

LNG & NATURAL GAS SOLUTIONS

Small & Mid Scale







<u>LNG</u> <u>Hub Storage</u> Small scale Shipping:

Bunkering (LNG) Vapor management (NG)

Biomethane production

<u>Gas</u> Treatment

Liquefaction



Partners manufacturers for:

- Cryogenic Top-Entry Valves up to 12"
- Side & Top-Entry Gas Valves up to 30"

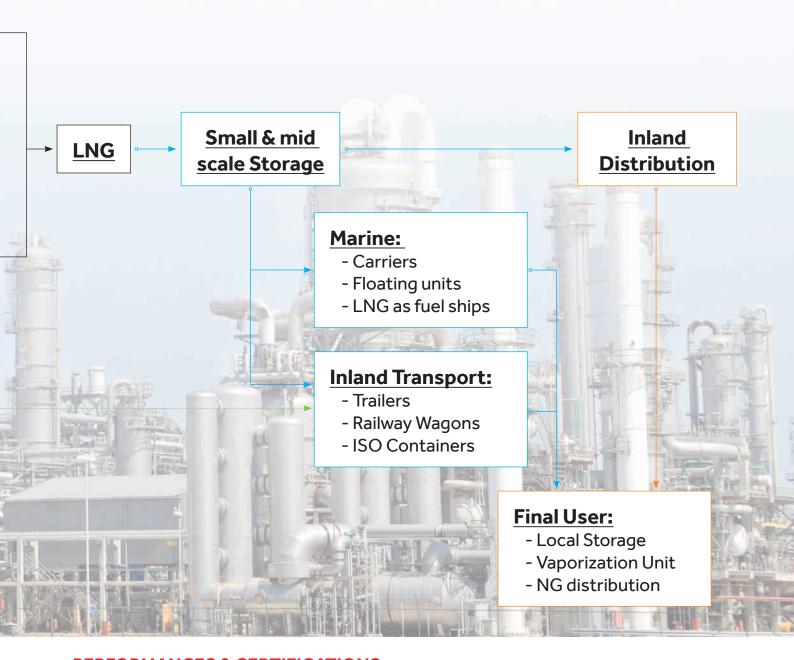


Expert in ball valves design and production technology since more than 50 years, Meca-Inox offers **Performant** & **Reliable, Robust** & **Durable, Adaptable** & **Innovative** solutions for stringent markets .

Based on 15 years experience in cryogenic ball valves for Industrial Gases, Meca-Inox is supplying LNG market high quality ball valves since 2010. Our range of LNG flow control solutions is covering low flow restriction manual and actuated isolating valves, 3-way diverting valves, multi valves skids, automatic shut-off valves and certified valves for transport and marine applications. Our ball valve solutions are dedicated to your cryogenic and gaseous fluids management with minimal pressure drop and optimized tightness.

From production of gas to liquefaction, gas treatment to transport and vaporization, discover all our range of solutions for operations and maintenance





PERFORMANCES & CERTIFICATIONS



Strength & Tightness EN 12266-1, ISO 5208. TA Luft (ISO15848-1)



Fire Resistance ISO 10 497 API 607/6FA



Functionnal Test EN12266-1, EN1626, EN12567, BS6364



Cleaning EN12300, EIGA33.06, Air Liquid standard



3 PIECE BALL VALVE FOR LNG – PY4CY SF



In House Ends Machining

- 316L & 3014L Stainless Steel
- All weld, threaded & flange designs

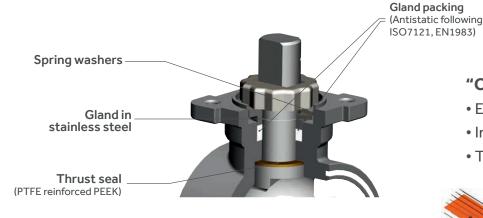
DN08 to DN150 pipe size

- 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

Size Full bore	Valve PN	-196°C Optimal Max ∆P	Extension (mm)
DN15	100 bar	40 bar	200,4
DN25	70 bar	40 bar	248,4
DN40	50 bar	40 bar	294,7
DN50	50 bar	40 bar	311,4
DN65	40 bar	40 bar	361,2
DN80	40 bar	10 bar	373,2
DN100	25 bar	10 bar	398,0

EN12567 (A, B & E) Certified ISO 10497/API6FA/API6D Certified





ISO7121, EN1983)

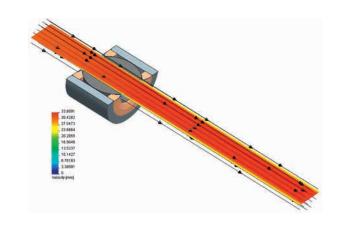
"Class A" Tightness

- External Helium Leak < 10-5 mbar.l.s-1
- Internal Helium Leak < 10-3 mbar.l.s-1
- TA Luft Certified

Low Pressure Drop

• 3 to 7 times lower than Globe Valves

Minimum Environment Impacts Maximum Energy Savings





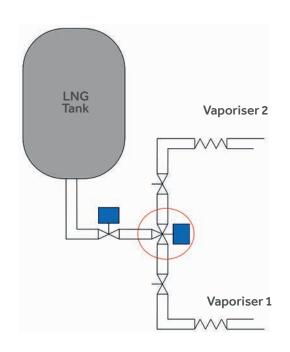






3 WAYS BALL VALVE FOR LNG - PY4CY 3VLH

Vaporiser Switch & LNG Distribution





1 valve to replace 2

AUTOMATIC SHUT OFF - PY4CY Fire-Block

Emergency Isolation of Tank

- DN20 to DN50 pipe size
- Thermal Fuse actuation 90°C / 3 min
- Manual actuation by cable
- Compact Design
- Certified 1300 cycles before maintenance

Energy Free Automatic & Manual Actuation





3 WAYS DIVERTOR for LNG VAPORS - PY4 3VTH

Safety Valve Isolation for Maintenance

- DN20 to DN125 pipe size
- Ball with 1 entry & 2 exits
- Lockable lever
- Functional EN 12 567 / BS 6364





High Tightness - Easy Actuation Low Flow Restriction

BALL VALVES FOR NATUREL GAS - PS4 & R2H

Industrial management of Natural Gas





- DN08 to DN200 pipe size
- 316L Stainless Steel Casting
- Body Strength PN100 to PN25
- All ends on demand (Butt Weld, Socket Weld, BSP & NPT thread...)
- "A Class" Tightness (EN12266-1)
- "TA Luft" Certified

Reliable & Performant **Technical & Flexible**





LNG Marine – Customized solutions Meca



Driven by the **Emission Control Area (ECA)** for pollution reduction, LNG as fuel ships become an important stake for the LNG market.

Our project team put their **experience** and technical **knowledge** to meet the stringent requirements of LNG marine applications.

Based on ball valve technology, Meca-Inox designs low flow restricitions **solutions** and manages certification projects.



LNG Speed Boat

Designs certified by:







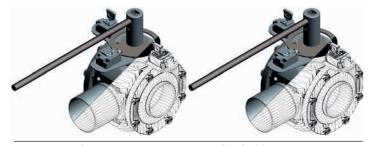
Customized systems for LNG Marine applications



LNG Bunkering



LNG Vapor Return



LNG Vapor Double Divertor for Safety Vavles

Dedicated team for project management, production and certification supervising.



HIGH QUALITY BALL VALVES

BORN IN FRANCE, WORLDWIDE AVAILABLE



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