

APS

Ammonia Pumping Skids

Designed to meet the needs of industrial processes where ammonia has to be pumped at a low temperature, frequently in freezer tunnels. The purpose of this equipment is to reduce the installation time and increase the reliability, guarantee and efficiency of the process thanks to integration of all the elements in our factory.

The Ammonia Pumping Skids are designed with a compact format to optimise the space and reduce the ammonia charge, making them the best solution where space is limited, and where there are restrictions on the refrigerant charge used.

APSs are designed with 1 or 2 compressors and drivers with VSD to offer the most cost-effective solution in the market to deal with changing circumstances and different operating requirements. The experienced design and the integration of efficient and robust elements make this equipment to have a long working life with low operating costs.

Ammonia condensation can be done by using a remote condenser (air, evaporative, adiabatic) or by integrating an exchanger in the chiller itself to condense ammonia with water.

MODEL	COOLING CAPACITY (KW)	SHAFT POWER (KW)	EER (APS)	COMP.Q.	MAYEKAWA MYCOM
APS/-30 2MYI 210	208.4	104.2	2,00	2	i125L-H
APS/-30 2MYI 310	306	151.2	2,02	2	i160S-H
APS/-30 2MYI 310	381.2	182.2	2,09	2	i160M-H
APS/-30 2MYI 450	456.4	216.4	2,11	2	i160L-H

Standard Conditions: Ammonia in -30C/+35C condition with economiser and compressors running at 3550rpm

MODEL	COOLING CAPACITY (KW)	SHAFT POWER (KW)	EER (APS)	COMP.Q.	MAYEKAWA MYCOM
APS/-40 2MYI 120	123.8	92.8	1,34	2	i125L-H
APS/-40 2MYI 180	183.2	134.6	1,36	2	i160S-H
APS/-40 2MYI 230	228.2	162	1,41	2	i160M-H
APS/-40 2MYI 270	273.4	192.4	1,42	2	i160L-H

Standard Conditions: Ammonia in -40C/+35C condition with economiser and compressors running at 3550rpm

APS

Ammonia Pumping Skids

Ammonia Pumps

We integrate in the skid 2 or 3 refrigerant pumps, with one of them in stand-by, to supply the required refrigerant flow (freezer tunnels, refrigeration chambers, etc).

Economiser

We tend to integrate an economiser in the refrigeration circuit to increase the efficiency of the installation (higher COP) and the compressors reliability. The intermediate injection via economiser reduces discharge temperatures of the compressors, reducing the thermal stress of several components (compressor valves, oil,...)

Thermal Insulation

In our factory we integrate thermal insulation in the low-pressure (LP) and medium-pressure (MP) circuits of a refrigeration system is crucial for performance, energy efficiency, and safety.

Integral Control System

Integral control system with a Siemens S7-1200 PLC with PROFINET communication, Schneider Electric 10" screen and inverters for compressor control. Remote access available.

Outdoor Installation

We offer the possibility of designing and manufacturing the equipment with an external housing, protecting all the elements against the weather.



Heat Recovery

We offer the option to integrate an additional heat exchanger to improve system efficiency by recovering heat from the oil or ammonia discharge.

Flexibility

Our technical team with more than 20 years of experience in the design and manufacture of technically complex equipment, offers the flexibility to adapt our solutions to the specific needs of the project to offer the best solution. Get in touch with our technical office to request a quote for an Ammonia Pumping Skid according to the needs of your project.