AshCarter Limited

Suppliers of world class
Gas Compressor Packages

Our OEM

Knox Western

We have manufactured quality compressors since 1930

AshCarter Limited

Suppliers of World Class Gas Compressor Packages

We Offer

- Cutting-edge design
- State-of-the-art equipment
- Package Flexibility
- Reliable Performance
- Engineering Expertise
- Cost-effective Package option

Knox Western

History

Knox Western

Founded in early 1930, the Knox Group has been recognized for over seventy years as the specialist within the compressor industry. Our reputation was established by consistent high standards and has been and quality control, is maintained by our professional engineers and craftsmen who elicit great

The principles established by Earl E. Knox have been maintained and are followed by Knox employees to this day: "Do a good job, the best you know how. Don't misrepresent. Sell at a reasonable price. Most of all, stand behind your guarantees and your promises." Adherence to these principles, as well as establishing a policy of working closely with the customer, has enabled the Knox Group to grow and preserve our proud reputation not only in North America but also in the international

Whether working with Firestone to design and modify vacuum equipment, with Allied Fibers to develop specialty boost compressors for a proprietary process, aiding Great Lakes Chemical to design a high pressure compressor package for a unique gas, assisting Texaco production handling sour gas, or developing gas lift projects for a Mississippi-based production company—the Knox solution is both dependable and professional.

The Knox Group equipment is recognized worldwide as reliable and affordable and our products can be found in more than twenty countries including France, Russia, Australia, Argentina, Mexico, Japan, China, Indonesia, Vietnam, New Zealand, Poland, Turkey, Brazil and India. The Knox Group has, indeed, earned international acclaim marketplace.

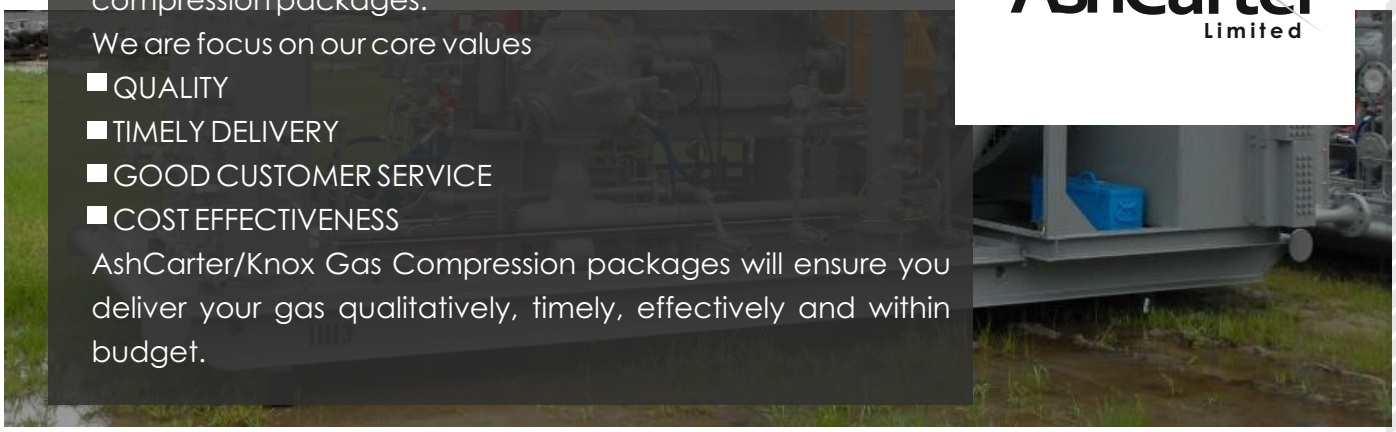
In partnership with KNOX we have continued to ensure penetration in new market frontier and ensure close contact with our clients in the supply and maintenance of gas compression packages.

We are focus on our core values

- QUALITY
- TIMELY DELIVERY
- GOOD CUSTOMER SERVICE
- COST EFFECTIVENESS

AshCarter/Knox Gas Compression packages will ensure you deliver your gas qualitatively, timely, effectively and within budget.

AshCarter Limited



APPLICATIONS OF OUR COMPRESSOR PACKAGE

GAS TRANSPORTATION

Natural gas travelling through a vast distance requires a booster in order to deliver at a required outlet pressure.

GAS GATHERING

Natural gas may be produced from gas wells, casing-head gas from individual oil wells, or similar production origins and "gathered" through a network and then compressed for injection into a pipeline at a common

GAS RECOVERY PLANTS

The reciprocating compressor is an integral part of purification and recovery systems used in many plants to prevent venting or burning valuable gases after being used in industrial processes. These compressors are integrated into the systems to ensure proper pressurization and temperature control of the feed, waste, and product gases.

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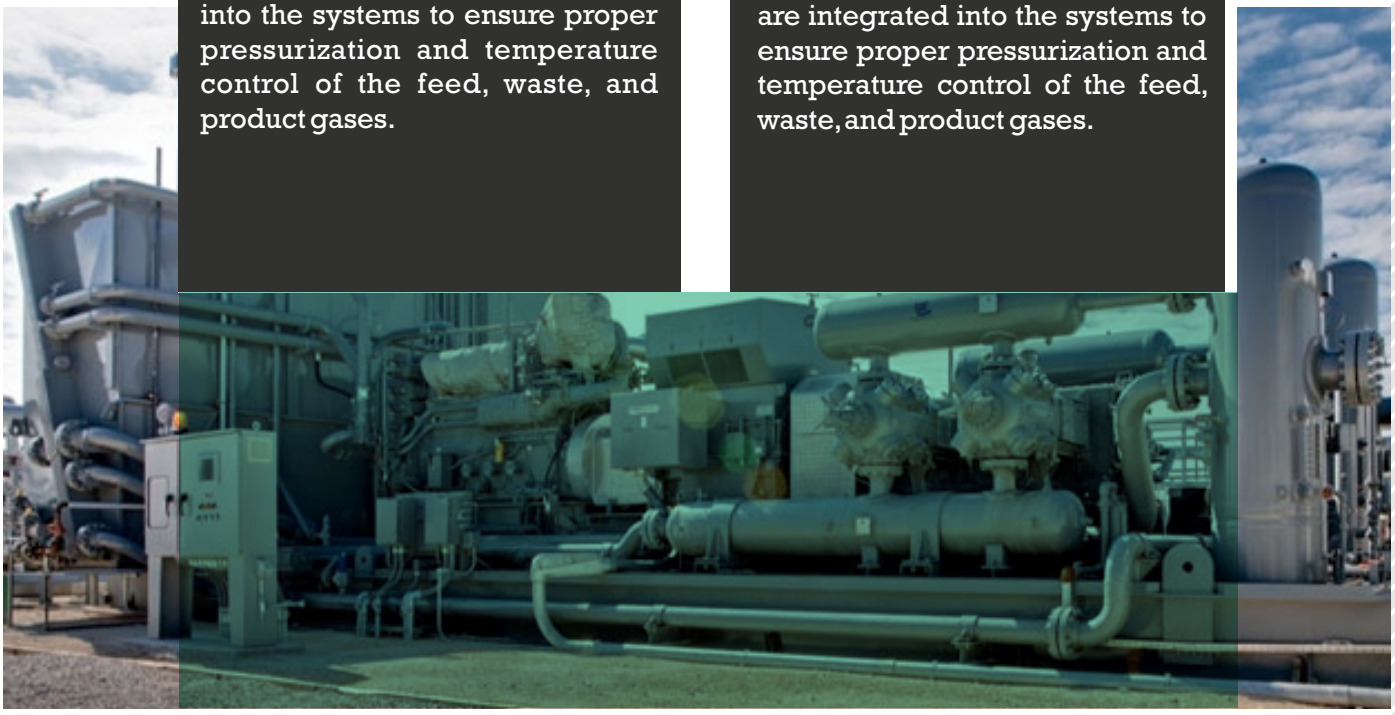


APPLICATIONS OF OUR COMPRESSOR PACKAGE

MEMBRANE SEPARATION PROCESS

Gas separation by membranes is based on the principle that some gases permeate more rapidly than others due to their solubility in a particular membrane material. A compressor is used to maintain a differential pressure across the membrane, and to recycle the product after separation.

GAS PLANT COMPRESSORS

A gas plant is an operation designed to remove heavier, more valuable components from the methane in a gas stream. During this process a pressure drop is required, which must be recovered prior to introducing the gas into the pipeline. For small plants, this is usually a gas engine driven compressor.

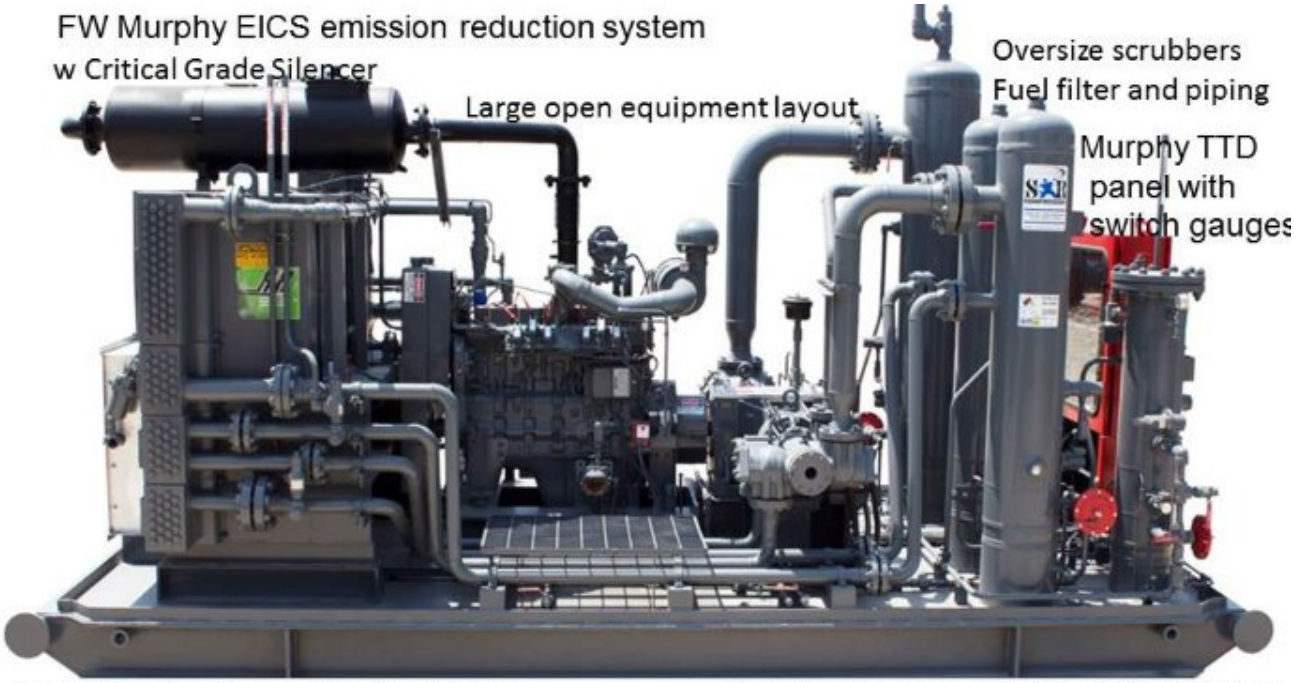
GAS TURBINE FUEL BOOSTER

The fuel gas booster is used to supply a constant amount of natural gas at a specific pressure to turbine-generators. The pressure available from many supply sources is insufficient for the demands of the turbine, therefore a compressor is required. Control devices to ensure that the correct capacity is maintained as inlet conditions fluctuate are a very important component of the compressor system.

AshCarter Limited

Suppliers of World Class Gas Compressor Packages

A SYMBOL OF HISTORICAL QUALITY IN COMPRESSOR MANUFACTURE SINCE 1930



The Best way to judge a brand is by its history; for over 70 years we have manufactured and delivered Compressors to seven Continents of the world with no single report of poor quality product or clients' dissatisfaction.

OUR COMPRESSOR TYPES/SERIES

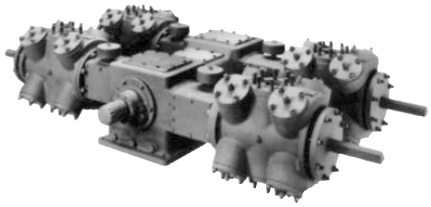
Reciprocating Gas Compressors
Eagle Series

Eagle Series 2000

Available in both two-throw and four-throw configurations with 3", 3-1/2", and 4-1/2" stroke, rated at 10,000 pounds Tension and Compression frame load capacity. This series uses the TP style as well as Eagle compressor cylinders mounted on a larger wider base, and accommodates up to 12" diameter bore cylinders.

	Two throw units models			**Four throw units** models		
SPECIFICATIONS	2230	2235	2245	2230	2235	2245
No. of crankthrows	2	2	2	4	4	4
Stroke (in.)	3	3.5	4.5	3	3.5	4.5
RPM, continuous	1,800	1,500	1,200	1,800	1,500	1,200
Piston speed, ft./min.	900	875	900	900	875	900
Rated horsepower	200	200	200	400	400	400
Crankshaft Cl. height (in.)	10	10	10	10	10	10
Overall width, max. (in.)	90	90	90	140	140	140
Overall length, max. (in.)	29	29	29	55	55	55
Crankshaft dia.- drive end	2.875	2.875	2.875	2.875	2.875	2.875
Approx. wt. (lbs.)	750	750	750	1500	1500	1500
Oil pump capacity (GPM)	20	20	20	20	20	20
Sump capacity (gallons)	2.5	2.5	2.5	7.0	7.0	7.0
Rod loads (tension) (lbs.)	10,000	10,000	10,000	10,000	10,000	10,000
Rod loads (compression) (lbs.)	10,000	10,000	10,000	10,000	10,000	10,000
Rod loads (combined) (lbs.)	20,000	20,000	20,000	20,000	20,000	20,000
Crankpin diameter (in.)	3.00	3.00	3.00	3.00	3.00	3.00
Main bearing (dia.) (in.)	5.12	5.12	5.12	5.12	5.12	5.12
Piston rod diameter (in.)	1.125	1.125	1.125	1.125	1.125	1.125

Eagle Series 3000



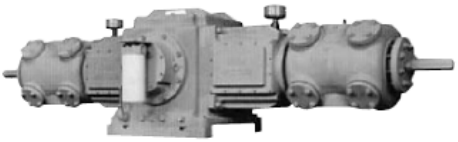
A heavy duty intermediate size compressor offered as a two-throw or four-throw unit, and with 3", 3-1/2", and 4-1/2" stroke. Frame load for this unit is 15,000 pounds Tension and Compression, making is a very economical compressor covering a wide selection of services.

	Two throw units models			**Four throw units** models		
SPECIFICATIONS	3230	3235	3245	3430	3435	3445
No. of crankthrows	2	2	2	4	4	4
Stroke (in.)	3	3.5	4.5	3	3.5	4.5
RPM, continuous	1800	1500	1200	1800	1500	1200
Piston speed, Ft./Min.	900	875	900	900	875	900
Rated horsepower	300	300	300	600	600	600
Crankshaft Cl. height (in.)	12	12	12	12	12	12
Overall width, max. (in.)	132	132	132	132	132	132
Overall length, max. (in.)	40	40	40	79	79	79
Crankshaft dia.- Drive end	3.875	3.875	3.875	3.875	3.875	3.875
Approx. wt. (lbs.)	2500	2500	2500	5200	5200	5200
Oil pump capacity (GPM)	20	20	20	20	20	20
Sump capacity (gallons)	8	8	8	18	18	18
Rod loads (tension) (lbs.)	15000	15000	15000	15000	15000	15000
Rod loads (compression) (lbs.)	15000	15000	15000	15000	15000	15000
Rod loads (combined) (lbs.)	30000	30000	30000	30000	30000	30000
Crankpin diameter (in.)	4.125	4.125	4.125	4.125	4.125	4.125
Main bearing (dia.) (in.)	7.00	7.00	7.00	7.00	7.00	7.00
Piston rod diameter (in.)	1.500	1.500	1.500	1.500	1.500	1.500

OUR COMPRESSOR TYPES/SERIES

Reciprocating Gas Compressors
Eagle Series

Eagle Series 4000



The mainstay of Knox Western large compressors for many years. Built in two-throw and four-throw models in both 3″ and 4-1/2″ strokes. Frame load for this compressor is 20,000 pounds Tension and Compression.

	Two throw units models		**Four throw units** models	
SPECIFICATIONS	4230	4235	4430	4445
No. of crankthrows	2	2	4	4
Stroke (in.)	3	4.5	3	4.5
RPM, continuous	1800	1200	1800	1200
Piston speed, ft./min.	900	900	900	900
Rated horsepower	500	500	1000	1000
Crankshaft Cl. height (in.)	13	13	13	13
Overall width, max. (in.)	140	140	140	140
Overall length, max. (in.)	45	45	84	84
Crankshaft dia.- drive end	5.000	5.000	5.000	5.000
Approx. wt. (lbs.)	3000	3000	6500	6500
Oil pump capacity (GPM)	35	35	55	55
Sump capacity (gallons)	12	12	30	30
Rod loads (tension) (lbs.)	20000	20000	20000	20000
Rod loads (compression) (lbs.)	20000	20000	20000	20000
Rod loads (combined) (lbs.)	40000	40000	40000	40000
Crankpin diameter (in.)	5.250	5.250	5.250	5.250
Journal diameter (in.)	5.11	5.11	5.11	5.11
Main bearing (dia.) (in.)	9.05	9.05	9.05	9.05
Piston rod diameter (in.)	1.875	1.875	1.875	1.875

Eagle Series 6000

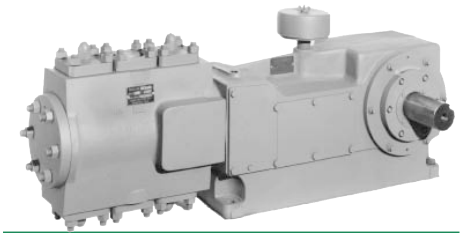
This series is currently the largest of the Knox Western compressors built in both two-throw and four-throw models in 3″ and 4-1/2″ strokes with a frame load rating of 30,000 pounds Tension and Compression.

	Two throw units models		**Four throw units** models	
SPECIFICATIONS	6230	6245	6430	6445
No. of crankthrows	2	2	4	4
Stroke (in.)	3	4.5	3	4.5
RPM, continuous	1800	1200	1800	1200
Piston speed, ft./min.	900	900	900	900
Rated horsepower	600	700	1350	1400
Crankshaft Cl. height (in.)	13	13	13	13
Overall width, max. (in.)	140	140	140	140
Overall length, max. (in.)	45	45	84	84
Crankshaft dia.- drive end	5.250	5.250	5.250	5.250
Approx. wt. (lbs.)	3000	3000	6500	6500
Oil pump capacity (GPM)	35	35	55	55
Sump capacity (gallons)	12	12	30	30
Rod loads (tension) (lbs.)	30000	30000	30000	30000
Rod loads (compression) (lbs.)	30000	30000	30000	30000
Rod loads (combined) (lbs.)	60000	60000	60000	60000
Crankpin diameter (in.)	5.250	5.250	5.250	5.250
Journal diameter (in.)	5.50	5.50	5.50	5.50
Main bearing (dia.) (in.)	9.84	9.84	9.84	9.84
Piston rod diameter (in.)	2.500	2.500	2.500	2.500

OUR COMPRESSOR TYPES/SERIES

Reciprocating Gas Compressors
TP Series

Splash lubricated | Model TP60



The TP 60 is a single throw, splash lubricated frame, especially suited for low H.P. for single or multi-stage applications. The heavy duty cast is frame is designed with an integral crosshead guide and single compartment distance piece, one piece counter weighted ductile iron crankshaft, single piece babbit faced crosshead and "I" Section designed connecting rod, will give years of dependable service.
The Crankshaft is a single piece ductile iron casting with integral counter weights, crossheads are one piece babbit faced.
This Simple design allows for ease of maintenance and will give years of dependable service.

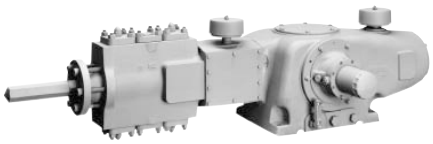
SPECIFICATIONS

Stroke	4.5"
RPM, Continuous	800
Piston Speed (fpm)	600
Horsepower	60
Crankshaft Centerline	13"
Overall Width, (maximum)	90"
Overall Length, (maximum)	29"
Approximate Weight (frame only) (lbs)	n/a
Sump Capacity (gallons)	2.0
Rod Loads, (tension)	6,000
Rod Loads, (compression)	6,000
Rod Loads, (combined)	12,000

COMPONENTS

	All models
Crankshaft	
Crankpin diameter	3.00"
Journal diameter	2.47"
Main bearing	4.72" x 1.22"
Connection Rod CL to CL	8.50"
Connection Rod bearing	3" x 2.4"
Connection Rod bolting	0.50"
Connection Rod bushing	1.75" x 1.9"
Piston rod	1.125"

Model TP65/TP75/TP90/TP100



The Single Throw, pressure lubricated, Knox-Western TP Series frame is designed for vibration free operation through a complete range of running speeds up to 1800 RPM by virtue of a balanced opposed counterweight and forced lubrication of the running gear. This frame can accept cylinder sizes as large as 8 1/2 inch diameter. Capable of one or two stages of compression.

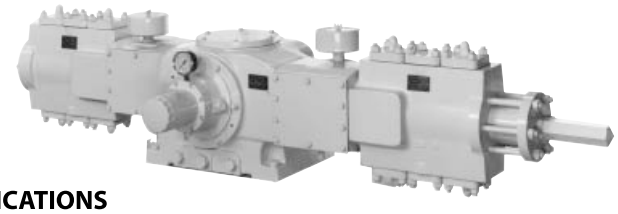
SPECIFICATIONS

	TP65	TP75	TP90	TP100
Stroke	4.5"	3.0"	3.0"	3.5"
RPM, Continuous	550 to 1,200	550 to 1,800	550 to 1,800	550 to 1,500
Piston Speed (fpm)	to 900	to 900	to 900	to 874
Horsepower	75	75	100	100
Crankshaft				
Centerline				
Overall Width, (maximum)				
Overall Length, (maximum)				
Approximate Weight (frame only) (lbs)				
Sump Capacity (gallons)	n/a			
Rod Loads, (tension)	6,000	6,000	9,000	9,000
Rod Loads, (compression)	6,000	6,000	9,000	9,000
Rod Loads, (combined)	12,000	12,000	18,000	18,000

OUR COMPRESSOR TYPES/SERIES

Reciprocating Gas Compressors
TP Series

Model TP120/TP145



SPECIFICATIONS

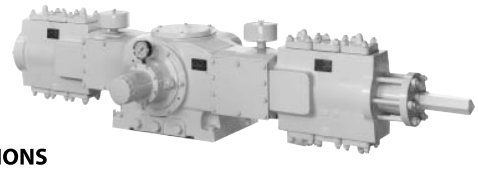
	TP65	TP75
Stroke	3.00"	4.50"
RPM, Continuous	550 to 1,800	550 to 1,200
Piston Speed (fpm)	to 900	to 900
Horsepower	150	150
Crankshaft Centerline		
Overall Width, (maximum)		
Overall Length, (maximum)		
Approximate Weight (frame only) (lbs)	500	500
Oil Pump Capacity (gpm)	n/a	n/a
Sump Capacity (gallons)		
Rod Loads, (tension)	6,000	6,000
Rod Loads, (compression)	6,000	6,000
Rod Loads, (combined)	12,000	12,000

The Two Throw version of the Knox-Western TP class frame is another one of our precision balanced machines capable of 1800 RPM with vibration free operation. As with all Knox-Western compressors, the Two Throw frame with its rugged construction was designed to operate in hostile environments with available features such as double compartment distance pieces, special materials of construction, and full flow oil filtration. Capable of one or two stages of compression.

COMPONENTS

	All models
Crankshaft	
Crankpin diameter	3.00"
Journal diameter	2.95"
Main bearing	5.12" x 1.22"
Connection Rod CL to CL	9.00"
Connection Rod bearing	3" x 2.4"
Connection Rod bolting	0.625"
Connection Rod bushing	1.75" x 1.9"
Piston rod	1.125"

TP200/TP220/TP245



Using the same field proven design of the Knox Western model TP200 compressor, Knox Western has now developed two units availabe with 3.0" or 4.5" stroke crankshafts, for direct couple or V-belt drive.

SPECIFICATIONS

	TP200	TP220	TP 245
Stroke	3.5"	3.0"	4.5"
RPM, Continuous	550 to 1,200	550 to 1,800	550 to 1,200
Piston Speed (fpm)	to 900	to 900	to 900
Horsepower	200	200	200
Crankshaft Centerline			
Overall Width, (maximum)			
Overall Length, (maximum)			
Approximate Weight (frame only) (lbs)	500	500	500
Oil Pump Capacity (gpm)	n/a		
Sump Capacity (gallons)			
Rod Loads, (tension)	9,000	9,000	9,000
Rod Loads, (compression)	9,000	9,000	9,000
Rod Loads, (combined)	18,000	18,000	18,000

COMPONENTS

	All models
Crankshaft	
Crankpin diameter	3.00"
Journal diameter	2.95"
Main bearing	5.12" x 1.22"
Connection Rod CL to CL	9.00"
Connection Rod bearing	3" x 2.4"
Connection Rod bolting	0.625"
Connection Rod bushing	1.75" x 1.9"
Piston rod	1.125"

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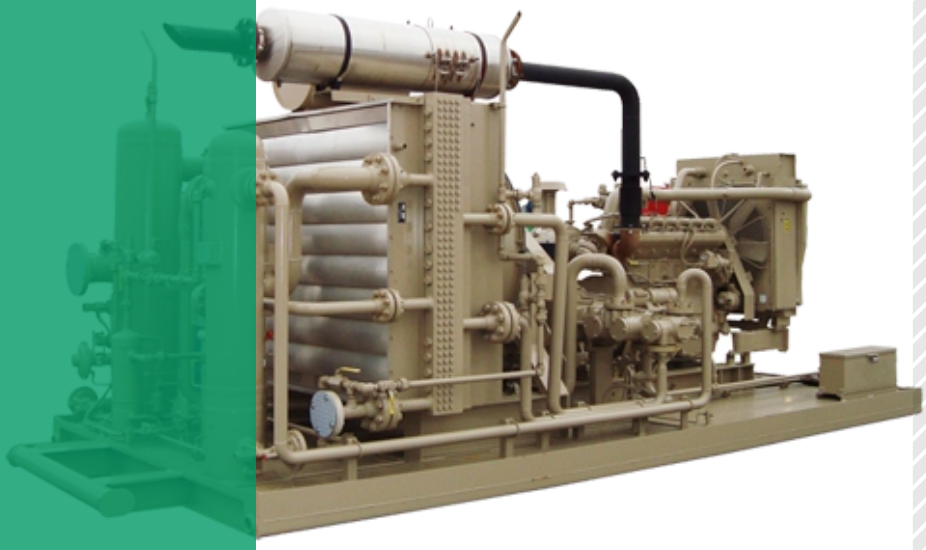
Suppliers of World Class Gas Compressor Packages

WORLD LEADER IN GAS COMPRESSOR

Knox Western has become a worldwide leader in the Compressor marketplace

- *Quality*



- *Consistent*

Manufacturing Quality Gas Compressors Since 1930

Knox Western

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