F.R.I. SRL

Our History

2012 **Founded in 2012** as the **exclusive representative** and manufacturing site for the **German company Zikesch**, part of Bopp & Reuther, with **over 60 years of experience** in the special valve sector, F.R.I. embarked on a strategic path of evolution and growth in the design and production of **special valves**.

2015 Following the acquisition of Bopp & Reuther and Zikesch, F.R.I. began the commercialization of valves under its **own brand**, focusing on superior quality and technical expertise. The brand launch experienced rapid growth, consolidating market trust.

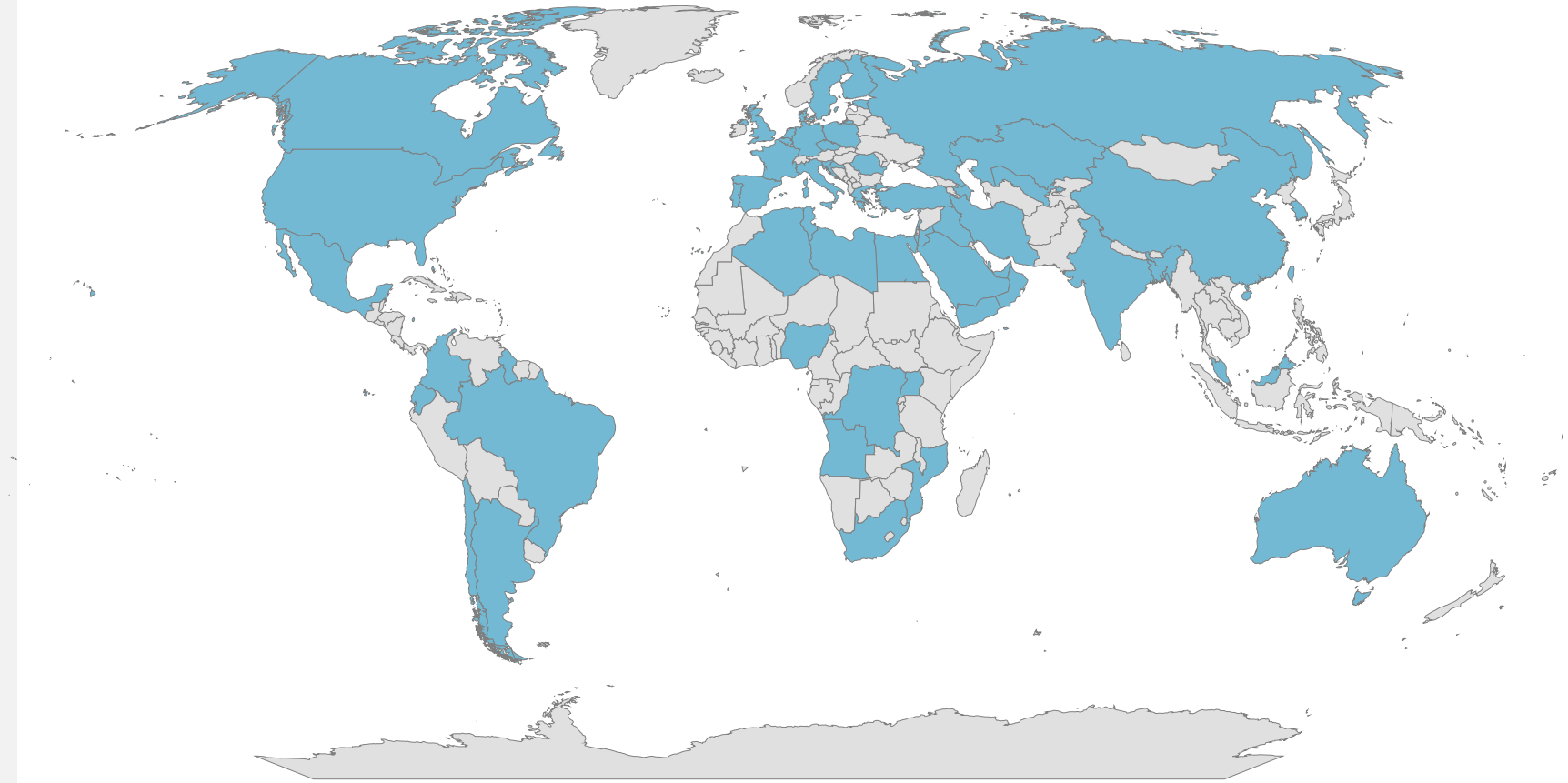
2018 Acquisition of a new **2,000 square meter workshop** and 400 square meters of office space to expand production. This investment allowed for better quality control, improved response times, and the development of increasingly customized solutions.

2023 Founded **FRI Kazakhstan** to enhance market presence.

2024 Registration of **3 patents for special valves for Liquid Hydrogen (-253°C)** application and completion of qualification with Kawasaki Heavy Industries for hydrogen projects

Our Global Presence

Global supplied countries



About F.R.I. Srl

F.R.I. is specializes in the design and production of valves intended for **high-criticality sectors with extreme applications**, including:

- Superheated steam up to 690°C
- High-pressure fluids
- Corrosive and erosive fluids
- Liquefied gases at low temperatures such as helium, hydrogen, oxygen, and LNG, with temperatures reaching -253°C

With a co-engineering approach, F.R.I. provides tailor-made solutions for applications requiring high performance and safety. It operates in a niche market characterized by strong growth and high technical expertise.
The company has built its success on a strategy focused on custom quality and strong collaboration with its clients in the design and development of innovative solutions

Our main **product portfolio** consists of:

1 On-Off Valves

- API 600
- API 623
- API 602
- API 6D
- API 6A
- BS 1878
- EN Standards

2 Control Valves

- Pressure Control
- Temperature Control
- Flow Control

3 Special Valves

- designed according client's requirements
- co-engineering activities

The Outside

Our production site is placed in:

Via Cadorna, 48, 33040 Salt UD

Headquarter and Production Site

Total Area 10.000 sqm

Covered Area 2.400 sqm

Production

Manufacturing process controlled 100% with MRP System and bar code traceability

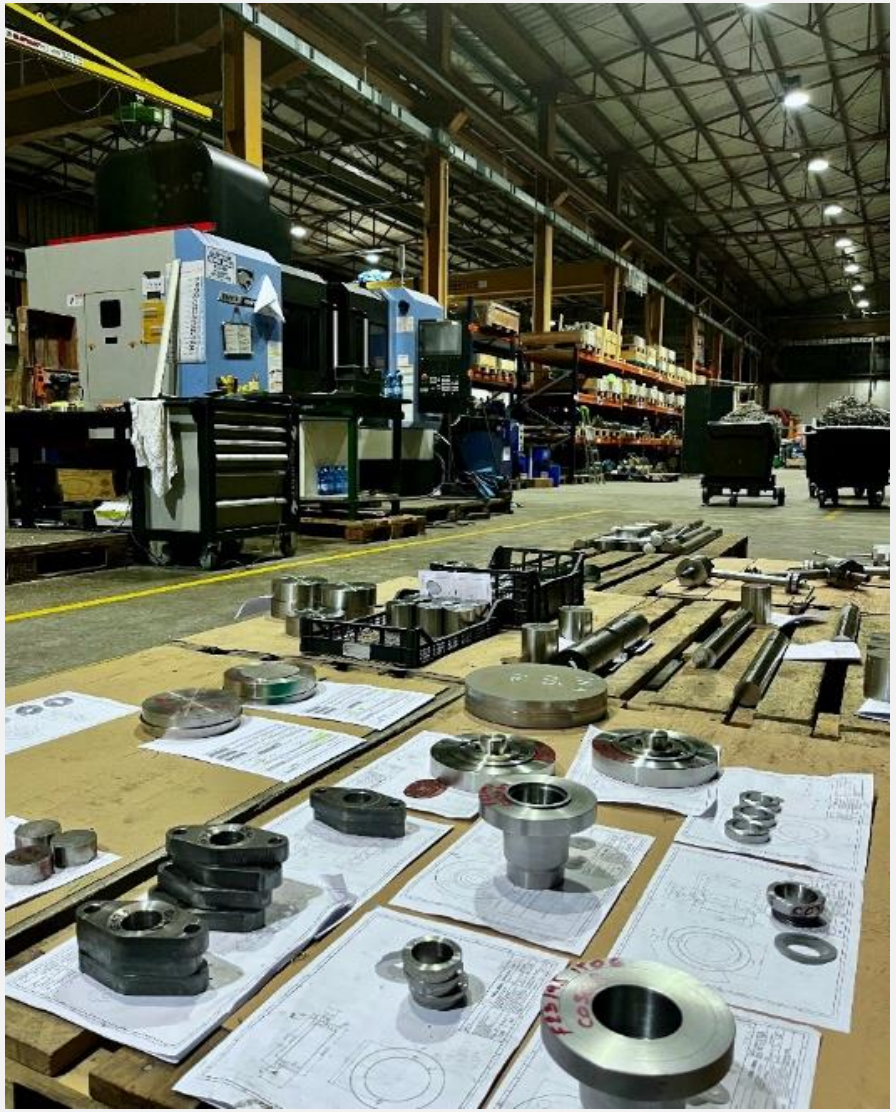
The Inside: Our Production Activities

> Machining

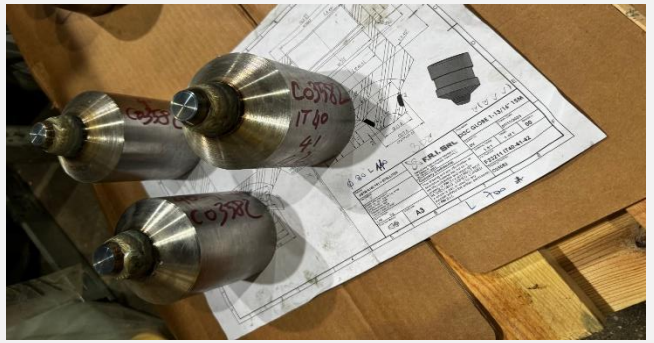
> Welding

> Assembling

> Testing



Machining

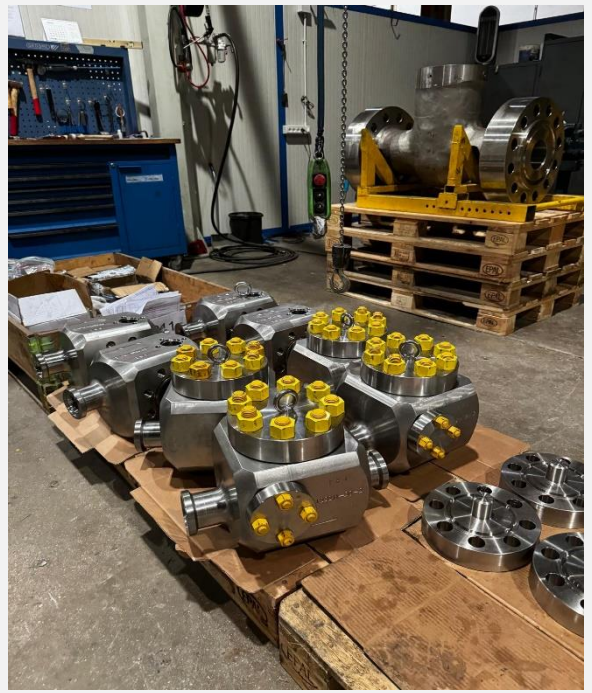


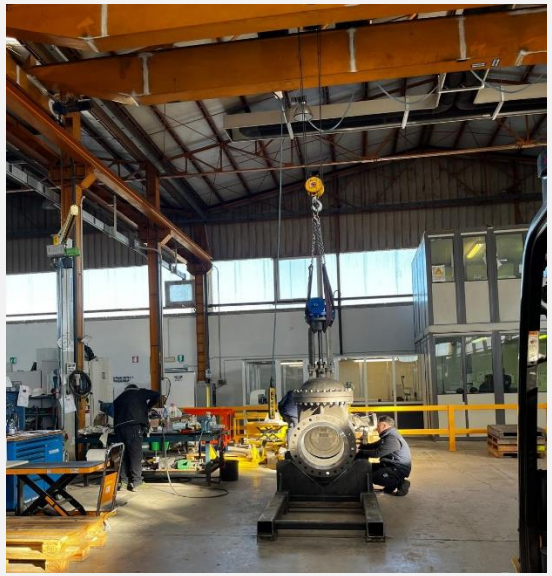
Machining

Assembling

Assembling

Assembling





Assembling

Welding and Cladding

Qualified welders and welding procedures (WPS/PQR) according to: ASME IX – EN 15614 – EN 287

Materials

Carbon & low alloy steel

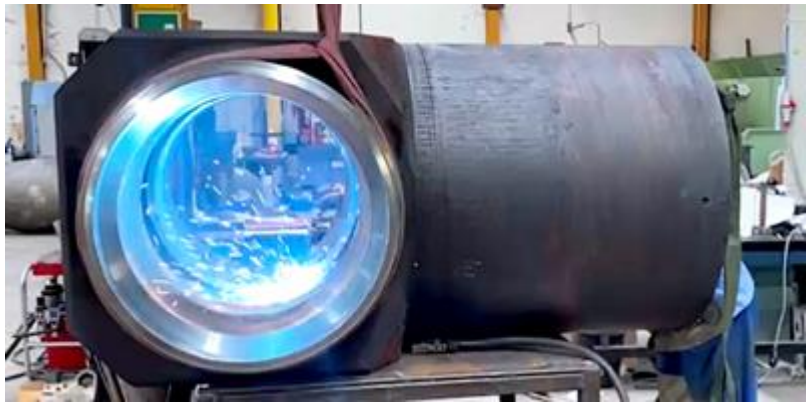
Austenitic stainless steel

Ferritic and ferritic-austenitic

Stainless steel

Nickel alloys

Hard facing (stellite)



Welding and Cladding

Heat Treatment

Non-Destructive Quality Control

Qualified personnel in house

(Certified Accordingly to UNI

EN ISO 9712:2012)

- 2 Technicians UT (Ultrasonic Examination) II Level
- 2 Technicians PT (Dye Penetration Examination) II Level
- 2 Technicians MT (Magnetic Particles Examination) II Level
- 2 Technicians VT (Visual Examination) II Level

Available as Needed Lev. III

As notified Body/Third part inspection (TUEV/BV/ABS/RINA)

Quality Controls As per ASME B16.34

1) **Visual and Dimensional Inspection**
2) **Radiographic Examination**
3) **Mechanical Tests**
   - Brinell Hardness test
   - Charpy Impact test
   - Tensile test
4) **Surface Examination**
   - MT: Magnetic particles examination
   - LP: Liquid penetrant examination
   - UT: Ultrasonic examination
5) **Chemical analysis**
   - PMI: Positive material identification

Our Laboratory

Analysis

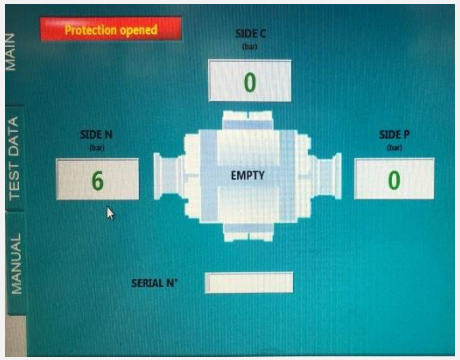
In our laboratory, we provide all the Quality Controls as per ASME B16.34 such as Mechanical Test, Surface Examination or Chemical Analysis.

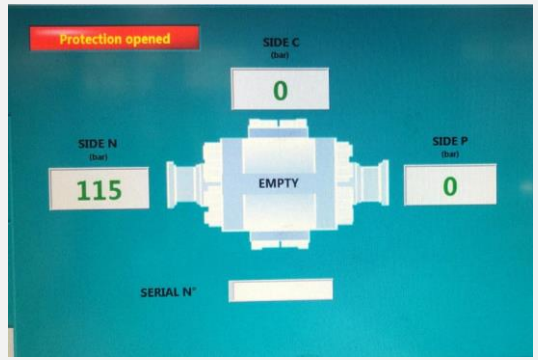
Valve Testing

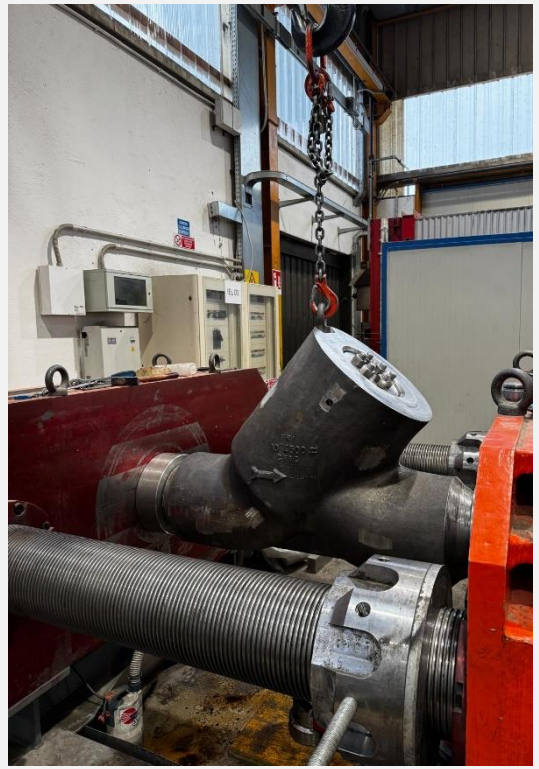
Valve Testing

- Pressure Test to API 598 – API 6A – API 6D – ISO 5208 – BS 6755
- Shell Test
- FAT Test
- Valve closure Test
- Backseat Test

Valve Testing



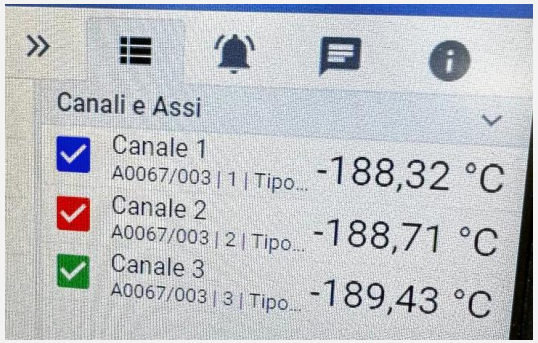


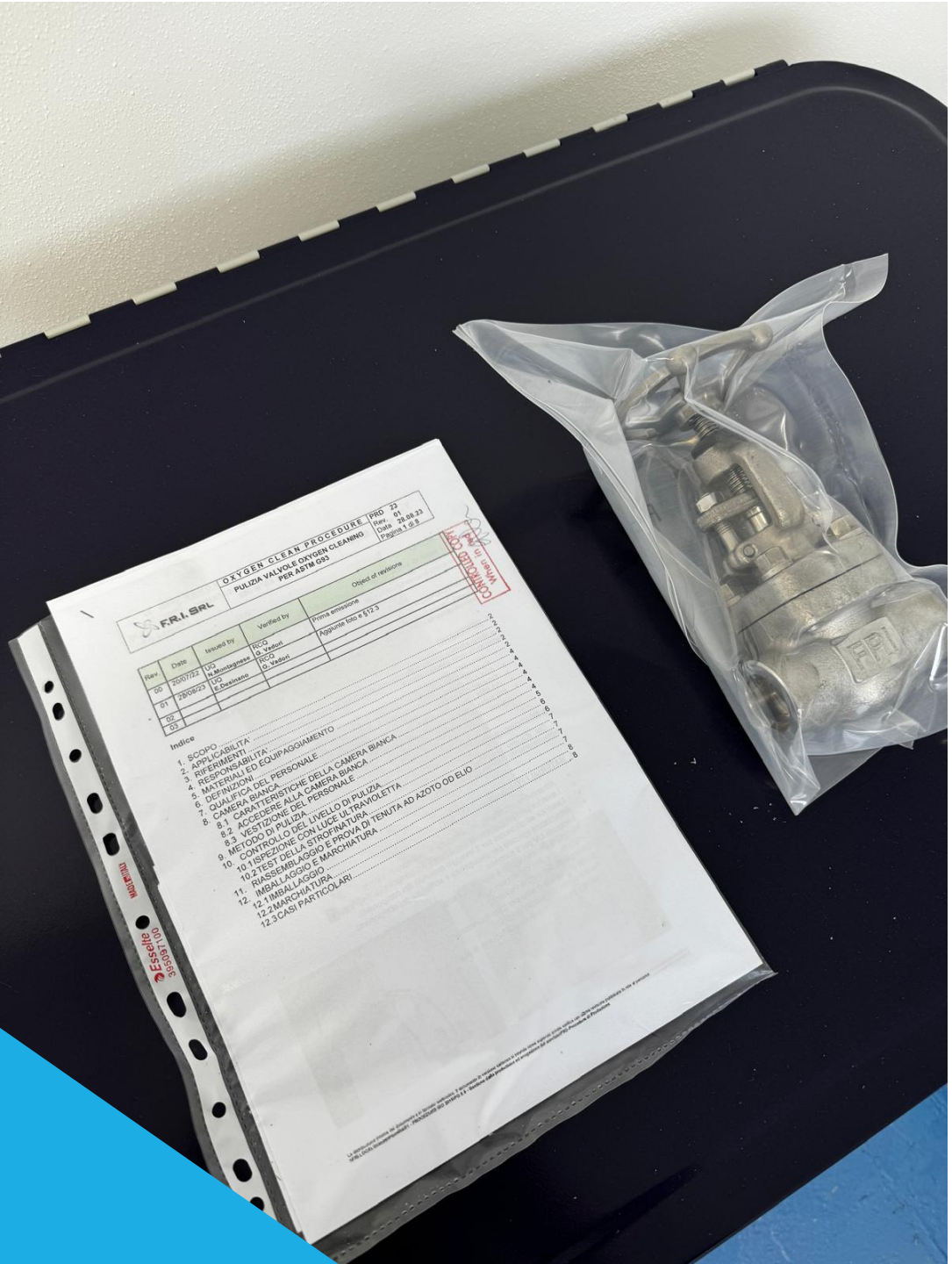


Special Valve Testing

- Fugitive Emission Inspection (helium) as per ISO 15848 or TA-LUFT
- Cryogenic Test up to -196°C
- Cleanliness Test for Oxygen application as per Linde or Air Products specification
- High Pressure Gas test
- Fire Test per API 607 – API 6FA

Special Valve Testing

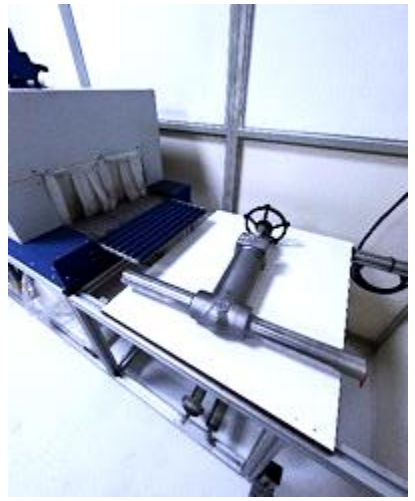




Oxigen & Hydrogen Cleaning

50%

Our Oxigen & Hydrogen Cleaning Room



Decontamination

In our Cleaning Room, we provide a specific decontamination for the valves used in the Oxygen / Hydrogen service, shipping them vacuum-packed.

Our Oxigen & Hydrogen Cleaning Room

Our Oxigen & Hydrogen Cleaning Room

Our
Strenghts

F.R.I. SRL

Our Strenghts

TAILOR-MADE VALVES FOR EVERY APPLICATION

FAST-TRACK DELIVERY

50+ YEARS EXPERIENCE and HIGH QUALITY MATERIALS

Seasoned F.R.I. technicians have extensive experience in the fields of energy, chemical, petrochemical and nuclear industries. They helped to put FRI at the forefront of research and development as well as creative technical solutions, material, automation, revamping and maintenance of existing system in those markets.

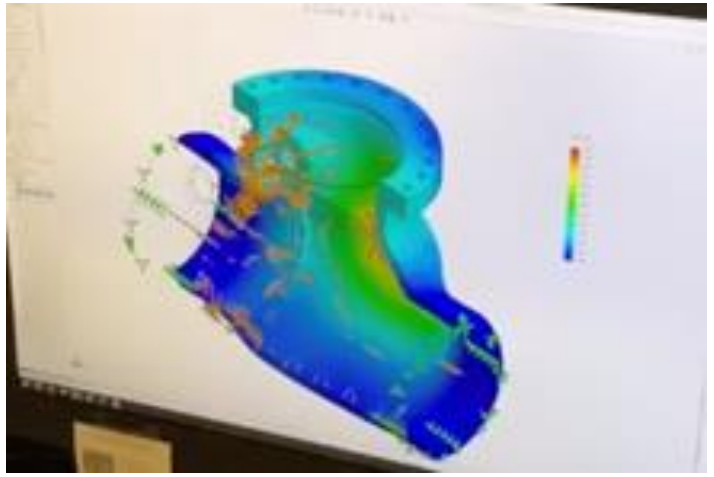
Our customers enjoy a strong and timely technical support due to our company's easy and flexible structure.

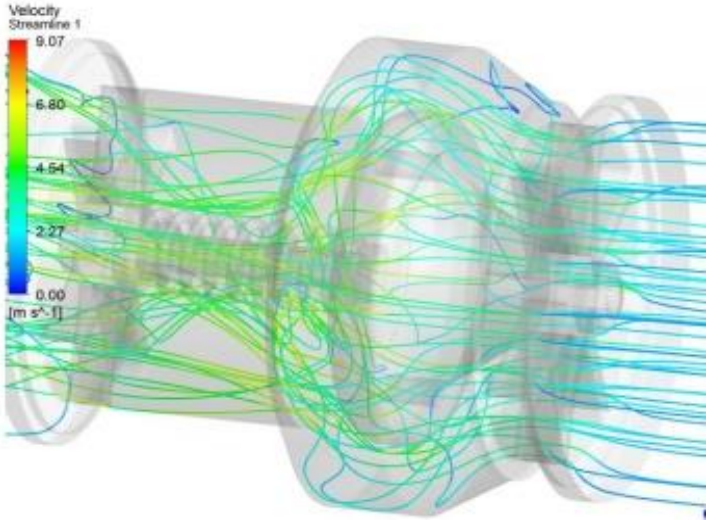
The long experience of FRI Technicians in materials technologies, metallurgic knowledge, machining techniques and valve manufacturing makes FRI able to respond of most of the technical challenges of our customers and to produce a wide range of valve types with a fast-track deliver.

Critical Application - Important Analysis

In case of Corrosive and aggressive Media following evaluations have to be taken into consideration:

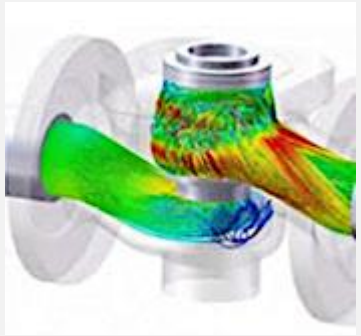
- Corrosivity, taking into account specified operating conditions including start up and shut-down conditions;
- Design lifetime and specific requirements;
- Failure probabilities, failure modes and failure consequences for human health, environment, safety and material assets;
- Resistance to brittle fracture;
- Inspection and corrosion monitoring
- Access for maintenance and repair.



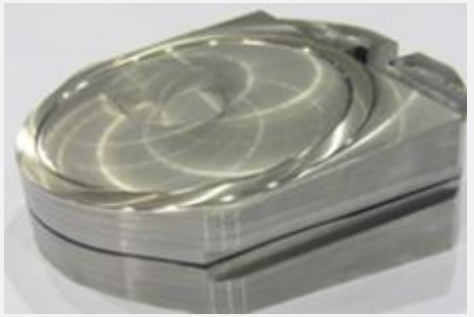


Critical Application - Design and Manufacturing

In case of Critical Application, Corrosive and aggressive media Valve design to improve lifetime is extremely important.
The design can not be standard and must be rechecked accordingly to working conditions.
Important is also high quality of machining and manufacturing process.



All our valve are 100% manufactured in Europe.



Our Sectors

Power Generation

Processing Refinery and Petrolchemical

Offshore and Marine

Cryogenic Service

Oil and Gas: Production API 6A Wellhead

Oil and Gas: Transmission API 6D

Nuclear

Cast Valves

Access to Italian qualified Foundries

Full patterns ownership

Cast Valves



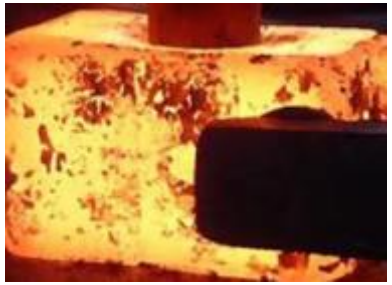






Cast Valves

Forged Valves



Access to Italian qualified forging parts

High Quality Materials

Forged Valves

Gate
Valves

- Pressure Seal
- Bolted Bonnet
- Slab & Expanding
- API 602 Forged

F.R.I. SRL

Pressure Seal Gate Valves

Flexible, Split and Parallel Slide wedge

Pressure Seal Classes:

600# 900# 1500# 2500# 4500#

+ Intermediate Classes

Designs Accordingly ASME B16.34 and EN 12516

Cast and Forged

Materials Available Carbon Steel (LF2-LCB, A105-WCB), low alloys (F1-WC1, F11-WC6, F22-WC9, F91-C12A, F92) and high alloys (F304-CF8, F316 CF8M, Inconel 625-CW6MC, Inconel 825 – CU5MCuC, Monel and others) for low and high temperature, critical service like sour, corrosive or erosive medias.

Manual, Gear and Motor operated

SIZE:

From **2”** To **40”**

Pressure Seal Gate Valves

Pressure Seal Gate Valves

Pressure Seal Gate Valves

Bolted Bonnet Gate Valves

Flexible, Split and Parallel Slide wedge

Classes:

150# 300# 600# 900# 1500# 2500#

+ Intermediate Classes

Designs Accordingly ASME B16.34 and EN 12516

Cast and Forged

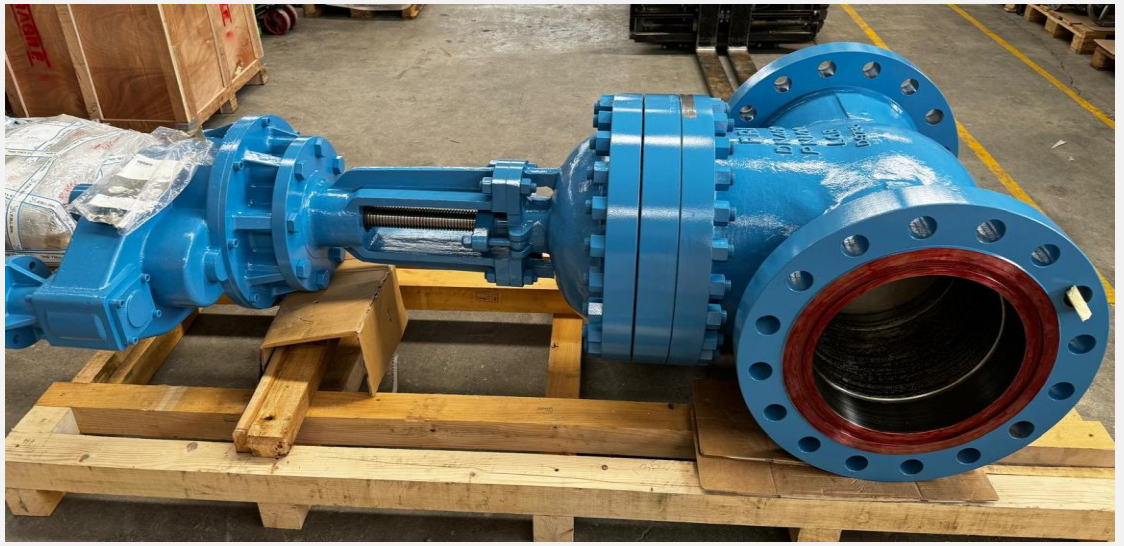
Materials Available Carbon Steel (LF2-LCB, A105-WCB), low alloys (F1-WC1, F11-WC6, F22-WC9, F91-C12A, F92) and high alloys (F304-CF8, F316 CF8M, Inconel 625-CW6MC, Inconel 825 – CU5MCuC, Monel and others) for low and high temperature, critical service like sour, corrosive or erosive medias.

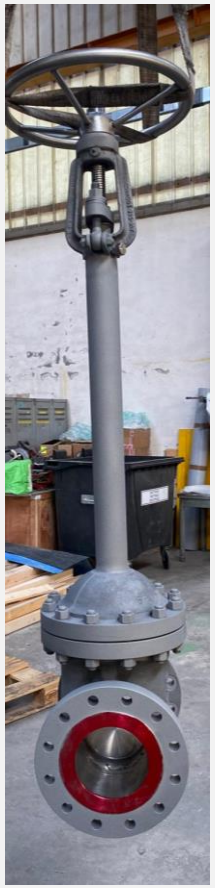
Manual, Gear and Motor operated

SIZE:

From **2”** To **40”**

Bolted Bonnet Gate Valves





Slab & Expanding Gate Valves

Spring Energized Seats, Double block and bleed service, piggable

Material selection from low temperature Carbon steel to high alloys, exotic materials including special cladding and trims

Classes:

150# 300# 600# 900# 1500# 2500#

+ Intermediate Classes

Through Conduit Double Expanding Gate Valves are manufactured with a full-bore port and with 2-piece (gate + segment) obturator designed for a positive, bubble tight, shut off upstream and downstream under both low and high differential pressure. Double block and bleed capability and high robustness are standard feature of this seat design.

The smooth, continuous bore minimizes turbulence within the valve and when in the open positive it produces a pressure drop equivalent to a portion of pipe of same length and diameter. The seat faces are outside the flow stream and therefore protected from the erosive action of the flow.

SIZE:

From **2”** To **48”**

Slab & Expanding Gate Valves

Slab & Expanding Gate Valves

API 602 Forged Gate Valves

Solid wedge

Classes:

150# 300# 600# 900# 1500# 2500#

+ Intermediate Classes

SIZE:

From 1/2” To 2”

Globe
Valves

- Pressure Seal
- Bolted Bonnet
- API 602 Forged
- Control

Plug Type

Needle Type

Cage Type

F.R.I. SRL

Pressure Seal Globe Valves

Pressure Seal Classes:

600# 900# 1500# 2500# 4500#

+ Intermediate Classes

Straight, Y and T Pattern, Angle Type

Accordingly, BS1873, ASME B16.34 and EN 12516

Materials Available Carbon Steel (LF2-LCB, A105-WCB), low alloys (F1-WC1, F11-WC6, F22-WC9, F91-C12A, F92) and high alloys (F304-CF8, F316 CF8M, Inconel 625-CW6MC, Inconel 825 – CU5MCuC, Monel and others) for low and high temperature, critical service like sour, corrosive or erosive medias.

Manual, Gear or Motor operated

SIZE:

From **2”** To **36”**

Pressure Seal Globe Valves

Bolted Bonnet Globe Valves

Classes:

150# 300# 600# 900# 1500# 2500#

+ Intermediate Classes

Straight, Y and T Pattern, Angle Type

Accordingly, BS1873, ASME B16.34 and EN 12516

Materials Available Carbon Steel (LF2-LCB, A105-WCB), low alloys (F1-WC1, F11-WC6, F22-WC9, F91-C12A, F92) and high alloys (F304-CF8, F316 CF8M, Inconel 625-CW6MC, Inconel 825 – CU5MCuC, Monel and others) for low and high temperature, critical service like sour, corrosive or erosive medias.

Manual, Gear or Motor operated

SIZE:

From **2”** To **36”**

API 602 Forged Globe Valves

Classes:

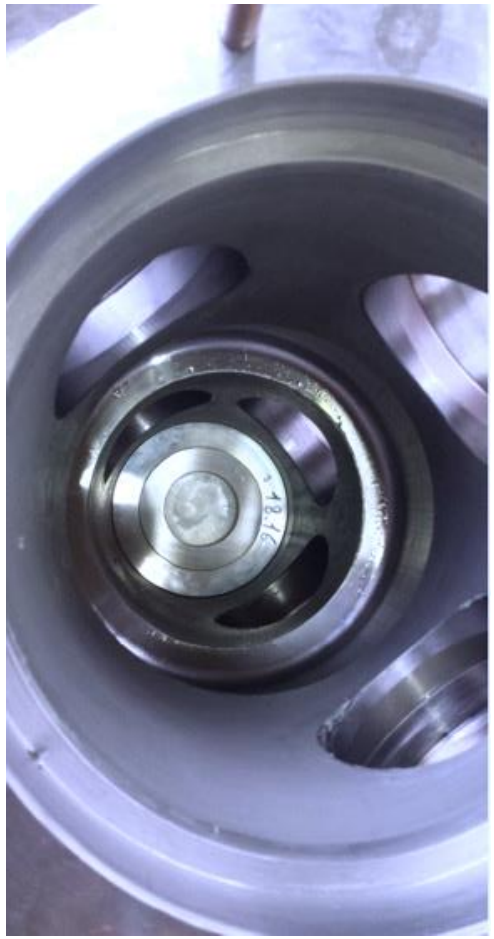
150# 300# 600# 900# 1500# 2500#

+ Intermediate Classes

SIZE:

From **1/2”** To **2”**

Control Globe Valves



- Water Flow Control Valve
- Water Injection Control Valve
- Minimum Flow Control Valve
- Steam Conditioning Control Valve
- Preheater Protection Valve

Control Globe Valves

Check
Valves

- Pressure Seal
- Bolted Bonnet
- Low Pressure Drop
- Axial Flow
- API 602 Forged

F.R.I. SRL

Pressure Seal Check Valves

Pressure Seal Classes:

600# 900# 1500# 2500# 4500#

+ Intermediate Classes

Accordingly, BS1868, ASME B16.34 and EN 12516

Both cast and forged

Materials Available Carbon Steel (LF2-LCB, A105-WCB), low alloys (F1-WC1, F11-WC6, F22-WC9, F91-C12A, F92) and high alloys (F304-CF8, F316 CF8M, Inconel 625-CW6MC, Inconel 825 – CU5MCuC, Monel and other) for low and high Temperature, Critical Services like sour, corrosive or erosive medias.

SIZE:

From **2”** To **40”**

Pressure Seal Check Valves

Bolted Bonnet Check Valves

Classes:

150# 300# 600# 900# 1500# 2500#

+ Intermediate Classes

Accordingly, BS1868, ASME B16.34 and EN 12516

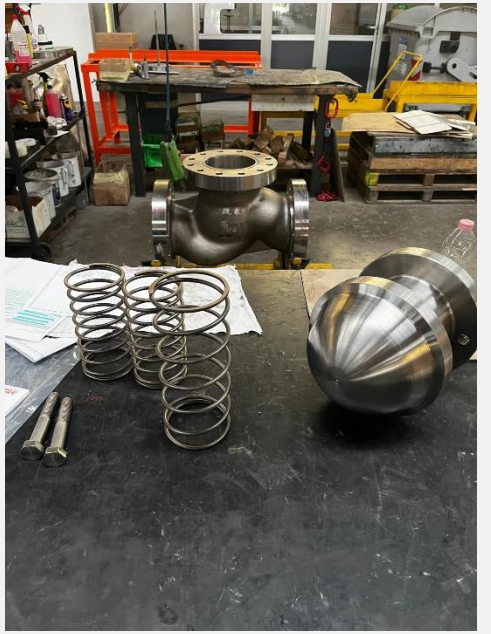
Both cast and forged

Materials Available Carbon Steel (LF2-LCB, A105-WCB), low alloys (F1-WC1, F11-WC6, F22-WC9, F91-C12A, F92) and high alloys (F304-CF8, F316 CF8M, Inconel 625-CW6MC, Inconel 825 – CU5MCuC, Monel and other) for low and high Temperature, Critical Services like sour, corrosive or erosive medias.

SIZE:

From **2”** To **40”**

Bolted Bonnet Check Valves



Low Pressure Drop Check Valves

Classes:

150# 300# 600# 900# 1500# 2500#

+ Intermediate Classes

Wafer, Lug and Flanged Type

Full Port Check Valves provide more flow and lower pressure drops than conventional check valves.

F.R.I. can design all types of Check valves increasing the performance by eliminating the restrictive valve seat, reducing the weight of the disc and substantially increasing the valve's open area and flow coefficient (Cv).

They are ideal for application in vacuum pumps, compressed air and gas system as well as in water systems where low head loss and elimination of wafer hammer are desirable.

SIZE:

From **2”** To **40”**

Axial Flow Check Valves

Classes:

150# 300# 600# 900# 1500# 2500#

+ Intermediate Classes

Wafer, Lug and Flanged Type

Full Port Check Valves provide more flow and lower pressure drops than conventional check valves.

F.R.I. can design all types of Check valves increasing the performance by eliminating the restrictive valve seat, reducing the weight of the disc and substantially increasing the valve's open area and flow coefficient (Cv).

They are ideal for application in vacuum pumps, compressed air and gas system as well as in water systems where low head loss and elimination of wafer hammer are desirable.

SIZE:

From **2”** To **40”**

Axial Flow Check Valves

Pattern Ownership

Italian Castings

All In-House Machining

Precise assembling

API 602 Forged Check Valves

Classes:

150# 300# 600# 900# 1500# 2500#

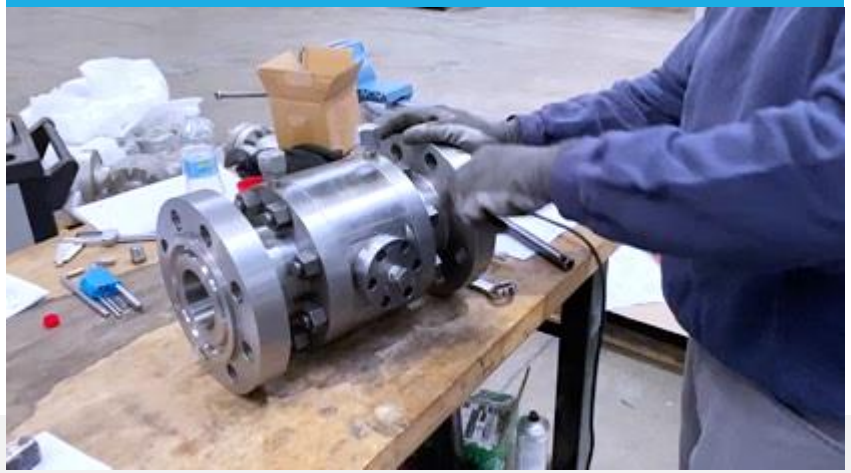
+ Intermediate Classes

SIZE:

From **1/2”** To **2”**

Ball
Valves

F.R.I. SRL



Ball Valves

- 2 or 3 pieces – Standard design
- Top entry design – ball and seat can be removed from top
- Fully welded - zero leakage for gas pipeline

Size from ½ inch to 48 inch (bigger on request)

Pressure classes from 150# to 2500# (4500# on request)

Forged and Cast version

Material selection Carbon steel, alloy steel, stainless steel, alloy steel for low temperature, nickel alloys. Available also cladding in Inconel 625 or other alloys.

All designs piggable, on request with stem extension for underground application

Floating, Trunnion

Soft (PEEK, PTFE, RPTFE, Viton) and metal seated (ENP, tungsten Carbide, Chromium Carbide)

Ball Valves

Ball Valves

Double Block and Bleed Ball Valves

Design API 6D

Size from ½ inch to 12 inch

Pressure classes from 150# to 2500#

Split body, monoblock, monoflange

Material selection from low temperature carbon steel to high alloys, exotic materials including special claddings and trims

Plug
Valves

F.R.I. SRL

Plug Valves

Lubricated Plug Valves and Pressure balanced

From ½ inch to 36 inch 150#, 300#, 600#, 900# or higher-pressure classes on demand

Forged and Cast material

All types of material available from Carbon Steel to high alloys

Thanks to the sealant or lubricant there is a better sealing, the surfaces are protected from corrosion and the valve has a lower torque.

Due to this advantages lubricated plug valves have a longer life, are more resistant and better for corrosive media.

Non-lubricated Plug Valves

Non-Lubricated Plug Valves are used where maintenance must be kept to a minimum

From ½ inch to 36 inch 150#, 300#, 600#, 900# or higher-pressure classes on demand

Forged and Cast material

All types of material available from Carbon Steel to high alloys

Plug Valves

API 6A Wellhead

F.R.I. SRL

Gate, Globe, Check, Ball, Choke and Antisurge

Choke positive and adjustable, needle type, drilling Chokes.

Pneumatic, Electric, Hydraulic and Stepping actuated.

Gate Slab, expanding, double expanding, rising and no-rising stem, special customer designs.

SSV surface safety valves, self acting, line pressurized, hydraulic or pneumatic acting.

Forged and Cast version

Design accordingly API 6A Size 1 13/16”, 2 1/16”, 2 9/16”, 7 1/16”

5.000, 10.000, 15.000, 20.000, 25.000 PSI

Oil and Gas: Production API 6A Wellhead

Oil and Gas:
Production API 6A Wellhead

Material Selection

AISI 4130, 4140, 410, F6NM, Duplex, Superduplex, Inconel and nickel alloy.

Special Cladding and trims metal to metal with tungsten carbide, Stellite or ENP coating.

Offshore and Marine

F.R.I. SRL

Offshore

There are some challenges for the design and manufacturing of valves for offshore service due to the difficult working conditions and the high corrosive environment.

Material requirements: Special Alloys like Duplex (ASTM F51), Superduplex (ASTM F53-F55), Inconel 625 or 825. Norsok requirements to assure the durability of the material under the severe working conditions and use of qualified foundries and forgings.

Valves dimensions should be reduced in volume and weight due to the space and weight limitations in the platforms or FSPOs.

Painting Procedures and tests to painted valves to guarantee the quality of the same to withstand the tough conditions of the offshore environment, including the splash area of the platforms. Color Coding.

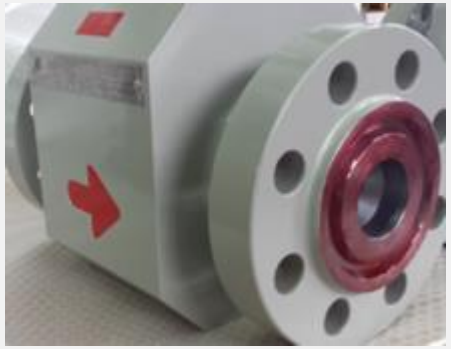
Offshore

Subsea Valves

Subsea valves are used in sub-marine envoirments, which can range in depth from shallow water (usually down to a depth of 75 meters) to deep water (down to 3500 meters).

They are designed to function in a sub-marine envoirment, withstanding the effects of raised external pressure, salt-water corrosion, and bubbles or debris in the materials.

Subsea valve design, like any critical component, must meet stringent industry standards including API 6A, API 6DSS and API 17D (ISO 10423, ISO 13628, ISO 14723). Body design must overcome deep water hydrostatic pressure and internally and externally the design must be corrosion resistant.



Cryogenic Service

- Liquified Natural Gas
- Oxygen Plant
- Helium Plant

F.R.I. SRL

Cryogenic Valves

Cryogenic Service includes Production, Transportation and storage of Liquified gases oxygen, nitrogen, argon, natural gas, hydrogen or helium down to -425°F (-253.9°C).

This presents many technical problems due to severe application and requires an high quality product in terms of material, machining, overlays and cleaning

Our Valves are fulfilling all technical specifications in Order to work properly at very low temperature

Special
Designs

F.R.I. SRL

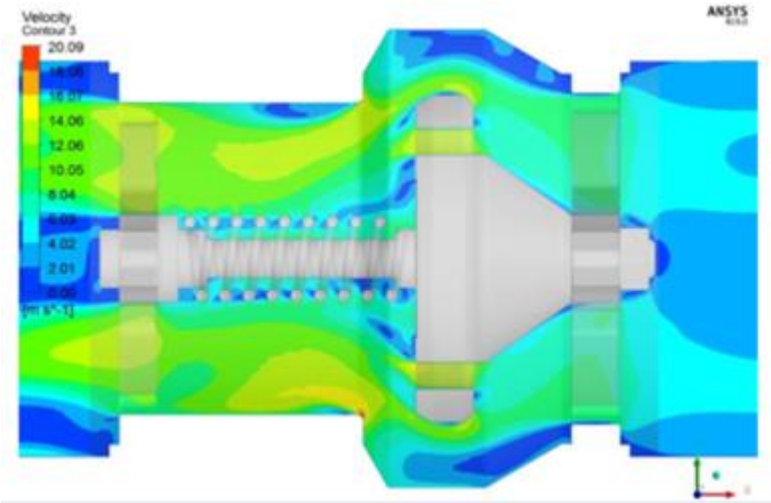
Excess Flow Valves

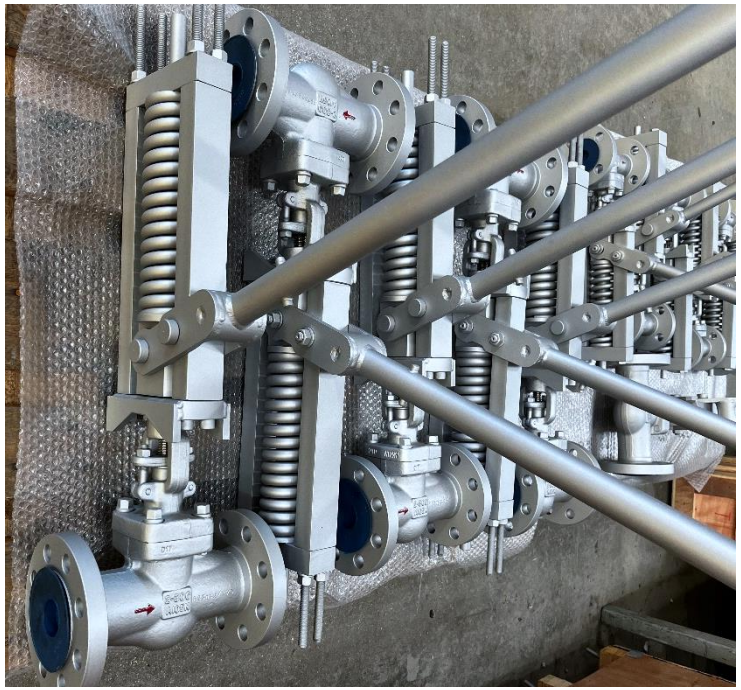
Excess Flow valves are emergency shutoff devices. These valves are designed to open when a sudden flow surge occurs.

Excess Flow valves are normally used in pipelines, tankers where pressurized gas or liquid flows in either direction.

Excess Flow valves are spring-loaded flow shut-off valves, which will only open when the flow through the valve exceeds a predetermined flow rate in direction marked on the valve. Each valve has a opening flow rate in the direction marked on the valve. Each valve has a opening flow rate based on specified conditions.

Excess Flow Valves reset automatically when pressure is restored.





Intermittent

Continuous

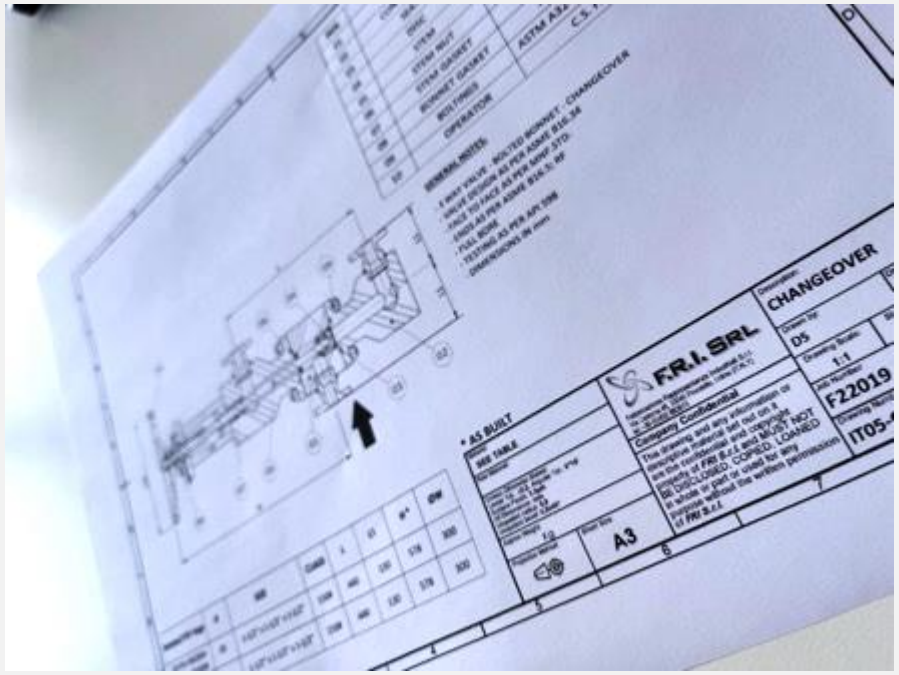
Continuos and Intermittent Blowdown Valve

Continuos blowdown valves are designed for operation in open position. Intermittent are controlled by an actuator. Their function is mainly to control a continuous or intermittent flow of media. Equipped with a special dial and pointer which enables the operator to set the valve opening. Each valve is fitted with a scientifically designed disc, insuring proportional flow throughout the entire lift of the stem.

Changeover Valves

Changeover valves are a switchover valves, switching flow from one pipeline to another.

Changeover Valves are typically used to connect two safety valves to a single pressurized system. These devices ensure the possibility to have one safety valve always in operation and one in “stand-by”, without interruption of the plant operation and protecting the plant against excessive overpressure.



Bellow Seal Valves

Gate and Globe Bolted Bonnet

Size from 2 inch to 36 inch
Pressure Classes 150#, 300#, 600#, 900#

All materials available for Body Bonnet
Bellow available in F304, F321 and Inconel

Manual, Gear and Motor operated

Design Certified accordingly ISO 15848-1
Fugitive Emission test in production






Bronze Valves

Gate, Globe, Check and Butterfly

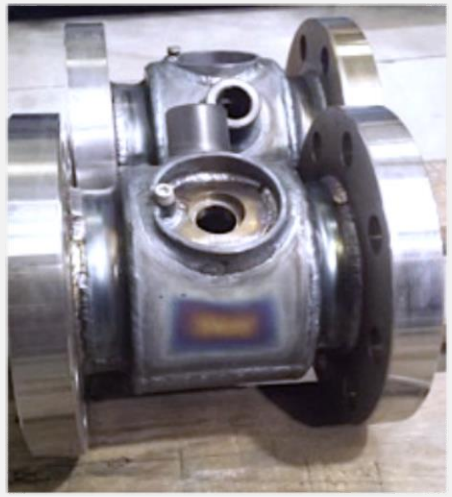
Size from ½ inch to 4 inch (bigger on demand)
Pressure Classes 150#, 300#, 600#

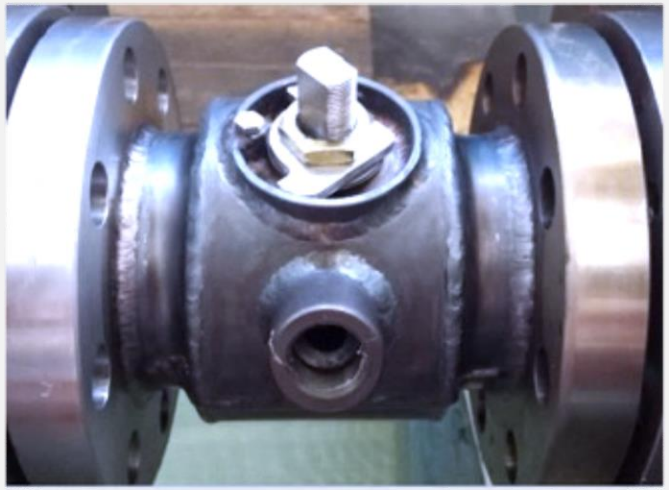
Materials:
-ASTM B61 C92200
-ASTM B62 C83600
-ASTM B148 C95800

Stem Extensions

Special Stem extensions up to lenght of 7 or 8 meters (Gate, Globe, Ball and Plug)

Jacket for Heating Up





Our Service
365 / 24 / 7

Power Plants

Petrolchem. Plants

Process Industry

Refinery

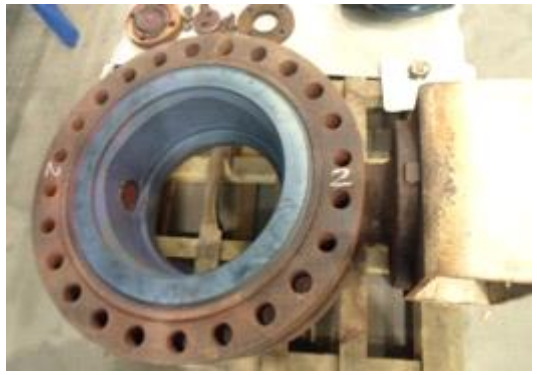
Valve Maintenance

Field Service

Reverse Engineering

Spare Parts Solutions

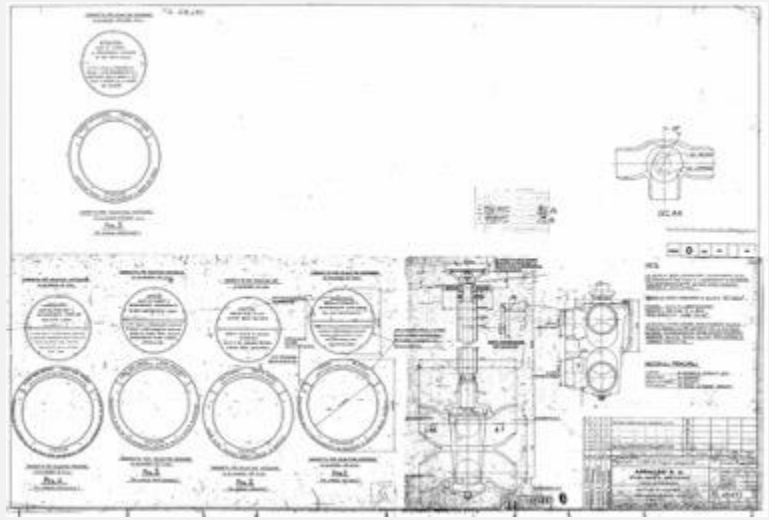
Before Reconditioning



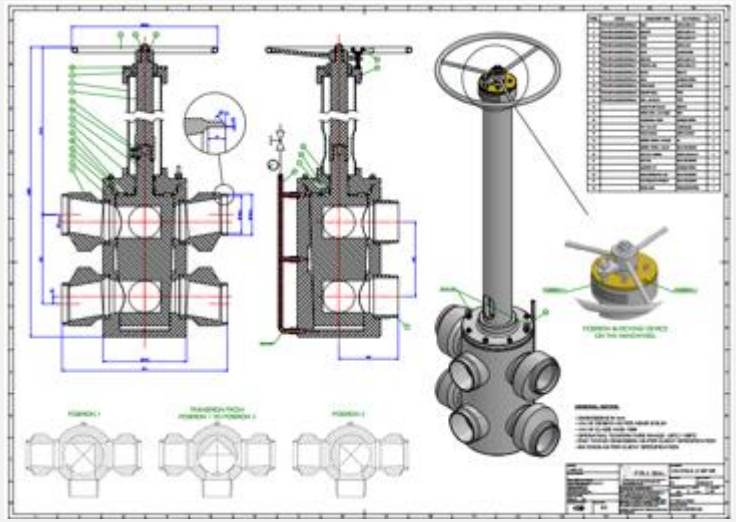
After Reconditioning

Supply of **New valve** through an **Old Non-F.R.I. Valve Drawing** [ANSALDO ENERGIA]

- **Old** Valve Drawing



- **New** Valve Drawing



- **Re-Production** as Old one

Case of Valve **Reverse Engineering**: [TENARIS DALMINE SPA, STEEL MILL]

FRI S.r.l. provided in 2017 a Revamping & Reverse engineering of internal Components for a Gate Valve Pressure Seal 3” 1500#.

Phases:

- Disassembly of the Valve
- Inspection of every component
- Identification of every component to be substituted
- Machining or Re-manufacturing of internal components
- Quality controls before reassembling
- Final phases (Assembling, testing, painting,..)

Case of Valve **Reverse Engineering**: [TENARIS DALMINE SPA, STEEL MILL]



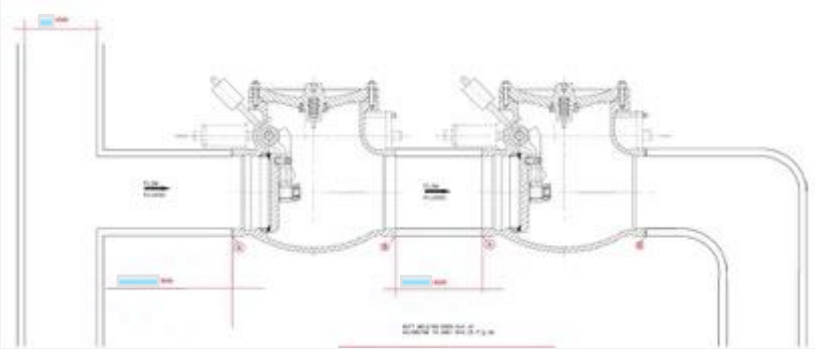






Case of Valve **Reverse Engineering**: [TENARIS DALMINE SPA, STEEL MILL]

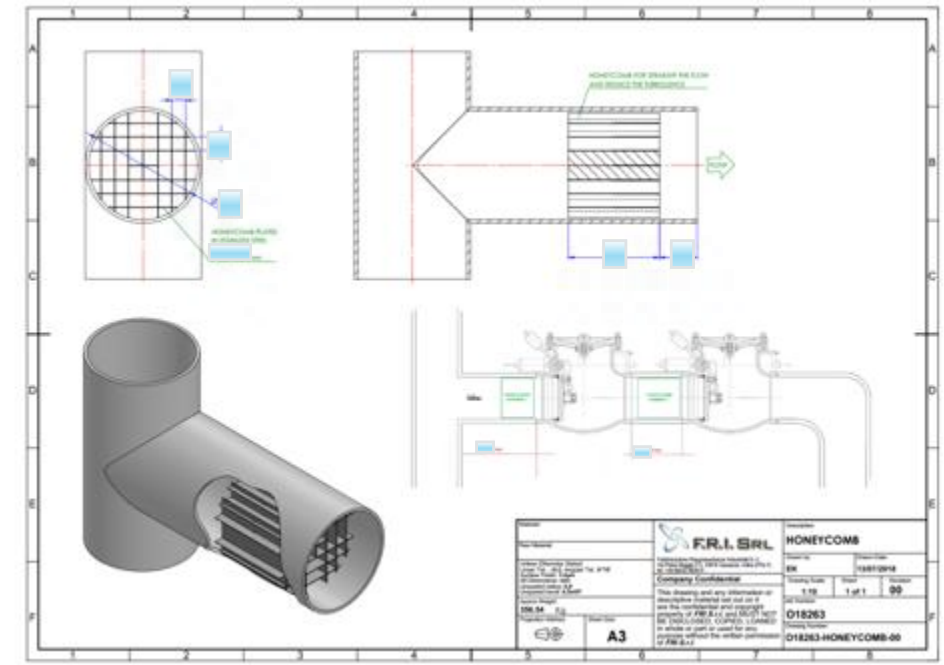
Case of **Flow Problem** on a Non-F.R.I. Valve : [ANSALDO NUCLEARE]

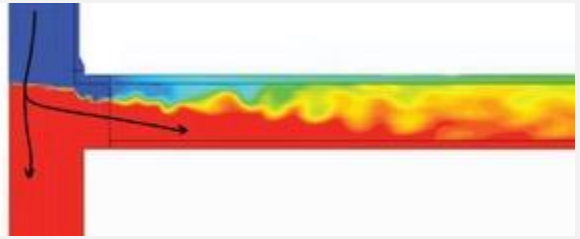


The Client was facing a turbulent and discontinuous flow that can cause the **CHATTERING** and **DISC SLAM** phenomenon on 2 check swing valves. Both of these phenomena accentuate the instability of the flow and involve strong noise, incorrect valve functionality, reduced valve life and possible problems with the equipment located downstream.

The solution proposed by FRI was to install a **flow rectifier** (HoneyComb Flow Straightening). Flow rectifiers of this type are usually used in wind tunnels to reduce the effects of discontinuities and allow much shorter paths. The rectifier must be positioned at a distance of approximately one diameter from the intersection "a tee" to avoid the addition of localized pressure losses and develop as close as possible to the valve inlet in order to maximize its effects. The cell size must not be too small to contain the induced load losses; the best compromise between efficiency and energy loss occurs with cells measuring approximately 60mmx60mm.

Case of **Flow Problem** on a Non-F.R.I. Valve : [ANSALDO NUCLEARE]

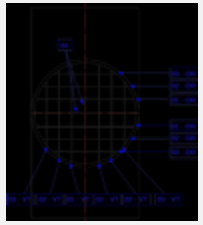




01 – Development of free flow in a tee joint (**without** the addition of a flow rectifier)

02 – Development of the flow in a tee joint **with** the addition of a flow rectifier.

The benefits are reduced noise, an increased life expectancy of the valves and a reduction of turbulence-induced problems in systems downstream of the installation.



Our Certificates

F.R.I. SRL

Our System Certifications

API 6D

Certificate of Authority to use the Official API Monogram
License Number: 6D-1937 ORIGINAL

The American Petroleum Institute hereby grants to
FABBRICAZIONE RAPPRESENTANZE INDUSTRIALI S.R.L.
Via Luigi Cadorna N 48
Povoletto, Uidne
Italy

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API-6D and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: 6D-1937

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Ball Valves

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: MAY 6, 2023
Expiration Date: MAY 6, 2026

To verify the authenticity of this license, go to www.api.org/compositelist.

Senior Vice President of Global Industry Services

ISO 9001

CERTIFICATO

FABBRICAZIONE RAPPRESENTANZE INDUSTRIALI S.r.l.

SEDE LEGALE E OPERATIVA:
VIA CADORNA 48 – FRAZIONE: SALT
IT - 33040 POVOLETTO (UD)

UNI EN ISO 9001:2015

Progettazione, fabbricazione e commercializzazione di valvole e relativi componenti meccanici per impianti di produzione d'energia, industria del petrolio e del gas, industria petrolchimica (IAF 18, 17, 28)

Design, manufacture and trade of valves and related mechanical components for energy production plants, oil and gas industry, petrochemical industry (IAF 18, 17, 28)

SIL

ATTESTAZIONE
DI VERIFICA DELLA CONFORMITÀ
CONFORMITY VERIFICATION STATEMENT

FABBRICAZIONE RAPPRESENTANZE INDUSTRIALI S.r.l.

IEC 61508:2010

PED

CERTIFICATO
CERTIFICATE

L'Ente di Certificazione TÜV Italia Srl
Organismo Notificato 0948 Direttiva Attrezzature a Pressione

FABBRICAZIONE RAPPRESENTANZE INDUSTRIALI S.r.l.
Sede legale ed operativa:
Via Cadorna Fraz. SALT 48 I-33040 POVOLETTO (UD)

CE 0948

Certificato No. / Certificate No.: PED-0948-QSH-568-22

API 6A

Certificate of Authority to use the Official API Monogram
License Number: 6A-2491 ORIGINAL

The American Petroleum Institute hereby grants to
FABBRICAZIONE RAPPRESENTANZE INDUSTRIALI S.R.L.
Via Luigi Cadorna N 48
Povoletto, Uidne
Italy

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API-6A and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: 6A-2491

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Check Valves at PSL 1, PSL 2

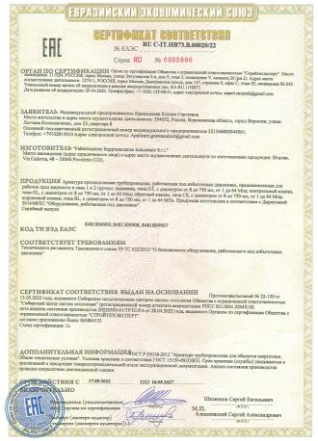
QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: APRIL 24, 2024
Expiration Date: MAY 6, 2026

To verify the authenticity of this license, go to www.api.org/compositelist.

Senior Vice President of Global Industry Services

EAC



ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
СЕРТИФИКАТ СООТВЕТСТВИЯ

ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

Our Product Certifications

FUGITIVE EMISSION, CRYOGENIC, FIRE SAFE TYPE TEST CERTIFICATES ecc...

*F.R.I. valves installed in Mexico, Vitol refinery

Our Clients

F.R.I. SRL

Our Clients


a2a
ANSALDO ENERGIA
BERKSHIRE HATHAWAY ENERGY
aramco
QatarEnergy
bp
SIEMENS energy
ADNOC
NETPOWER
GASCO
QAPCO
EUROCHEM
Karachaganak
INEOS
CNPC
Aluminium for the world
ICA FLUOR
IMI
Enel
iren
PRODUZIONE
HYUNDAI HEAVY INDUSTRIES CO., LTD.
QAFCO
QATAR FERTILISER COMPANY
Kawasaki
Powering your potential
ERIKS
ORYX GTL
Kuwait Energy
REPSOL
EDISON EDF GROUP
Baker Hughes
TechnipFMC
desfa
HELLENIC PETROLEUM
eni versalis
SBM OFFSHORE
TRUE. BLUE. TRANSITION.
BECHTEL
NCOC
NORTH CASPIAN OPERATING COMPANY
OPC
TECNICAS REUNIDAS
TOTAL
QatarEnergy LNG
CALENERGY RESOURCES LIMITED
ENGIE
Air Liquide
carbon clean
TECHNOLOGY TO ACHIEVE 'NET ZERO'
مياهنا miyahuna
AIR PRODUCTS
T.EN TECHNIP ENERGIES
JINDAL STEEL & POWER
sabic
one dyas
البوتاس العربية Arab Potash
mainova
enel
NESTE OIL
SOCAR
CTCI
ORANJE-NASSAU ENERGIE
КазМунайГаз
Dragados Offshore
Enppi
Engineering For The Petroleum & Process Industries
PETRONAS
KSS
Hamad International Airport QATAR
FATA Part of Danieli Group
equinor
AkzoNobel
CHIYODA ALMANA ENGINEERING LLC
Kürvers Piping
Unipetrol ORLEN GROUP
T&C GROUP TROUVAY & CAUVIN Channelling all energies
ТЕНГИЗШЕВРОЙЛ
ORYX GTL
أوريكس لتحويل الغاز إلى سوائل المحدودة ORYX GTL Limited
GEKO Energia & Ambiente
NESTE OIL
LUKOIL
Linde
MRC Global We Make Energy Flow.
ExxonMobil
MODEC
PETROJET
thyssenkrupp
FLUOR
BLACK & VEATCH
КазМунайГаз АНПЗ REFINERY
ansaldo nucleare
HELLENIC PETROLEUM
AkerSolutions
Eskom
ALSTOM
ORLEN
Crossbridge ENERGY FREDERICIA

Our Approvals

CLIENT	COUNTRY
A2A	ITALY
ADNOC	UNITED ARAB EMIRATES
ANSALDO ALGERIA	ALGERIA
ANSALDO ENERGIA SpA	ITALY
ANSALDO NUCLEARE	ITALY
BAKER HUGHES	ITALY
BANAGAS	BAHRAIN
BAPCO	BAHRAIN
Berkshire Hathaway energy (BHE) – Cal Energy	USA
BUSINESS GATAWAY - JSRS	OMAN
CCC	WORLDWIDE
CHIYODA ALMANA	QATAR
CTCI	SINGAPORE
EDISON	ITALY
EGAS	EGYPT
EGPC	EGYPT
EGYPT GAS	EGYPT
ENGIE	ITALY
HELLENIC PETROLEUM	GREECE
ICA FLUOR	MEXICO
IREN	ITALY
JINDAL	INDIA
KAWASAKI HEAVY INDUSTRIES	JAPAN
KPO – A company jointly owned by ENI, Shell, Chevron, Lukoil and KazMunaiGas.	REPUBLIC OF KAZAKHSTAN
MATAR	QATAR
NESTE OY	FINLAND
NTPC	REPUBLIC OF KAZAKHSTAN
OPC	ISRAELE
ORASCOM	EGYPT
UNIPETROL ORLEN	CZECH REPUBLIC / LITHUANIA
ORYX GTL SASOL	QATAR
PETROBEL	EGYPT
PETROJET	EGYPT
QAPCO	QATAR
QATAR ENERGY LNG	QATAR
ROSETTI MARINO	ITALY
SOCAR	TURKYE / AZERBAIJAN
TECNICAS REUNIDAS	SPAIN
THYSSENKRUPP	GERMANY

Some Important Supplies & Achievements

2012 - 2014 **SOME KEY END USERS supplies under Zikesch (IMI) Brand** for Special & High Pressure Valves:

- NESTE Oy Refinery Finland
- ALSTOM KOELN HBK5 A NEW HIGH-PRESSURE COMBUSTION CHAMBER TEST STATION FOR TURBINES IN JV BETWEEN ALSTOM AND ROLLS ROYCE PLC Germany
- DURO DAKOVIC-TERMOENERGETSKA POSTROJENJA D.O.O Ferrybridge Power Plant UK
- SIEMENS CLEAN ENERGY CENTER BURNER TEST CENTER FOR GAS TURBINES IN LUDWIGSFELDE BERLIN Germany
- AIRLIQUIDE Ludwigshafen Germany
- ISAB Raffineria Impianti plant Refinery Italy
- GE OPOLE COAL POWER PLANT POLSKA GRUPA ENERGETYCZNA (PGE) Poland
- Solvay Plant Germany
- Mitshubishi Power plant Germany
- Vattenfall Plants Germany
- ESKOM MATLA POWER STATION South Africa

2015 **FIRST OFFSHORE PROJECT** supplied with F.R.I. Brand Gate, Globe and Check valves 2, 4 and 6 inches up to Pressure Class 900# in Duplex F51, F53 End user ORANJE-NASSAU ENERGIE BV (ONE) Project OFFSHORE Q16-MAAS GAS FIELD NETHERLANDS

2016 **SUPPLY OF MORE THAN 1.200 VALVES IN 12 WEEKS** Gate, Globe and Check valves from 1/2 to 12 inch up to Pressure Class 2500# in F22 End user Unipetrol EPC Company Technip Project LITVINOV Refinery

Some Important Supplies

2017 **HIGH PRESSURE & TEMPERTAURE POWER VALVES SUPPLIED IN EGYPT** 50 Gate, Globe and Check valves from 1 to 12 inch up to Pressure Class 2500# in F91 End user Pgesco EPC Ansaldo Energia Project CAIRO ELECTRICITY PRODUCTION COMPANY (CEPC) 6TH OCTOBER POWER PLANT 600 MW Egypt

FIRST CRITICAL CRYOGENIC VALVES (Helium Service -268°C & Oxigen Cleaned) SUPPLY TO QATAR Gate, Ball End user RASGAS (QATARENERGY LNG), EPC Chyoda Almana for Helium 3 project

2018 **SUPPLY OF 1.120 VALVES FOR HIGH PRESSURE AND TEMPERATURE FOR SOCAR** Gate, Globe and Check valves from 3/4 to 8 inch up to Pressure Class 2500# in F91 End user Socar EPC Company Technip Project AZERIKIMYA MODERNIZATION PETROCHEMICAL COMPLEX AZERBAIJAN

SUPPLY OF SPECIAL LOW PRESSURE DROP PISTON CHECK VALVES to ORYX GTL Plant in Qatar 4 pieces 20 inches 1500# in CF8C

SUPPLY TO End user Karachaganak Petroleum Operating (KPO) where KazMunayGas, Eni, Chevron Corporation, Shell, LUKoil are JV partners Kazakhastan 54 Globe valves from 3 to 8 inch up to Pressure Class 600# in LCC and TRIM Inconel

2019 **SUPPLY OF 1180 Gate, Globe, Check, Ball and DBB valves** from 1/2 to 20 inches up to Pressure Class 2500# in LF2 and Inconel Trim End user Karachaganak Petroleum Operating (KPO) where KazMunayGas, Eni, Chevron Corporation, Shell, LUKoil are JV partners Kazakhastan

2020 **SUPPLY OF 52 valves from 1 to 28 inches up to pressure Class 2500# in F92 for Power application** End User Edison EPC Ansaldo Energia Power Plants Marghera and Presenzano. Marghera is actually the most innovative ed efficient Power plant in Europe

Some Important Supplies

2020 **signed frame Agreement with Baker Hughes** for supply of GGC up to critical high pressure and temperature.
Constant supply of thousands of valves (up to 600 pcs per months) of Gate, Globe, Check, Butterfly up to 14" and up to 15.000 PSI in pressure.
Final end-users & EPCs supplied:
Equinor, Exxon Mobil, Shell, Aramco, Adnoc, Hyundai Heavy Industries, SBM, Air Products, Modec, ICA Fluor, McDermott, Tecnicas Reunidas, and more

2021 **signed frame Agreement with QatarEnergyLng** (CONTRACT REF. 4600013265 AGAINST)
Constant supply for thousand of valves of various valves Gate, Globe Check and ball for different services from Cryogenic to standard

2022

signed frame Agreement with QAPCO (Qatar Petrolchemical Company) for the supply of Special Gate Valves Cryogenic service and Steam in various materials LF2, SS304, SS316 and WC6 and dimensions from 1/2 inch to 28 inches
Costant supplies from 2022 ongoing for various other types as well like ball, butterfly, globe and check

2023

SUPPLY OF MORE THAN 100 CRITICAL API 6A & POWER VALVES for EXXON MOBIL & EQUINOR (EPC MODEC) up to 14inch 1500# Gate, Ball, Check, Butterfly in SS, F91, Duplex ecc, penumatic actuated, with hubs and special features

Thanks

For your Attention

Via Cadorna, 48
33040 Salt Di Povoletto (UD) Italy
P.Iva 02699040305
Tel. +39 0432 882813
www.frisrl.com

Email: sales@frisrl.com