



Valves & Technology



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01

Our company



The history of TTV since it was founded in 1982, has always been about a continuous growth thanks mainly to our team, which is one of the fundamental pillars of our organization, and to the continuous development of technical innovations in our products.

Our philosophy of family business focused on customer service has made TTV a benchmark in the valve industry.

In 2005, a new generation of the family takes over the direction of the company, achieving success in innovation and international projection. Several trade agreements with large industrial companies are signed, which greatly increase the international impact of the brand.

Later in 2009 and following a strong policy of expansion into other sectors, TTV completes the acquisition of JC Group, thus setting up the largest manufacturing group in Spain, TTV-JC Valve Group. TTV-JC group can offer supplies with the most strict quality requirements and with a wide range of references and types of valves.

The long history of the company, the deep knowledge of the industry and our experienced and dedicated staff **make TTV one of the most promising companies in the current industrial landscape.**



“ More than 400 employees around the world ”

Our team is formed by more than 50 people at the headquarters in Madrid even though our human team is composed of more than **400 employees distributed in the different headquarters of the group around the world.** It is a highly qualified staff, constantly receiving training in the latest technologies and combining youth and experience.

We believe that the only way to stay at the **forefront of the valve manufacturing** is to learn and put into practice new ideas continually. Due to these constant improvements we are a company recognized worldwide in the field of applications of industrial valves.

Thanks to our team we are in a position **to offer our clients a global service**, from technical advice to choose the proper valve as well as design and manufacture of valves with special service requirements.

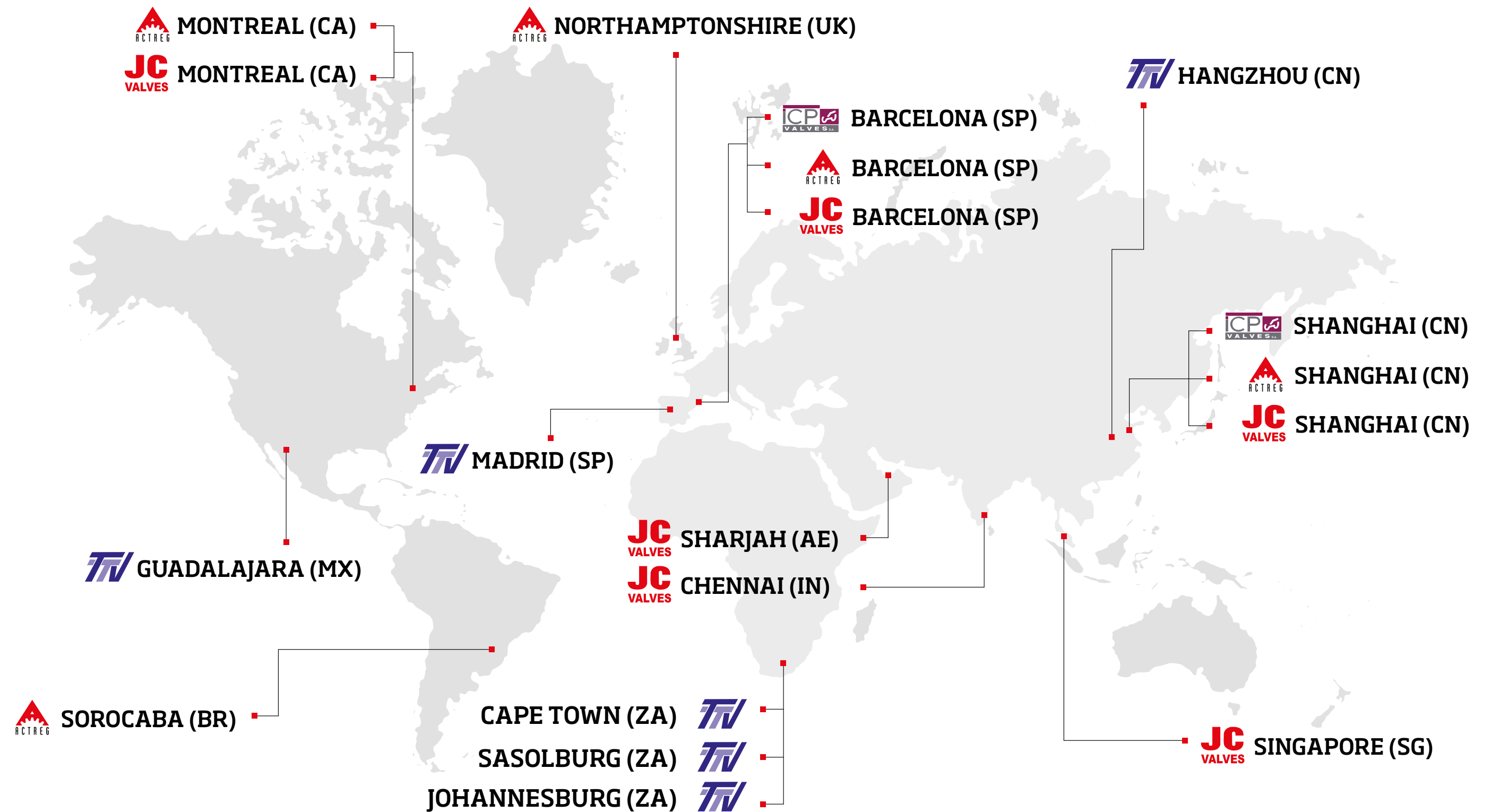


Highly qualified professionals, multicultural environment and collaborative working are the hallmark of TTV.

02

Location

TTV's headquarters are located in Spain (Madrid), where all operations of our factories in Spain (Madrid), China (Hangzhou), Mexico (Jalisco) and South Africa (Johannesburg, Sasolburg and Cape Town) are coordinated, from design to manufacture.



Valves & Technology
www.ttv.es

The quality option
www.jc-valves.com

The art of power and perfection
www.actreg.com

A valve for every need
www.icp-valves.com

TTV's activity focuses on the design, production and quality. We have a wide network of channel distributors and partners worldwide.



TTV Madrid



JC-ICP Barcelona



Actreg Barcelona



TTV Guadalajara



JC Chennai



TTV South Africa



JC-Actreg Montreal



JC-ICP Shanghai



JC Singapore



JC Sharjah



Actreg Sorocaba



TTV Hanzhou



Actreg Shanghai



Actreg Northamptonshire

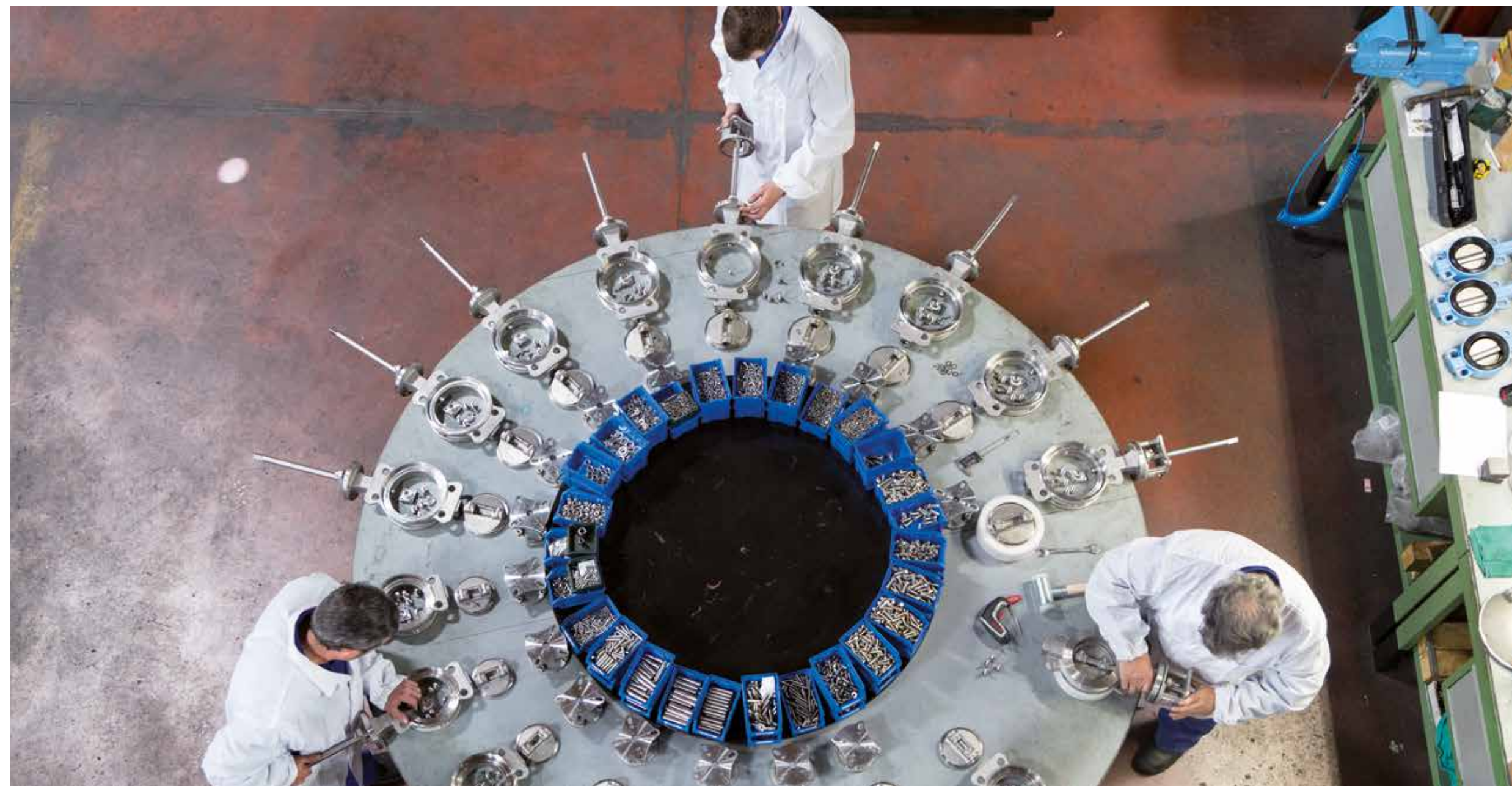
03

Production

“ Constant investments in technology ”

TTV's facilities have the most technologically advanced equipment for components transformation, quality control at the reception, valves assembly and quality testing. All the activities related to manufacture are carried out by our personnel in TTV's own facilities.

TTV makes constant investments and improvements to produce with greater quality, efficiency and effectiveness. We work with approved foundries in Europe and Asia and demand a high commitment and level of quality from our suppliers.





TTV can give very short delivery times as we have got a large stock of valves and spare parts in our facilities.

Not only for standard manufacture, but also for exotic alloys and materials. The flexibility in our operations also allows us to make special manufacture on demand, such as Silicone free valves for painting systems or different special coatings such as Halar, Ebonite, etc ... We also offer polished finishes for the food sector and solutions suitable for vacuum services.

For the delivery of the product, we take great care in the packing, using different materials according to the laws of the destination country to guarantee a safe shipment of the material.



04

Applications and references

**TTV valves have been supplied, installed and tested
in facilities worldwide.**

They have a great international acceptance,
being a highly competitive
product in different industries.

Sectors

Shipbuilding and offshore

Water supply

Irrigation

Heating, air conditioning

Construction

Power generation

Food industry

Paper mills

Chemical and petrochemical

Mining

Steel industry

Oil industry

Sugar Mills

Cement industry

Pharmaceutical industry

“ Warranty and after-sales service worldwide ”



Clients



05

Quality assurance

Approvals and certifications

ATTESTATION DE CONFORMITÉ SANITAIRE
14 ACC LY 011

FDA SEATS
Test Report:
891/13/9797 M1

APSAD
N/Ref.: PJ.NG/RB/10.10/VAN.045

TYPE APPROVAL
MARINE & OFFSHORE DIVISION
CERTIFICATE No.: 1487/CO BV

N° ROB 064

СЕРТИФИКАТ СООТВЕТВИЯ
N° TC RU C-ES.MIO62.B.02152
N° 0208542

CERTIFICATE OF APPROVAL QUALITY
MANAGEMENT SYSTEM STANDARD
ISO 9001: 2008
No.: SGI 2202326

CERTIFICATE OF CONFORMITY
DIRECTIVE 2104/68/UE

FIRE SAFE TEST
FOR VALVES

ATEX
2014/34/UE

Certification and inspection bodies

RADIOGRAPHY
MAGNETIC PARTICLE
LIQUID PENETRANT
ULTRASONIC
NON DESTRUCTIVE TESTING

CONTROL & INSPECCION

TTV valves are designed and manufactured to comply with the most important international standards: API 609, BS 5155, EN 593, AWWA C504, JIS, PN6, PN10, PN16, PN25, PN40, Class 150, Class 300, Class 600, etc.

TTV has got a Quality Management System according to ISO 9001: 2008 certified by Lloyd's Register through regular audits, which assure the quality in every process from design to manufacturing of valves and from sales management to after sales service. A wide range of certificates and approvals guarantee the company's excellent quality trajectory.

TTV guarantees valves for 2 years from delivery date. Every TTV valve is hydrostatically and bidirectionally tested according to ISO 5208 before shipping. We can stand third part inspections of the most significant entities, SGS, BV, LRS, ABS and perform destructive or non-destructive tests according to the client's requirements.



06

Our Product

Our Product

With over 30 years of R & D behind us, we have provided our valves with excellent additional features:

- Reduced dimensions and weights.
- Quick assembly and disassembly.
- Low operating torque.
- imple manual regulation and electrical, pneumatic and hydraulic automation.
- Auto cleaning and maintenance free.
- Fully tightness and minimum leakage due to the aerodynamic butterfly design.
- Full guarantee and after sales service.
- One piece and dry shaft with anti-blowout system.
- Rilsan® coating (C5 / C5M according to ISO 12944).
- Available in any international standard.



▸ Concentric soft seated



Concentric design with replaceable soft seat.

Types

Wafer, Lug, Flanged, Double flanged, Grooved

Pressure rating

PN6, PN10, PN16, PN25, class 150 lbs, API605

Temperature rating

-40 °C a 160 °C

Diameters

DN32 (1 1/4") a DN3000 (120")

Replaceable or vulcanized seat

Materials

- **Wide range of materials for bodies, discs and shafts:** ductile iron, WCB, stainless steel, bronze, bronze-aluminum, duplex, super duplex, Monel K500, CK3MCuN, CA15, LCC, LCB...
- There is a wide range of materials in stock depending on the application, from the most common EPDM or NBR, to different types of Silicone, Hypalon, Nordel, Viton, etc.

Note: Double Flanged type is always assembled with vulcanized seat.

▸ Concentric PTFE



Concentric design with replaceable PTFE seat.

Types

Wafer, Lug

Pressure rating

PN6, PN10, PN16, class 150 lbs,

Temperature rating

-25 °C - 200 °C

Diameters

DN32 (1 ¼")- DN300 (12")

Split body design

Polished disc option

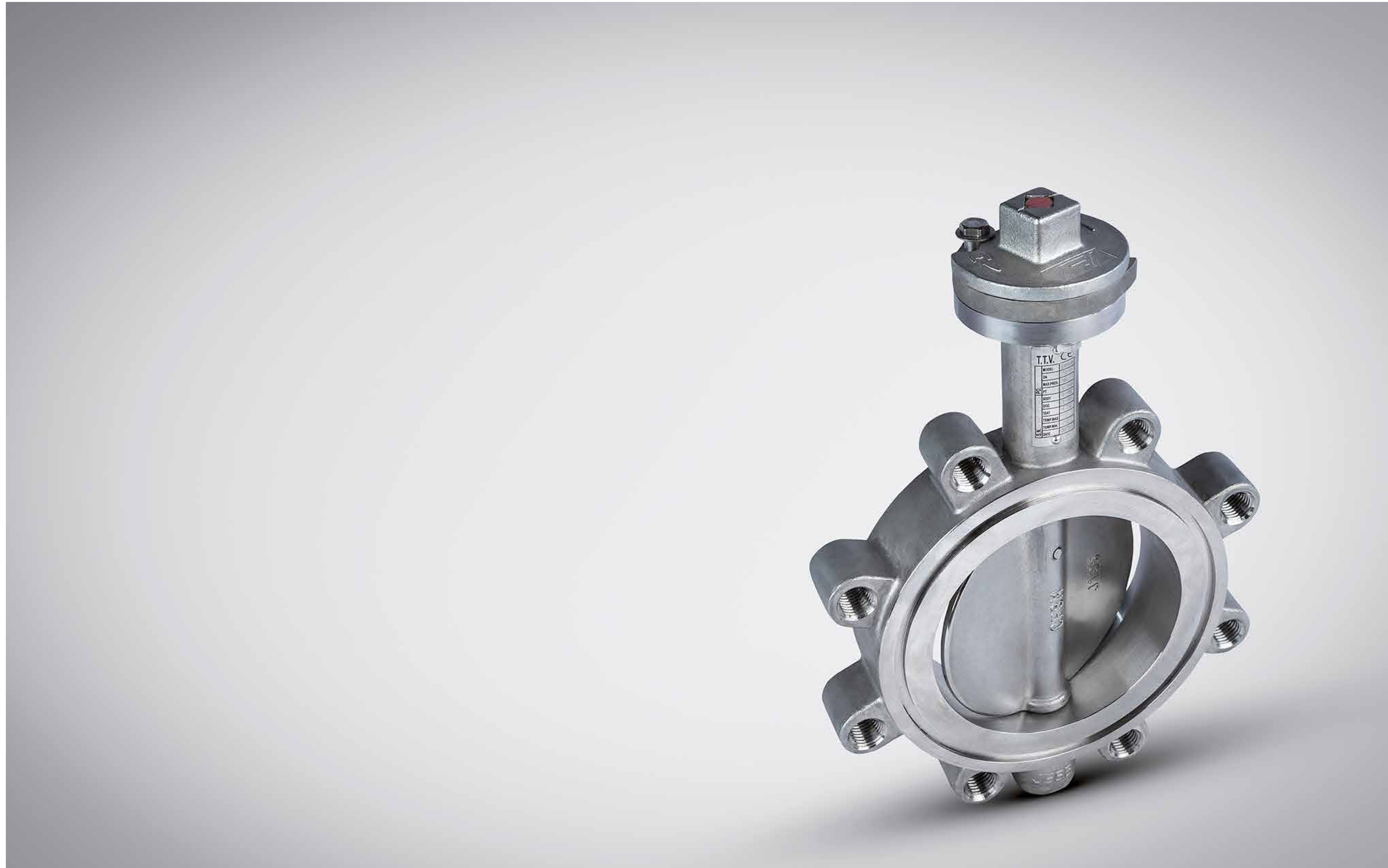
Materials

- **Body:** GJS500.7 +Rilsan / CF-8M
- **Disc:** CF8-M / CF8-M + PTFE
- **Shaft:** AISI 316, 17-4PH, duplex
- **Seat:** PTFE

Features

- High resistance to the action of chemical agents and solvents.
- High antiadherence.
- Excellent dielectric properties.
- Low coefficient of friction.
- Nontoxic, FDA approved.
- Excellent thermal stability.

▸ High temperature metal concentric



Concentric design to work at very high temperatures, where 100% tightness is not required.

Types

Wafer, Lug, Flanged

Temperature rating

-190 °C - 850 °C

Diameters

DN40 (1 ½") - DN1200 (48")

98% tightness

Design and manufacture of heat diffusers to avoid damages in the actuators

Materials

- **Body:** ductile iron, WCB, stainless steel, CA-15, Ally30
- **Disc:** ductile iron, stainless steel, bronze, aluminium,...
- **Shaft:** AISI 316, 304, 420, Monel, Duplex, Superduplex,...

Applications

- Exhaust gases.
- Industrial ovens.
- Fume outlets.
- Cogeneration.

▸ Colossus



Double and triple eccentric high performance design. Interchangeable seat of RPTFE, AISI 316L or AISI 316 + graphite, depending on the model.

Types

Wafer, Lug, Flanged

Diameters

DN40 (1 1/2") – DN600 (24")

Soft seat: R-PTFE

- **Temperature:** -50°C +220°C
- **Class VI tightness, 0% leakage**
- **Pressure rating:** PN10, PN16, PN25, 150#, 300#
- **R-PTFE seat (PTFE + 25% glass fiber)**
- **Fire-safe option:** R-PTFE + F-316L

Applications

Vacuum services, chemical, petroleum products, ethylene, LPG / LNG, vegetable oils, derivatives of hydrocarbons, steam, air, drinking water, saturated water, seawater.

Hard seat: Meta - Metal

- **Temperature:** -100°C +360°C
- **Special design for 500°C**
- **Class V tightness**
- **Pressure rating:** PN10, PN16, PN25, 150#, 300#
- **Metal seat can be rigid or flexible depending on the service.**

Applications

Saturated steam, thermal insulation gases, bitumen / asphalt, corrosive liquid, thermal oil, cogeneration.

▸ Double eccentric double flanged



Double eccentric design with soft seat retained in the disc.

Pressure rating

PN10, PN16, PN25, 150#

Diameters

DN50 (2") a DN1600 (64")

100% tightness in the preferential direction of flow

Two pieces shaft

Low pressure drop

Facet to face: Series 13, series 14

Applications

- Drinking water.*
- Desalination plants.*
- Cooling water systems (power plants, general industry).*
- Waste water effluent and treatment plants.*

▸ Gate



Gate valve with resilient seated.

Pressure rating

PN10, PN16

Diameters

DN50 (2") - DN300 (12")

Face to Face

F4 / F5

Materials

- **Body, bonnet :** GJS400-15
- **Wedge:** ductile iron GJS 400.15 fully encapsulated with EPDM or NBR by vulcanizing process guaranteeing a great elasticity, durability and tightness.
- **WARS certificate** for drinking water.

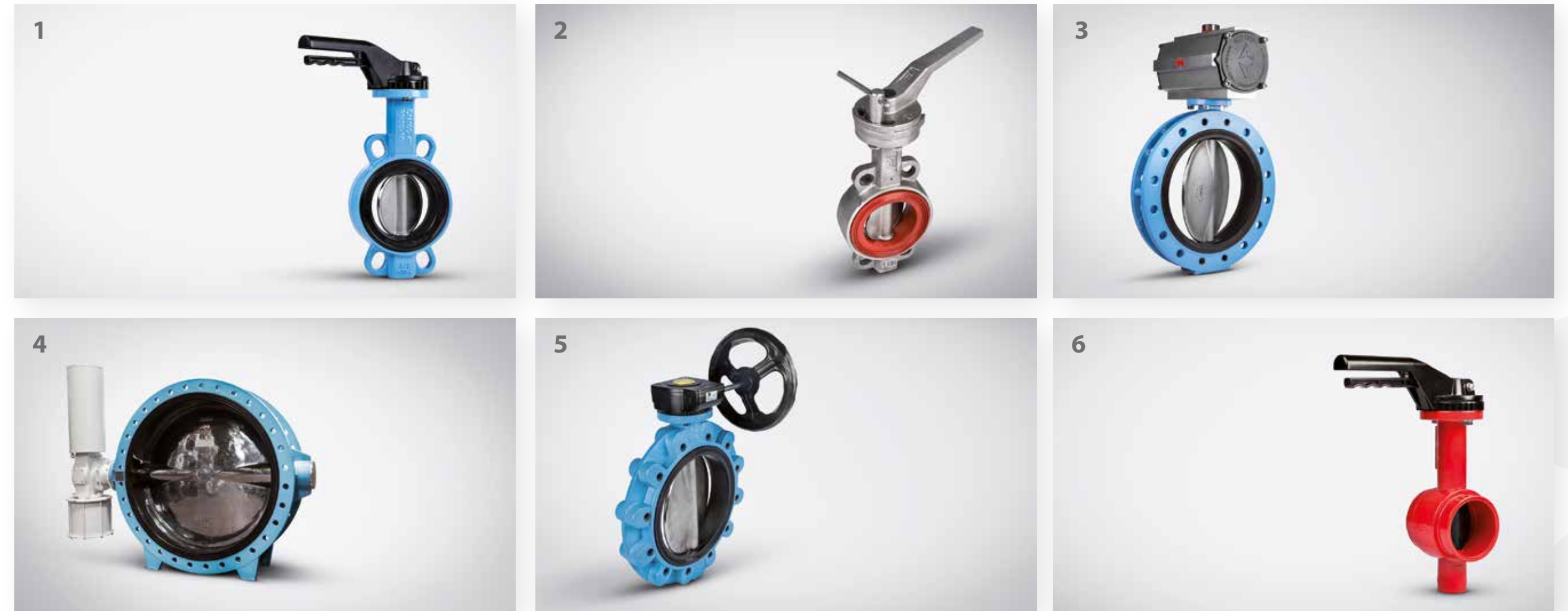
Applications

Suitable for use with drinking water, sewage, sea water, air conditioning and irrigation systems.

▶ Concentric soft seated

Concentric design with interchangeable soft seat.

1 Wafer	2 Wafer	3 Flanged
4 Double flanged	5 Lug	6 Grooved



▶ Concentric PTFE

Concentric design with interchangeable PTFE seat.

1 Wafer PTFE - CF8M	2 Wafer PTFE - PTFE
3 Wafer PTFE - CF8M	4 Lug PTFE-PTFE



High temperature metal concentric

Concentric design to work at very high temperatures, where 100% tightness is not required.

1 Wafer 850°C	
2 Lug 180°C	3 Wafer 350°C



Colossus

Double and triple eccentric high performance design. Interchangeable seat of RPTFE, AISI 316L or AISI 316 + graphite, depending on the model.

1 Wafer double eccentric metal-metal	2 Flanged triple eccentric	
3 Wafer double eccentric PTFE	4 Wafer double eccentric PTFE	5 Flanged triple eccentric



▶ Double eccentric double flanged

Double eccentric design with soft seat retained in the disc.

1
Double flanted series 14

2
Double flanted series 13

3
Double flanted series 14



▶ Gate

Gate valve with resilient seated.

1
Series F4 / F5



▸ Customized manufacturing



Our technical department is qualified to design and produce valves specially adapted to the particular needs of our clients.

▸ Actuators & automatization



All our valves can be operated through different manual or mechanical actuators.

TTV offers assembly, regulation and testing services of electric or pneumatic actuators and accessories, such as positioners, limit switches or solenoid valves. We have a wide experience working with the most important manufacturers in the industry.



Other products of the group

TTV owns, through other companies of the group, a wide catalog of references such as ball, globe, check and gate valves as well as pneumatic and hydraulic actuators.



