



STANDARD PACKAGE DIVISION

Light Chemical Applications



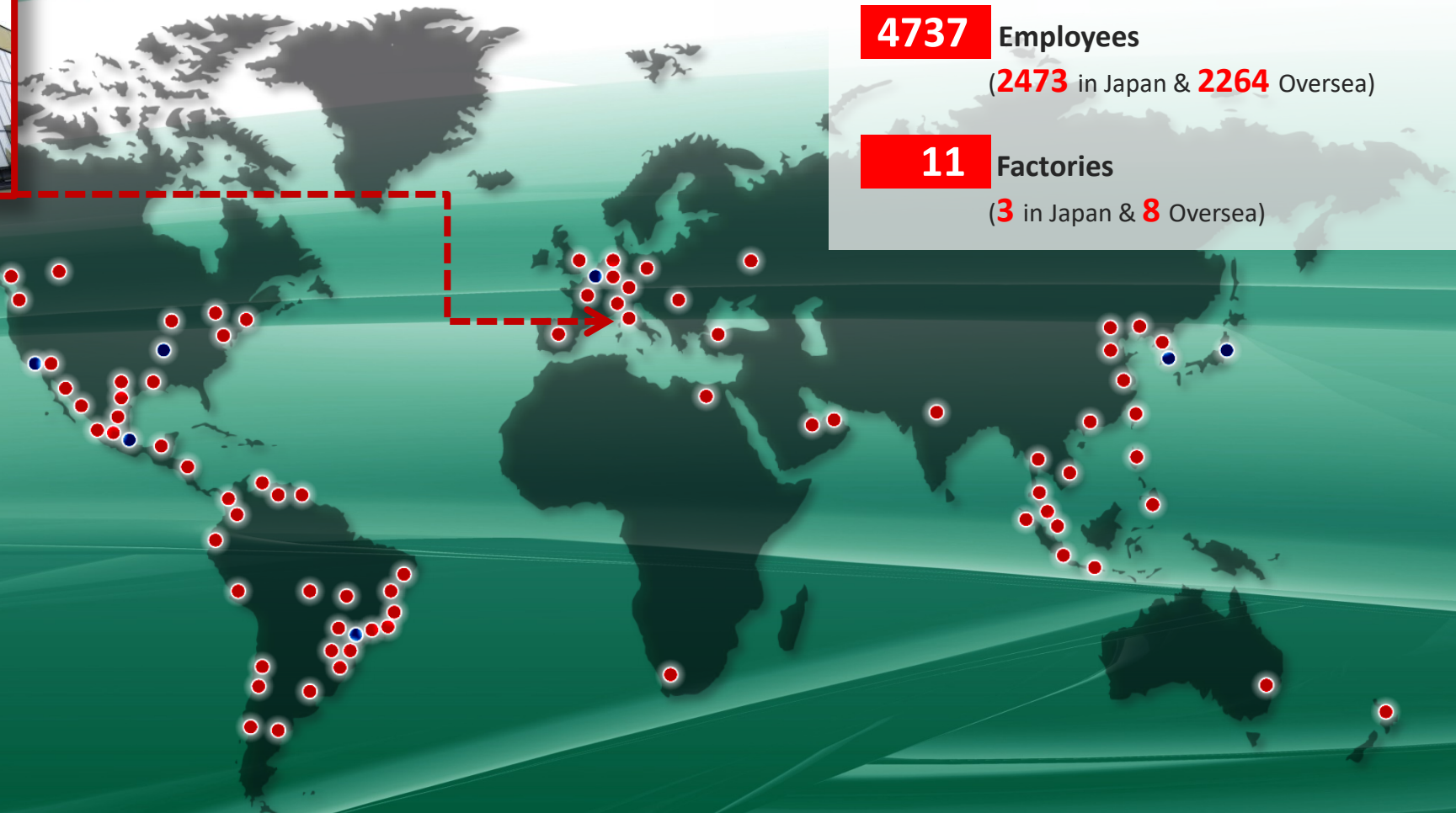


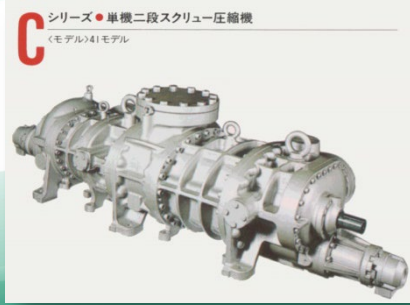
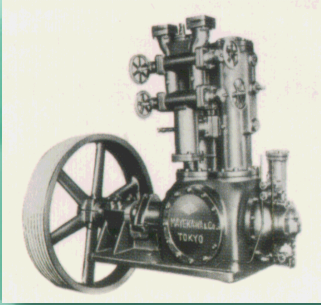
106 Worldwide network offices
(in **45** countries overseas)

4737 Employees
(**2473** in Japan & **2264** Oversea)

11 Factories
(**3** in Japan & **8** Oversea)

- London
- Paris
- Madrid
- Hamburg
- Brussels
- Muenchen
- Zug
- Milan
- Bologna
- Poznan
- Sofia
- Istanbul
- Moscow
- Cairo
- Abu-Dhabi
- Dubai
- New Delhi
- Beijing
- Dailan
- Seoul
- Busan
- Qingdao
- Shanghai
- Guangzhou
- Taipei
- Taichung
- Kaohsiung
- Bangkok
- Manila
- Trang
- Ho Chi Min City
- Singapore
- Changwon
- Jakarta
- Surabaya
- Moriya
- Saku
- Tokyo
- Higashihiroshima
- Kuala Lumpur
- General Santos
- Kuala
- Cape Town
- Sydney
- Auchland
- Vancouver
- Seattle
- Calgary
- Toronto
- Chicago
- Nashville
- New York
- York
- Covina
- San Antonio
- Houston
- Hermosillo
- Culiacan
- Monterrey
- Irapuato
- Guadalajara
- Mexico City
- Medan
- Cuernavaca
- Villahermosa
- San José
- Medellin
- Maracaibo
- Barcelona
- Bogota
- Caracas Maracay
- Guayaquil
- Lima
- Curaba
- Recife
- Goiania
- Bahia
- Macae
- Oeste Paulista
- Rio de Janeiro
- Aruya
- Curitiba
- Chapeco
- Santiago
- Concepcion
- Rio grande do Sul
- Buenos Aires
- Puerto Montt
- Puerto Madryn





First Reciprocating Compressor

Multiple Cylinder Reciprocating Compressor

Screw Compressor

Ethylene Plant

4K Super Low Temp. Particle Accelerator

LNG Tanker

1924

1958

1960

1970

1978

1980

- Company founded in 1924.
- Over 90,000 screw and reciprocating compressors running in more than 100 countries.
- 40% of the world market share.





Nuclear Fusion

1981



MagLev Train

1984



Rocket Fuel

1989



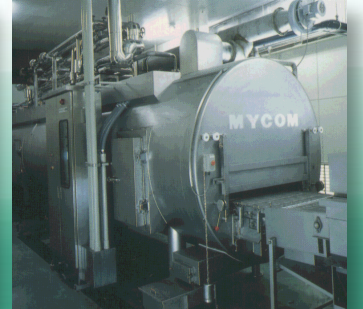
Chemical Plant
(EG & NH₃)

1990



Super GE
(Super Conductive
Electric Generator)

1993



Pharmaceutical

2000

- Company founded in 1924.
- Over 90,000 screw and reciprocating compressors running in more than 100 countries.
- 40% of the world market share.



1924

Vertical Compressor



1958

Multi-Cylinder Compressor



1964

Screw Compressor



1968

Dual-Stage Screw Compressor



1968

**UD/G-Series
C-Series**



**UD/G-series
C-series**
Widely used single and two-stage gas compressor series (with cast steels casing / compliant to API 619)

1998

VR-Series



VR-series
The line of rugged, oil injected, integral gear box screw compressors designed specifically for engine driven field gas application.

2003

GH-Series



GH-series
High pressure with high efficiency, due to a new rotor profile.

2011

J-Series



J-series
Mayekawa's new standard single-stage screw compressor for premium efficiency with the new rotor profile, J profile. The completely new design provides more CFM for less HP.

2011

FX-Series



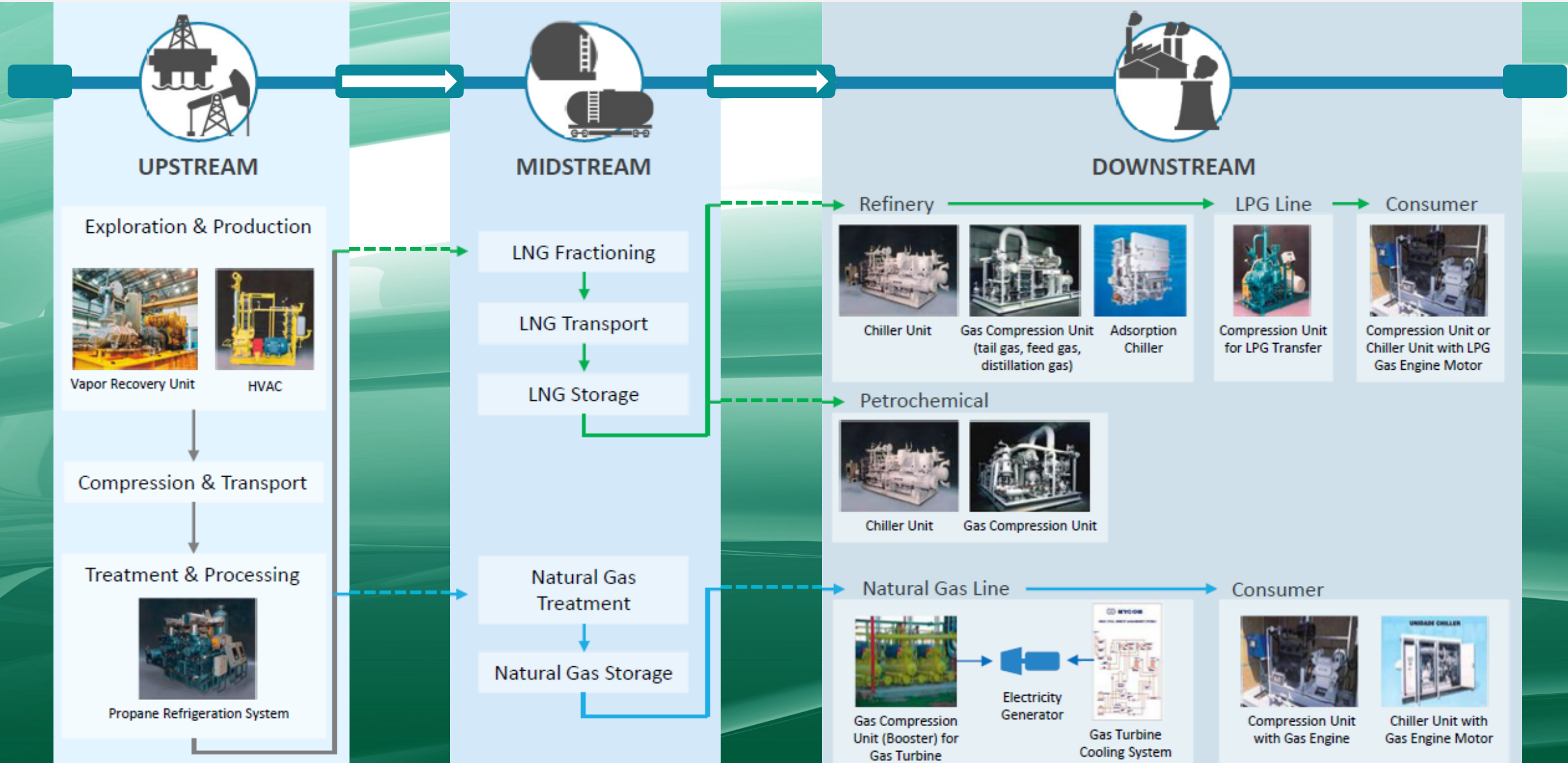
FX-series
Oil flooded screw compressor for On & Offshore VRU, FGRU, Gas Compression, Process Refrigeration applications. The benefits of both Dry & Wet screw compressors with much simpler construction than Dry screw compressors.

2017

API J-Series



API J-series
All the benefit of the J-series compressor, with API compliance.





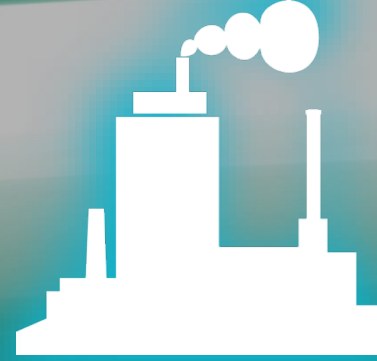
Refinery



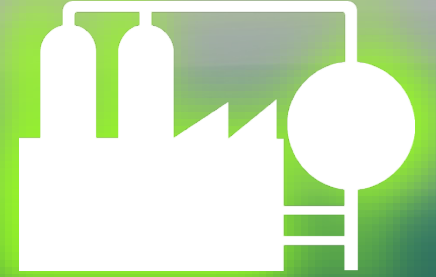
Mining



Refrigeration



Power



Biogas



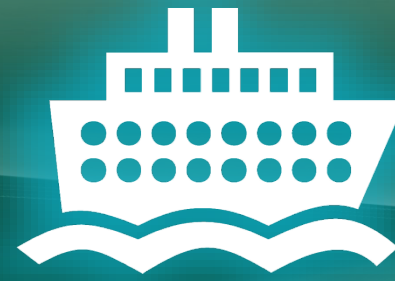
Oil&Gas



Chemical



**CO₂ recovery
and liquefaction**



Marine

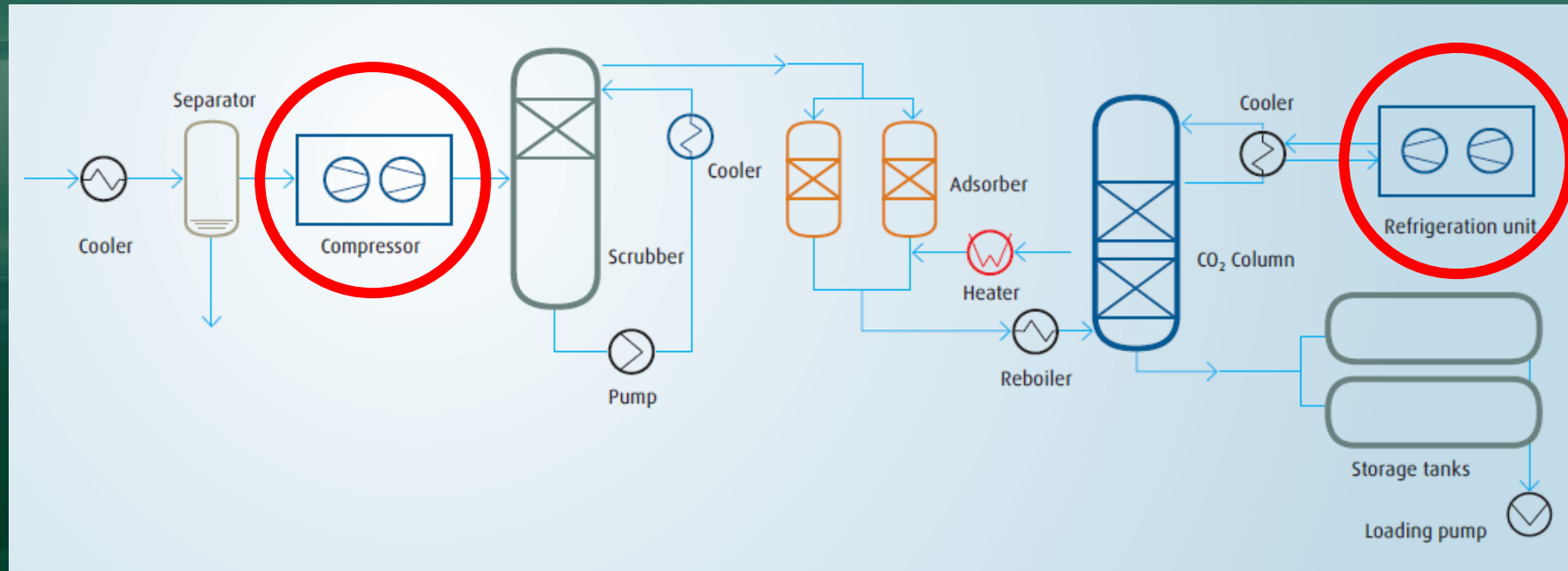


Bio-Fuel

Our compression units support :

- Ammonia
- Ethylene oxide/glycol
- (Bio) Ethanol
- Natural wells
- Refineries
- Synthesis gas
- Biogas
- Natural gas sweetening processes

- Step-by-step process flow pre-cooling and compression.
- This unit cools down the water-saturated feed gas and then separates the water.
- The cooled gas is sent to the CO₂ compressor to increase the pressure up to operating conditions. Boil-off gas from the storage tanks can also be recycled to the compressor.
- Oil filters and various adsorbers can be added downstream as required to remove additional components such as hydrogen sulfide (H₂S).
- Mayekawa can supply the CO₂ compressor and NH₃ compressor unit.



Hydrogen has been identified as a key element for the decarbonization of different sectors:

- Energy
- Mobility
- Industry
- Residential

OUR CHALLENGE

A lot of investments in decarbonization of the Planet and in green technology where our standard compressor unit can be used:

- Biogas upgrading plants
- Power Purchase Agreement (PPA)
- Hydrogen production plants
- CO₂ liquefaction plant
- CO₂ recovery system (CCS)



MAYEKAWA'S AVAILABLE APPLICATIONS

- Process Gas Compression
- Fuel Gas Boosting
- Vapor Recovery
- Wellhead & Gas Gathering
- Refrigeration
- Gas Turbine Inlet Air Cooling
- Air Conditioning (HVAC)
- and more ...

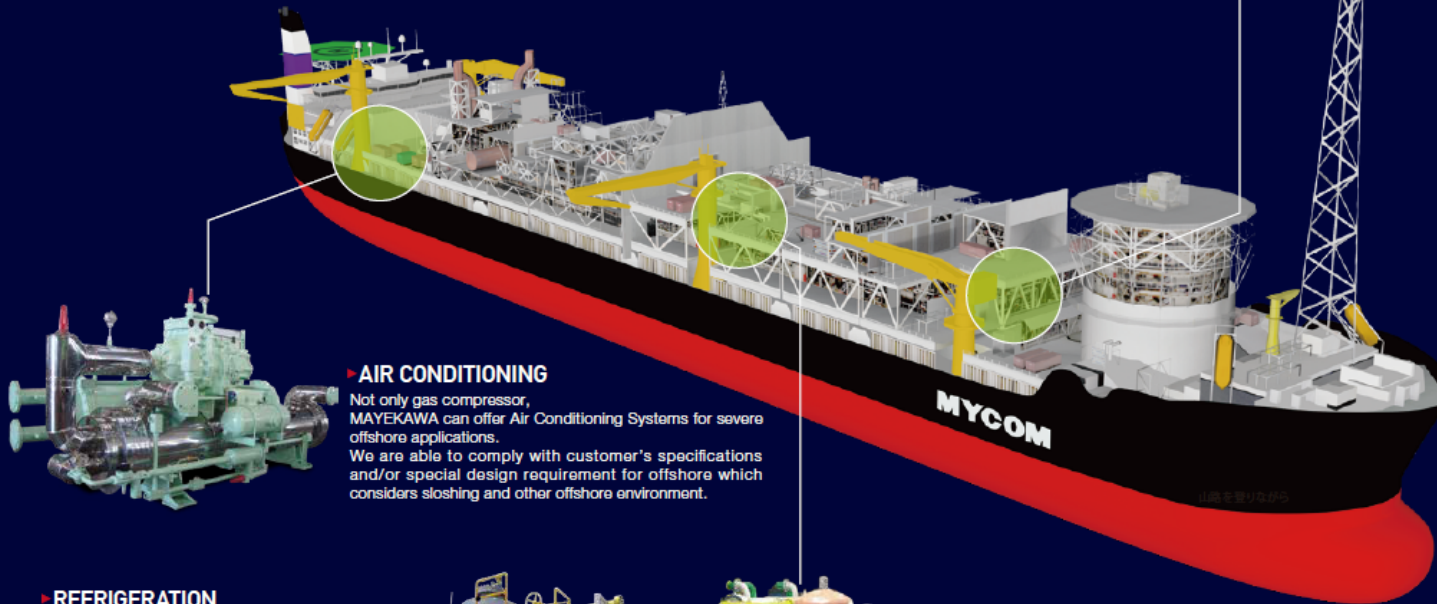


► VAPOR RECOVERY

By recent environmental circumstance, needs of Flare Gas Recovery and/or other gas recovering systems are increasing.

Our flare recovery systems are currently operating on oil rigs around the world.

Also our own developed compressor technology with isolated lubrication systems allows you to recover gases such as heavier hydrocarbon gases or gas including active substances. This unique system offers you advantage of both dry and wet screw design.



► AIR CONDITIONING

Not only gas compressor, MAYEKAWA can offer Air Conditioning Systems for severe offshore applications.

We are able to comply with customer's specifications and/or special design requirement for offshore which considers sloshing and other offshore environment.

► REFRIGERATION

Mayekawa's outstanding refrigeration technology and experience will offer you reliable cooling for various gases. Moreover our latest technology allows using a variety of natural refrigerants, which could be the key solution to global environmental problems.



OUR RELIABILITY

Mayekawa's well sophisticated Compressor Package Design and High Quality provide "HIGH RELIABILITY"

MYCOM OFFSHORE SCREW COMPRESSOR PACKAGE IN FOULING SERVICE

Platform	2014	Planning Hour Minimal Backlog Overhead as of End of 2014
A	97.84%	>98303
B	98.80%	>52325
C	99.83%	>29302
D	99.40%	>27988
E	98.60%	>35748
F	98.20%	>25253
G	99.30%	>20253

Source: Real Data / Information from End-User

98.7% as Whole package

*as average of above Real Data

FOR REFERENCE "GENERAL BARE SHAFT COMPRESSOR"

Equipment	Availability	
	Highest	Average
Rotary Screw (Oil-Injected)	99.2%	97.7%
Rotary Screw (Dry Type)	99.6%	99.0%
Centrifugal (Clean service)	99.9%	99.7%
Centrifugal (Fouling service)	99.6%	99.0%
Reciprocating (Oil-Injected)	99.5%	97.3%
Reciprocating (Dry Type)	98.6%	91.3%

Source: Jan.'99 - Hydrocarbon Processing Magazine

Reliability of bare shaft screw compressor is generally known as 97.7 % (as average)

※This FPSO image is for illustrative purposes.



<https://mayekawa.it>

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