



Cryogenic Service

Process Valves for Cryogenic applications



General Chemicals



Fine Chemicals



Petrochemicals



Plastics and Polymers



Nuclear and Navy



Other applications





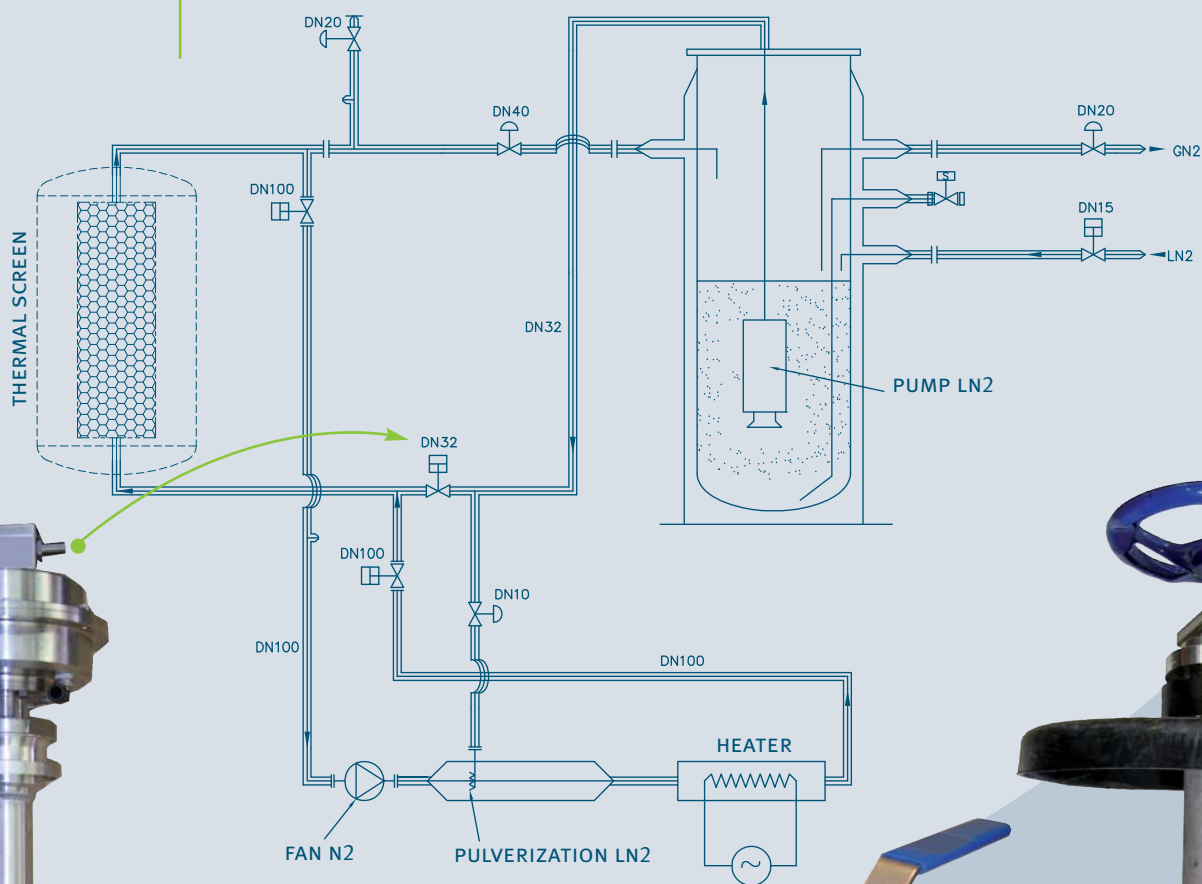
Specific cryogenic requirements



Constraints related to the cryogenic applications

- Good **tightness** covering a wide range of temperatures
- Significant **reliability** and safety with respect to the operator and the environment
- Limitation of **thermal losses**
- **Easy maintenance** considering the valve surroundings

Example of process :
Space simulation room



Globe or
needle valve



Ball valve



Gate valve

Our offer, adapted to your specifications

➤ Meet the constraints of tightness

- Design expertise to control clearances and dilatations
- Choice of materials exposed to low temperatures (stainless steel)
- Radial sealed disc (plastomer) or hard-faced seats and disc sealing surfaces (stellite)

➤ Reliability

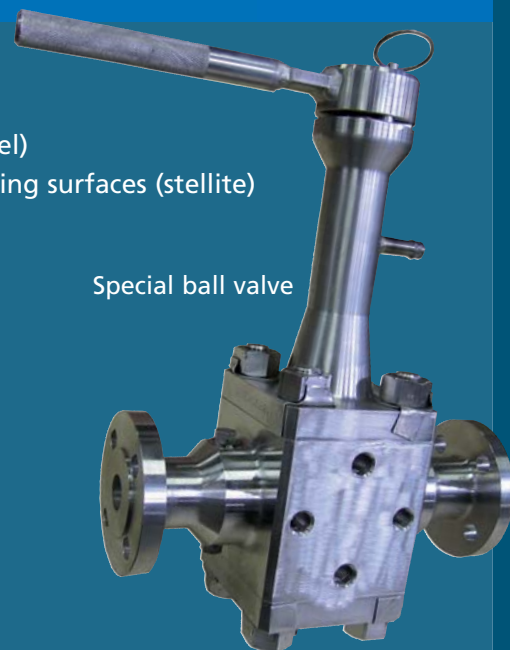
- 100% traceability of materials and processing
- Downstream decompression opening
- Flow facilitated by a bulkier room
- Extended stem
- Thermal separator in the stem to limit the propagation of ice
- Grease free assembly

➤ Restricted thermal losses

- Specific design and dimensioning

➤ Maintenance facility

- Top entry (in-line repair possible)
- Adaptable cold box



Special ball valve

Guichon Valves' range



Hand operated globe valve

Control valve

- Cryogenic valves for transfer and storage of liquid gas (-196°C / 25 bars maximum) – DN 6 to 50
- Cryogenic process valves for production, transfer and storage of liquid gas (-268°C / 25 bars maximum) - DN 6 to 50
- Cryogenic gate valves - DN 25 to 250
- 2 ways and 3 ways ball valves
- Check valves

Sealing features

- Outside tightness guaranteed up to 10^{-6} mbar.l/s (helium test) for bellows sealed valves (Oxygen grade Viton O'rings, stainless steel bellows)

Construction features

- Various connections (BW, SW, flanged)
- Various assemblies: in line, angle, tank bottom
- Manual operation or with pneumatic actuator
- Options: Positioner, limit switches, etc.

Materials

- 304L – 316L Stainless Steels
- Oxygen grade viton seals
- Low temperature grade plastomers

Agreements and Quality Management

ISO 14001

Environmental Management certified to ISO 14001: 2004 standards by L.R.Q.A.

ISO 9001

ISO 9001 certified since 1991. ISO 9001: 2000 certifying body: Lloyd's Register Quality Assurance.

PED 97/23/EC

Compliance with the European Pressure Equipment Directive. Guichon Valves is certified according to Appendix III Module H of Directive 97/23/EC.

Welding

Welding procedures qualified as per ASME and EN standards.



Experienced and qualified welders



Machining shop equipped for in-house production



Design department: the company's heart



New production plant

Leading Valves Manufacturer

GUICHON VALVES was founded in **1921**. It developed its first valves for cryogenics as early as the years 1980 and currently offers a full range of globe, needle, ball and gate valves for these applications.

Today, we rank among the leading European manufacturers of special valves, thanks to our long experience and capability to provide customer-made valves solutions.

Guichon Valves has full control over the design, manufacturing and testing of its products and also provides full after-sales service.

Our know-how in manufacturing high performance valves, added to the expertise of our engineering and design department have ensured constant progress in the development of innovative and effective solutions, produced by our Company.

Guichon Valves : an expert to optimize your process.



Cryogenics

GUICHON Valves

is offering a special know-how in manufacturing valves for gaseous fluids (e.g. gaseous oxygen, nitrogen)



High pressure globe valve

Our main customers in this field of application

AIR LIQUIDE

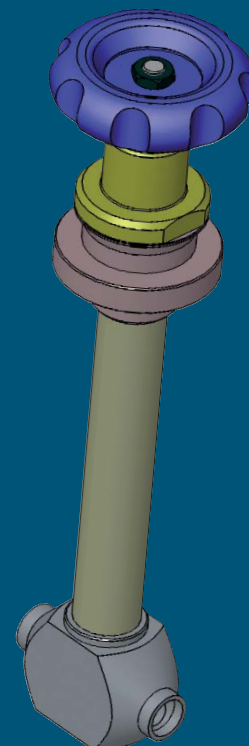
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