



TÜVRheinland®
CERT
ISO 9001

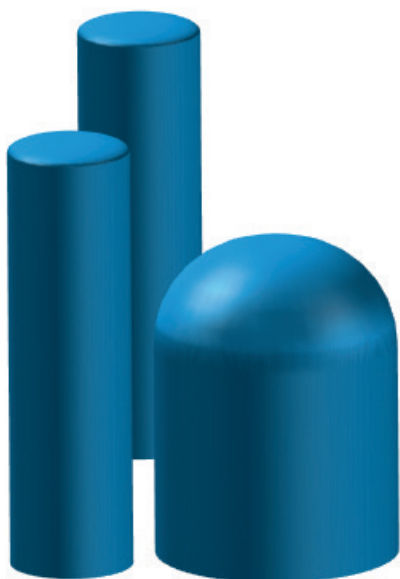
INDUSTRIAL GAS SOLUTIONS

Cryogenic & Non-Cryogenic



GB-2016

Meca-inox
BALL VALVES



Production

Industrial Gas
(Corrosive & Non Corrosive)

Non Cryogenic Liquid& Cold Gas
(Carbon Dioxide, Acetylene, Ethylene, Dinitrogen Monoxide, ...)

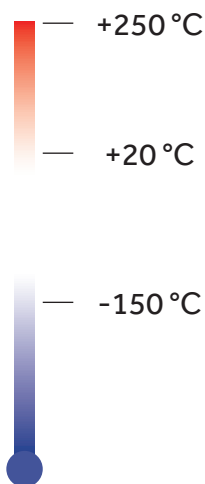
Cryogenic Liquid Gas
(Oxygen, Argon, Air, Nitrogen, Hydrogen, Helium)



Transport

Since more than **50 years**, MECA-INOX is a ball valve strategic partner of major chemistry and process industries for liquid and gas management. In 2001 Meca-Inox launched its first cryogenic ball valve and became a leading supplier of the liquid air and industrial gas for **Electronic, Chemistry, Pharmaceutical, Health and Industry**.

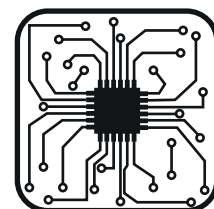
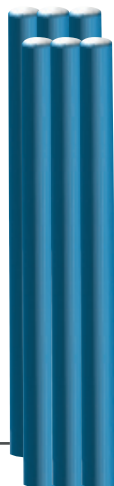
Designed, produced and tested in our two facilities of **France and China**, our ball valves for industrial gases are complying with European and International strictest standards for performances, cleaning, assembling and testing.



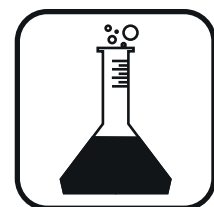
Storage



Distribution



Electronic



Chemistry



Pharma & Health



Industry

ATEX / PED / FIRE SAFE / FDA / ADR2015 ...



Strength & Tightness

EN 12266-1, ISO 5208,
TA Luft (ISO15848-1)



Functionnal Test

EN12266-1, EN1626,
EN12567, BS6364



Cleaning

EN12300, EIGA33.06,
Air Liquid standard

NON CRYOGENIC COLD BALL VALVES



DN08 to DN150 pipe size

- 316L Stainless Steel Casting

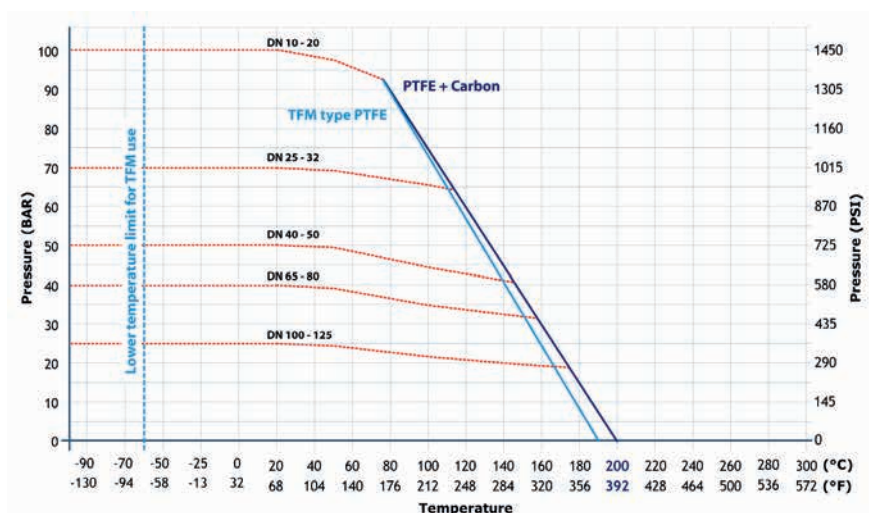
Body Strength PN100 to PN25

- Ball with upstream vent hole for liquid vaporization management

Functional EN1626 / -100°C / PN

- All ends on demand (Butt Weld, Socket Weld, BSP & NPT thread, compression fitting, Triclamp, Orbital weld, SMS, Schedule, ISO, BSOD...)

Valves	Ball Seats	Body Seal
PS4 PG	TFM type PTFE	PTFE
PY4	PTFE + Carbon (TF3215)	PTFE



CERTIFIED FIRE SAFE

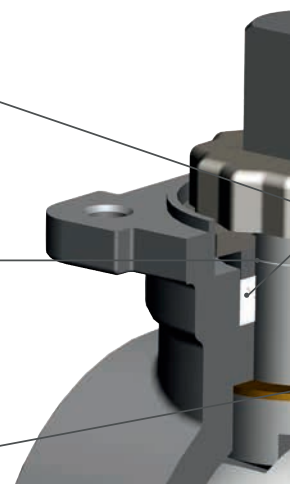
TIGHTNESS & FLOW PERFORMANCES

EN12266-1 "A Class" :
No bubble Helium External
Leak < 10⁻⁵ mbar/l.s-1
Vacuum Resistance down
to 10⁻³ mbar

Spring washers

Gland in
stainless stell

Thrust seal
(PTFE reinforced PEEK)



CRYOGENIC BALL VALVES



DN08 to DN150 pipe size

- 316L Stainless Steel Casting

Body strength PN100 to PN25 (EN12266-1)

- Ball with upstream vent hole for liquid vaporization management
- Single piece machined extended stem & cryogenic stem

Functional EN1626 / -196°C / 40bar

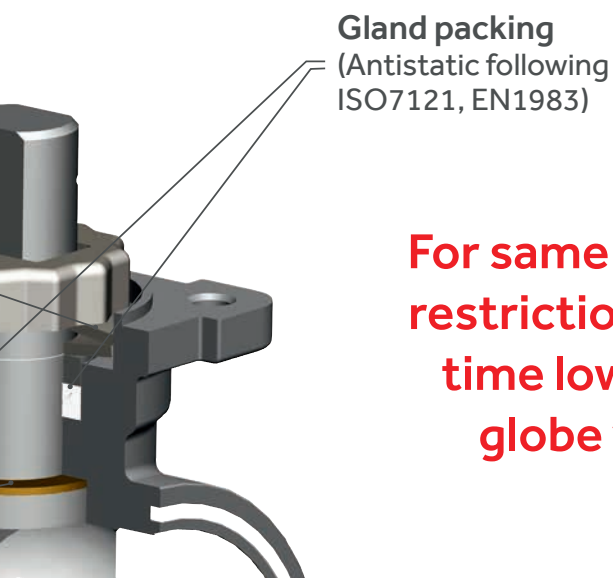
All ends on demand

Liquid N2, O2, Helium ...

Valves	Ball Seats	Body Seal
PY4CY	PTFE - Carbon (TF3215)	PTFE

Size Full bore	-196°C Max P	Extension (mm)	-196°C Max Torque
DN15	40 bar	200,4	12 Nm
DN25	40 bar	248,4	36 Nm
DN40	40 bar	294,7	86 Nm
DN50	40 bar	311,4	158 nm
DN65	40 bar	361,2	172 Nm
DN80	10 bar	373,2	172 Nm
DN100	10 bar	398	301 Nm

VERSIONS ON DEMAND



**For same size, flow
restriction is 3 to 7
time lower than
globe valves**

Size Full bore	$\Delta P=1\text{bar}$ Kv (m³/h)	$\Delta P=0,001\text{ bar}$ Flow (m³/h)
DN15	13	0,40
DN25	46	1,47
DN40	120	3,81
DN50	223	7,07
DN65	423	13,37
DN80	617	19,52
DN100	1154	36,49

3 WAYS CRYGENIC VALVES – PY4CY 3VLH

Vaporizers Switch, Liquid Cryogenic Distribution

- DN08 to DN150 pipe size
- Functional EN1626 and EN12266-1
- -196°C to +100°C
- PN25 to PN100



CHECK VALVES – CL4

- Piston Check Valve – PN80
- -200°C to +180°C
- DN08 to DN50
- Opening pressure 0,4 – 0,8 bar



3 WAYS DIVERTER – 3VTH

Gas Management to Safety Valves

- DN08 to DN100
- Functional EN1626 and EN12266-1
- -196°C to +100°C
- PN25 to PN100



CRYOGENIC V-BALL - PY4CY V-BALL

- Tight in close position
- Gradual opening = No Hammer
- Full opening = flow restriction is 2 time lower than globe valves

ADR2015 : Liquid CO₂ - Industrial Gas / Trailers & Bulk



PY4 & PS4 PG for ADR

- Certified EN14432
- -100°C to +60°C
- PN25 to PN100
- TPED Pi Marking



Food & Drink: CE1935/2004 & FDA21CFR

Soda, food freezing, beer, ...



CE 1935/2004 Certified

- Fluid A / 5°C @ 3 x 10 days

FDA 21CFR177-1550 Certified

- PS4-PG for LCO₂

OXYGEN Management

Cryogenic Liquid & Gas

PY4CY Bronze Ball & Ends

- Functional EN1626 & EN12266-1
- -196°C to +200°C
- PN25 to PN100



HDPE Fluoride Free seals & seats on demand

Meca-inox

BALL VALVES

HIGH QUALITY BALL VALVES

BORN IN FRANCE, WORLDWIDE AVAILABLE



meca-inox.com

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A BRAND OF GROUP
Meca-inox
SINCE 1955