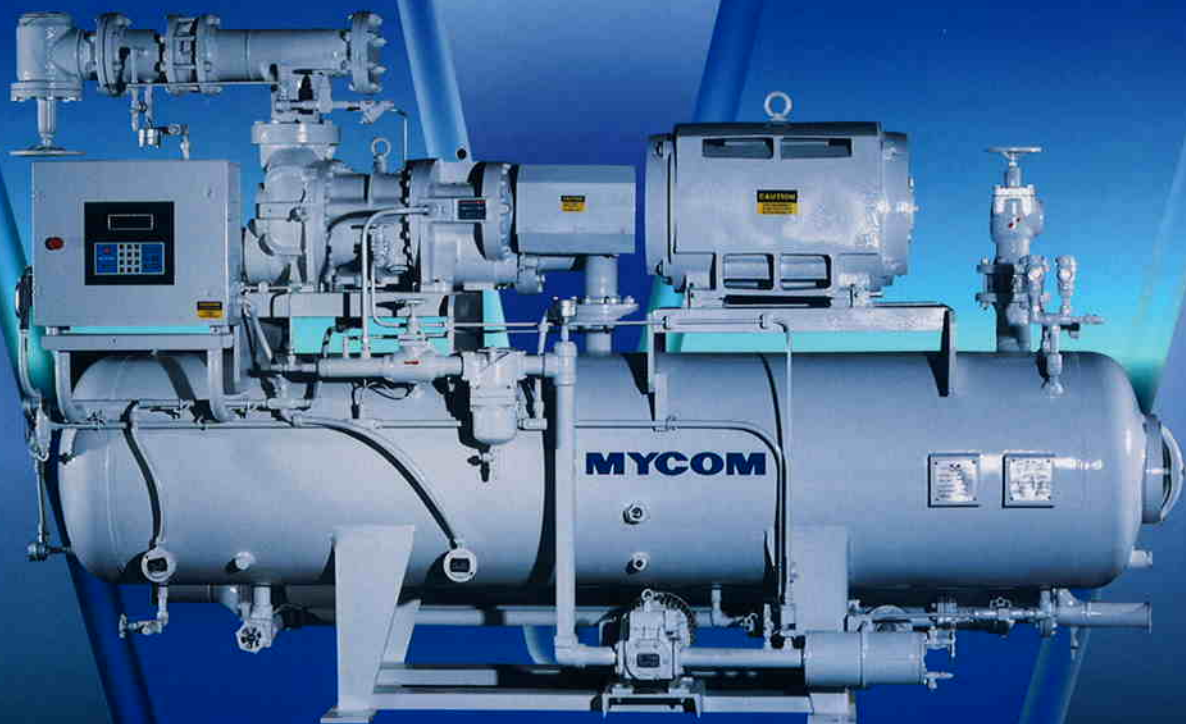


MYCOM

OUR COMMITMENT TO A BETTER ENVIRONMENT



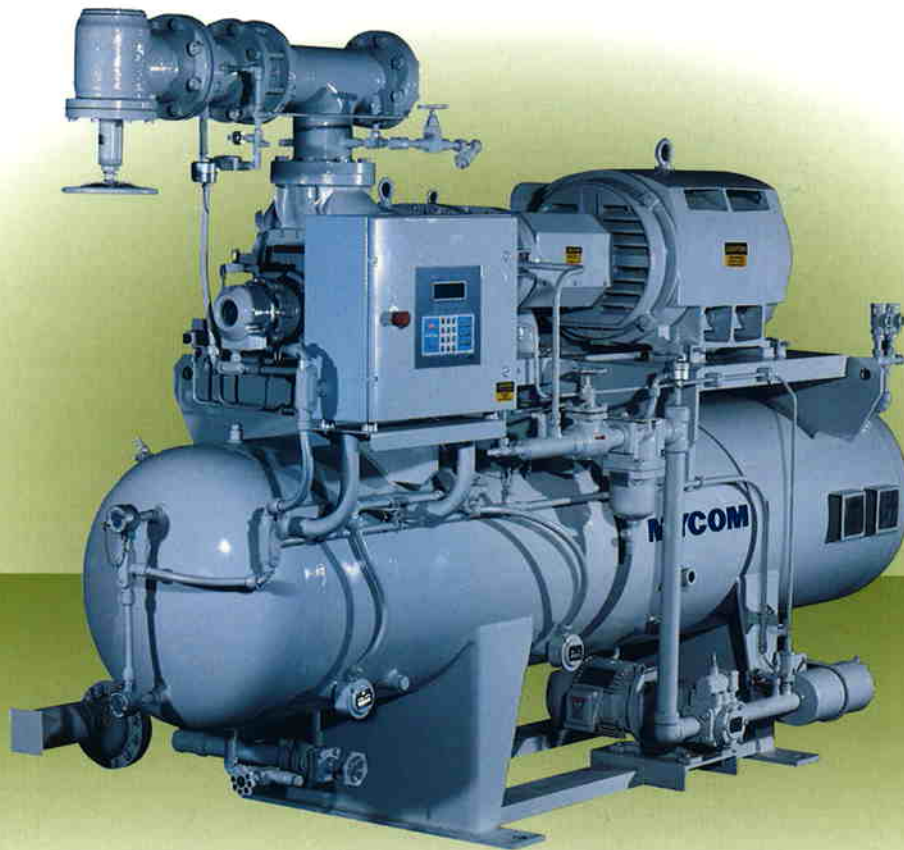
MYCRO-COLD

V SERIES

REFRIGERATION SCREW COMPRESSOR PACKAGE

-DEPENDABLE HIGH PERFORMANCE OPERATION-

MYCRO-COM



MYCOM, the number one screw compressor manufacturer in the world. We have developed the ultimate screw compressor for the MICRO COLD screw packages. Designed and manufactured by MYCOM, the "V" series has many superb features. These work together to obtain maximum performance, ease of operation and high reliability.

Models from 125 mm (140 cfm) to 400 mm (5,760 cfm) diameter to meet all of your requirements (based on 3550 RPM compressor speed).

COMPRESSOR HOUSING

MYCOM screw compressor housings are low porosity cast iron (cast steel is also an option) designed in compliance with ANSI/ASHRAE 15-1994. The compressor assembly is hydraulically tested at 350 psig after assembly.

ROTOR PROFILE

A newly developed MYCOM "O" profile is used in the "V" series screw compressors. Higher efficiency is achieved by reducing the inter-lobe blow-by gas. This profile also facilitates a build up of oil film on the rotor lobe surface by the circular arc profile rather than the conventional raised sealing edge.

VARIABLE Vi

"V" series compressors have the capability of being able to change the Vi (internal volume ratio) whenever required. Manually adjustable Vi is standard (fully automatic variable Vi is available as an option). The applicable range is from 2.6 to 5.8 (2.2 to 5.0 as an option). Optimum Vi can be set at the factory prior to shipment if required.

CAPACITY CONTROL

The hydraulically operated slide valve regulates the capacity of the compressor from 10% to 100%. Part load efficiency is improved on the "V" series compressors.

D SCREW COMPRESSOR PACKAGES

"V" SERIES

OIL COOLING

MYCOM offers various options for oil cooling. Thermosyphon, Water and Liquid Injection.

THERMOSYPHON: External shell and tube refrigerant cooled oil coolers are mounted and piped for this option. The heat exchanger is constructed to ASME Sect. VIII at a design pressure of 400 psig. A 3-way oil temperature bypass valve is installed to control a constant oil temperature.

WATER: External shell and tube (plate and frame optional) water cooled oil coolers are mounted and piped. The tubes are either copper or steel and the shell is made of carbon steel designed for 400 psig. Oil temperature is controlled either by a water regulating valve or a 3-way oil temperature control valve.

"YOSAKU" LIQUID INJECTION: MYCOM has developed an electronic pulse type liquid injection valve (YOSAKU). Discharge gas/oil temperature is continuously monitored by the micro processor control panel. This controls the discharge temperature by pulsing the 'YOSAKU' valve as required. All "V" series compressors are provided with 2 liquid injection ports corresponding to the operating Vi position; low port I-1 or high port I-2.

BEARINGS

Main and side bearings are steel backed babbit type. The bearings are arranged for forced feed lubrication. Proper oil management design assures longer bearing life without periodic replacement. Thrust bearings are angular contact ball bearings and absorb axial loads on the male and female rotors. An enlarged balance piston is employed on the male rotor to balance any uneven loads on the rotors.

OIL MANAGEMENT

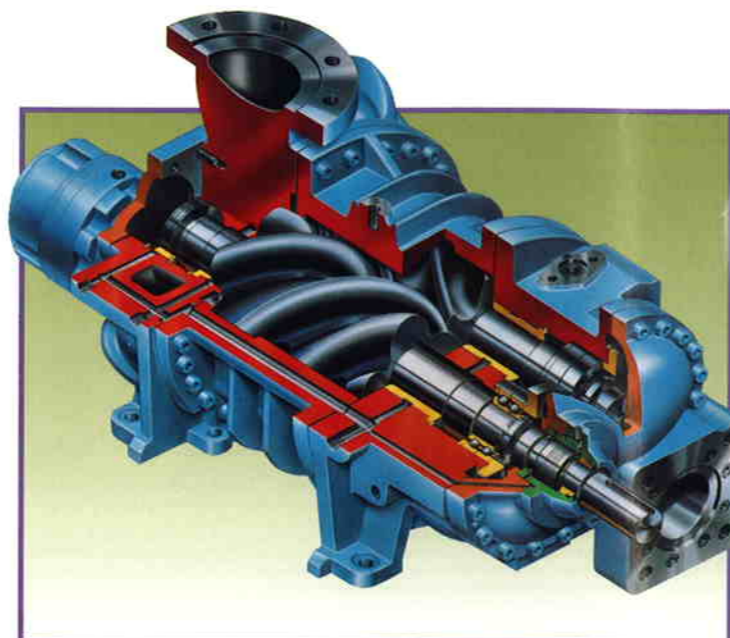
A high efficiency horizontal (vertical as an option) oil separator incorporates three-stage oil separation which includes a fine coalescing type element. The separator is designed and constructed to ASME Sect. VIII for a design operating pressure of 300 psig. Oil is drawn from the oil separator through the oil cooler and is filtered by a stainless steel cleanable 300 mesh strainer. The oil enters the oil pump and is maintained at a set discharge pressure which supplies oil to the bearings, balance piston and the capacity control piston via a 20 micron replaceable oil filter. The oil pump is a MYCOM double helical screw direct driven self regulating oil pump. This oil pump is well recognized in the industry as a reliable, quiet oil pump.

ECONOMIZER SYSTEM (optional)

The factory mounted economizer is effective for single stage systems at medium and low temperature applications. The liquid sub-cooler provides sub-cooling of the liquid refrigerant between the condenser and the expansion device which improves the cycle performance.

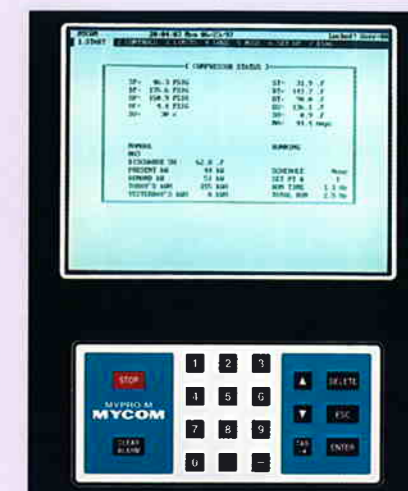
SPECIAL FEATURES AND OPTIONAL ACCESSORIES

- ✓ Dual oil filters and oil pumps are available.
- ✓ Electro mechanical control panel is available.
- ✓ Control panel options: NEMA 4 outdoor panel, NEMA 4 stainless panel, Class 1, Group C & D Div. II type electrical equipment are all options.
- ✓ Modem communication.
- ✓ Two stage systems with two compressors on one oil separator is available.
- ✓ Dual screw compressor package (two screw compressors mounted on a single oil separator) is available.
- ✓ Special cast steel casing material and forged steel rotors are available.
- ✓ Tilting pad type bearings are available for high pressure applications.



"MYPRO" MICROPROCESSOR CONTROL PANEL

MYPRO microprocessor control panels are designed specifically to provide for equipment safety and efficient manual and automatic control of the MYCRO-COLD series compressor units. In addition, the MYPRO has built-in diagnostic, unit setup and configuration, service and data-acquisition features, including trending and alarm and failure logs. Also available are demand-based Automatic Compressor Staging, Condenser Control and Power Utilization sensing which makes the MYPRO a key component in energy management systems. Network-based communications in several configurations and protocols are available in the MYPRO for both local and remote monitoring and control of the compressor unit.



SPECIAL FEATURES AND OPTIONAL ACCESSORIES

REMOTE CAPACITY CONTROL - The compressor may be started, stopped, loaded and unloaded via digital input signals (dry contact closure) from a remote device or controller. Compressor slide valve position (0 - 100%) feedback is provided as a 4 - 20 mA signal to the remote device.

AUTO STAGING - In a MYPRO RS-485 network, one compressor control panel is selected as "staging master" (i.e. a working 'lead' compressor). The master monitors the suction pressure level of up to (2) system loads. It will then automatically control the compressors to meet the user established network and control parameters for each load.

CONDENSER CONTROL - Each MYPRO control panel may control up to (6) condenser ancillary devices (i.e. fans, pumps, etc.). It will cycle these devices on/off based upon the local compressor discharge pressure. Condenser control may be selected as active at all times, or active only when the compressor unit is running.

PC NETWORKING - Installing a MYCOM RS232/422 Communications Interface Card enables the MYPRO to provide remote monitoring and control of the compressor unit from any ANSI standard computer (e.g. Macintosh, IBM PC or IBM PC compatible). All of the data available at the local display screen may be collected at the remote computer via modem or serial cable, depending upon the distance, for use in monitoring, control or even report generation.

PLC INTERFACE - The MYPRO communications network is ideally suited to interface as the node of a PLC network in larger systems applications. The IEA-485 communications protocol maximizes throughput to the PLC master network controller via either token-passing bus or master / slave configurations.

Other Features include:

- | | |
|--|---------------------------------------|
| Suction and Discharge Superheat Controls | Chiller Temperature Capacity Controls |
| 'Yosaku' Liquid Injection Controls | Economizer Controls |
| Motor Amp Limiting Startup Ramp | Pump Down |
| True PID Capacity Controls | Discharge Pres Limited Startup Ramp |
| Display Contrast Viewing Adjustments | Vibration Monitoring and Analysis |

MYCOM'S UNIQUE COMPONENTS



MYCOM PUMP

Mycom Lubricating pumps are high efficient positive displacement rotary screw pumps with double helical rotors which enable high capacity in smaller size but still keep noise and vibration low.

Model 50P, 80P, and 100P Series, which range from 20 GPM to 170 GPM, are available. The F50P flanged motor type has been introduced for MYCOM Screw package as shown above.



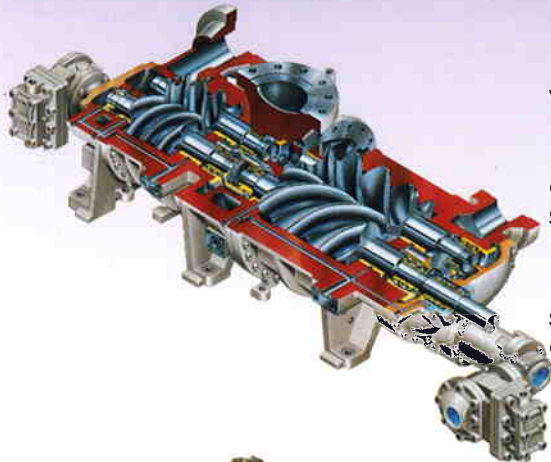
YOSAKU LIQUID INJECTION VALVE

MYCOM Yosaku valve is a unique pulse type on/off style valve. The specially developed linear plunger, with digital pulse signal, moves quickly for precise flow regulation. It is controlled through MYCOM's microprocessor control panel.

The Yosaku Valve's compact structure promises high reliability and easy maintenance.

Yosaku Valves are also used as precision temperature control expansion valves for chillers and freezers.

COMPOUND SCREW COMPRESSORS



MYCOM is one of a few manufacturers in the world who build compound two stage screw compressors.

Our compound screw compressor has two stage function and one shaft which is coupled with a single motor. That saves installation space as well as electric equipment cost.

The MYCOM "C" series unit performs better under low suction temperature than single screw compressors with economizer system.



ALSO AVAILABLE:

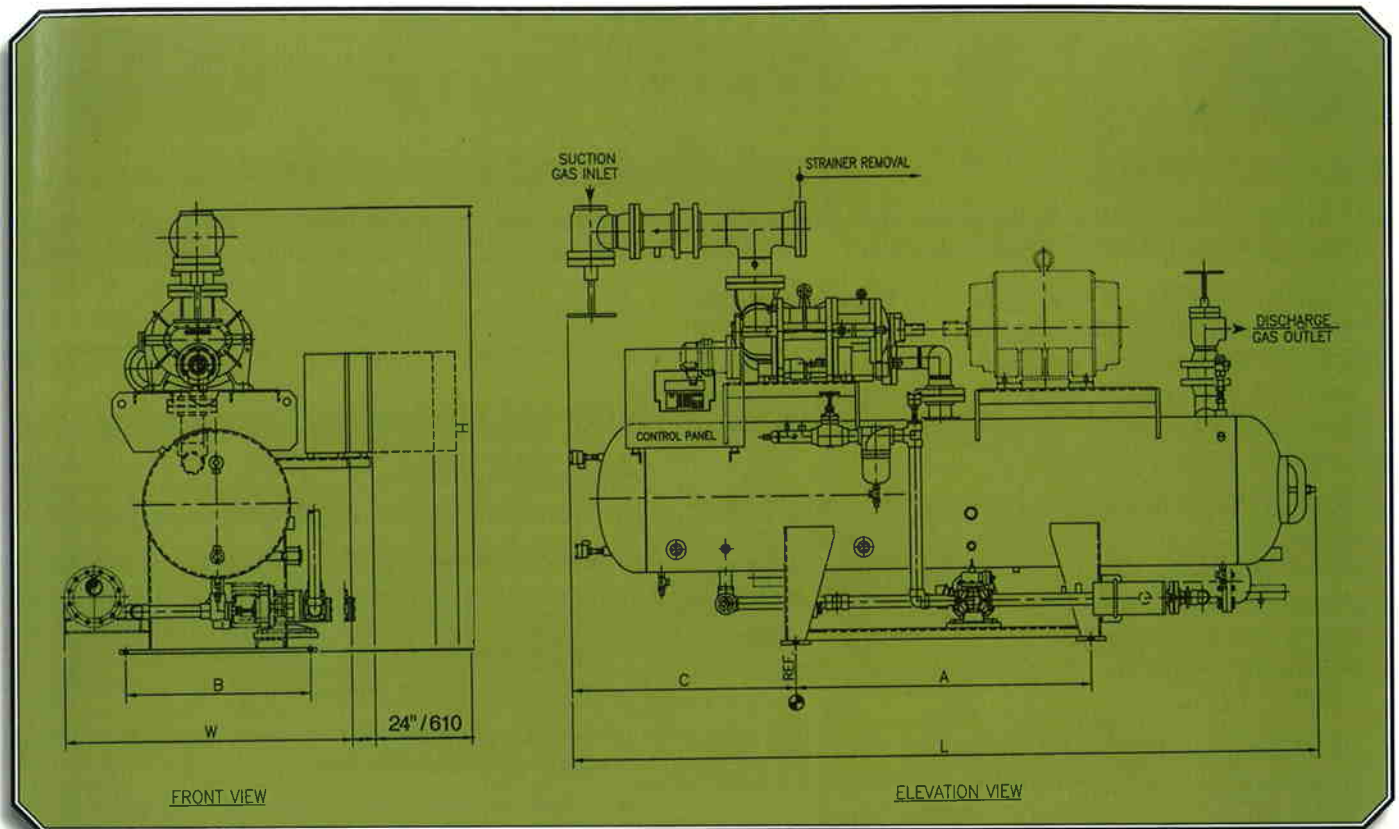
Condensing Units

Chillers

Custom Made Units

Contact your nearest Mycom office or Mycom Representative for any special units or applications.

MYCRO-COLD "V" SERIES



STANDARD RATINGS:

MODEL #	DISPLACEMENT CFM	R-717		R-22	
		CAPACITY TR	POWER BHP	CAPACITY TR	POWER BHP
125 SUD	140	48.5	56.7	29.3	53.5
125 LUD	209	71.4	85.1	44.0	81.3
160 VSD	294	102.7	119.3	69.0	117.4
160 VMD	367	128.9	149.1	86.7	147.5
160 VLD	441	155.5	170.0	104.7	177.5
200 VSD	574	206.3	233.0	138.4	232.0
200 VMD	719	259.5	291.6	173.7	291.2
200 VLD	860	312.5	348.9	208.8	349.2
250 VSDS	997	366.1	403.9	243.2	404.8
250 VSD	1120	414.2	454.1	274.1	455.6
250 VMDS	1250	461.1	509.0	307.6	511.3
250 VMD	1400	518.6	568.8	344.5	571.9
250 VLD	1670	618.9	678.7	413.0	683.5
320 SUD	2250	831.3	912.9	545.8	921.4
320 MUD	2800	1035.1	1137.6	680.1	1149.7
320 LUD	3350	1238.9	1362.2	814.4	1378.2
320 LLUD	3970	1489.5	1626.9	982.8	1647.5
400 SUD	4590	1722.1	1881.0	1136.3	1904.8
400 MUD	5760	2161.1	2360.4	1425.9	2390.3

PHYSICAL DATA:

DIMENSIONS (INCHES)						CONNECTIONS (INCHES)		APPROX.	MODEL #
A	B	C	L	H	W	SUCTION	DISCH.	WEIGHT LB	
47	28	34	107	68	51	4	2	3000	125SUD
47	28	37	110	68	51	4	2	3050	125LUD
47	28	38	111	71	48	4	2 1/2	3400	160VSD
50	34	39	128	76	51	4	2 1/2	4750	160 VMD
50	34	41	130	76	51	4	3	4800	160 VLD
50	34	48	137	81	53	5	3	5450	200VSD
60	38	46	152	90	59	6	4	6850	200VMD
60	38	48	154	90	59	6	4	6950	200 VLD
60	38	50	156	95	68	6	4	8600	250 VSDS
60	38	50	156	95	68	6	4	8600	250VSD
90	42	52	188	107	80	8	4	11750	250VMDS
90	42	52	188	107	80	8	5	11750	250 VMD
90	42	55	191	107	80	8	5	11950	250 VLD
90	42	59	195	112	74	8	5	14850	320 SUD
									320 MUD
									320LUD
									320LLUD
									400 SUD
									400 MUD

A. Performance based on 20° F (-6.7°C) evaporating temperature, 95°F (35°C) condensing, 10°F (5.5°C) sub-cooling and 10°F (5.5°C) suction superheat.

B. Performance based on 5° F (-15°C) evaporating temperature, 105°F (40.6°C) condensing, 10°F (5.5°C) sub-cooling and 10°F (5.5°C) suction superheat.

Data source: MYCOM screw compressor performance program v 8.21

- Physical data based on refrigerant R 717, 3550 RPM, no economizer, thermoston oil cooler mounted.
- Weight does not include motor.
- All dimensions are in inches.
- Dimensions shown are for reference only. Subject to change without notice. Use actual fabrication drawings for final dimensions.

For Further Information, contact:

MYCOM

LOS ANGELES: TEL 310-328-6279 • FAX 310-328-8487
 SAN FRANCISCO: TEL 510-294-5252 • FAX:510-294-5253
 HOUSTON: TEL 713-589-8796 • FAX 713-589-8798
 SAN ANTONIO: TEL 210-599-4536 • FAX 210-599-4538

REFRIGERATION AND GAS COMPRESSORS

CHICAGO: TEL 847-806-6886 • FAX 847-806-6902
 NEW JERSEY: TEL 201-587-8111 • FAX 201-587-1122
 YORK: TEL 717-846-4558 • FAX 717-854-4206
 MIAMI: TEL 305-477-3900 • FAX 305-477-4419

VANCOUVER: TEL 604-270-1544 • FAX 604-270-9870
 CALGARY: TEL 403-254-2860 • FAX 403-254-0989
 TORONTO: TEL 905-564-0664 • FAX 905-564-7614