



Equipment Solution Group

Colombia S.A

Integral Solutions

ESGCOL



Drilling
Perforation

1



Alternative
Energy



OIL / GAS
Production



Integral Solutions

Automation



Piping, Fittings
and
Transportation



6

5

3

4

Energy Industry
and
Environment



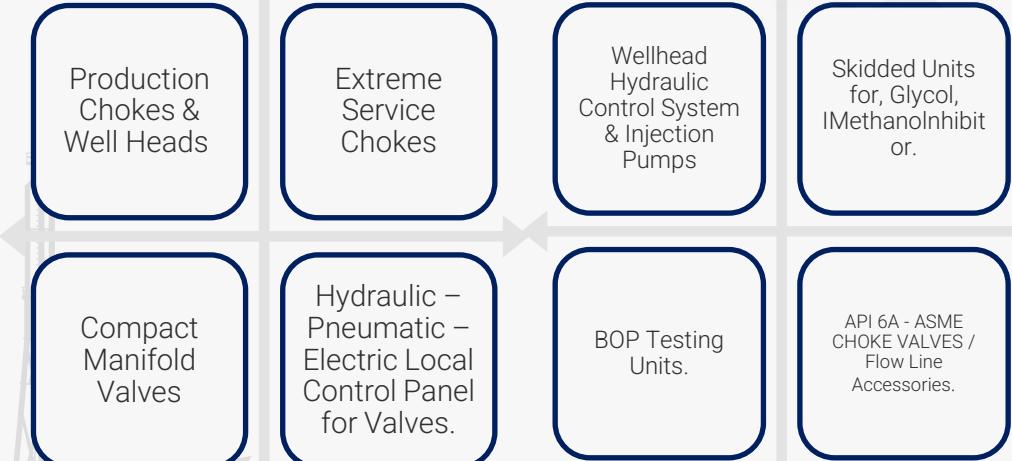
Refining and
Petrochemicals



1 - Drilling Perforation

Well Heads & Choke Valves: Oil & Gas

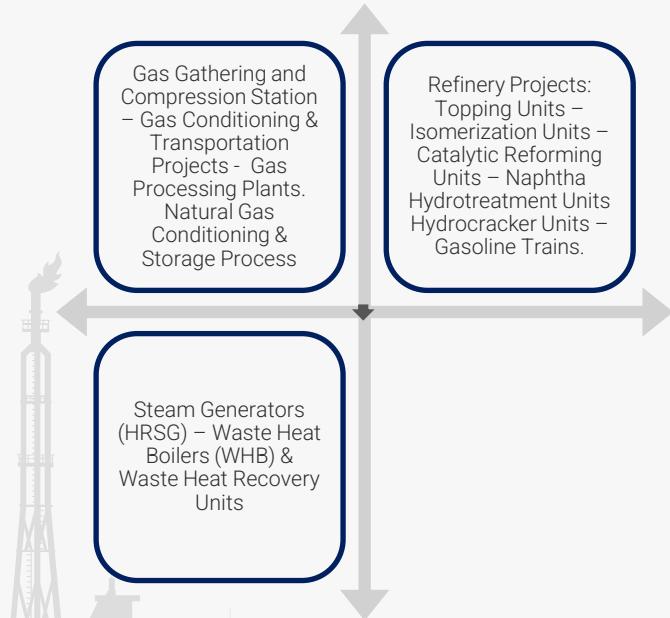
Manufacturer



Italy

2- OIL / GAS Production

EPC Company



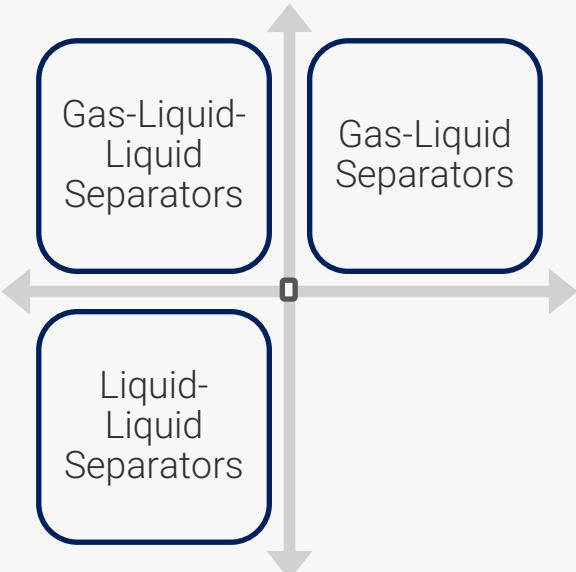
Spain

OIL / GAS Production

Separation Technologies

Manufacturer

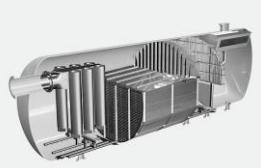
Computational Fluid Dynamics:



VI Co Costacurta



Italy



OIL / GAS Production

Tanks

Manufacturer



Storage Tank

Design, Construction & Assembly as per API 650 & API 620 Using the elevation by electromechanical equipment constructive method

Engineering

Group is structured in a matrix and multidisciplinary way to meet process, mechanical engineering, pipeline, civil engineering, Architecture, Structural, Electrical Engineering



United States
of America

3 - Piping, Fittings and Transportation

Manufacturer



Applications:

Hydrocarbons
Loading Arms -
Chemical Loading
Arms - LPG Loading
Arms - Hot Products
Loading Arms -
Food Sciences
Loading Arms



Italy



Piping, Fittings and Transportation

Pipelines & Accesarios

Manufacturer

UNI EN ISO 3834 – DNV
– PED - API 5L, 5LC,
5LD, 5CT, A671, Q1,
OHSAS 18001, ISO
14001

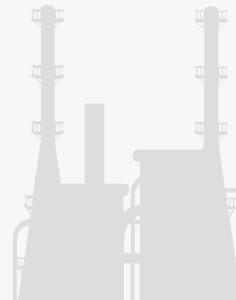
Applications:
Off-shore, On – Shore,
Oil & Gas transmission,
Inox Tech
Manufactures: St. St.
Duplex, Super duplex,
Nickel Alloys, Clad &
Others Exotic Materials.



SeAH



South Korea



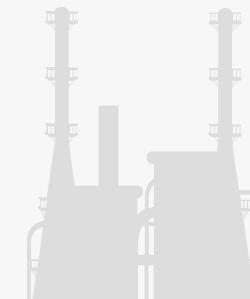
Piping, Fittings and Transportation

Flexible Pipelines

Manufacturer



Germany



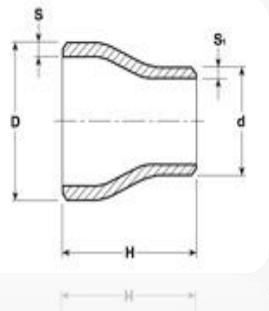
Piping, Fittings and Transportation

Pipelines & Accessories

Manufacturer

Pipelines elbow /
Pipelines tees /
Caps / Bends /
Fittings

Carbon Steel
Stainless Steel /
Rating up to API
3000 / Concentric
& eccentric
reducer



Italy



Piping, Fittings and Transportation

Pipelines & Accessories

Manufacturer

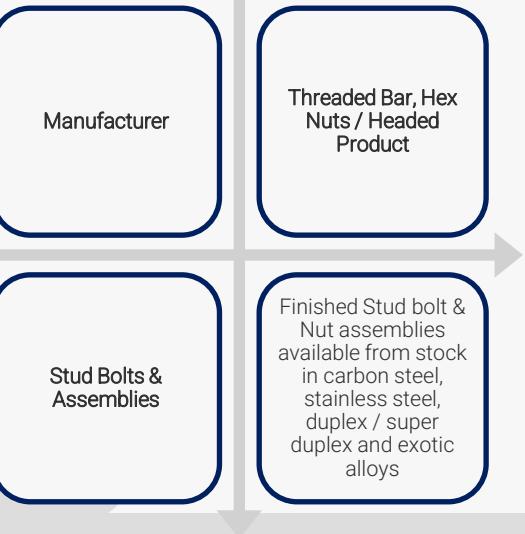


Italy

Piping, Fittings and Transportation

Studs & Nuts

Manufacturer



United
Kingdom

Piping, Fittings and Transportation

Valves: Oil, Gas & Industries

Manufacturer

Certifications:
SIL 3 – TUV - ISO
9001-2008 – PED -
API 6A API 6D - API
6DSS - API 17D

Gate Valves:
Slab – Double
Expanding –
Flexible Wedge
– Through
Conduit.

Ball Valve: Top
Entry – Side
Entry - Fully
Welded – Rising
Stem.

Globe Valves /
Axial Flow Control
Valves / Sub Sea
Valves / LNG Ball
Valves / Choke
Valves

Check Valve:
Swing - Dual
Plate - Axial &
Nozzle.



ATV
HIPPS



Italy

Piping, Fittings and Transportation

Valves: Oil, Gas & Industries

Valvosider

Manufacturer

Manufacturer

Gate Valves /
Globe Valves /
Check Valves /
Strainers /
Valvosider –
Power / Stock
Materials

Certifications:

API 600-0200 /
API 594-0034 /
API 6D-0166 /
API 6A-0992 /
API 622 / API
624 / AD 2000 /
VDI 2440



ASME

150 ÷ 1500 LBS
NPS 2" ÷ 16"

DIN

PN 6 ÷ 250
DN 15 ÷ 400



ASME

150 ÷ 2500 LBS
NPS 2" ÷ 48"

DIN

PN 6 ÷ 420
DN 50 ÷ 1200



ASME

150 ÷ 1500 LBS
NPS 2" ÷ 24"

DIN

PN 6 ÷ 250
DN 50 ÷ 600



ASME

150 ÷ 1500 LBS
NPS 2" ÷ 42"

DIN

PN 6 ÷ 320
DN 50 ÷ 1050



ASME

150 ÷ 2500 LBS
NPS 2" ÷ 48"

DIN

PN 6 ÷ 420
DN 50 ÷ 1200

VALVOSIDER
MANUFACTURER OF VALVES



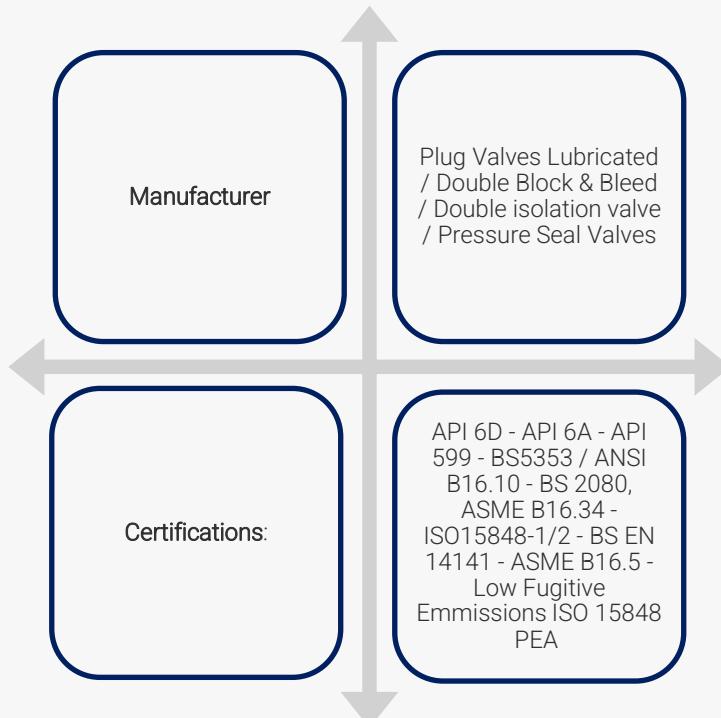
Italy



Piping, Fittings and Transportation

Plug Valves: Gas, Oil & Industries

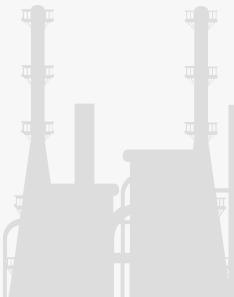
Manufacturer



GALLI & CASSINA
Plus Valvola
SINCE 1919



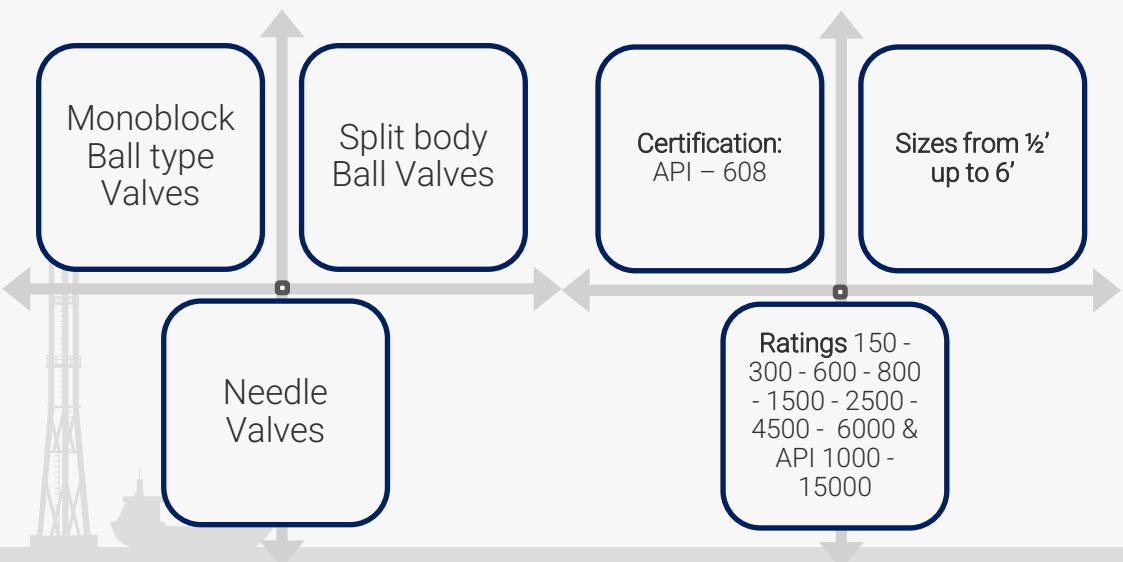
Italy



Piping, Fittings and Transportation

API 608 Ball Valves

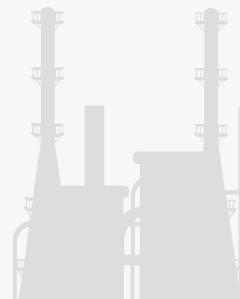
Manufacturer



C.V.L. Valvole a sfera



Italy



Piping, Fittings and Transportation

Valves: Oil & Gas, Industries

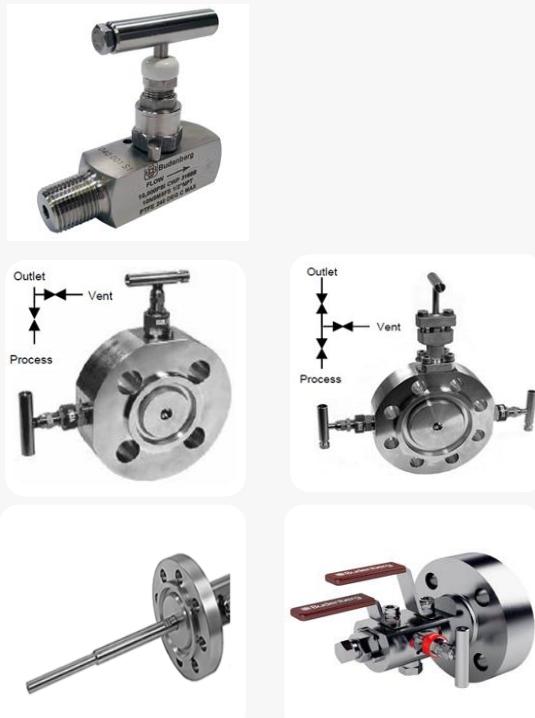
Manufacturer

Needle Valves &
Manifolds / Double
Block & Bleed
Valves /

Monoflange Valves /
Monoblock Valves

Calibration
Equipment /
Positioners

Injection/Sampling
DBB / API
Monoflanges



Budenberg



United
Kingdom

Piping, Fittings and Transportation

API 602 Valves: Gate, Check & Globe

Manufacturer

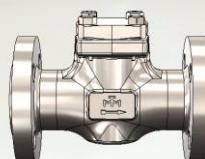
Gate Valve /
Globe Valve /
Check Valve /
Piston Check
Valve / Swing
Check Valves

Classes: 150 -
300 - 600 - 800 -
1500 - 2500 -
4500 / API 10000
- API 15000 / API -
602

Sizes: From $\frac{1}{4}'$ to
 $4'$

Ends: Socket
Welding: ASME B16.11 /
N.P.T: ASME B1.20.1 /
Butt Welding: ASME
B16.5 / Integrally
Elanged: ASME B16.10 &
ASME B16.5 Special
clamp

Execution:
Bolted & Welded bonnet
- Pressure seal - Reduce
& Full port, Bellows seal -
Cryogenic



Italy

Piping, Fittings and Transportation

PSV Valves: Oil, Gas & Industries

Manufacturer

9100

Flanged



8100

Threaded



1400

Series



9500

Pilot Operated



Flanged and
threaded inlet form
1' to 8

PSV Spring
operated valves /
PSV Pilot operated
valves / Pressure
ranges 15-2400
psi and 3000-
8700 psi.

Excel spreadsheet
sizing applications
to help choose the
right valve for the
job. / Weather
caps

Bleed rings /
Rupture discs and
holders



Mercer Valve Co., Inc.
"Auto Seat Technology"®



United States
of America

4- Refining and Petrochemicals

Refineria y Petroquímica

Manufacturer



Products:

Reactors / Shell & Tube Heat Exchangers / Columns & Towers / Methanol Converter

Hydrocracking Reactor / Sulphur Recovery Units / Steam Condenser / High Pressure Vessels

H2S Column Stripper / Combustion Chamber / Casing for turbine



Refining and Petrochemicals



STRACK PHONIX

Manufacturer

Gate – Globe –
Piston – Swing
Check & Plug
Valves.

For HF – ACID
SERVICE & UOP
SPECIFICATION

ALKYLATION
VALVES

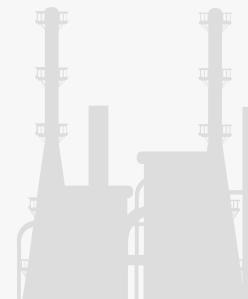
Body Material
Carbon Steel –
Monel – Sealing
Surface PTFE –
Stem Sealing
Monel Sleeve –
RF, RTJ, SW & TE



Armaturenwerke GmbH



Germany



5-Energy Industry and Environment

EPC COMPAY



Pig launching and Receiving Traps - Gas pressure Reducing Station and Control Units - Skid Mounted Gas, Filtering Regulation, Metering

 NOVARGI
Oil/Water Separators (2 or 3 Phase) - Nitrogen Production Systems - Glycol Dehydration Units

Heating Systems - LNG - LPG Plants. - Odorizing Units

Filters - LAC Units & City Gas Stations



Spain

Energy Industry and Environment

Manufacturer

Mobile: Refueling
Tanks - Tank for
Fuel Electricity
Generations and
Heating Use

Transportable:
Steel: For Diesel
Fuel/Gasoline In
Polyethylene:
Fuel Dispenser
Units

Underground:
Single & Double
Skinned Tank
Fuel Dispenser
Units;
Management
System

AdBlue: Above
Ground in
Polyethylene
AdBlue
Dispenser
Fuel
Dispenser Units

 Righetto
SERBATOI

Italy

6- Automation

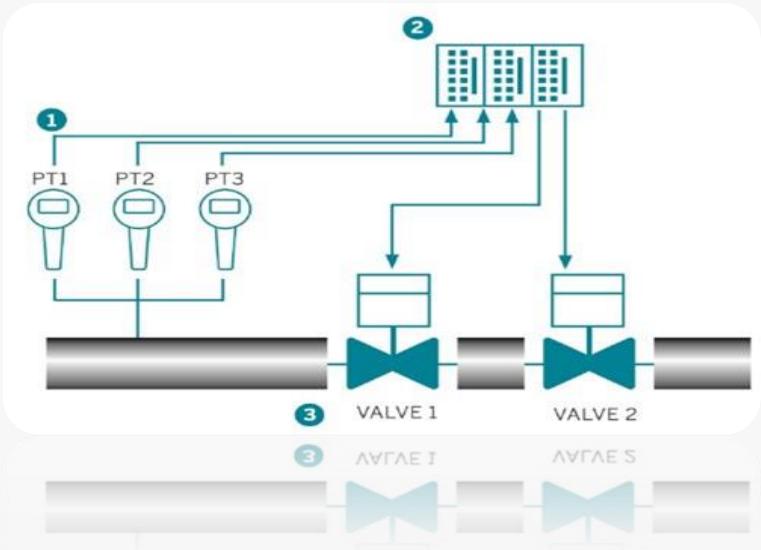
DVG Company Automation

Manufacturer



7-Alternative Energy

High Integrity Pressure Protection System (HIPPS)



1. INITIATORS

The elements measuring the (over) pressure.

2. LOGIC SOLVER

Safety system that receives the signals from the initiators, performs the required logics and drives the final elements.

3. FINAL ELEMENTS

On/Off valves provided with actuators, solenoids and limit switches. Typically valves close to isolate the dangerous pressure source and protect the downstream lines.



Italy

Alternative Energy

EPC Company

Hydrogen Systems Plant

Green Energy: Grey & Blue
 Hydrogen – Dynamic Green
 Ammonia Production Modular
 Plants – Methanol Production
 Units – Energy Transition
 Projects: Recover the Biogenic
 Co2 coming from Biogas
 PowerPlant to produce Methanol
 employing renewable Hydrogen.
 Hydrogen for Industrial uses,
 Capture of Co2 – Synthetic
 Hydrocarbons



Spain



Gracias Thank You !

