

 **flowrates**

Expect more
from your valves



A word from the CEO “

Flowrates' DNA is based on innovation, responsiveness and the quest for quality, embodied by committed teams who bring our ambition to be a trusted partner for the industry to life every day.

Flowrates represents the culmination of more than 12 years of expertise in the design, manufacturing and marketing of butterfly and gate valves within the European industrial landscape. Drawing on valuable lessons learned from leading manufacturers, we have carefully integrated their processes, challenges and best practices into a business model that redefines industry standards.

Our vision is clear: to become a trusted leader in providing innovative and sustainable solutions that exceed the highest expectations. Our dedicated team prides itself on providing expertise and personalized service, actively contributing to Europe's economic growth and industrial excellence.

VALUES



REACTIVITY



CLARITY



EFFICIENCY



"We have built a robust and innovative infrastructure designed to uphold our commitments."

THEY BELIEVE IN US



Rudolf Grams

Germany

When I handle a project to Flowrates, I know it will go well. Their reactivity and quality are highly appreciated for the German market.



Niels Hau

Denmark

I have worked with Elia for the last decade and the innovative process built by Flowrates brings a lot of value on the table.



Michal Wronski

Poland

What I always appreciated at Flowrates is their know-how and problem solving attitude. Elia has been particularly helpful identifying our project needs and providing most efficient solutions.

OUR STRENGTHS



Technical Expertise

Focused Specialization:

Experts in butterfly and knife gate valves, offering both standard and custom solutions.

Mastery of Complex Applications:

Reliable equipment for the most demanding industrial environments.

Industrial Know-How:

Expertise built on years of collaboration with leading industry players



Strong European Partnerships

Exclusive collaborations with top European manufacturers sharing our values.

Renowned specialists in advanced technologies, ensuring performance and reliability.

Certified, reliable products delivered swiftly through trusted relationships.





Innovation and Technology

In-house software for precise project tracking and Flowrates' exclusive valve configurator.

Innovative website: track your orders and customize your equipment effortlessly.

Continuous optimization to deliver tailored solutions with unmatched responsiveness.



Partner Satisfaction

Tailored support from project design to completion.

Technical follow-up and after-sales service to build lasting trust.

A European network of distributors and agents to stay close to our clients.

Our markets expertise



Energy



Chemical



Steel



Water



Pulp & paper



Cement



Flowrates supports industrials and resellers in water, energy, chemistry, and heavy industry sectors. Active accros Europe !



European Partners & Collaborations



We collaborate with renowned European manufacturers, recognized for their expertise and exceptional production quality. These partnerships enable us to deliver tailored solutions that meet the highest industry standards. At Flowrates, we oversee every step, from engineering to delivery, to provide valves perfectly suited to your specific needs.

Certification ISO 9001 / (ISO 9001 certification)

Certification européenne CE-PED / (European CE-PED certification)

Certification de sécurité SIL3 / (SIL3 safety certification)

Certification anti-incendie API 607 / (API 607 fire certification)

Certification ATEX anti-explosion / (ATEX explosion-proof certification)

Certification d'hygiène alimentaire US FDA / (US FDA food hygiene certification)

Certifications eau potable ACS / Kiwa / DVGW / (Drinking water certifications ACS / Kiwa / DVGW)

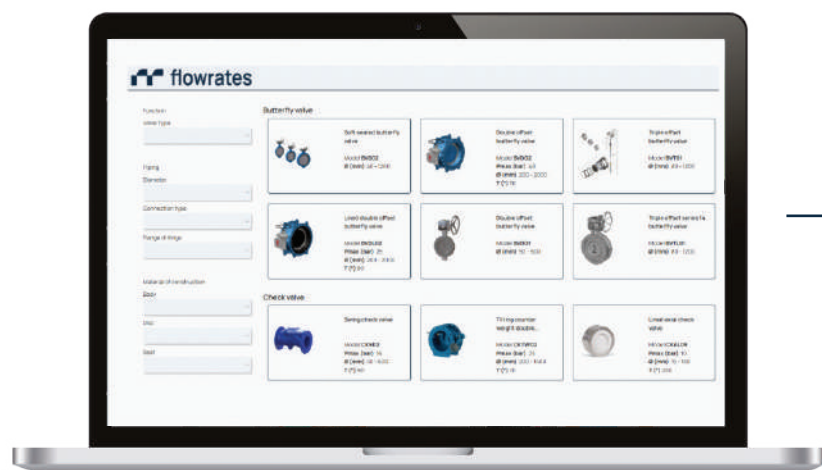
ISO 14901 : Exigences et méthodes d'essai pour les revêtements époxy / (ISO 14901 requirements and test methods for epoxy coatings)



Our commitment to innovation, our passion for precision



Your valve configurator
Visit our webshop and find:



Our Documentation



Our Technical Sheets



Speed: accelerated responses to requests.



Personalization: configure the valve to each need.



Support: technical support in real-time video.



Our 3D plans



Reliability: After-sales service, Technical support



User area: Order tracking. Easy recommendations and discounts.

Feel free to contact our team for any
information or price requests!



By Flowrates we :

Our teams are trained and dedicated to help you select the right equipment to improve your operations.

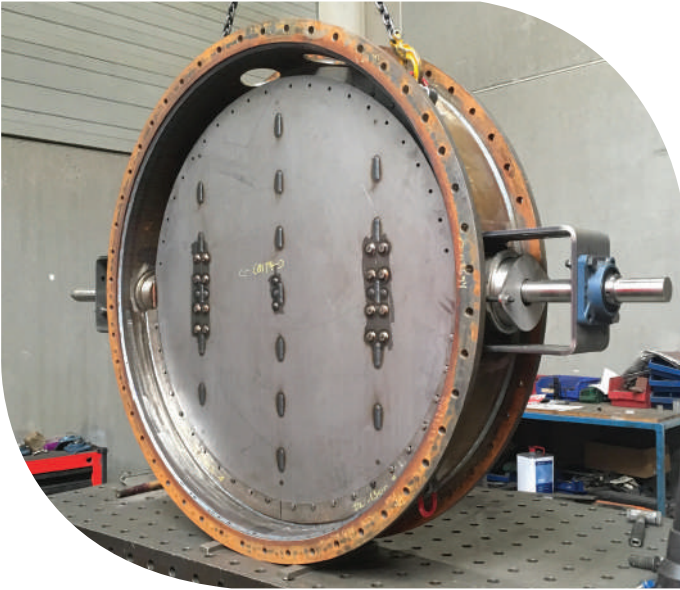
- High-performance solutions, tested and certified
- Order standard solutions instantly, with controlled pricing
- Create added value with dedicated sales representatives
- We carefully study your process to improve its operation



Production



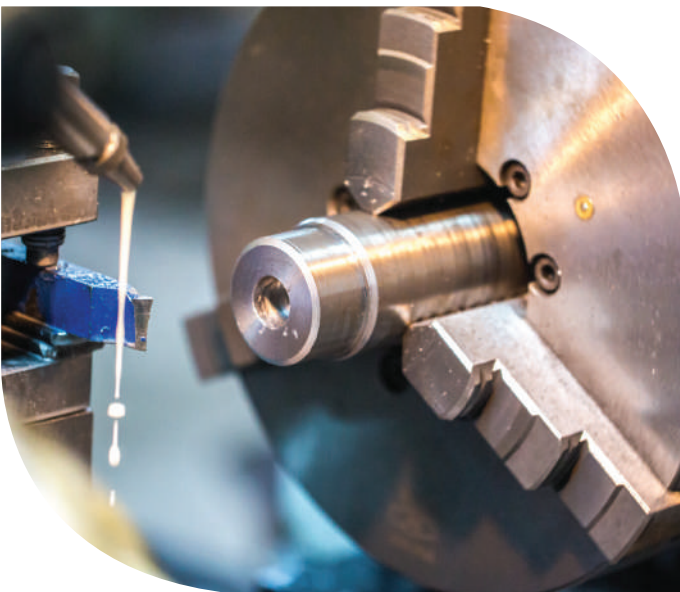
Through our trusted partners, we handle all types of customized assembly, mounting, and machining. This includes pneumatic actuators, solenoid valves, manual override systems, electric actuators, positioners, limit switches, special seals,



Butterfly valve under assembly, prior to welding and coating application



Welding valve's bodies



Assembling



All manufacturing is carried out by skilled and passionate technicians.

Adaptation of actuators (pneumatic, electric)

Assembly of solenoid valves, limit switches

Manual emergency controls

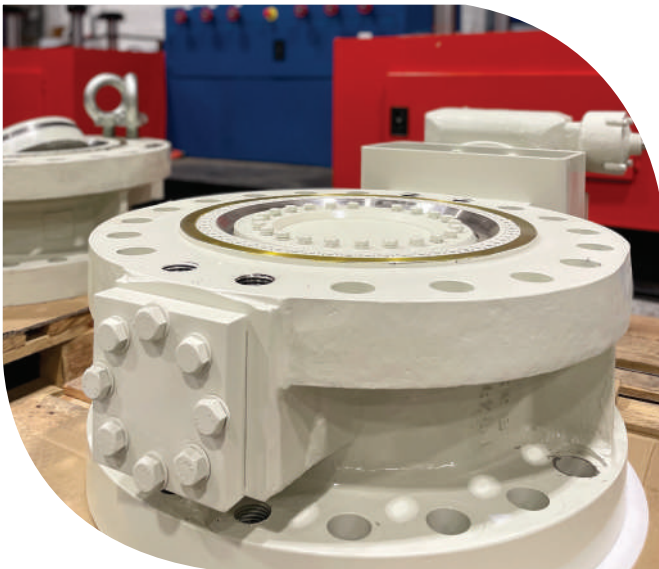
Positioners, special seals, and much more



Quality Control Test Benches



Material Inspection, Dimensional Control,
Leak Tests per EN12266-1. and API598
Torque Control and Operational Testing
Painting thickness controls



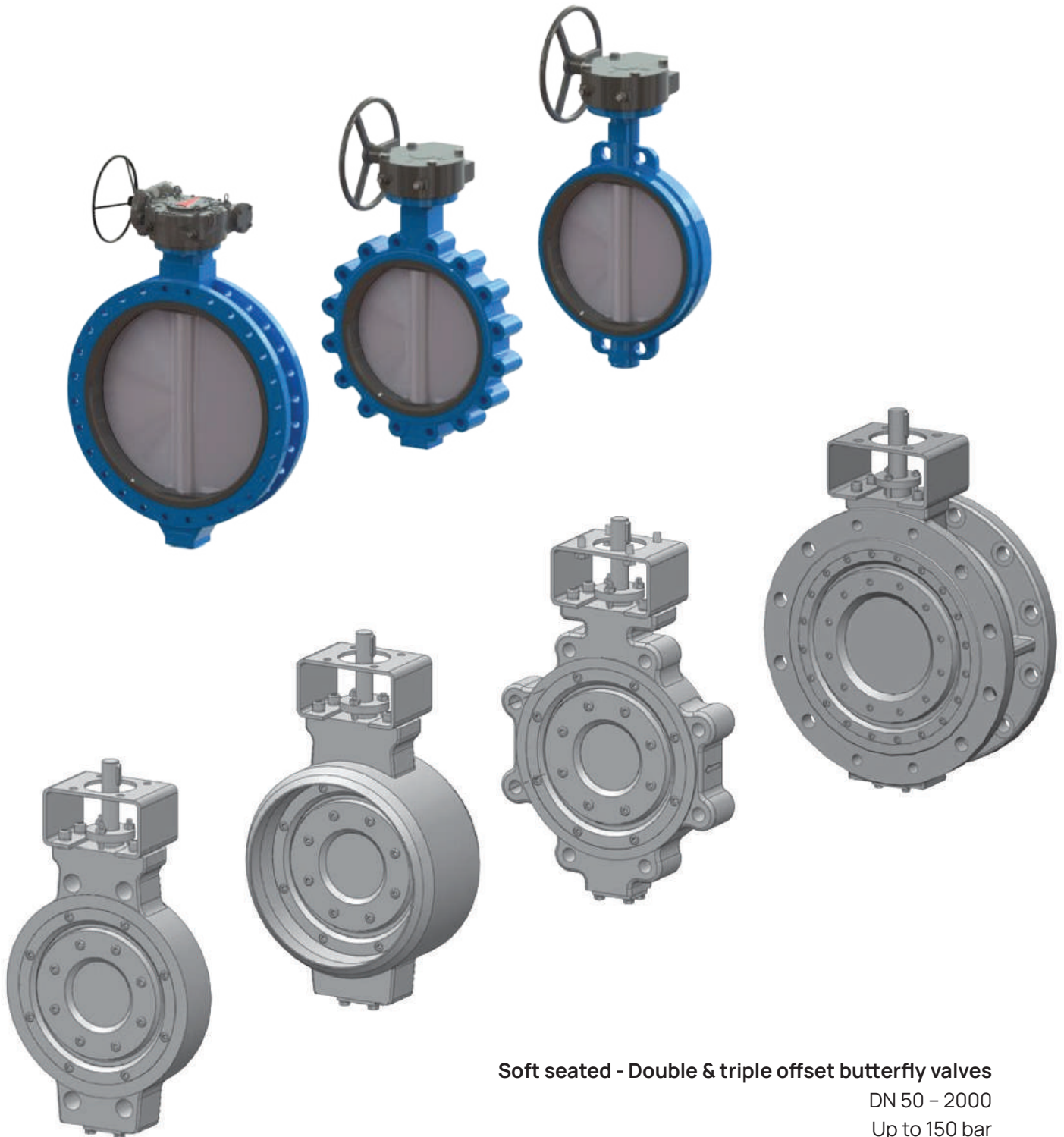
100% of the valves are tested as per
EN12266-1 or AP1598 standards



Conception Design Development Innovation
3D Drawings for Customers Projects



Butterfly Valves



Soft seated - Double & triple offset butterfly valves

DN 50 – 2000

Up to 150 bar

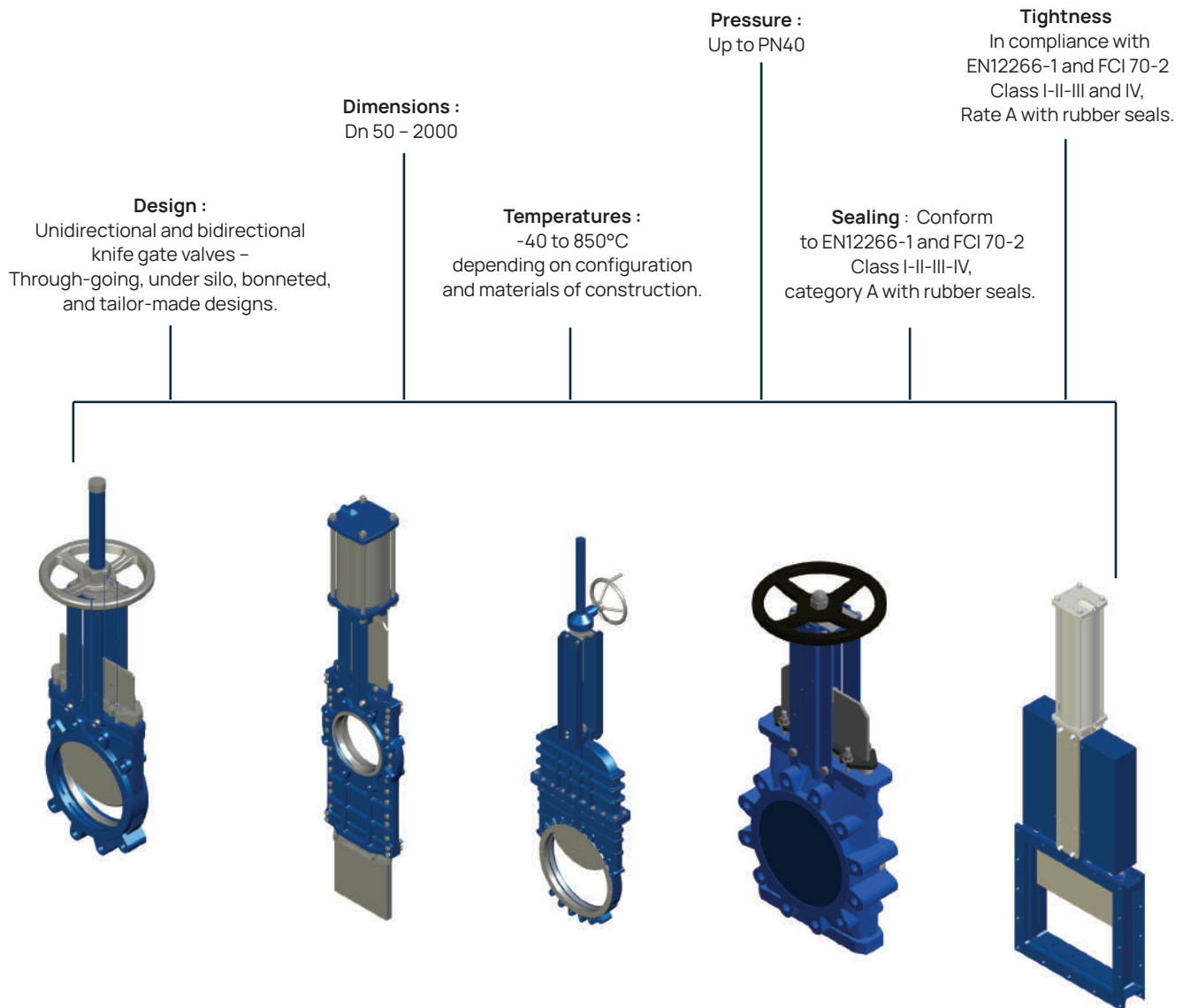
-30°C to 140 °C Soft seated

-50°C to 280°C Double excentric

-196°C to 850°C Triple excentric

Leak test acc. to : EN 12266-1 rate A – B / API 598 ANSI/FCI 70-2 Class IV – V and VI

Knife Gate Valves



Damper valves



Pressure :

< 0.5 bar
< 3.0 bar (with PED Directives)

Tightness

Class I - II - III - IV acc. to
FCI 70-2 or 100%
by air injection

Dimensions :

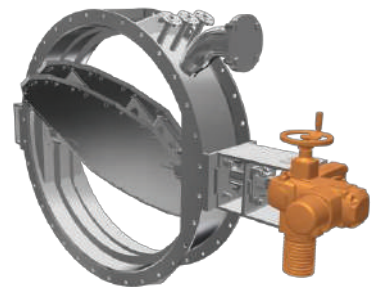
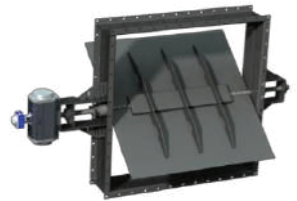
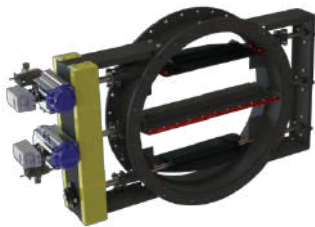
DN200 to 5000 ou
200x200 - 5000x5000
and above

Temperatures :

-40 to 1050°C
depending on configuration
and materials of construction.

Design :

Damper - Butterfly - Guillotine -
CNC Machined - Welded construction -
multi-louver - split body -
100% tightness by air system



Triple Offset Butterfly Valve



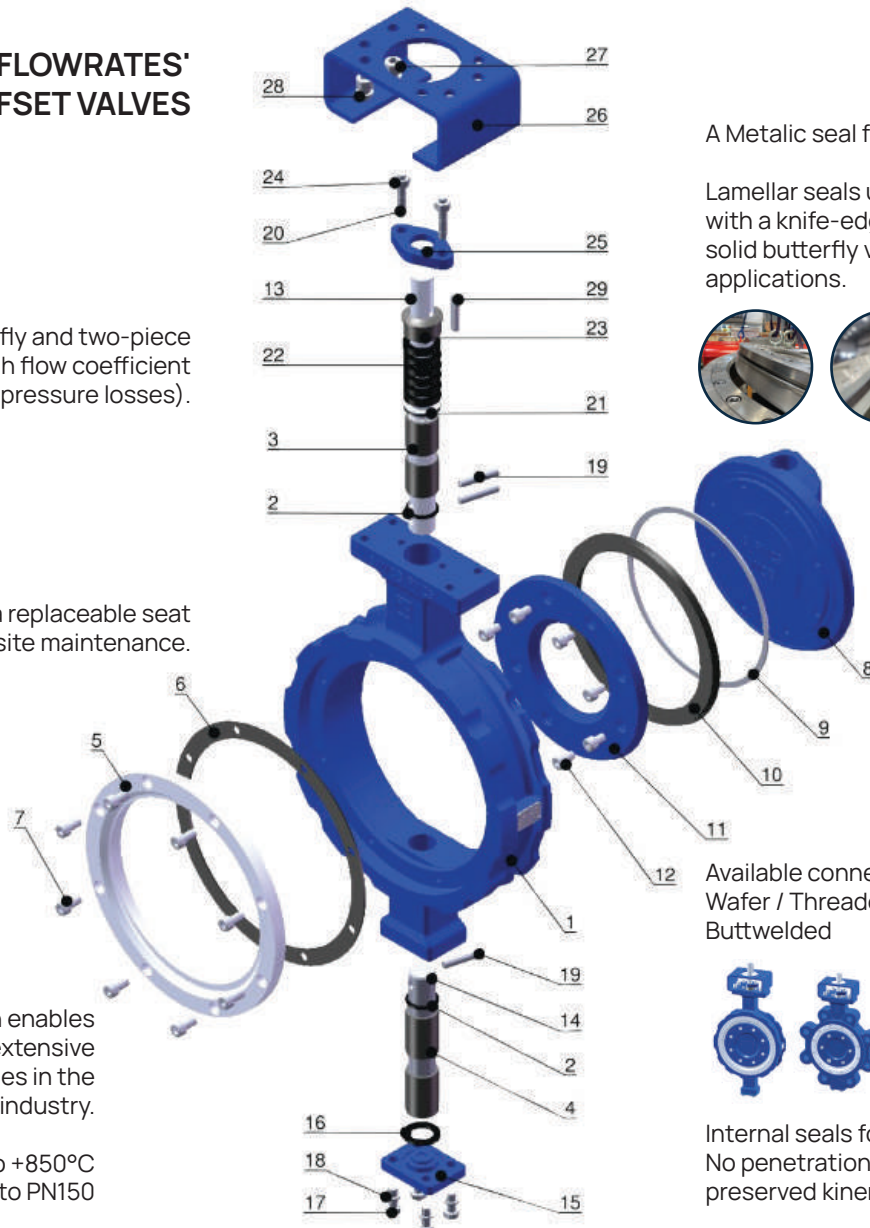
ADVANTAGES OF FLOWRATES' TRIPLE OFFSET VALVES

Profiled butterfly and two-piece shaft. High flow coefficient (low pressure losses).

Unique design with a replaceable seat
Enables easy on-site maintenance.

The Modular design enables one of the most extensive configuration ranges in the valve industry.

-196°C to +850°C
PN10 to PN150



A Metallic seal for each application.

Lamellar seals up to 500°C, solid seals with a knife-edge effect up to 850°C. The solid butterfly valve for regulation applications.



Available connections :
Wafer / Threaded / Flanged S13 - S14 /
Buttwelded



Internal seals for bearing protection
No penetration of foreign bodies =
preserved kinematics.

Energy | Chemistry | Industry | Petrochemicals | Cryogenics | Desalination | Powders

Advantages of Triple Offset Technology:

No risk of gasket seizing between the disc and seat.

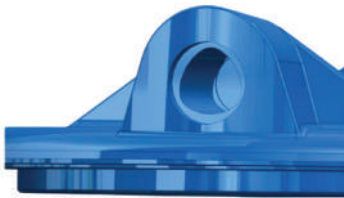
NO FRICTION = NO WEAR = EXTENDED LIFESPAN

No retention zones.

No friction-induced torque at opening = smaller actuators

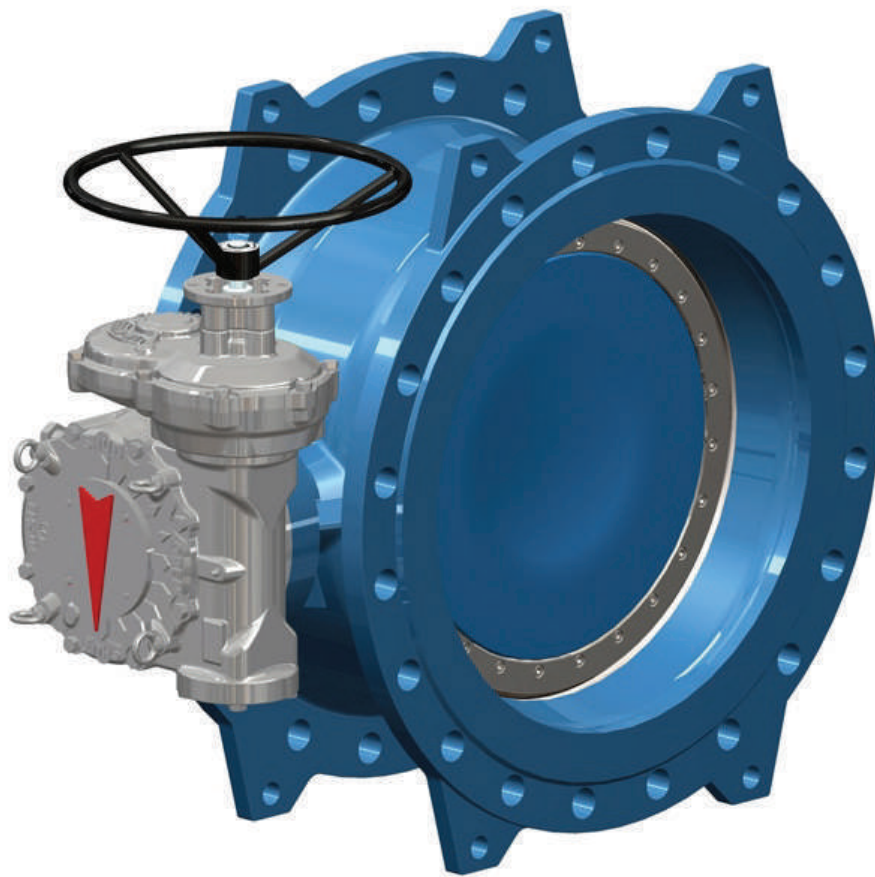


Double offset valve water applications

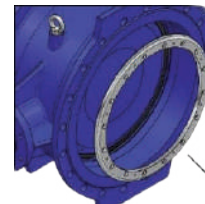


ROKO connection, a disc-to-shaft linkage that eliminates mechanical play and vibrations.

Hydrodynamic disc design, minimizing turbulence and optimizing flow.



Two-way sealing
One-piece, glue-free seal design, EN681-1
compliant
Easy seal access and replacement



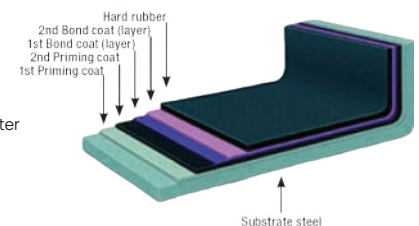
Manual IP68 gearbox,
providing complete protection
against immersion.

Stainless steel welded
sealing seat,
ensuring enhanced
corrosion resistance.

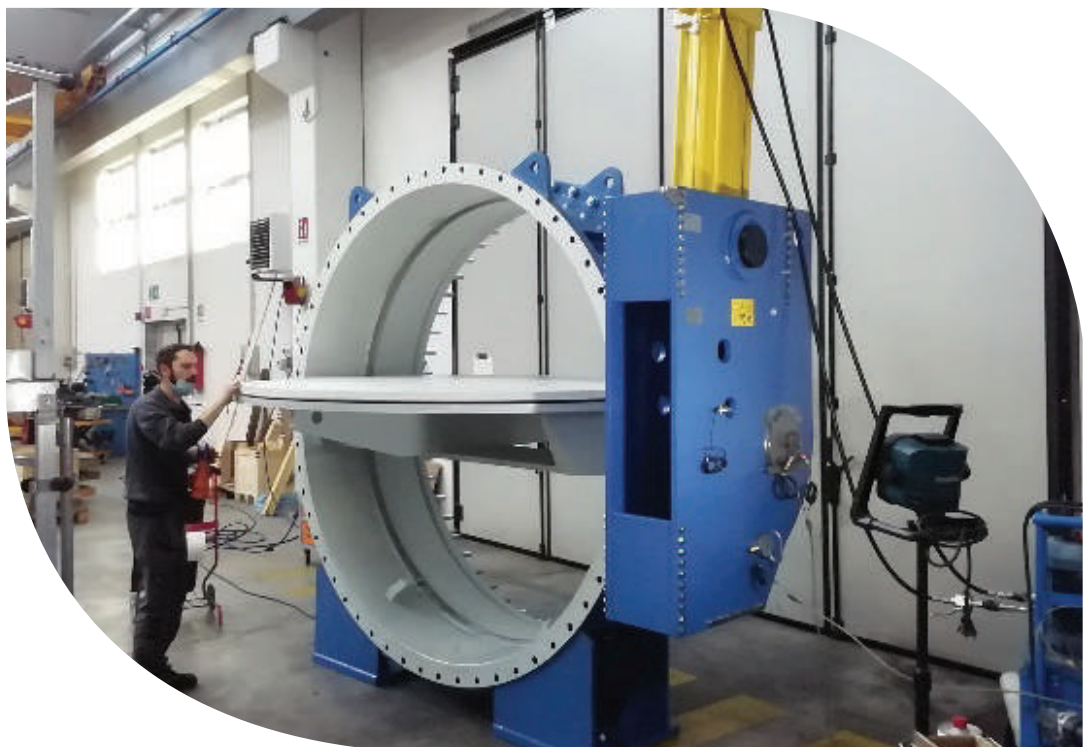


Epoxy coating compliant with sanitary standards
across various European countries.

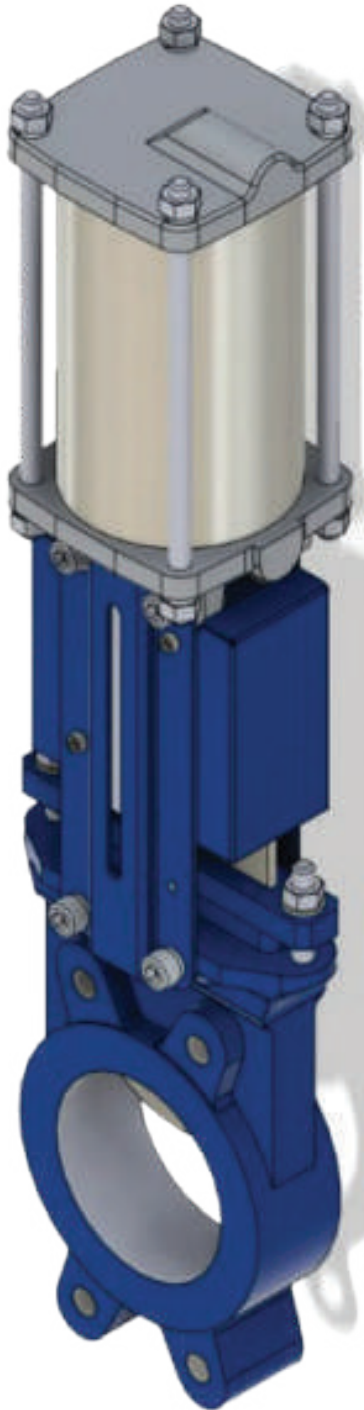
Hard Rubber Ebonite lining
This coating can be applied for seawater
applications
And abrasive scenarios.



Hydroelectric applications (overspeed valve).



Knife Gate Valves



Visual Position Indicator

Oblong slots designed for the installation of inductive limit switch sensors.

Aluminum Pneumatic Actuators

Compatible across the entire range. Available with Namur base and ISO mounting plate.

Monoblock Body in Ductile Iron or CF8M

Resistant to deformation and abrasion, with a 150µm epoxy coating for enhanced abrasion resistance.

Bolted Gland Follower with Nylon Lock Nut

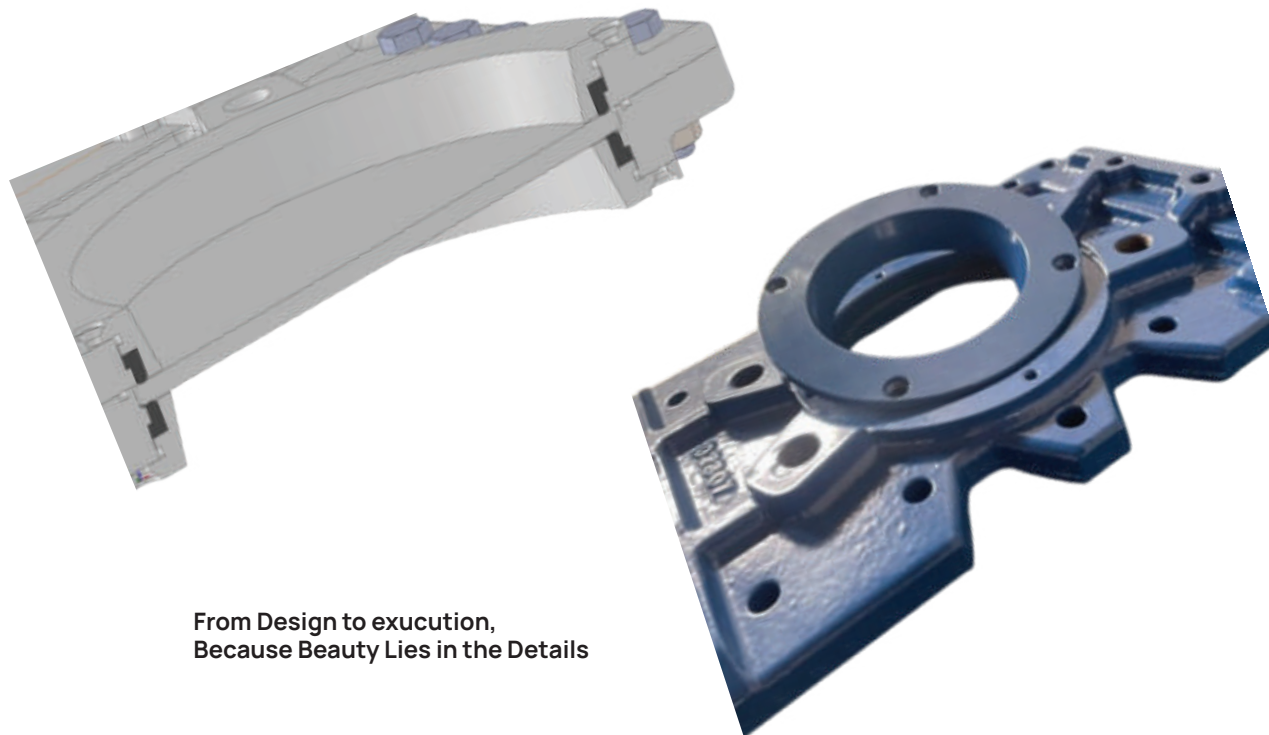
Tightenable during operation. A combination of packing materials and options ensures perfect atmospheric sealing.

Elastomeric Seat Gaskets with held in position by Heel Support or profiled Bolted Retainer

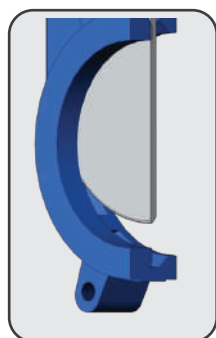
Ensures no tearing, facilitates maintenance, and integrates a deflector. A broad combination of seat gaskets and components to meet all installation requirements.



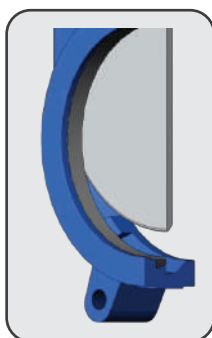
Knife Gate Valves



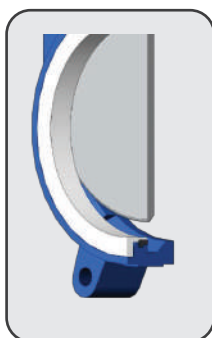
From Design to execution,
Because Beauty Lies in the Details



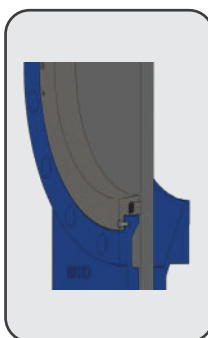
Metal seat



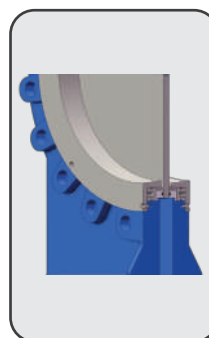
Soft seated



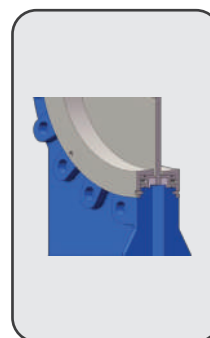
Reinforced seat



Dynamic O-ring
back seat



Spring loaded
dynamic O-ring



Spring loaded
Dynamic Metal
seat

Packing material temperature range

Material	Temperature range
PTFE	0 to 180°C
Graphite	-10 to 650°C



Body material temperature range

Material	Temperature range
Cast iron	-15 to 250°C
Ductile iron	-30 to 350°C
Carbon steel	-29 to 425°C
Stainless steel	-196 to 600°C

Attention: all temperatures given are indicative.
Please consult for extreme temperature application



Damper valves



Product properties:

range of diameters: Ø 50 mm – Ø 10 000 mm
Available rectangular design, multi-louver, split body, air injection

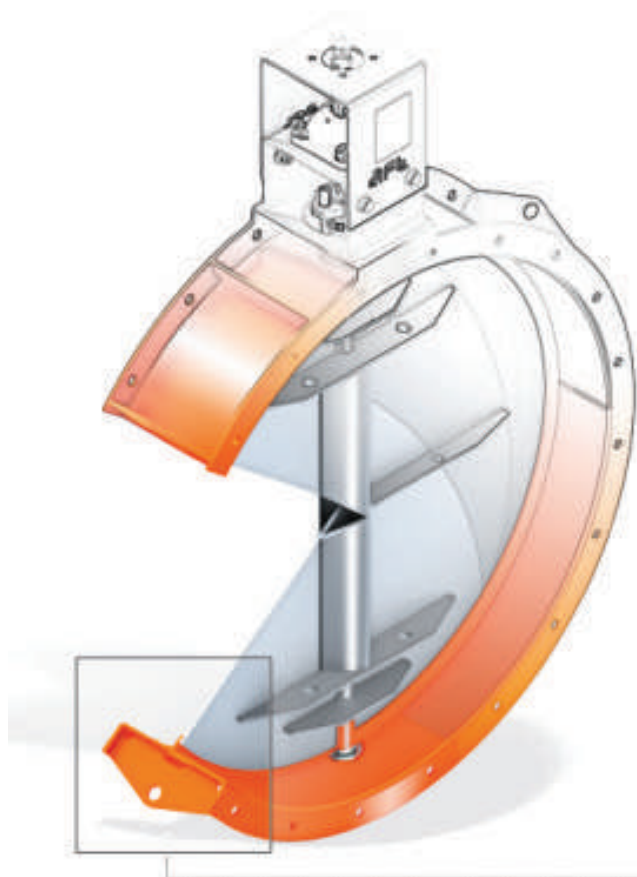
Connection to duct:

- by fanges acc. to DIN 24154
- by fanges acc. to PN6, PN10, PN16 (acc EN1092-1)
- custom-made acc. to customer requirements (ANSI / GOST / OTHER)
- welding-ends

Design and working parameters:

- design pressure < 0,5 bar
- design pressure < 3,0 bar (with PED Directive)
- design temperature -30°C do +750°C (max up to 1100°C)
- other temperatures on request, possibility to use isolation, concrete or ceramic lining etc

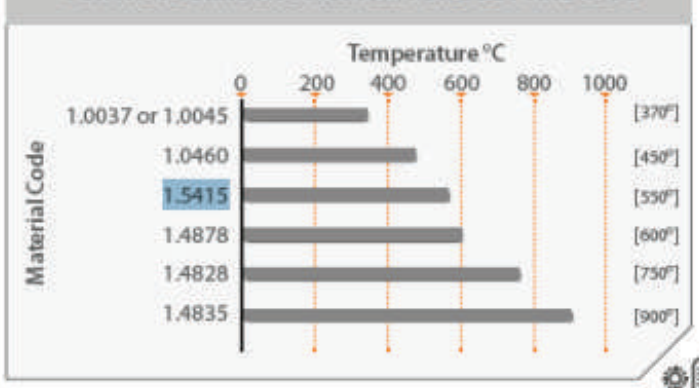
Damper valves



DISC SEALING TYPES

Geometrical tightness [%]	
	92 93 94 95 96 97 98 99 100
NO SEAL	[95%]
METAL-METAL	[98%]
SOFT SEAL	[99%]
GLASS FIBRE	[99%]
FLEXIBLE LAMELLAS	[99,7%]
FLEXIBLE PROFILES [with sealing air]	[100%]
Geometrical tightness [%]	no seal metal-metal soft seal glass fibre flexible lamellas flexible profiles
	>95% >98% >99% >99% >99,7% 100%
FCI 70-2 value [class/Kvs]	class I relative tightness class I/II <0,5% Kvs class II/III <0,5% Kvs class III <0,1% Kvs class III/IV <0,05% Kvs class IV <0,01% Kvs

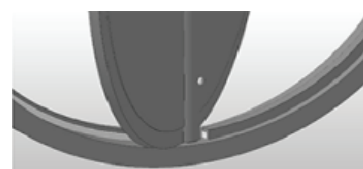
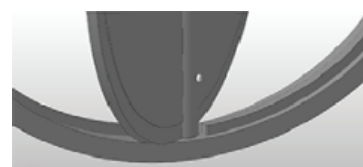
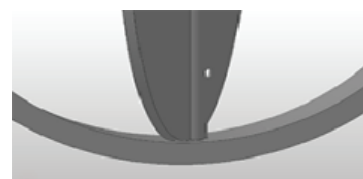
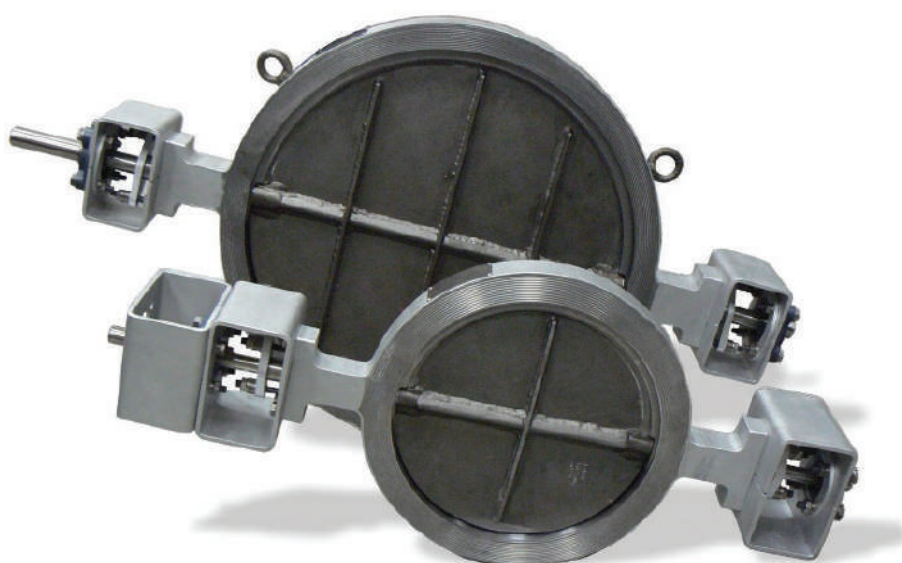
FOR NON CORROSIVE MEDIUM FOR BODY AND DISC



Damper valves



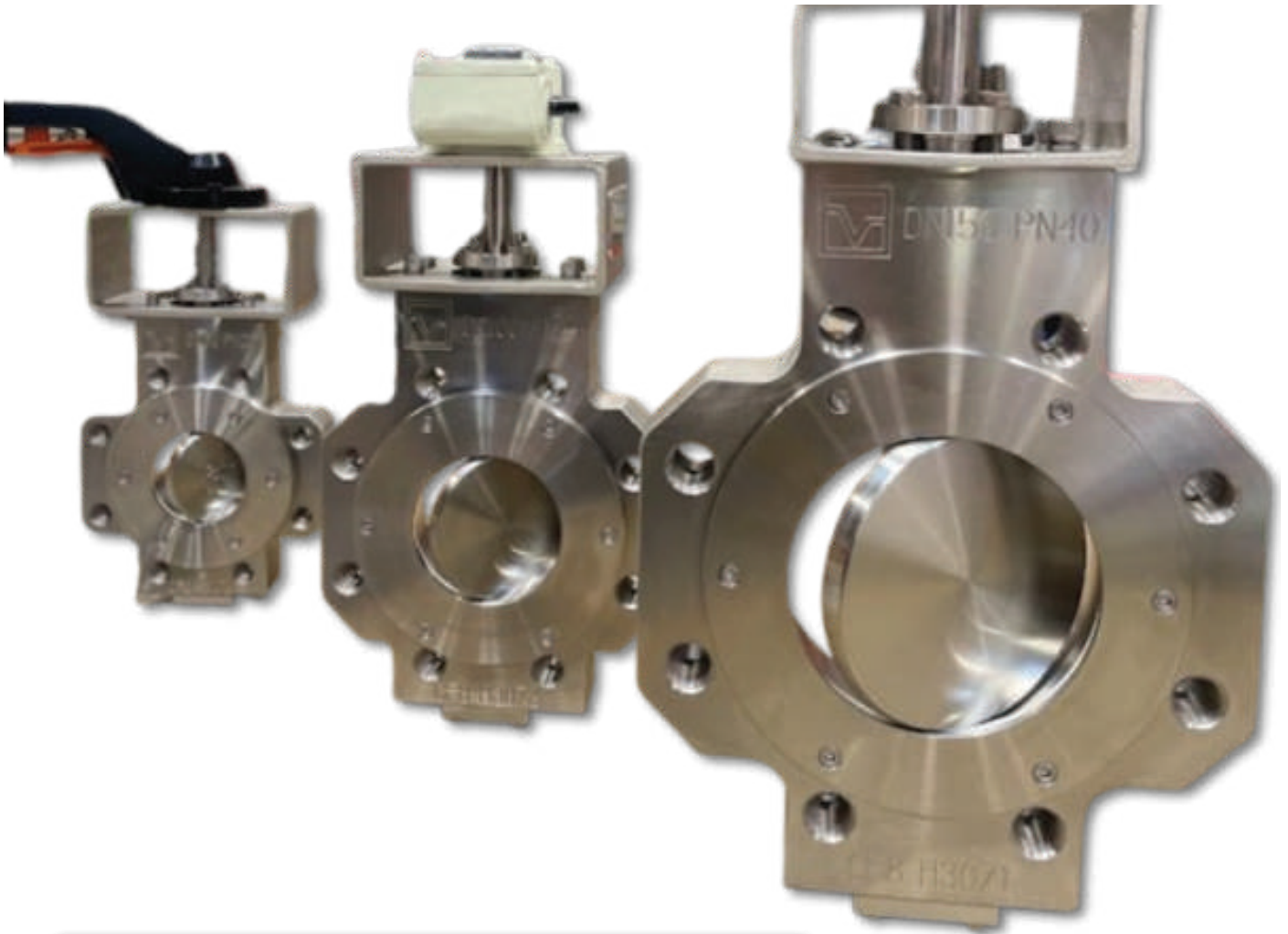
Operating temperature:	-40°C to +1000°C, according to the combination of material selected
Operating pressure :	< 0,5 bar
Velocity of flow:	25m/s for gases
Leakage rate:	<ul style="list-style-type: none"> - Swing trough leakage 1-2% of Kvs - Step seat leakage < 0.5% of Kvs - Step seat and seal, leakage < 0.05% of Kvs



Materials used for main valve parts					
Body	Disc	Shaft	Shaft bearings	Shaft packing	Bolting mat.
P265GH(3E0) up to 350°C	P265GH	1.4057 (AISI 431)	1.4301 (AISI 304)	Graphite	8.8
16Mo3 up to 500°C	16Mo3	1.4301 (AISI 304)	1,4305	Graphite	10,9
1.4301(11E0) up to 500°C	1.4301 (AISI 304)	1.4301 (AISI 304)	1.4571 (AISI 316Ti)	Grafite	12.9
1.4404(13E0) up to 600°C	1.4404 (AISI 316)	1.4404 (AISI 316)	1.4571 (AISI 316Ti)	Textilie – sklo + Ceramic	12.9
Others materials on special request					



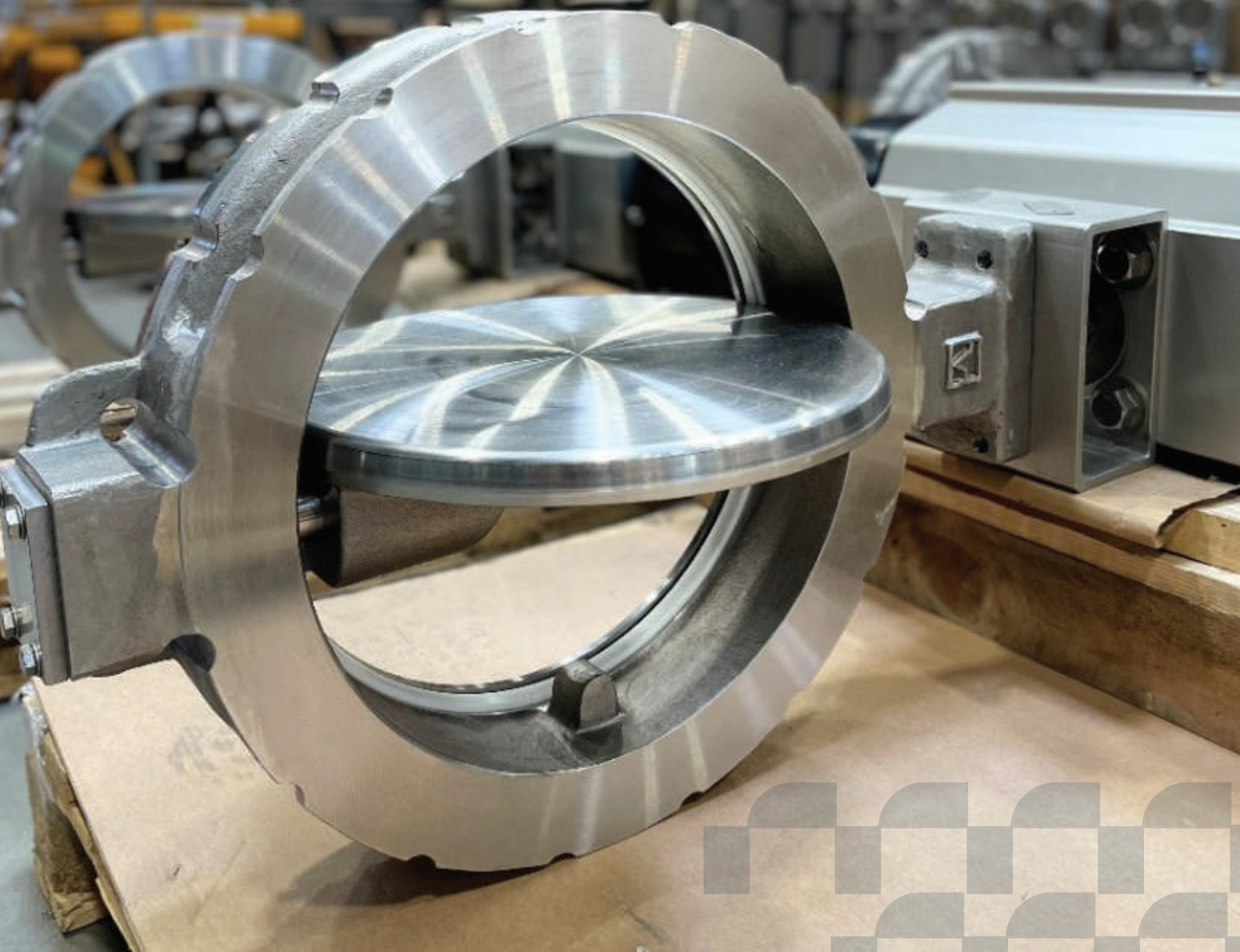
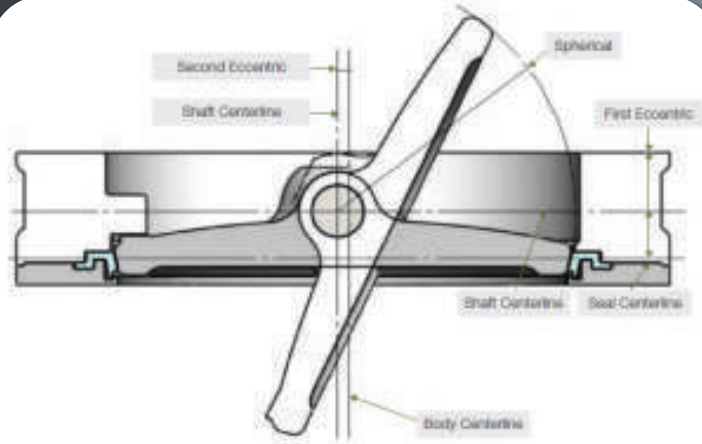
Double offset Butterfly valve



- Bidirectional bubble-free, zero leakage sealing
- Optimized seat
- Automatic compensation of temperature and pressure variations
- Safe and reliable sealing performance
- Easy access to the seat, simplified maintenance operations
- Shut-off and control of gaseous and liquid media
- Seat available in R-PTFE and pure PTFE
- Seat variants: soft seat (R-PTFE) up to 230°C
- Optimal lifespan, even with high-frequency operations



Double offset Butterfly valve



CONTROL VALVES



NEEDLE VALVES

Also called Plunger Valves

Needle and plunger valves can be used in many different applications with a need for flow or pressure regulation. In water treatment and distribution, dams, reservoirs, power plants and industry needle

Valves are used for:

- Flow control
- Pressure regulation
- Pump start
- Turbine by-pass
- Discharge
- Reservoir inlets
- Air regulation
- Desalination plants

Product properties:

- DN80 to 2000 mm
- PN10 to PN40 standard and up to PN100
- T° range : 0°C - 70°C standard/ 180°C with Fpm seals
- Epoxy coating FBE 250µm drinking water approved
- Gaskets are made in PUR for high resistance to abrasion
- Hydraulic tests as per EN 1074-5 and EN 12266
- EN558 Series 15



Automatic control valve



Automatic control valves enable continuous and precise regulation of hydraulic networks. Thanks to their modular design, they adapt to various functions such as pressure management, overpressure protection and flow control, thus ensuring increased sustainability and optimum efficiency of the systems.

“Water is a precious resource that we must protect. We must secure access to water for future generations and a growing population “

Available functions :

- Flow control
- Upstream pressure control
- Downstream pressure control
- Altimetric control
- Relief valve function

Product properties:

- DN50 to 1400 mm
- PN10 to PN25
- Temperature from 0°C to 70°C
- Epoxy coating (FBE 200 µm) approved for drinking water according to EN 14901 - Calculation note written and delivered with each valve on sizing software.
- EN 558 Series 1



Reference



Steel production sites – Dunkirk France
Isolation and control valves for high temperature air and fumes

DN1000 – DN350 – DN250 – DN80

+650°C – sealing requirement

Flowrates solution:

To solve our client's problems, Flowrates proposed a triple eccentric valve with a solid seal, capable of withstanding the 650°C of the client's process while ensuring perfect sealing, increasing the combustion cycle and reducing scale deposits in the installation.

Chemical Plant – Italy
Reactor Isolation Process for Solvents and Powders

Client Constraints:

Handling of powders, adhesives, and solvents
Vacuum resistance
ATEX compliance
High maneuvering frequency

Flowrates Solution:

To meet these stringent requirements, Flowrates supplied triple-offset butterfly valves with monobloc discs and a nitrided hardening treatment to ensure long-term abrasion resistance. The metallic sealing and valve geometry guarantee perfect vacuum tightness and reliable performance under high maneuvering frequencies.

Specifications:

PN16 / DN300
Solid metal ring butterfly valve with nitrided surface
Compliance with PED, ATEX, and certified by TÜV Rheinland
Vacuum pressure resistance up to -1 bar with flawless sealing



Reference



Industrial Site:

Sugar factory High temperature and high pressure steam networks
Customer constraints: large valves up to PN100

Flowrates Solution:

Production of triple eccentric valves with lamellar graphite seats, a double flange design according to EN 556 Series 14. Produced, tested and delivered within 14 weeks to meet our customer's technical shutdown. A satisfied customer, a perfectly sealed installation.

Reference



Design: Fully CNC machined for precision and durability

Specifications: DN450 / PN10

Features: Food-grade seals ensuring compliance with stringent hygiene standards

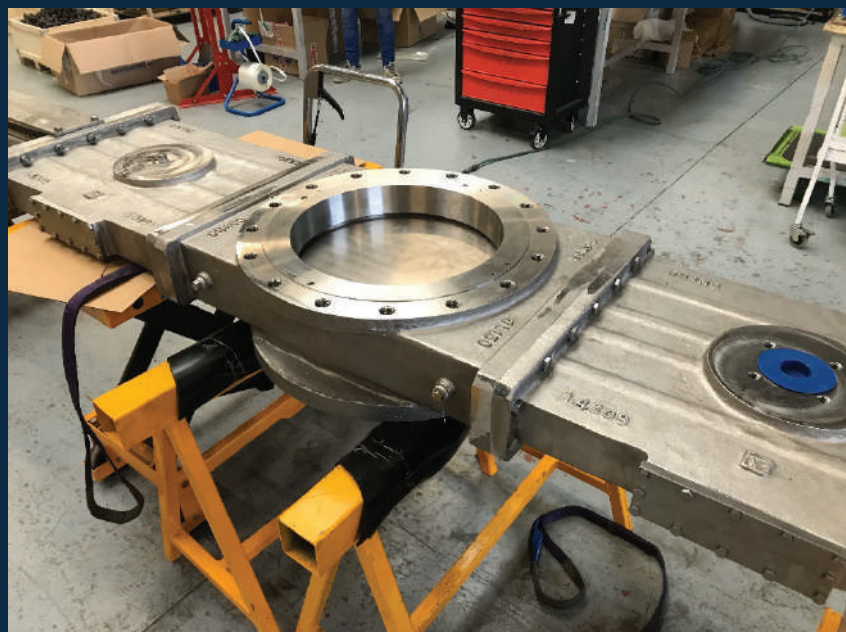
Application: Designed with exceptional machining quality for a European Chemical plant

Design : Trough going knife gate valve with silo shape and bonnet

Specifications : DN300 / PN10 / CE PED / ATEC/ TA LUFT / SIL Certification

Features : Flushing holes, dynamic seat, tightness and security for

Application : Important Petrochemical plant in the Netherlands and build for a French Engineering company.



Reference



Paper Production Site in France

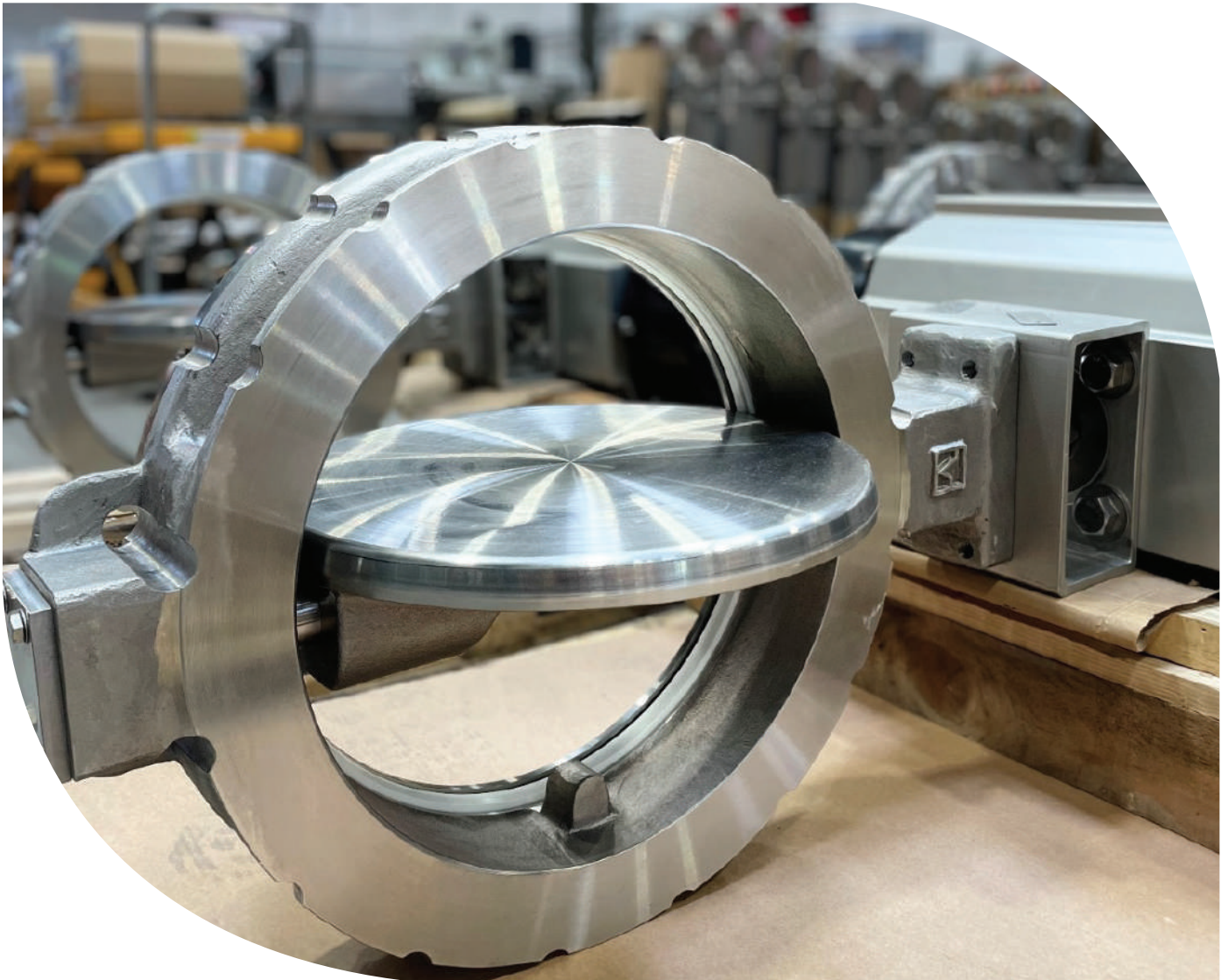
Process: Isolation and control of flows for loaded and demineralized water.

Client Constraints: Abrasion, corrosion, and precision in flow regulation.

Flowrates Solution:

We provided a complete set of knife gate valves entirely made of 316 stainless steel, equipped with backup seals and through-going blade designs to ensure tightness and manage solid particles effectively. All valves were fitted with detachable flanges for easier maintenance over time. For regulation, we supplied double-offset butterfly valves with reinforced PTFE seals to withstand demineralized water.

Certifications: PED / ATEX / Regulation / Corrosion Resistance



Reference



Pumping Station – Italy

Process: Creation of a retention basin with penstocks and a pumping station.

Client Constraints: Velocity and pressure.

Flowrates Solution:

We supplied an overspeed valve with a hydraulic counterweight, serving as a critical safety component for the process. The aerial and underground pipelines are secured by double-offset butterfly valves featuring ROKO shaft technology, which eliminates vibrations and disturbances, even under high pressure and high flow velocity conditions.



Reference



Industrial Site – France

Process: By-pass of a smoke circuit for waste heat recovery.

Client Constraints: High temperature, abrasion, and the need for strong sealing.

Flowrates Solution:

We supplied a set of T-shaped damper valves equipped with an air purge system to create a pressurized barrier, ensuring 100% tightness.

Specifications: DN500 / 450°C / Flexible Inconel Lamellas with an Air barrier system with a Fan







Contact us to discover how Flowrates can answer to your requests :

Contact
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www.flowrates.com 

**Let's keep
in touch**