# PROCESS & GUARANTEES FIRST!

THE NEW VERTICALLY INTEGRATED ENGINEERING COMPANY



**Solver Equipment** is a **Vertically Integrated Engineering** Company that provides technical-commercial **consultancy** and turn-key **support** to clients for the design and supply of **Process, Static** and **Heat Transfer Equipment, Valves** and **Process Filter Elements**. Solver Equipment represents a **fusion of diverse expertise** in Process Design, Mechanical Design, Manufacturing, Project Management and Expediting. This integration provides an **all-in-one solution**, offering both **Process and Mechanical Guarantees**.

#### Our priority: process and guarantees first!

This is made possible thanks to our **team of established professionals**, which includes **process engineer** who focus on feasibility studies and technology selection, **mechanical engineer**, **project manager** and a **sales & marketing manager**.

The company is located in **Bergamo**, approximately 45 km from Milan, a **strategic position** that places us in the heart of Italy's most **competitive and highly skilled industries**, including mills, material stockists, precision mechanical machining, heat treatment facilities, painting shops, and qualified equipment and valve manufacturers.

# **OUR MISSION**

Solver Equipment means *Problem Solver* and our objective is to provide our customers with comprehensive solutions and supplies through a flexible and streamlined structure. We aim to enhance your supply chain and establish a lasting partnership, supporting you throughout all your endeavours.

#### **OUR VISION**

Solver Equipment aim at professionally manage projects in alignment with customer needs, foster information sharing, establish new partnerships and joint ventures, and drive sales across the globe.

We are optimistic about the **energy future** that lies ahead and aims to support its clients during this phase of transition to a better energy future.

#### **ENGINEERING AND DESIGN**

As a single source supplier, we proceed through **process design**, **thermal design**, **mechanical design**, **expediting**, **project monitoring** and **procurement**.

We utilize our **process and mechanical expertise** in conjunction with software products that hold a widespread reputation as the industry standard for thermal design, rating and heat transfer equipment simulation, and we employ **software for the mechanical design** of the entire **pressure equipment and heat exchangers**, encompassing all wall thickness regulations and stress analysis prerequisites to estimate the comprehensive equipment cost.

Furthermore, our **filtration and separation process design & review** adhere to a dedicated spreadsheet based on **international standards**, providing pertinent internals.

We possess a deep understanding of **various design codes**, including European (*EN-PED*, *AD*, *BS...*) and American standards (*ASME VIII Div. 1 & 2* and *API*).

#### **MANUFACTURING CAPABILITIES**

Solver Equipment is a Vertically Integrated Engineering Company and has not have its own workshop. The ones selected by us strictly adhere to at least an ISO 9001 Quality Management System and follows the environmental, health and safety management directives in order to ensure the quality of the product. The below mentioned product lines are carried out by our trusted manufacturing partners, ASME stamp holder U, U2, S and National Board Registration, when specifically required. We are responsible for design, inspection, supply (i.e. Rina, Lloyds Register, Bureau Veritas, etc.) with our personnel during the fabrication of all equipment and valves.

#### **PRODUCT RANGE**



#### **PROCESS EQUIPMENT**

**ALL SOLUTIONS FOR PHASE SEPARATION - Based** on the client's process data, our process engineer will conduct feasibility studies to select the appropriate process internals for 2-3 phase separators, scrubbers, KO drum and other process equipment.

ALL SOLUTIONS FOR HIGH QUALITY FILTRATION -Dry gas filters and filter separators & coalescers will be designed to give high efficiency removal of liquid/solid particles from gas steam with process cartridges (for which we supply together with its spare parts).



#### STATIC EQUIPMENT

The procurement of pressure vessels, columns, pig launching and receiving traps (pig trolley, jib crane and accessories), quick opening/actuating closures or strainers is a highly complex task due to many variables, such as work shop facilities, lifting capacity, production capability, delivery time schedule, equipment type and material: for this reason, we assist our clients who, based on their needs, will be recommended the best solution.



#### **HEAT TRANSFER EOUIPMENT**

Shell & tube heat exchangers, IWBGH (indirect water bath gas heaters) and electric heaters: we achieve this by providing thermal design, mechanical calculations & reports in accordance with design codes, handling material procurement, fabrication, quality test reports, Factory Acceptance Tests (FAT), assembling final data books, overseeing packing & transportation and all expediting activities required.



We assist and back our clients by delivering solutions for revamping or upgrading existing pressure equipment, as well as complete tube bundles, encompassing all commissioning and start-up activities at the end user.



We give special attention to immediate quotation and prompt delivery of components needed for a normal maintenance of your process filters (high-quality process cartridges & filter elements), heat exchanger or valves. We just help optimize the operational procurement process which reduces your indirect costs and wins you more time for strategic purchasing.

# **PROCESS SKID**

We design and supply customized chemical storage and dosing packages tailored for a diverse range of applications, employing peristaltic or metering pumps to dispense chemicals. We excel at troubleshooting plants facing process problems and inefficiencies.



#### **PALVES**

We perform the calculation of the discharge flow rate performed in worstcase scenarios to determine the appropriate orifice size for pressure safety valves. The procurement of ball valves, actuators, plug valves, gate, globe & check forged steel valves, pressure safety valves is a highly complex task due to various players with distinct characteristics. For this reason, we assist our clients who, based on their needs, will be addressed to the best solution.

# **SUMMARIZING, WE ARE...**

- A flexible and interdisciplinary engineering company;
- Strategically located in the heart of European most significant oil & gas hubs;
- Close to qualified partner suppliers for expedited services, even on a daily basis:
  - Able to consistently guarantee adherence to the established timetable.

# INDUSTRIES WE WORK FOR:

Oil & Gas, FPSO, Offshore, Gas processing plant, Natural Gas Pipeline, LNG, Petroleum Refining, Petro-chemical & chemical, Power, Biofuel, Water Treatment, Mining, food & beverage, pulp & paper, pharma.

# **OUR FIELDS OF APPLICATIONS:**

Solver Equipment is able to fit within various application fields, some of which are:

- OIL & GAS PRODUCTION: Fuel Gas, Injection Water, Well Head Separation, Produced water.
- **NATURAL GAS PIPELINE**: Condensate stabilization, Meter stations, Compressor protection, Glycol dehydration.
- GAS PROCESSING PLANT: Residue gas, Glycol Dehydration, Mol sieve dehydration, Acid gas removal (amine sweetening), Inlet plant protection.
- COMPRESSOR STATION: Fuel Gas, Lube oil, Compressor inlet, Compressor outlet.
- PETROLEUM REFINERY: Hydrotreating, Hydrocracking, Amine Sweetening, gas sweetening, aromatic fractionation, Delayed Coking, BTX, Fuel Gas, sour water stripping, coke cutting water.

### **SOLVER EQUIPMENT Srl**

Piazza Matteotti, 20 | 24122 Bergamo | Italy Mobile +39 373 7454139 info@solverequipment.com

