi)               | Up to 10 bar (150 psi)<br>depending on size               | Up to 10 bar (150 psi)<br>depending on size | 10 bar (150 psi)  |



## SD Swing disc valve



## SG Swing knife gate valve



## 3VY 3 way diverter valve

|                     | SD   | SG                                      | 3VY                         |
|---------------------|--|---|-----------------------------|
| APPLICATION         | Bulk handling<br>abrasive services (fly ash,...) | Bulk handling<br>demanding applications | Bulk handling               |
| SIZES               | DN 100 to DN 300 (4" to 12")                     | DN 100 to DN 300 (4" to 12")            | DN 50 to DN 250 (2" to 10") |
| WORKING<br>PRESSURE | up to 3 bar (45 psi)                             | up to 3 bar (45 psi)                    | up to 3 bar (45 psi)        |

# SPECIAL ENGINEERED VALVES

CW

Single wedge  
knife gate valve

WS

Fabricated Single wedge  
knife gate valve



|                  | CW   | WS   | BONNETED VALVES   |
|------------------|--|--|---|
| APPLICATION      | Solid loaded / hazardous fluids<br>high pressure | Solid loaded / hazardous fluids<br>high pressure | Solid loaded / hazardous fluids<br>available for EX, ET, TL, XC |
| SIZES            | DN 80 to DN 900 (3" to 36")                      | up to DN 2400 (96")                              | up to DN 600 (24")  |
| WORKING PRESSURE | Up to 64 bar (960 psi)<br>depending on size      | Up to 25 bar (375 psi)<br>depending on size      | Up to 10 bar (150 psi)<br>depending on size                     |



# WALL & CHANNEL SLIDE GATES



Wall (4 side sealing) & Channel (3 side sealing) Slide Gates, Swing check gates with round or rectangular port,... mainly used in waste water treatment plants, irrigation, hydro power stations...

Fabricated in carbon or stainless steel construction, with an elastomer sealing for bubble tight shut-off. Available in a wide range of dimensions and design pressures with either handwheel, pneumatic, electric or hydraulic actuators.

ORBINOX manufactures according to the AWWA C561-04 standard.

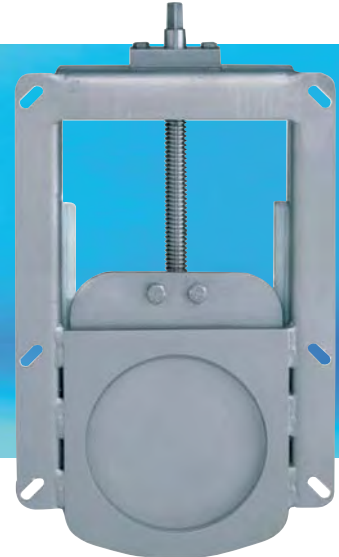
CC Channel slide gate



MU Wall slide gate



MC Round wall slide gate



RR Round swing check gate



RC Rectangular swing check gate



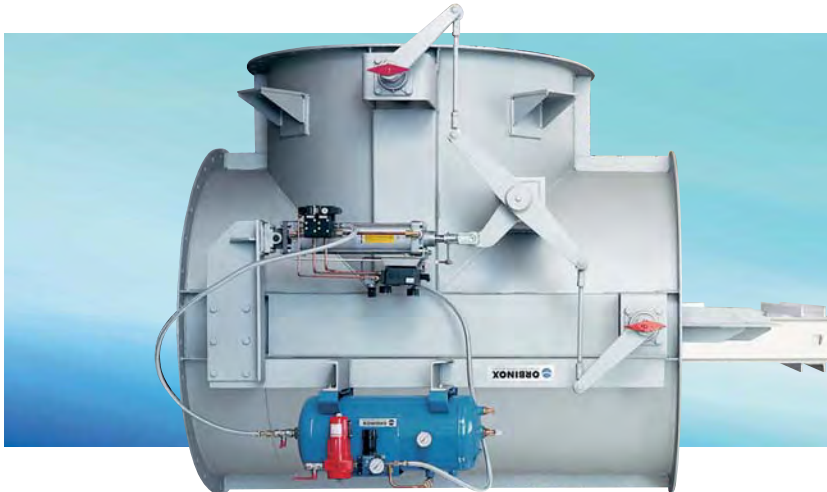
# DAMPERS

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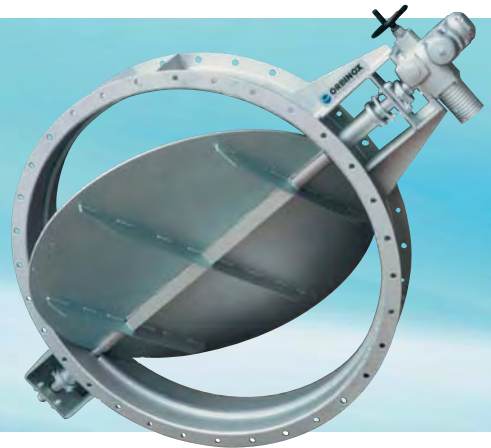
Industrial dampers for regulating, isolating or distributing (3 way) low pressure and high temperature gases for use in cogeneration systems, power plants, steel works,...

Fabricated in a wide variety of different materials of construction and designs (air sealing,...) depending on sizes and working conditions.  
Available with pneumatic, electric, hydraulic or manual actuator.

**DI** Multiple diverter damper



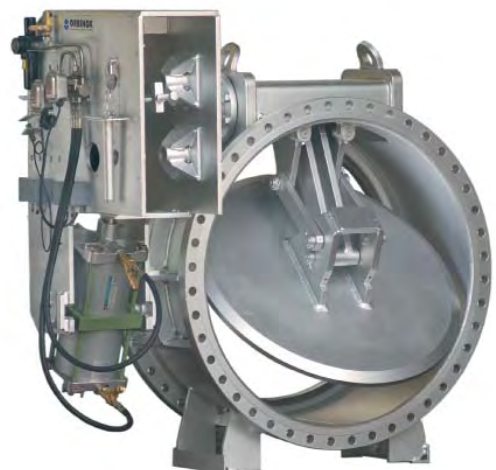
**ML** Butterfly damper



**DV** Diverter damper



**MP** Three lever valve



# VALVES FOR HYDRAULIC WORKS



ORBINOX designs and manufactures special valves and gates for regulating and closing flow through the outlet works of dams, and ducts in pumping and hydro power stations.

Rugged fabricated construction, available in a wide range of sizes and special materials to match specific requirements and depending on the head under which the valve will operate.

Available with hydraulic, electric or manual actuator.

## BU

Bonneted gates



## CT

Radial gates



## CV

Roller gates



## CH

Howell-bunger valves



## MB

Double eccentric butterfly valve

