

Equipment Solution Group Colombia S.A



Integral Solutions

ESGCOL



Integral Solutions

Drilling
Perforation

1



OIL / GAS
Production

2



Alternative
Energy

7



Automation

6



5

Energy Industry
and
Environment



4

Refining and
Petrochemicals



3

Piping, Fittings
and
Transportation



1 - Drilling Perforation

Well Heads & Choke Valves: Oil & Gas

Manufacturer



Production
Chokes &
Well Heads

Extreme
Service
Chokes

Wellhead
Hydraulic
Control System
& Injection
Pumps

Skidded Units
for, Glycol,
IMethanolInhibit
or.

Compact
Manifold
Valves

Hydraulic –
Pneumatic –
Electric Local
Control Panel
for Valves.

BOP Testing
Units.

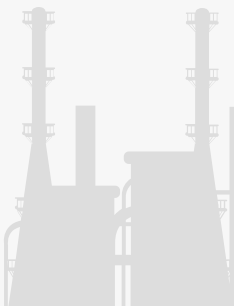
API 6A - ASME
CHOKE VALVES /
Flow Line
Accessories.



HYDROPNEUMATIC



Italy



2- OIL / GAS Production

EPC Company

Gas Gathering and
Compression Station
– Gas Conditioning &
Transportation
Projects - Gas
Processing Plants.
Natural Gas
Conditioning &
Storage Process

Refinery Projects:
Topping Units –
Isomerization Units –
Catalytic Reforming
Units – Naphtha
Hydrotreatment Units
Hydrocracker Units –
Gasoline Trains.

Steam Generators
(HRSG) – Waste Heat
Boilers (WHB) &
Waste Heat Recovery
Units



 **NOVARGI**



Spain

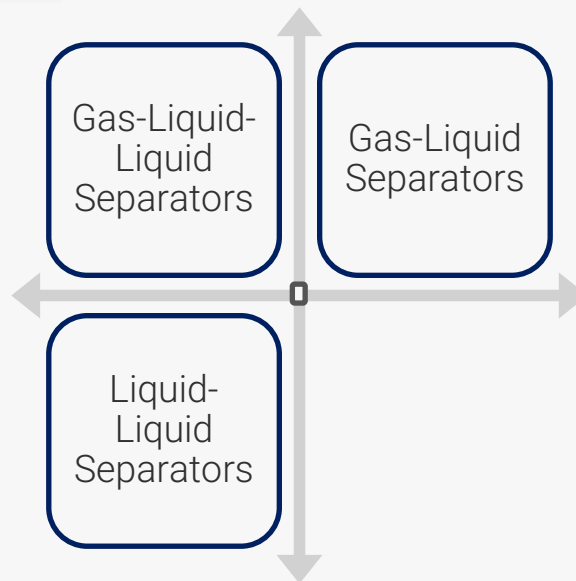
OIL / GAS Production



Separation Technologies

Manufacturer

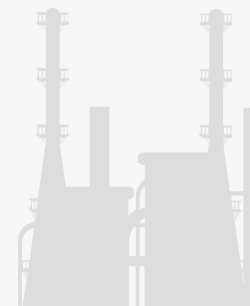
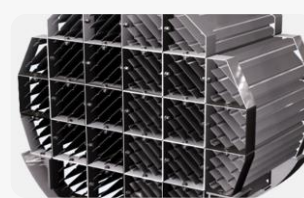
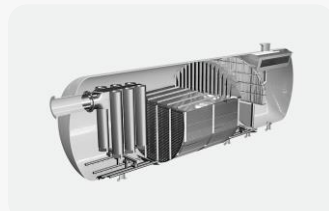
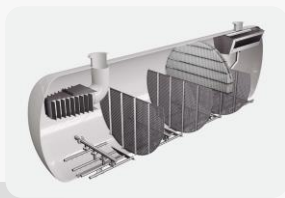
Computational Fluid Dynamics:



VIco **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



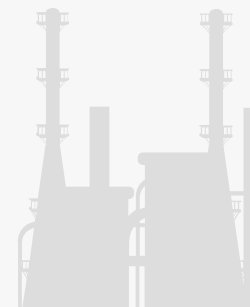
Manufacturer



Italy

Applications:

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



Piping, Fittings and Transportation

Pipelines & Accesorios

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.



SēAH



South Korea



Piping, Fittings and Transportation



Flexible Pipelines

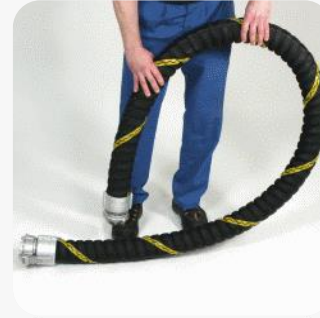
Manufacturer

Applications:

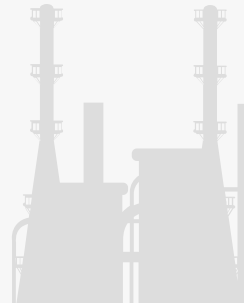
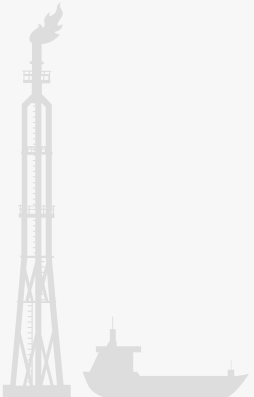
Crude Oil – LPG –
Natural Gas –
Steam – Petrol
Pump – Solvents
– Chemical –
Petrochemical –
Pharmaceutical

Products:

Rubber Expansion
Joints –
Couplings - Pipe
Couplings –
Swivels - Flexible
Pipe Line



Germany



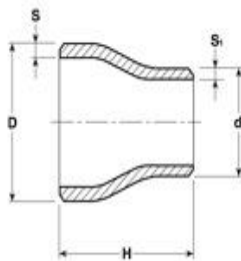
Piping, Fittings and Transportation

Pipelines & Accessories

Manufacturer

Pipelines elbow /
Pipelines tees /
Caps / Bends /
Fittings

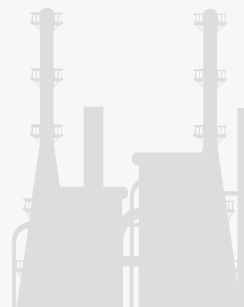
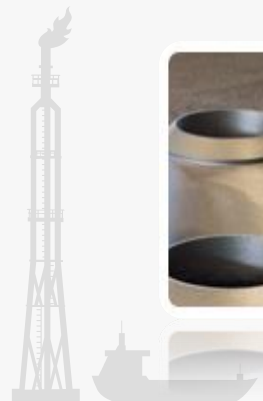
Carbon Steel
Stainless Steel /
Rating up to API
3000 / Concentric
& eccentric
reducer



IRC SPA
FITTING CONNECTIONS



Italy

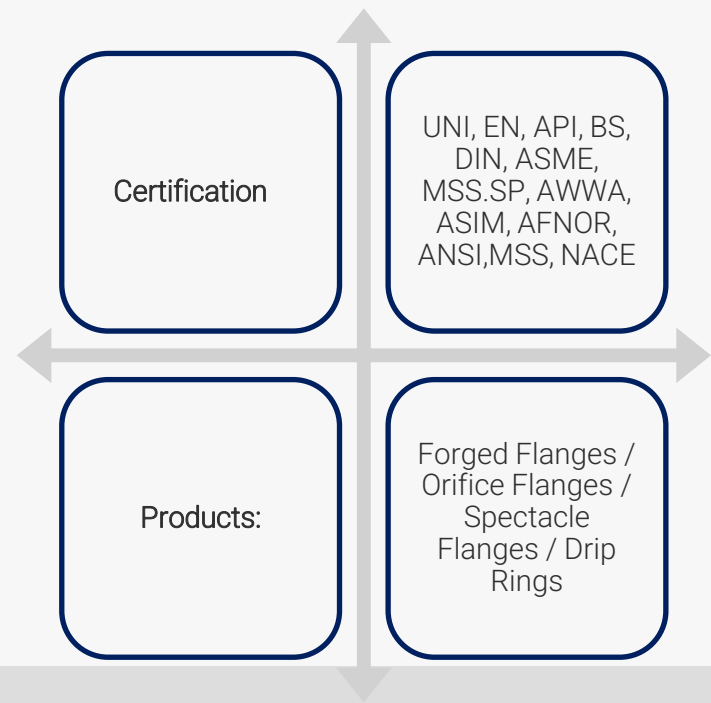


Piping, Fittings and Transportation

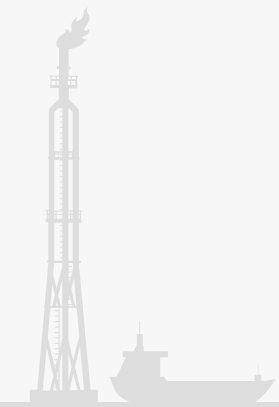


Pipelines & Accessories

Manufacturer



Italy

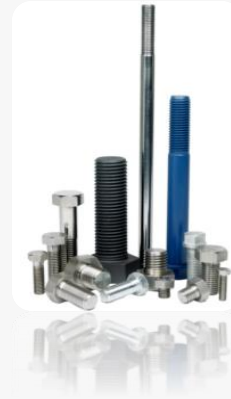
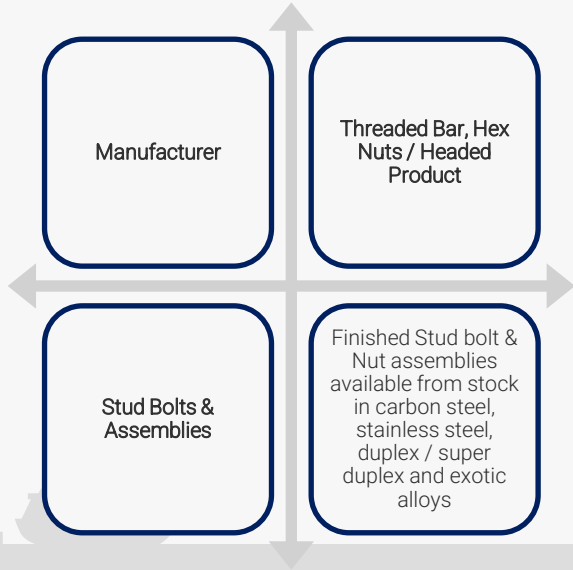


Piping, Fittings and Transportation



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

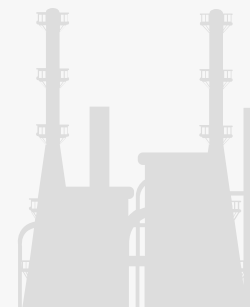
Check Valve:
Swing - Dual
Plate - Axial &
Nozzle.



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



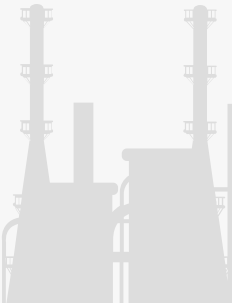
ASME
150 ÷ 2500 LBS
NPS 2" ÷ 48"

DIN
PN 6 ÷ 420
DN 50 ÷ 1200

VALVOSIDER
MANUFACTURER OF VALVES



Italy

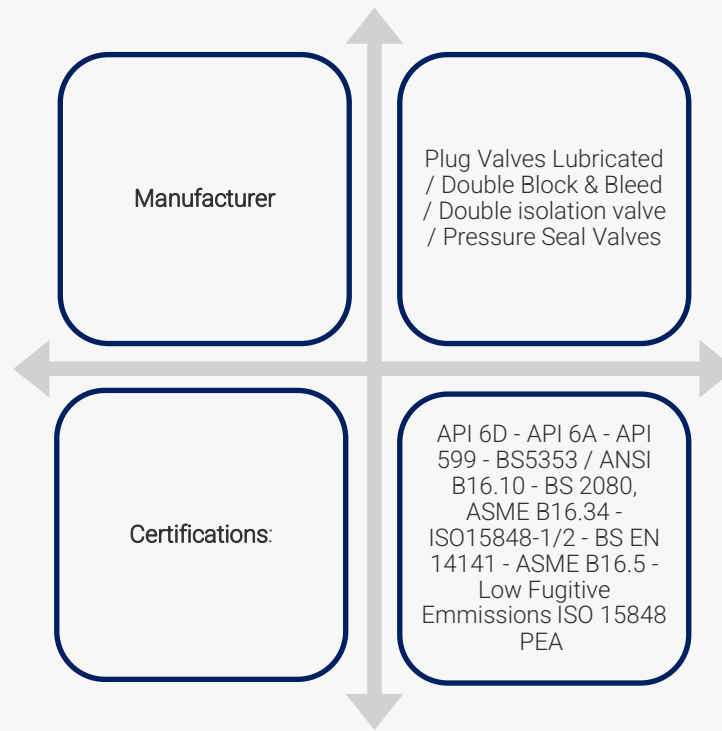


Piping, Fittings and Transportation



Plug Valves: Gas, Oil & Industries

Manufacturer



GALLI & CASSINA
Plus Valves
SINCE 1919



Italy



Piping, Fittings and Transportation



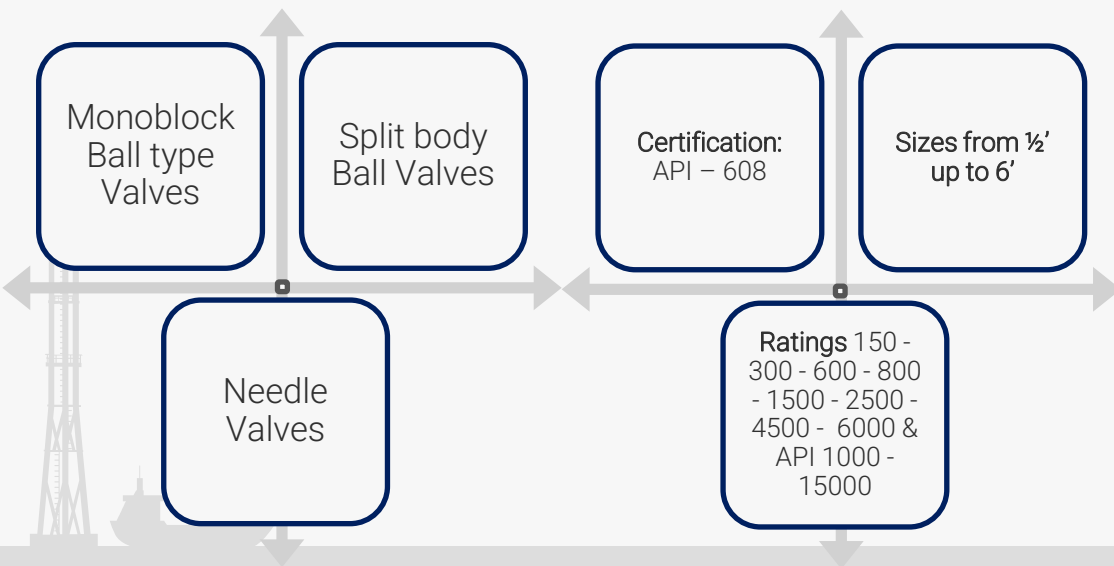
API 608 Ball Valves

Manufacturer

 C.V.L. Valvole a sfera



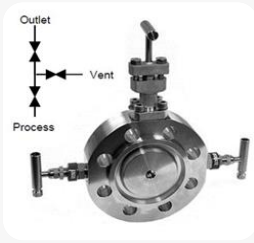
Italy



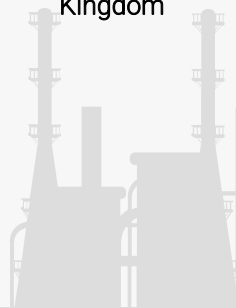
Piping, Fittings and Transportation

Valves: Oil & Gas, Industries

Manufacturer



United Kingdom



Piping, Fittings and Transportation

API 602 Valves: Gate, Check & Globe

Manufacturer

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

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

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 1/4' to
 4'



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



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



Italy



Refining and Petrochemicals



STRACK PHONIX

Manufacturer



Germany

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

5-Energy Industry and Environment



EPC COMPANY



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

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

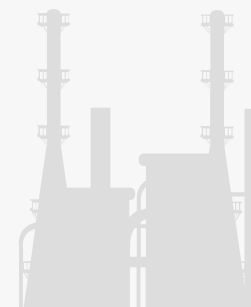
AdBlue: Above
Ground in
Polyethylene
AdBlue
Dispenser Fuel
Dispenser Units



 **Righetto**
SERBATOI



Italy



6- Automation



DVG Company Automation

Manufacturer

Control Instruments:

Limit Switch Box –
Electronic Smart Valve
Controller – Partial Stroke
Device – Valve Monitoring
– Self Contained – Double
Pressure Switch – Quick
Exhaust – Volume
Booster & Filter Regulator
Unit.

Actuators System Type:

Pneumatic – Gas Over Oil
– Direct Gas – Hydraulic
– Electro Hydraulic
Compact – Linear
Hydraulic & Helical Slot
Mechanism

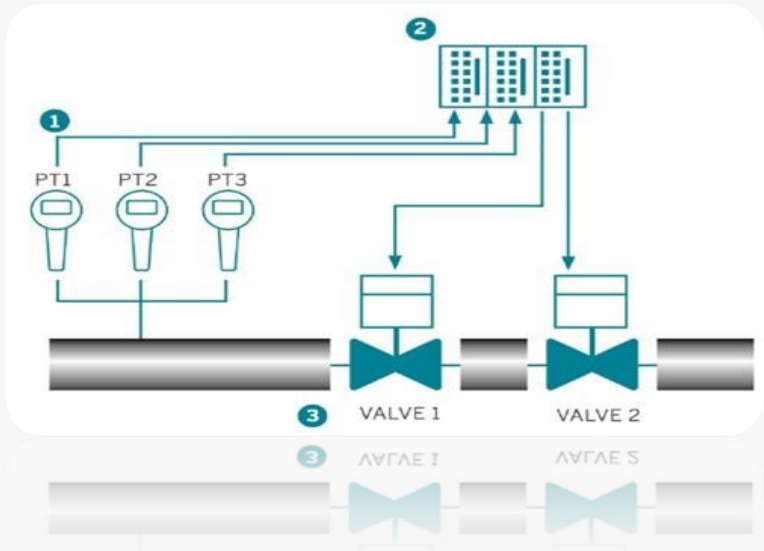


Italy



7-Alternative Energy

High Integrity Pressure Protection System (HIPPS)



1. INITIATORS

The elements measuring the (over) pressure.

2. LOGIC SOLVER

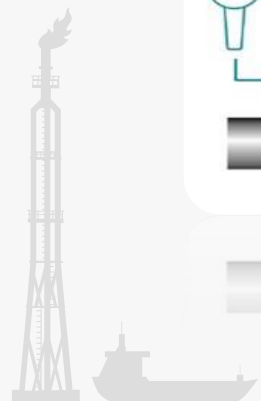
Safety system that receives the signals from the initiators, performs the required logics and drives the final elements.

3. FINAL ELEMENTS

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



Italy



downstream lines.
pressure source and protect the
to isolate the dangerous

Alternative Energy

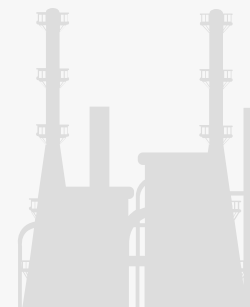
EPC Company

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 !

