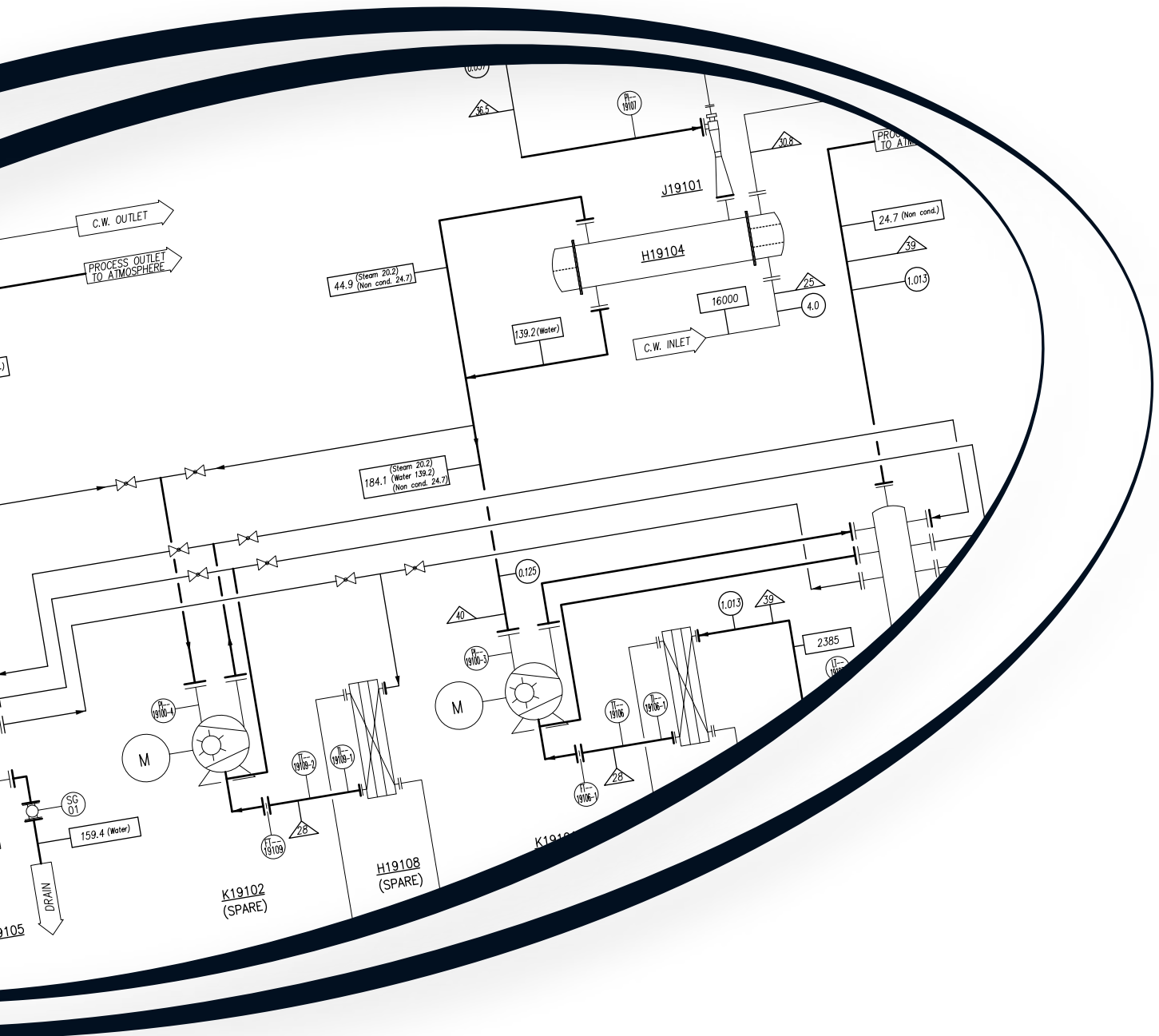




Vacuum Technologies

A Unit of ASCO POMPE



Vacuum Pumps & Systems



ASCO VACUUM is an Italian Company specialized in the design, production and supply of pumps and systems dedicated to air & gas handling. ASCO VACUUM team, with more than thirty years experience in vacuum applications, is able to propose a wide range of solutions for most industrial duties including both standard products and customized engineered systems designed to fulfill client technical requirements in terms of performance and international construction standards.



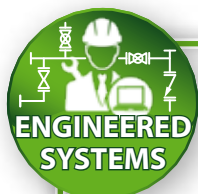
ASCO VACUUM is a Division of ASCO POMPE, a company founded in 1956, which in more than 65 years of activity has established itself as a primary and successful supplier of pumps and solutions for most of the applications related to the fluid handling. The synergic connection between the two companies allows both to increase their competence, strength and dynamism to achieve new goals within the global market.

ASCO VACUUM wants to be an innovative manufacturer, supplier and also a present and competent partner able to guide customers in the various stages of cooperation focusing to the most efficient and effective path. The great variety of applications and environments of the gas handling sector require experience and flexibility that are the two main strengths and guidelines of ASCO VACUUM team.



VACUUM-PUMPS & BLOWERS

The current program is based on different technologies in order to cover most industrial needs in terms of flowrate and compression ratio. Our products are designed, developed and manufactured according to the highest quality standards in line with ASCO business milestone.



ENGINEERED SYSTEMS

ASCO VACUUM has the know-how and capability to design and manufacture customized products and engineered package systems. A multidisciplinary team is available to drive customers toward the best reliable and efficient solutions.



SERVICE

We provide aftersales service for our pumps and systems and technical consultancy for vacuum applications. Our service engineers are qualified to support customers directly on site for commissioning and maintenance activities.



INDEX

Page 4
Side Channel Blowers



Page 5
Rotary Vane Pumps



Page 6
Liquid Ring Pumps



Page 7/9
Engineered Systems



Page 10
Dry Screw Pumps



Page 11/12
Service & Quality





AVCX SERIES. Wide range of side channel compressors and exhausters to suit most industrial needs in air handling. Working principle based on the lateral ducts, the blowers can operate as exhauster or compressor. Full die-cast aluminum construction combined with latest machining technology to ensure high performance and high reliability.

Motor design allows for variable frequency drive to grant the right demand and maximum operating flexibility.



ONE IMPELLER



Flowrate: from 18 to 1.650 m³/h



Vacuum: from -80 to -380 mbar



Pressure: from 70 to 460 mbar



Motor: 1ph or 3ph



Noise level: from 48 to 84 dBA



TWO IMPELLERS



Flowrate: from 18 to 2.480 m³/h



Vacuum: from -60 to -490 mbar



Pressure: from 40 to 750 mbar



Motor: 1ph or 3ph



Noise level: from 55 to 84 dBA



THREE IMPELLERS



Flowrate: from 300 to 620 m³/h



Vacuum: from -550 to -650 mbar



Pressure: from 580 to 670 mbar



Motor: 3ph



Noise level: from 75 to 79 dBA



AVPL SERIES



Oil rotary vane vacuum pumps of AVPL series are extremely compact thanks to the integrated motor and transmission, making them the ideal choice for compact installations. They are equipped with extremely resistant blades that ensure long life. Specially designed oil filters ensure excellent oil separation by removing even the smallest oil droplets from the exhaust air.



Flowrate: from 2 to 365 m³/h



Vacuum: 2 mbar or down to 0,1 mbar



Motor: 1 ph (up to 1,8 kW) or 3 ph



Installed power: from 0,25 to 9 kW



AVPS SERIES



Dry-operated rotary vane vacuum pumps. Designed to operate completely dry without periodic maintenance. Can be used as vacuum pumps, as compressors, or to produce vacuum and pressure simultaneously as a suction/pressure unit.



Flowrate: from 5 to 150 m³/h



Vacuum: 150 mbar or down to 120 mbar



Pressure: from 0,6 to 1,0 barg



Motor: 1 ph (up to 1,5 kW) or 3 ph



Installed power: from 0,75 to 4,0 kW



AVCL SERIES



Claw Pumps create air volume and transfer it through the intake duct to the outlet duct by means of the rotation of two claw shaped rotors in a moulded chamber. The dry running contactless rotation of the rotors is oil free. Claw Pumps guarantee low operating costs thanks to moderate energy consumption and high efficiency. The claw pump is suitable to operate as vacuum pump or as compressor.



Flowrate: from 20 to 300 m³/h



Vacuum: 200 mbar or down to 150 mbar



Pressure: from 0,6 to 2,0 barg



Motor: 3 ph



Installed power: from 3 to 9,2 kW





Wide range of liquid ring vacuum pumps designed to meet most severe process conditions, available in different constructions and materials, capable to achieve 33 mbar abs. at reference conditions, is the right choice to handle contaminated, corrosive or explosive gas mixtures including vapors and liquid carry over.

No internal metal to metal contact, isothermal compression, robust design, versatile and oil-free operation are the main features contributing to high reliability standards.

Use as compressor up to 2 bar g, possible by selecting the correct motor size.



AVM - AVL Single stage
monoblock and lantern version



Flowrate: from 5 to 475 m³/h



Vacuum: down to 33 mbar



Pressure: up to 2 bar g.



Installed power: 0,75 to 15 kW



Noise level: 78 dBA max.



AVA Single stage
bareshaft version



Flowrate: from 400 to 45.000 m³/h



Vacuum: down to 33 mbar or to 180 mbar



Pressure: up to 2 bar g.



Installed power: 15 to 1.000 kW



AVD - AVDL Two stage
bareshaft and lantern version



Flowrate: from 50 to 1.800 m³/h



Vacuum: down to 33 mbar



Installed power: 3,0 to 55,0 kW



Noise level: 80 dBA max.

AQUAPACK AVM/AVL/AVA SYSTEMS



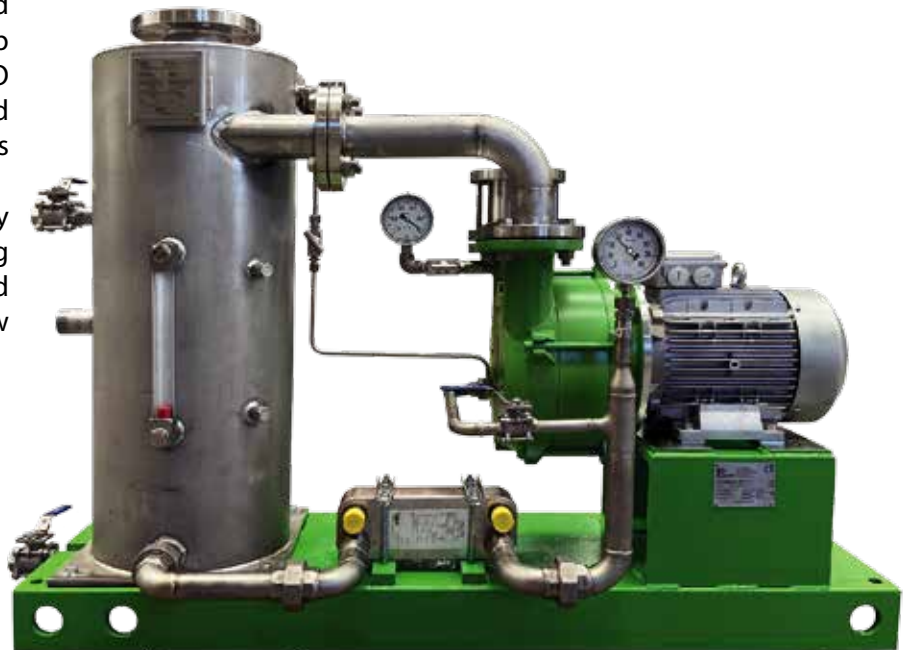
AQUAPACK units are standard pre-engineered liquid ring vacuum pump package systems designed by ASCO VACUUM to operate with total service liquid recirculation. Service liquid cooling is granted by a plate type cooler. Compactness, versatility and simplicity make AQUAPACK units an interesting solution that rewards low service liquid consumption and reliability towards low investment costs.



Flowrate: from 5 to 1.800 m³/h



Vacuum: down to 33 mbar



HEAVY DUTY / SPECIAL EXECUTIONS



Besides the various standard liquid ring pump series, ASCO VACUUM is in the position to supply customized engineered pumps specifically designed for the duty. Implementations could involve the use of different alloys compared to the standard selection, special seals, connections' adaptations, specific project quality control requirements and others.



AVD10185 made in 316L with special cartridge mechanical seals



AVA606 designed to meet Off-shore requirements

ASCO VACUUM is specialized in engineered systems which is the business area that covers all tailor made solutions to meet specific customer needs in terms of performance or of construction.

Counting on its highly skilled multidisciplinary team made by mechanical and electrical specialists coordinated by the project managers, ASCO VACUUM is capable to design and manufacture package units according to most stringent International standards and EPC's specifications.

The systems are built in our qualified workshop where all manufacturing steps take place from assembling to final packing including testing and inspections activities foreseen by the quality assurance.

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



LIQUID RING VACUUM PUMP SYSTEMS & CENTRALIZED UNITS



Liquid ring vacuum pump systems designed to meet most needs of vacuum of the industry. Developed with one or more pumps acting in parallel depending on the specific needs, the systems are equipped with dedicated equipment for service liquid cooling and recirculation including instrumentation and devices for control and full remote automatic operation including control panel with PLC and VFD. Units for hazardous area, on request.



Flowrate: from 50 m³/h up



Vacuum: down to 33 mbar



HEAVY DUTY & API 681 LIQUID RING VACUUM PUMPS & SYSTEMS



Liquid ring vacuum pumps and systems meeting API 681 standards for chemical and petrochemical applications.

Suitable for heavy duties, are available in different exotic materials with single or double cartridge API 682 cartridge mechanical seals. Package design standards in line with most stringent project specifications and quality requirements.



Flowrate: from 500 to 10.000 m³/h



Vacuum: down to 100 mbar



LIQUID RING PUMP CONDENSER EXHAUSTERS



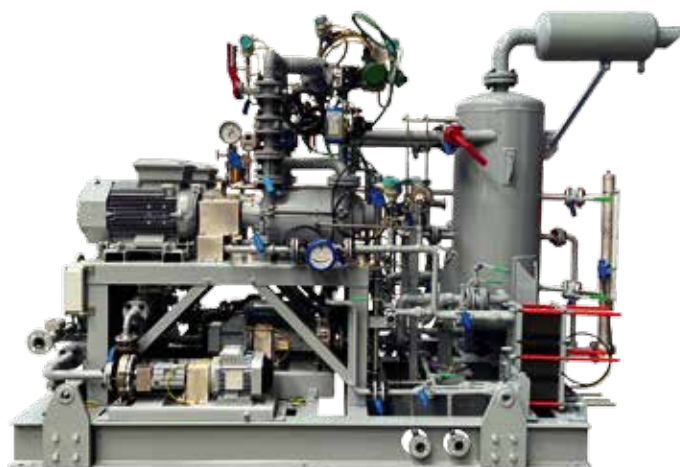
Liquid ring vacuum pump systems specifically designed for power generation consisting in main condenser air extraction units and condenser water box priming units. The systems are designed to perform both the hogging/priming duty but also the holding duty. In many cases the pump is assisted by a first stage gas or steam ejector in order to improve the pump performance to the various condenser loads. Asco Vacuum team has significant experience in geothermal applications.



Flowrate: from 50 m³/h up



Vacuum: down to 33 mbar



HYBRID SYSTEMS

Hybrid systems represent the engineering excellence in designing process vacuum systems based on the combination of two or more different technologies in order to achieve the required performance with the most reliable and efficient solution.



LIQUID RING PUMP HYBRID SYSTEMS



The liquid ring vacuum pump as primary pump grants a great flexibility when combined to one or more ejector stages or to mechanical boosters due to its great ability to handle condensing vapors. Furthermore, the isothermal compression working principle of the liquid ring pump makes it less sensitive to any process fluctuation which may occur and impact on the interstage pressure.





AVVS SERIES



AVVS series consists in dry screw vacuum pumps designed to operate at very deep vacuum capable to achieve 0,05 mbar or deeper if combined with a booster pump.

The new patented hybrid screw design ensures higher efficiency due to lower temperature and less power consumption.

Different type of coatings protect the internals from corrosion caused by aggressive gas mixture and vapors typical of the process industry, chemical, pharmaceutical and petrochemical applications.



Models: 6



Flowrate: from 50 to 3.000 m³/h



Vacuum: down to 0,05 mbar
(deeper with a booster pump)

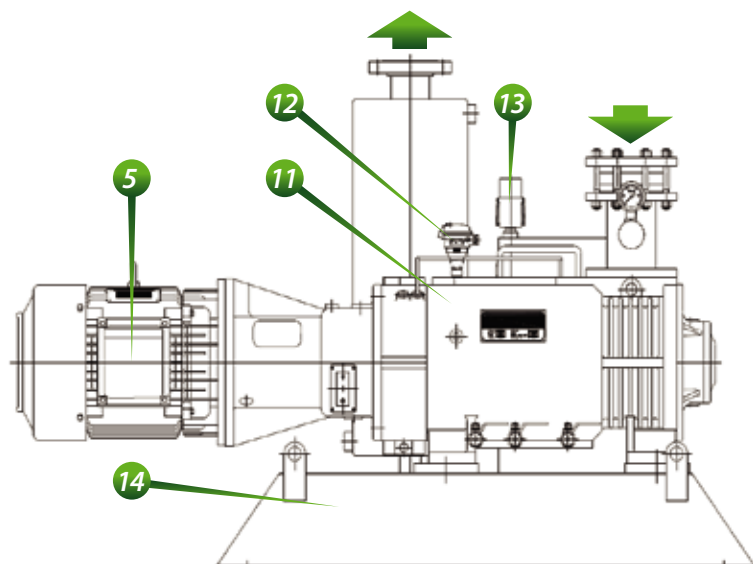
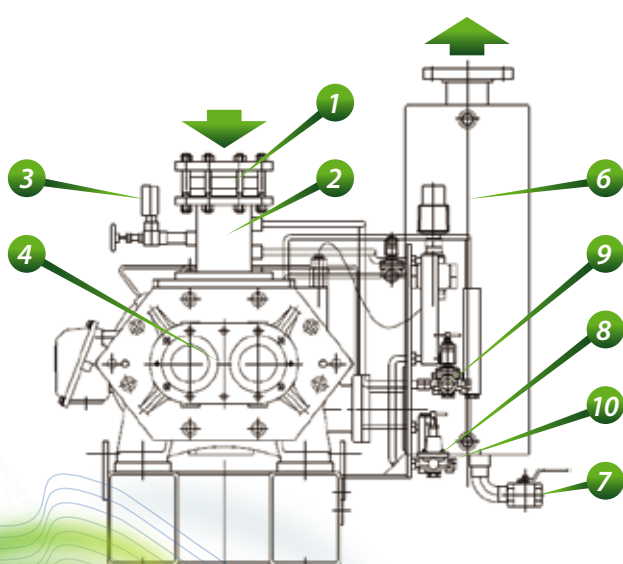


Coatings: PEEK or Ni + PEEK



Installed power: 2,2 to 55,0 kW

Normally the pump set is supplied complete of accessories to grant a correct and safe operation.
Typically the accessories are as follows:



1. Non-return valve
2. Suction port
3. Pressure gauge
4. Vacuum pump
5. Motor

6. Exhaust silencer
7. Exhaust silencer drain valve
8. Seal purge system
9. Inlet purge system
10. Solvent flush system

11. Gas ballast port
12. TE (Temperature Element)
13. TCV (Thermostatic Control Valve)
14. Base frame

FIELD SERVICE & ASSISTANCE

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 activities 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

For all these listed activities, there is experienced personnel ready to travel in Italy as well as in any other country of the world.



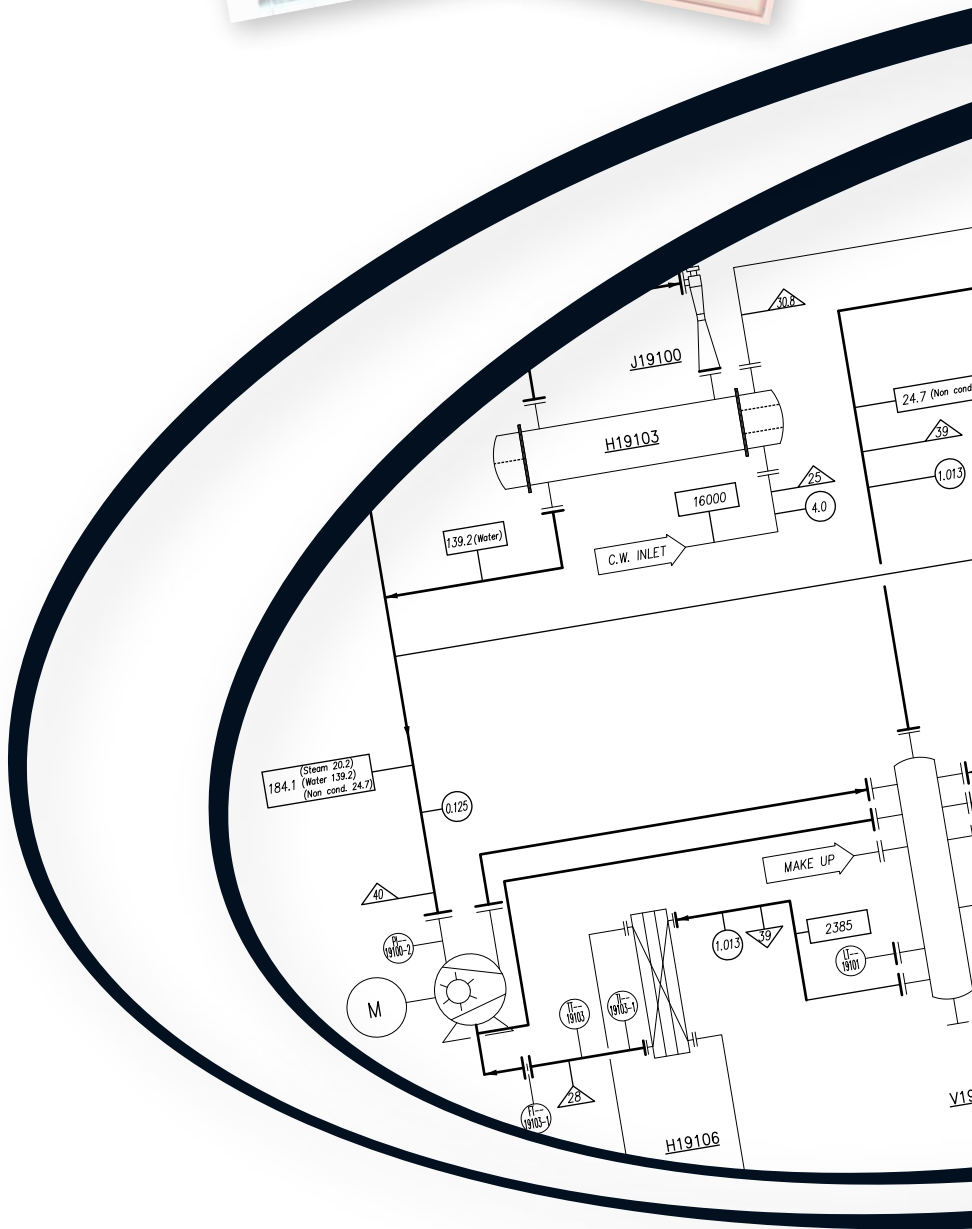
QUALITY STANDARDS

ASCO organization complies to ISO-9001-2008 standard, as certified by notified body DNV and ISO 18001:2007.

Welders are certified according ASME or EN standard.

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

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



Excellence In Gas Handling



Asco Pompe S.r.l.

Via Silvio Pellico, 6/8
20089 Rozzano (MI) - ITALY
Phone: +39 02 89257.1
Fax: +39 02 89257.201
@: info@ascovacuum.com
www.ascovacuum.com



REV.2 - 102022201