



TÜVRheinland®  
**CERT**  
ISO 9001

# CHEMISTRY & PROCESS SOLUTIONS



EN-2018

**Meca-inox**  
BALL VALVES

Since more than **50 years**, MECA-INOX is ball valve strategic partner of major chemistry and process industries. For Petro Chemistry, Fine Chemistry and many Specialties, our stainless steel and carbon steel valves are qualified and used for their **performance, durability and quality**.

Designed, produced and tested in our two facilities of France and China, all our ball valves are complying with European and International strictest standards.

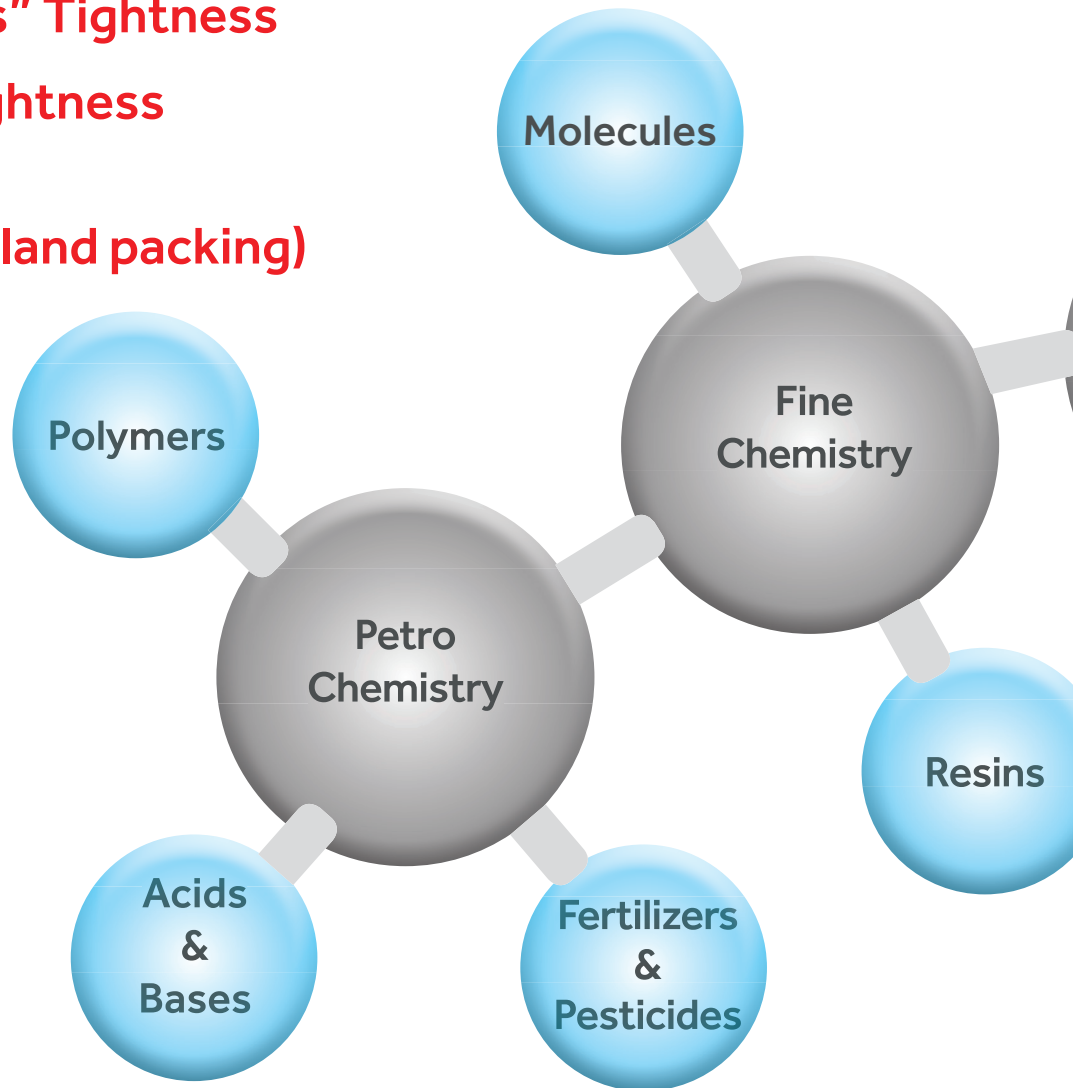


**EN12266-1 "A class" Tightness**

**Helium & Gases Tightness**

**TA Luft «BH Class»**

**(valves with PTFE gland packing)**

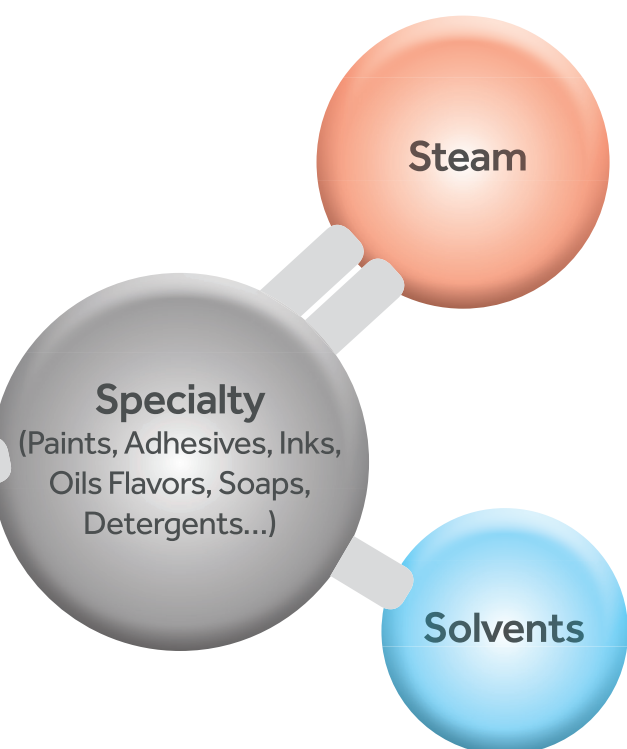


Discover our range of more than **4 500** different manual and actuated ball valves, with standard and special designs and material to **find your specific solutions**.

## APPLICATIONS



**Acids, Bases, Solvents, Alcohol, Gases, Steam, Reactants, Utilities ...**



## PRODUCTION & STORAGE

- ✓ Olefins & Aromatics
- ✓ Polymers & Elastomers
- ✓ Fertilizers NPK & Pesticides
- ✓ Paints, Resins & Coatings
- ✓ Adhesives & Inks
- ✓ Powders & Explosives,
- ✓ Soaps, Shampoos & Detergents
- ✓ Flavors & Fragrances
- ✓ Oil, Ethanol & Bio Diesel
- ✓ ...

## ADR/RID 2017 TRANSPORT

- ✓ EN14432 Certified Valves

## THEY TRUST US

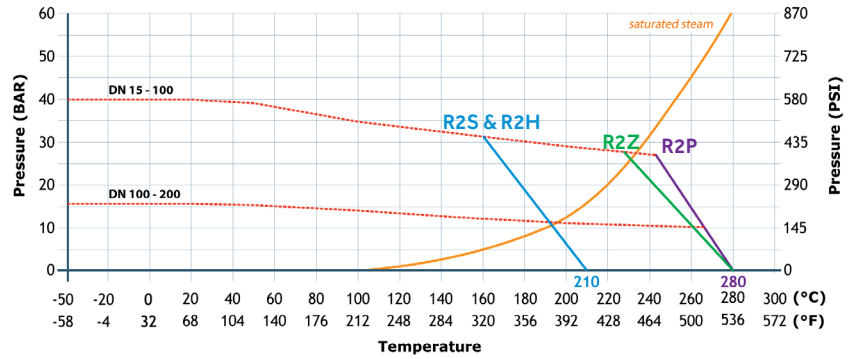
ARKEMA, BASF, BAYER, CLARIANT, COLGATE, DIOR, DRT, DSM, GIVAUDAN, HENKEL, L'OREAL, ORIL, PPG COATINGS, ROQUETTE, SANOFI, SOLVAY, TATE & LYLE, TORAY, YARA ...



2 PCS BALL VALVES DIN SHORT & DIN LONG PATTERN



Pressure & Temperature Performances



Carbon Steel Valve Minimum Temperature Limit : -10°C  
Environment Temperatures Range : [-55°C to +80°C]

Valve Type	Seats	Fluids Temperatures @ ΔP 1bar	Fluids
R2S	PTFE 2ND GENERATION	-50°C to +190°C	Acids, Bases, Solvents, Alcohols, Gases ...
R2Z	PTFE 20% PEEK	-30°C to +280°C	Steam, Hot Oils, Hot Chemicals, Bitumen ...
R2P	PEEK	-30°C to +280°C	Hot Concentrated Acids, Oil Cracking ...
R2H	PTFE 2ND GENERATION	-50°C to +190°C	Fire Safe Design, Flammable Liquids & Gases

Standard

- ✓ Full Bore
- ✓ Manual & Actuated (Pneumatic & Electric)
- ✓ Pipe line up to 8"
- ✓ FDA 21CFR Certified Plastics

Options

- ✓ PTFE Cavity Fillers (FDA)

EUROPEAN REFERENCE BALL VALVES



Design

- ✓ Loose Body Flanges (Meca-Inox Patent 1966)
- ✓ All Ends Produced In House
- ✓ Low Flow Restriction
- ✓ Easy Mounting (-30% time)

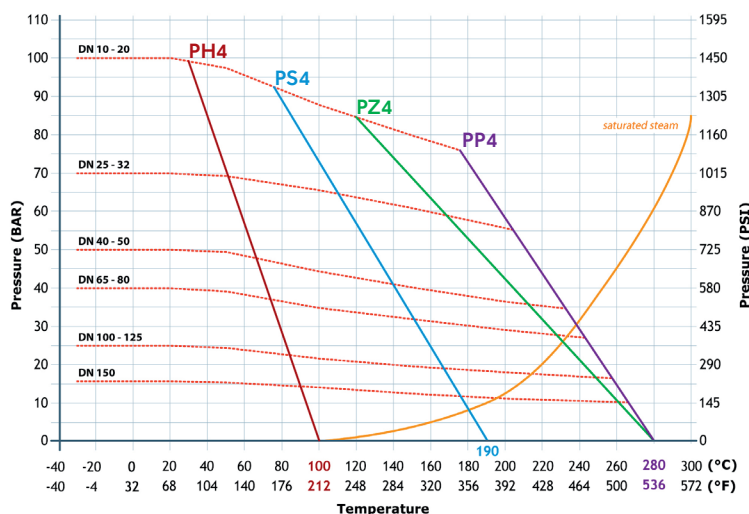
Performances

- ✓ High Performance PTFE Modified Gland Packing
- ✓ EN12266-1 "Class A"
- ✓ Helium Tightness 20°C < 10-5 mbar/l.s-1
- ✓ Chemical Resistance

### 3 PCS BALL VALVES



### Pressure & Temperature Performances



Carbon Steel Valve Minimum Temperature Limit : -10°C  
Environment Temperatures Range : [-55°C to +80°C]

Valve Type	Seats	Fluids Temperatures @ ΔP 1bar	Fluids
PH4	TIVAR 1000 PEHD	-80°C to +100°C	Water & Gaz In Radiation Environment, Medical Oxygen ...
PS4	PTFE 2ND GENERATION	-50°C to +190°C	Acids, Bases, Solvents, Alcohols, Gases ...
PZ4	PTFE 20% PEEK	-30°C to +280°C	Steam, Hot Oils, Hot Chemicals, Bitumen ...
PP4	PEEK	-30°C to +280°C	Hot Concentrated Acids, Oil Cracking ...

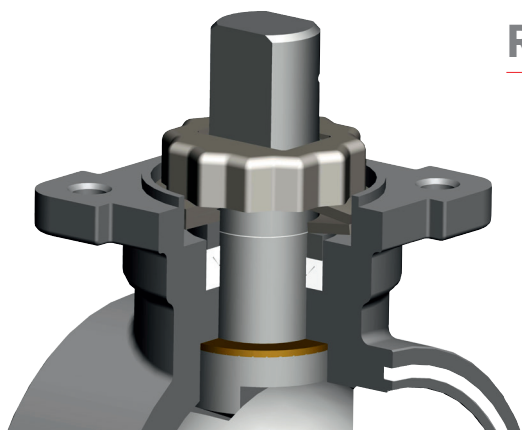
### Standard

- ✓ Full Bore & Reduced Bore
- ✓ Manual & Actuated (Pneumatic & Electric)
- ✓ Large choice of ends (BW, SW, NPT, BSP, Schedule, Orbital, Tri clamps, PN40 flange ...)
- ✓ Pipe line up to 8"
- ✓ FDA 21CFR Certified Plastics

### Options

- ✓ PTFE Cavity Fillers (FDA)
- ✓ True Bore design for pigging
- ✓ EN12300 degreased (<50mg/m<sup>2</sup> Hydrocarbon)

## FOR PERFORMANCE & RELIABILITY



### Reliability

- ✓ Self Compressed Gland by Spring Washers
- ✓ TA LUFT "Class BH" (Helium) 2500 actuations (PTFE gland packing)
- ✓ Low & Constant Operating Torques

### Maintenance

- ✓ Spare Kits of Seals Permanent Stock
- ✓ Valve Body KIT BOX
- ✓ Easy Disassembling (MTTR <5minutes)

**LIQUIDS & POWDERS STORAGE – TANK BOTTOM VALVE**



**Minimum Retention Area**

- ✓ Tanks,
- ✓ Mixing Reactors,
- ✓ ...

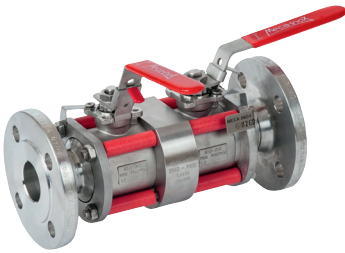
**SAMPLING & INJECTION – FLUSH MOUNTING VALVE**



**Minimum Dead Volume**

- ✓ Quality Control,
- ✓ Acid Sampling,
- ✓ ...

**LINE PROTECTION – DOUBLE BLOCK & BLEED VALVE**



**Double Line Tightness**

- ✓ Steam Lines,
- ✓ Dangerous Fluids,
- ✓ ...

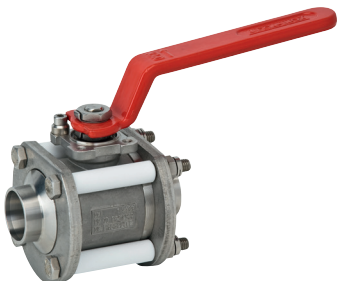
**THERMAL MANAGEMENT – JACKETED VALVES**



**Fluid Line Heating**

- ✓ Bitumen,
- ✓ Hot ingredients,
- ✓ ...

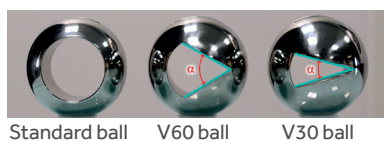
**CORROSIVE FLUIDS – SPECIAL ALLOYS VALVES**



**304L  
904L (UB6)  
Alloy C22  
DUPLEX**

- ✓ HNO<sub>3</sub>,
- ✓ Strong Acids
- ✓ Chlorinated Fluids
- ✓ Brine & Sea water,
- ✓ ...

## REGULATION & CONTROL – V BALL VALVE



**±10% Accuracy**  
**Tight in Close Position**

- ✓ Level Regulation,
- ✓ Temperature Management,
- ✓ ...

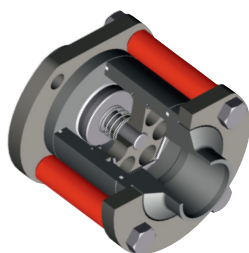
## FUSE AUTOMATIC SHUT OFF - FIRE BLOCK ACTUATOR



**Energy Free**  
**90°C ± 3°C Calib.**  
**0,1s Shut Off**

- ✓ Alcohol storage protection,
- ✓ Flammable solvents lines,
- ✓ ...

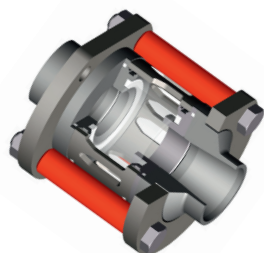
## NON RETURN FLOW – CHECK VALVE CL4



**DN08 to DN65**  
**PN80 All Design**  
**-196°C to +180°C**

- ✓ Gas injection line,
- ✓ ...

## FLOW VIEWING - SIGHT GLASS VIEWER VC4



**DN08 to DN65**  
**PN7, PN11 & PN17**

- ✓ Reactor injection lines,
- ✓ ...

## UTILITIES – 1 PCS BALL VALVE RBSTNI



**DN08 to DN65**  
**PN63**  
**Meca-Inox Certified**

- ✓ Low Pressure utilities,
- ✓ ...

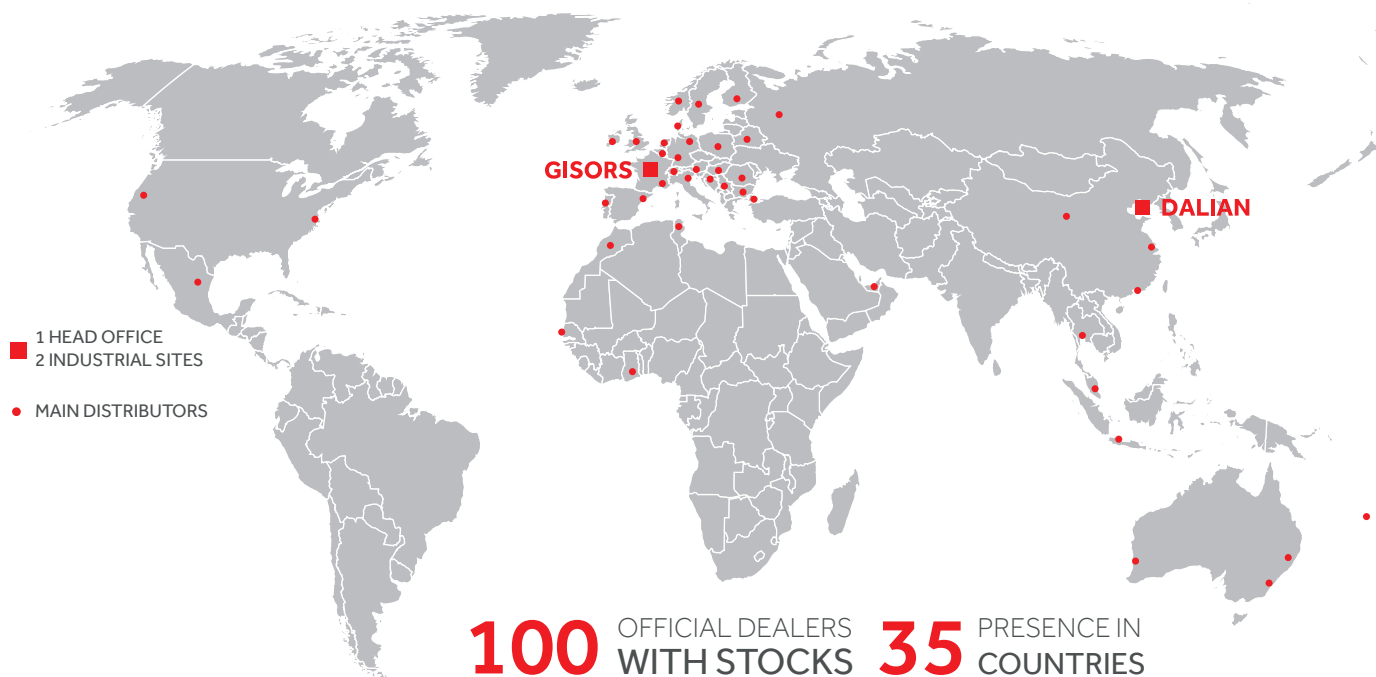


# Meca-inox

## BALL VALVES

HIGH QUALITY BALL VALVES

BORN IN FRANCE, WORLDWIDE AVAILABLE



Since 1967, MECA-INOX has manufactured ball valves and is a European leading signature for high quality ball valves dedicated to Chemistry, Pharma & Cosmetic, Cryogenic fluids, Food & Beverage and Industry with more than 3 million valves installed all over the world and 150 000 ball valves yearly production.

Expert in stainless steel and carbon steel ball valves technology, we have developed over the years a complete products offer internationally recognized for its reliability, performance, and flexibility of use. Combining high quality materials and our specific knowhow of design and manufacturing, our products meet the most stringent requirements.

From our industrial sites of Gisors (France) and Dalian (China), our teams can support you anywhere in the world. Our network of distributors provide an optimal availability of our valves and equipment for your international projects.

[meca-inox.com](http://meca-inox.com)

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A BRAND OF GROUP

Meca-inox

SINCE 1955