

Engineered Systems

Division

CHEMICAL INJECTION PACKAGES WELL HEAD CONTROL PANELS ANALYSIS AND SAMPLING SYSTEMS POLYELECTROLITE PREPARATION UNITS





Engineered Systems Division

the Company

ASCO POMPE was established in 1954 as a distributor of volumetric pumps for the Italian Territory.

In 2009 ASCO POMPE has opened the Engineered Systems Division for the manufacturing of engineered systems such as PUMP' SKID and CHEMICAL **INJECTION PACKAGES**

During its history **ASCO POMPE** Engineered Systems Division has been able to become a first class manufacturer for the Oil & Gas market by means of an internal Engineering Division and a group of highly skilled Mechanical and Electrical Engineers and a very strong commercial, quality and manufacturing team.

ASCO POMPE Engineered Systems has also established in a very few years a very strong network of agents and local partners throughout the world including but not limited to Europe, Middle East, Russia, ex CIS contries and Far East territories.

ASCO POMPE Engineered Systems has also been able to be registered in the major Oil & Gas Companies.

ASCO POMPE Engineered Systems range of production includes:

CHEMICAL INJECTION PACKAGES PUMP' SKIDS

ANALYSIS and SAMPLING SYSTEMS WELL HEAD CONTROL PANELS POLYELECTROLITE PREPARATION UNITS

MISSION:

To be a leading manufacturer for the above products worldwide.

To actively and positively contribute to the success of our business partners.

To create wealth for our stakeholders.

The company policy is to satisfy our customer needs as true business partners by supplying high quality specialised services & products that will add value to the customer business.





ASCO ENGINEERING



Engineered Systems

ASCO Pompe Engineered systems with its own internal Engineering Department is capable to design and manufacture its systems to meet any customer requirement.

The units are designed in accordance with the most stringent International Standards such as: ASME, PED, ATEX, API, ROARK & YOUNG, NEMA etc...

Aside engineering and design: Local control panels and Junction Boxes plus complete wiring activities (including cables, cable glands and cable trays)





MEG Injection Package

Typical scope of supply

- Tank's construction
 - (carbon steel, stainless steel, plastic, grp)
- Common baseplate and support frame
- Special painting
- Pumps
- Instruments
- Control panels
- Instruments junction boxes
- PLC
- Factory acceptance test
- Sea worthy packing

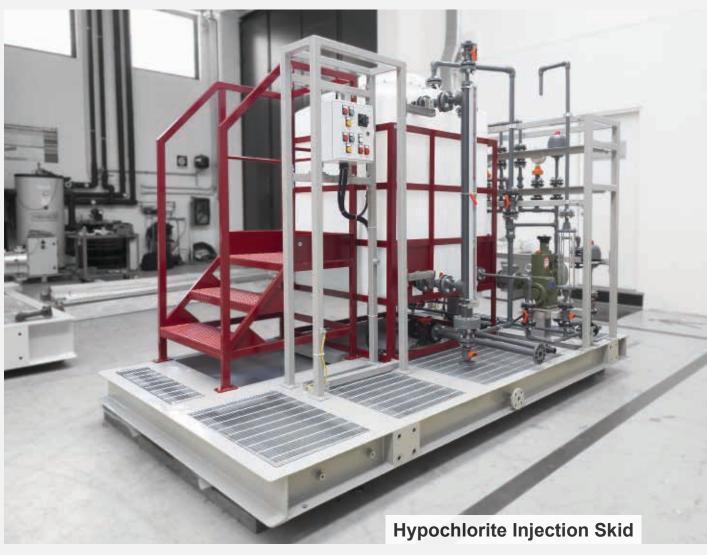




ASCO CHEMICAL INJECTION PACKAGES

ASCO Packages:

- > Chemical Injection Packages (or Chemical Injection Skids) are used to inject a precise and accurate amount of chemical into a system at a required pressure either continuously or intermittently
- > Chemical injection packages are assembled bringing the following components together.
- Baseframe
- Tanks
- Pumps
- Instrumentation
- Piping and valves
- Electrical board







Offshore PLC based Skid





ASCO SKIDS include also Nitrogen Blanketing System and Pressure Control Valves whenever required.



ASCO WELL HEAD CONTROL PANELS &



Wellhead Control Panels (single or multi) and High Pressure Units are designed for controlling the Sub-Surface Safety Valves, Master Valves, Wing Valves, Choke Valves and Gas Lift Valves.

The panels are designed for local or remote operation.

All cabinet are included in high quality and double thickness cabinet IP 65 protected.

All electrical and electronic controls are designed to meet hazardous area requirements.

Working method can be either Pneumatic hydraulic, Electro hydraulic and PLC based.

The products are designed to meet most demanding work environment at offshore, onshore, and desert severe weather conditions.

SIL2 or SIL3 solution.

Engineered Systems

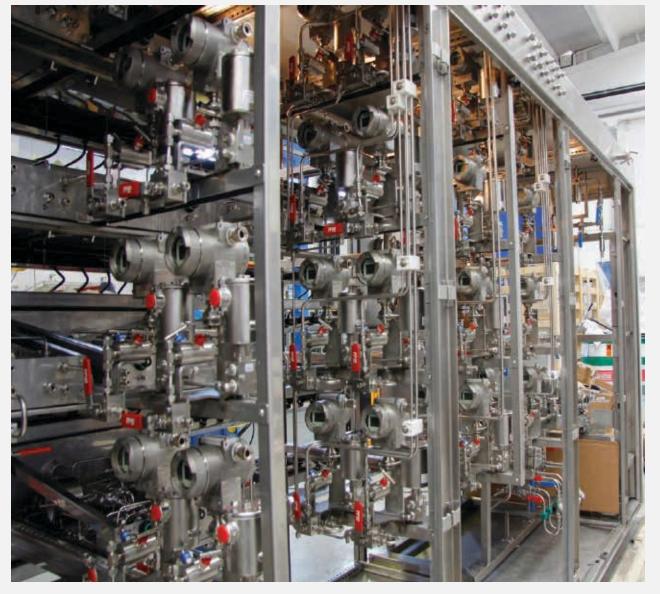




HYDRAULIC POWER UNITS

Design, construction and test for systems in onshore / offshore environment.

- Design of low/high pressure pneumatic / hydraulic / PLC operated control systems meeting SIL 3 level.
- Solar powered low voltage control systems.
- Engineering of distribution piping for offshore platforms of hydraulic operated valves and controls.
- AutoCAD schematic and construction drawings
- Installation, commissioning, flushing and hydrotesting of offshore hydraulic distribution systems.
- Programming of PLC operated systems.
- ATEX Certification for Wellhead Safety systems





ASCO ANALYSIS AND SAMPLING SYSTEM



Completely supply of analysing systems or CEMS for in-line installation or in process shelter/cabinet construction.









OUR SYSTEMS ARE BASED ON THE FOLLOWING MAJOR ITEMS:

- Sample take-off probes for installation on process lines
- Sample pre-conditioning units (temperature and pressure control)
- · Fast-loop systems and pumping facilities in base of analysis cycle time
- · Sample conditioning systems designed for suitable flow, temperature, pressure and filtration values
- PLC based safety control system
- Sample recovery system

Shelter with all equipment rated for hazardous area request, assembled specific to customer requirements in our facility by our experienced analyser technicians. Process analyser shelters fully equipped with:

- · Heating Ventilating and Air Conditioning System complying with the hazardous area
- Power distribution systems, Lightning, Grounding, Safety devices and Gas Monitoring Systems
- Utilities headers

• Analysers such as: Gas chromatographs, Flash Point, Freeze Point, Pour Point, Viscosity, Vapour pressure, TOC, Moisture, Density, Chemical composition, Physical properties, NIR, FTIR, Sulphur etc



ASCO POLYELECTROLITE PREPARATION UNITS



ASCO POLYCOMPACT PREPARATION UNIT are also suitable for working with emulsion instead of powder and for preparing different solutions including calcium chloride and activated carbons

Materials: SS304 tanks and PP tanks are available ATEX solution on request





OUR SYSTEMS ARE BASED ON THE FOLLOWING MAJOR ITEMS:

These automatic systems for continuous preparation and dosing of dry polymer are capable to produce from 200 l/h up to 12000 l/h of polyelectrolyte solution with a leve of concentration adjustable within 0,1% and 0,5%. Polyelectrolyte Preparation Units are assembled bringing the following components together.

TANK

Suitable for preparation and maturation of anionic or cationic polyelectrolyte solution is divided into two or three compartments with one or two mixers installed.

HOPPER

Sized to contain solid powder polyelectrolyte has a size of 40-70 or 250 I and includes motorized screw with manual adjustment for dosing of right quantity of powder into the preparation unit.

DISSOLUTION UNIT

Water spray (min 2 barg) and dissolution unit is installed into the preparation tank to have the best prediluition of powder into water.

PUMP SECTION

One or more ASCO high viscosity pumps are usually installed to dose the right quantity of solution duly prepared.

LOCAL CONTROL PANEL

Used to control any part of the system, it can also be supplied with synoptic and integrated plc.



ASCO DEVELOPMENT



Asco provides continuos improvement of its production range. Our engineering team has developed new lines of production in accordance with the most stringent international codes and standards.

THE WIDE RANGE OF PRODUCTION NOW INCLUDES:

- CHEMICAL INJECTION PACKAGES
- WELL HEAD CONTROL PANELS
- HPU
- SAMPLING SYSTEMS
- POLYELECTROLYTE PREPARATION UNIT





QUALITY STANDARDS

egistration

Engineered Systems

SCO PONIPE S.R.L.

ASCO Engineered systems organization complies with ISO-9001-2008 standard, as certified by notified body DNV.

DNV certficate 93506-2011-AQ-ITA- ACCREDIA

Welders are certified according to ASME or EN standard.

All sytems are fully tested for mechanical and process performances, before shipment.

When products must comply with European regulation and/or required by Customers, CE stamp is provided according to ATEX, PED and Machine directives.

ASCO WORKSHOP

Assembly and testing are carried out into the facility located in Rozzano, south Milan-Italy.





The facility is equipped by bridge crane, machining and cutting machines, TIG welding equipment.

Testing is always carried out by using factory testing control panel, in order to simulate real operating conditions before shipments.

Assembling and testing operations are coordinated by the engineering office, who supervises all the activities until final completion and packing.

100% of the manufactured systems are tested with or without the Customer or his consultants before shipment.

All operations are held in compliance with ISO 9001:2008 and ISO 18001 standards.





FIELDS OF ACTIVITY

ON-SHORE Plant:

Additive in the refining and blending stages Water Treatment chemicals for water conditioning and distillation The control of corrosion by adjusting the Ph The injection of inhibitor and gasoline to fuel oil Antiicing chemical boiler feed treatment Pilot plant laboratory and research

OFF-SHORE Plant:

Wax Inhibitor Demulsifier Methanol & Glycol Oxygen Scavenger Biocides MEG injection skids Scale Inhibitor Corrosion Inhibitor Hypochlorite Injection Packages

PETROCHEMICAL-CHEMICAL Plant:

Odorizing natural gas Methanol injection Butane or Propane Injection Boiler Feed treat-ments Boiler feed water



ASCO Service guarantees full support at site during commissioning, start up, maintenance programs, spare parts supply, upgrades and any need Customer might have after delivery.

ASCO Engineers on request can follow and supervise acticvities related to connections, control system integration, site acceptance and performance testing.

We believe that the true wealth of a company is customer satisfaction.

This has led to the creation of a department-oriented to customer service even if the need is on the other side of the planet.

With after-sales service, we will take care of the customer as well as the products that carry the nameplate of **ASCO**.

The division consists of experienced staff, oriented to follow the customer once the product has been installed on field.

The main activities involving the division are:

- Pre-commissioning Commissioning
- Start-up
- O&M









Engineered Systems

Division



ASCO ENGINEERED SYSTEMS

www.ascosystem.com engineered-systems@ascopompe.com ASCO Pompe S.r.I. Via Silvio Pellico, 6/8 - I 20089 Rozzano (MI) - Italy Tel. +390289257.1 Fax: +390289257.201 www.ascopompe.com