

# MYCOM

MAYEKAWA MFG. CHEMICAL PROCESS DIVISION

**Unparalleled quality. Unparalleled reliability. Unparalleled service.**

Compression Solutions and Critical Service Refrigeration



## MYCOM CHEMICAL PROCESS DIVISION

### Quality, Reliability, Service

After manufacturing our first compressor in 1924 and our first screw compressor in 1964, Mayekawa Manufacturing company steadily grew to be one of the largest oil flooded screw manufacturers in the world. Due to their simple and robust design, oil flooded screw compressors have been successful in a wide variety of applications from simple industrial refrigeration to highly specified offshore petrochemical compression. To better serve our customers in the petrochemical and severe duty markets, Mayekawa Manufacturing Company formed Chemical Process Division located in various key countries covering all over the world.

Mycom Chemical Process Division (Mycom) is dedicated to providing dependable high quality oil flooded screw compressor solutions for petrochemical compression and process refrigeration applications. Under one roof we have the skills to engineer, manufacture, and service custom built equipment for the most demanding applications. All our employees work to be the industry leader in quality and customer satisfaction.

Mycom specializes in API compliant packages and projects requiring engineered solutions for compression and refrigeration applications. Top engineers from Mayekawa Mfg. Japan have transferred direct oil flooded screw compressor design experiences to the worldwide members within the division. Our engineering staff has hands-on experience working with screw compressors in refineries around the world. With over 75 years of direct oil flooded screw compression and refrigeration experience our engineering team is

ready to solve your most demanding applications.

Mycom is operating totally five skid assembling factories worldwide, Japan, U.S.A, Belgium, Korea and Brazil, dedicated to oil flooded screw compressor packages. With the majority of our packages built to heavy and stringent client specifications, our shop and quality control personnel carry knowledge and experience that assures we produce only the highest quality custom packages. Each component on our equipment is rigorously tested to ensure our high quality standards are maintained.

Mycom has sales, service, and parts departments located in over 25 countries to provide prompt local customer support. Mycom has over several hundred compressors and a large inventory of compressor parts in various locations around the world. In most cases we provide next day delivery for spare parts requests.

Manufacturing oil flooded screw compressors since 1964 the Mycom name has grown to be synonymous with quality reliability and service. Contact Mycom for assistance with your oil flooded screw compression and refrigeration needs.



Mayekawa Mfg's main plant, Moriya factory, about 50 km north east of Tokyo.

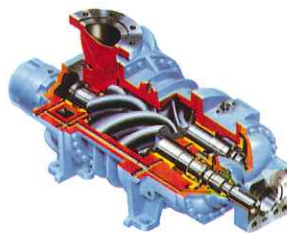


## Partnering

It is part of Mycom's philosophy to develop long - term partnerships with our customers. We understand our customers long-term value and believe that working as partners, we can provide the best service and ultimately the highest quality packages. As the original equipment manufacturer, Mycom has access to engineering tools, special

services, the latest product technology and experienced shop personnel that bring added value to our customers. We pride ourselves on service and dedication to our customer's needs. We work closely with our customers during each stage of a project, using our screw compressor knowledge to ensure the best solutions for you.

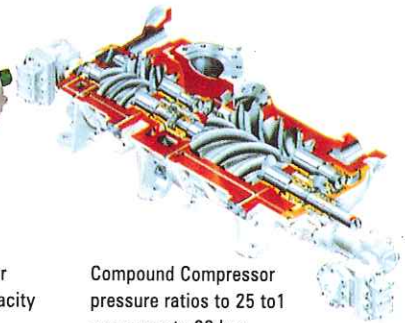
## Mycom's Full Range of Compression



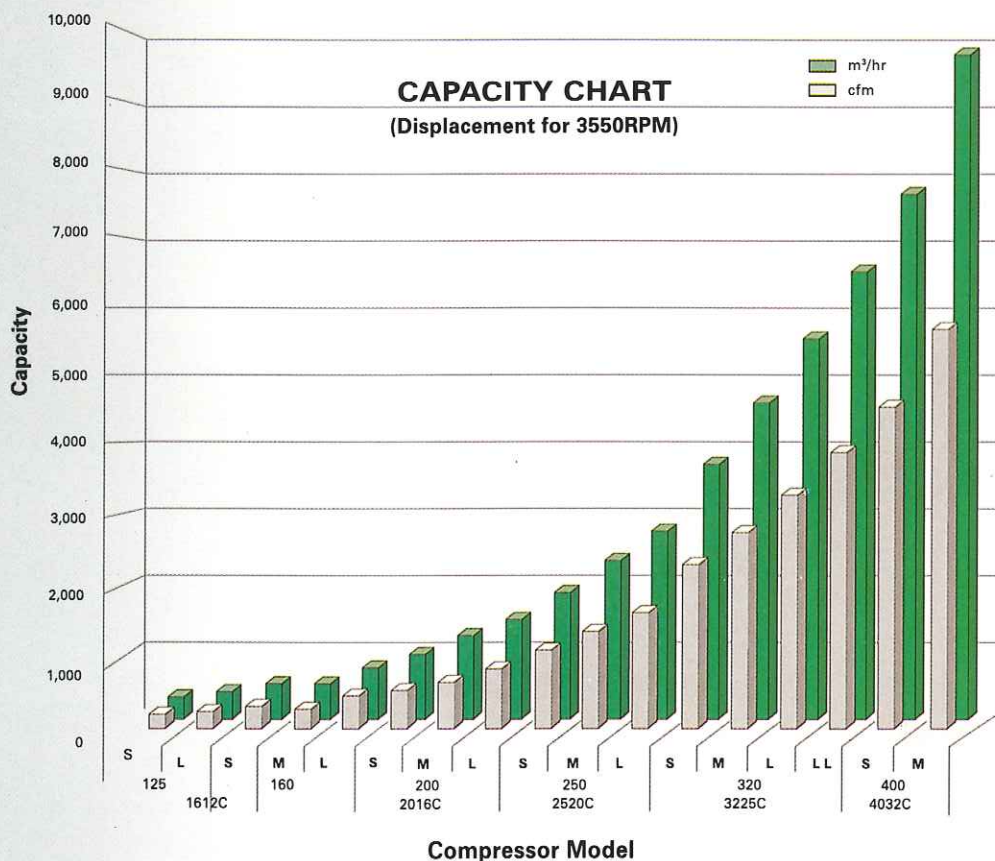
Single-Stage  
Screw Compressor  
Pressure ratios to 12 to 1  
Pressures to 50 bar



400 Series Compressor  
with a Volumetric Capacity  
to 13000 m³/h



Compound Compressor  
pressure ratios to 25 to 1  
pressures to 30 bar



MYCOM MODEL			Theoretic Displacement at 3550 RPM	
			m³/hr	cfm
1612C	125	S	236	139
		L	350	210
	160	S	496	292
		M	620	365
2016C	200	L	744	438
		S	969	570
		M	1,215	715
		L	1,450	853
2520C	250	S	1,880	1,110
		M	2,370	1,400
		L	2,830	1,670
3225C	320	S	3,790	2,230
		M	4,730	2,780
		L	5,660	3,330
		LL	6,520	3,840
4032C	400	S	7,800	4,590
		M	9,800	5,770
		L	11,700	6,880
		LL	13,820	8,130

Mycom has been aware of the market push for increased capacity units. We have responded with our 400 frame screw compressors.

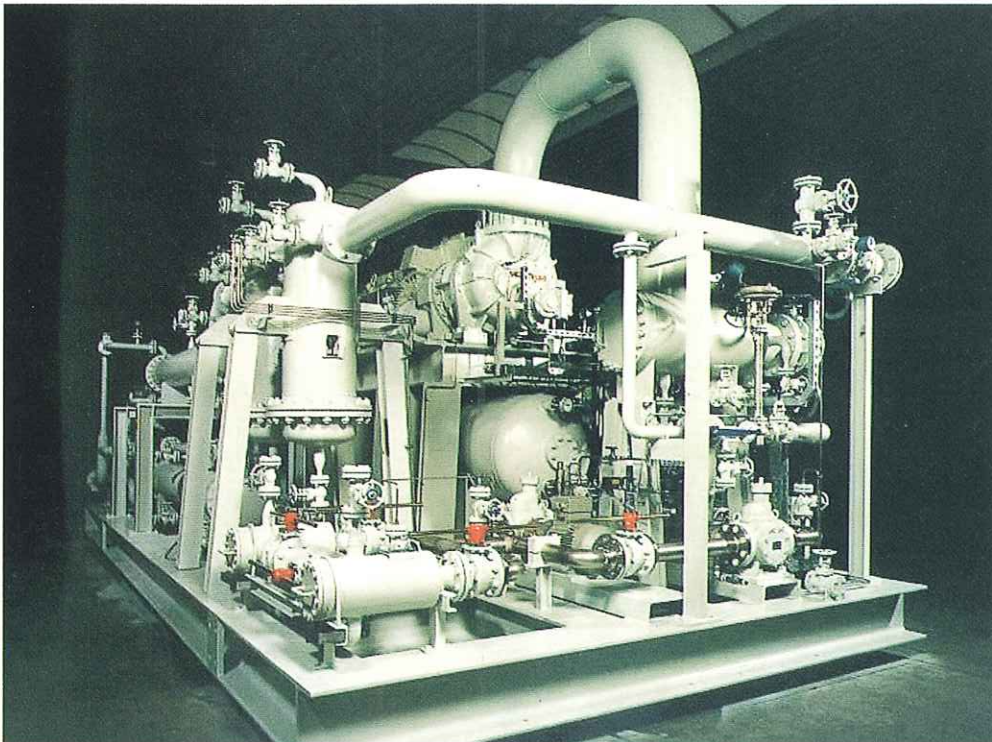


## Engineering

Mycom Chemical Process Division engineering team specializes critical service refrigeration and corrosive or wet gas compression. Our team is dedicated to providing reliable high quality packages for the most demanding services and applications.

With a staff that began their careers designing screw compressors in our

manufacturing plant in Moria, Japan, we have a complete understanding of the compressors we package. Our engineering staff has hands-on experience working in refineries and platforms around the world. With over 75 years of direct experience designing, maintaining and packaging oil flooded screw compressors, Mycom's engineering team stands ready to work for you.



Hydrogen rich tail gas compression built API specifications for an ethylene plant in Korea.



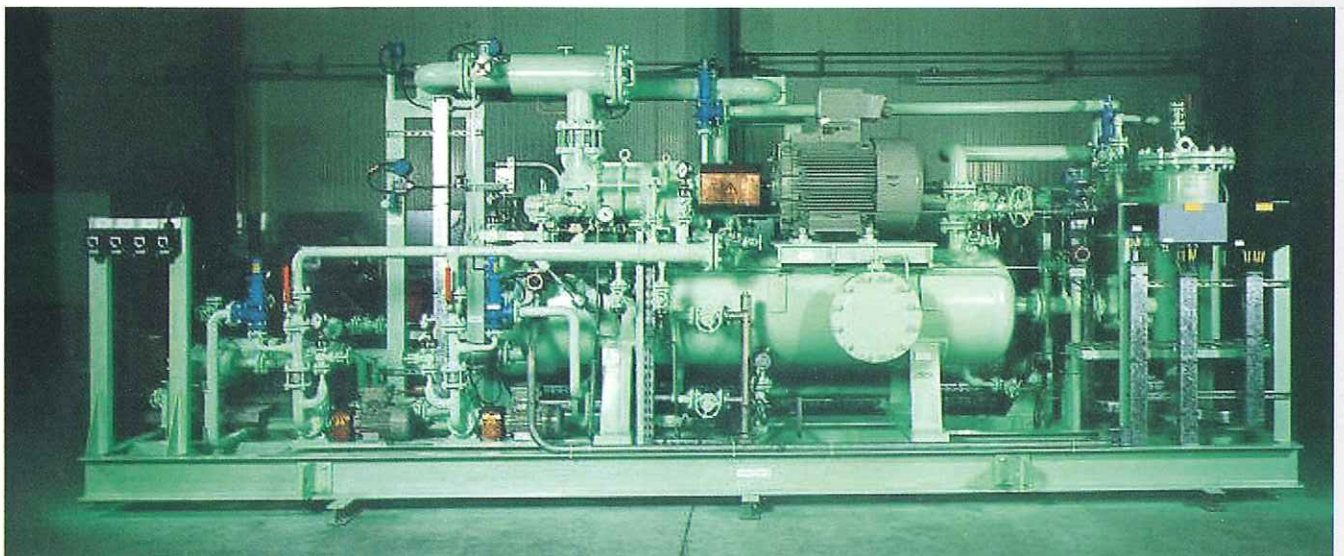
3D machinery layouts ensure our packages are optimized for operational efficiency, maintenance access, an instrument visibility.



Rotor thermal distortion analysis monitored by Finite Element Method (FEM).



CO compression package built to IEC electrical Code for Installation in France.



API compliant fuel gas compression system with two stages of oil separation for a petrochemical plant in Belgium.



## Manufacturing



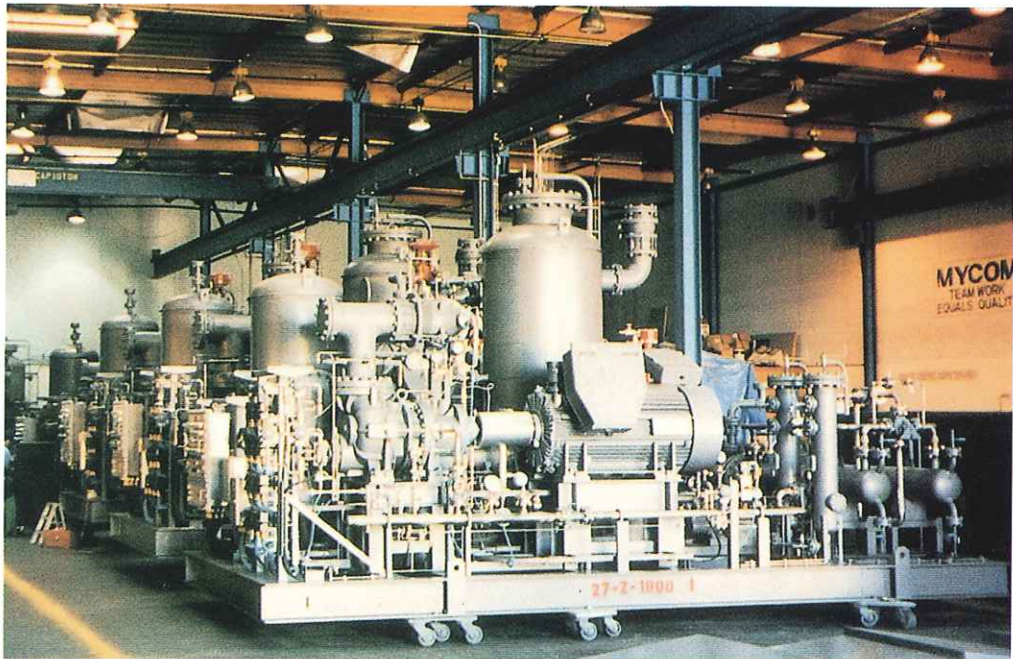
Process refrigeration packages shipping to South America.

Mycom Chemical Process Division has totally five skid assembly factories worldwide with over 30000m<sup>2</sup> of manufacturing floor space dedicated to producing top-quality heavy duty and engineered oil flooded screw compressor packages. Backed by knowledge gained through the years of working with top engineering firms such as: Chiyoda, Chevron, Dow, Exxon, Fluor Daniel, JGC

Mobil, Pemex, Petrobras, Shell, Technip, Toyo and Uop, our shop staff stands ready to work on your most demanding projects. You can rest assured that our shop personnel have the skills to manufacture the highest quality API and customer specified packages. Our goal is to provide units that exceed our customer's expectations.



To offshore VRU units built to Chevron and API specifications for installation in Venezuela.



Three butane compression system built to API specification for process refrigeration in Kuwait.



Mycom's manufacturing staff is ready to work on you most demanding projects.



Boil - of recovery package for Singapore designed in conformance with Shell, DEP and API specifications.



Ammonia liquefaction system built in to API specification for fertilizer plant in Saudi Arabia.

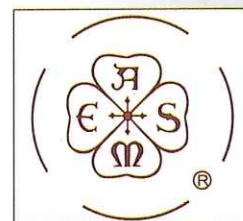


## Mycom Excels in Engineered Solutions

Mycom Chemical Process Division has been compressing inert, flammable, explosive and corrosive gases since 1976. Our technical pioneering work has contributed to the advancement of the rotary screw compressor. Applications where Mycom Chemical Process Division excels:

Process gas compression in refinery,  
chemical and petrochemical plants  
H<sub>2</sub>O saturated hydrocarbon vapor recovery  
HCl/MeCl compression  
Wet H<sub>2</sub>S compression  
He, H<sub>2</sub> compression

Vinyl chloride gas  
Landfill gas compression  
Pressure swing absorption  
Tail gas compression  
Fuel gas compression  
Silicon production compression  
Coke oven compression  
Gas field gathering  
Process gas refrigeration  
Process gas dehydration  
Boil-off gas refrigeration



### Compressor stocking

Mycom understands that fast deliveries are critical to succeed in today's market place. To provide our customers with the fastest deliveries, Mycom has compiled one of the largest screw compressor inventories in USA, Belgium and Brazil covering worldwide costumers with over several hundred units. Chances are we have the unit you need in stock. In addition, we have an extensive inventory of spare parts. In most cases we provide same - day delivery of spare parts requests.



### Mycom Chemical Process Division Services

Call one of the offices of Mycom Chemical Process Division and you will speak directly with an OEM service engineer with years of experience working on oil flooded screw compressors. We are ready to fly out on a moment's notice anywhere to ensure maximum availability of our equipment.

Because we understand the urgency of a plant down situation, Mycom has

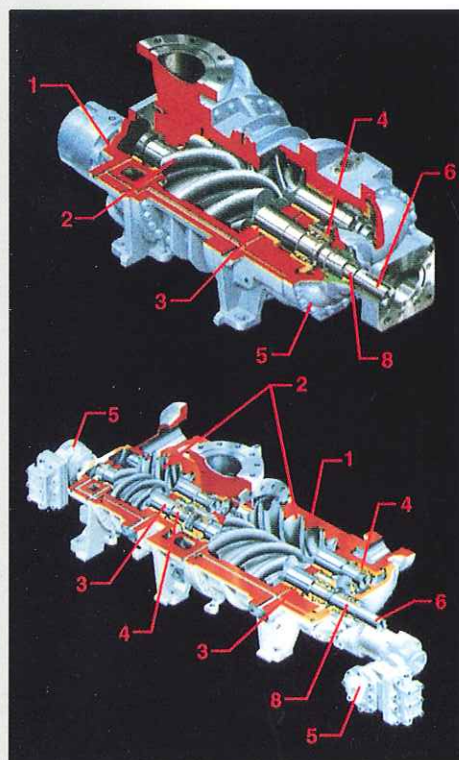
constructed a dedicated repair and rebuild center within our shop. With independent senior staff and access to our large stock and spare parts, we put the highest priorities on speed and quality. In most emergency situations, Mycom can repair or rebuild a unit within one day. For routine maintenance or major overhauls contact us for OEM reliability and service for your units.



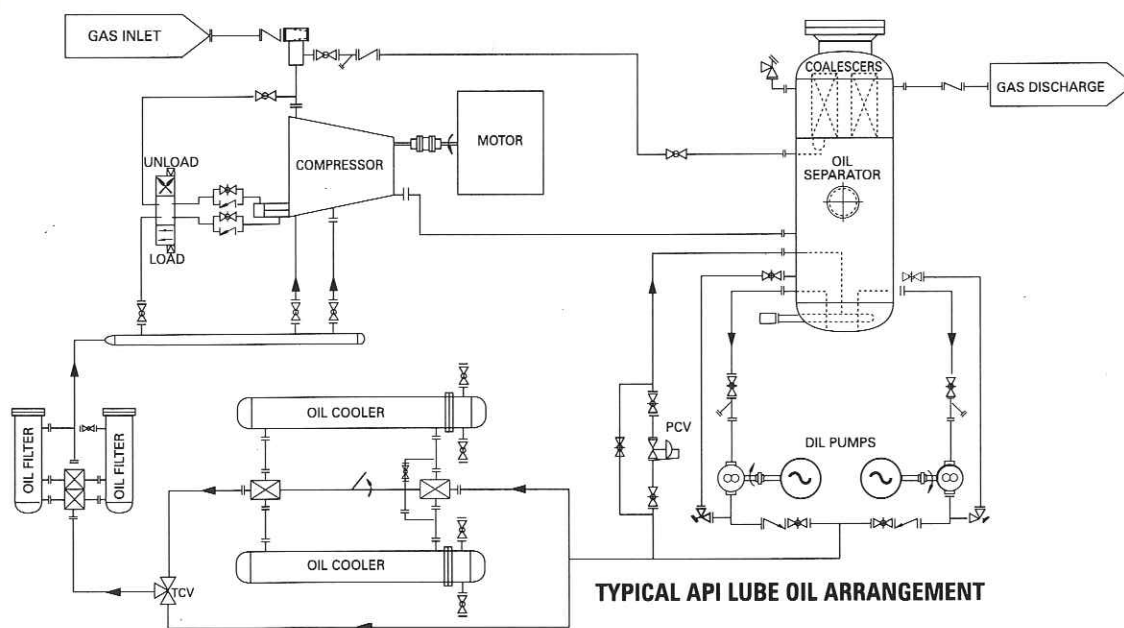
## Mycom conforms to API 619 3rd edition

Mycom Chemical Process Division specializes in providing screw compressors in conformity with API 619. API 619 requires compressors to be designed for a minimum life of 20 years and a minimum of 3 years uninterrupted operation. Our API 619

compressors include cast steel casings forged steel rotors, tilting pad thrust bearings and vibration and displacement probes. For our standard offerings see our exceptions to API 619 3rd edition \* detailed below. \*Minor exceptions are stipulated



Mycom Standard	API - 619 3 <sup>RD</sup> EDITION REQUIREMENT	
	API Par	API Requirement / Mycom option
All mycom screw compressors meet this requirement	4.1.1	The Equipment.... shall be designed for a minimum service life of 20 years and at least three years of uninterrupted operation
1. cast iron casings	4.2.3	Cast steel casings and low temperature steel casings are available
2. One piece ductile iron rotors	4.5.1.2	One - piece forged steel rotors are available
3. Sleeve type hydrodynamic journal bearings	4.8.3	Mycom's bearings comply with this API requirement
4. Double-row angular contact thrust bearings	4.8.4	Central pivot tilting pad thrust bearings are an available option
5. Unclassified area load/unload indicator	4.1.12	Explosion - proof housings are an available option
6. Straight shaft end with keyway	5.2.2	Shaft end per API-671 (tapered shaft is an available option)
7. No provisions for shaft monitoring	5.4.3.5	Bearing housing acceleration & axial position probes are available options
8. Oil flooded mechanical seal	4.6.4.2	Mycom's seal meets API requirements Other sealing options are available.





## Mycom Around the World



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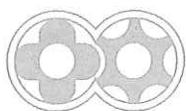
## Worldwide Service — Always on Call

Mycom has experienced service support staff stationed in more than 25 countries, as well as strategically located spare parts and sales offices to ensure total availability of your Mycom screw compressor.

Rely on Mycom for full support of our manufacturing facilities in Belgium, the U.S, Brazil, Mexico, Korea and Japan and for replacement parts that meet original tolerances and material specifications

Please keep in mind that specifications in this brochure are for illustration only, and each compressor application requires unique analysis and qualification.

Mycom also offers remote and emergency breakdown service as well as a variety of preventive maintenance, performance monitoring and service programs. For faster delivery, each service center normally will have replacement models in stock. Ask your Mycom sales representative for the location of your nearest service center.



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