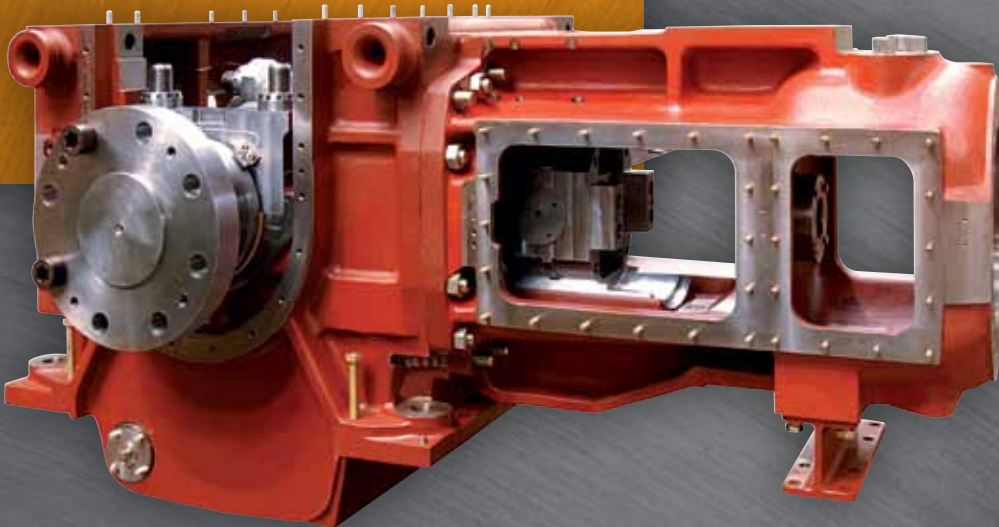


HE-S

The world's most powerful high-speed reciprocating compressor designed to API 618 standards for pipeline, storage, re-injection and refinery applications.



Unique machines

With more than a century of experience and continual innovation in reciprocating compressor technology, GE Oil & Gas has one of the most complete lines of advanced and proven API 618 machines.

The HE-S is a dramatic evolution of our globally proven heavy duty HE compressor to include high-speed characteristics. It enables the highest performance and productivity in the medium frame range for both gas-engine and electric motor-driven applications.

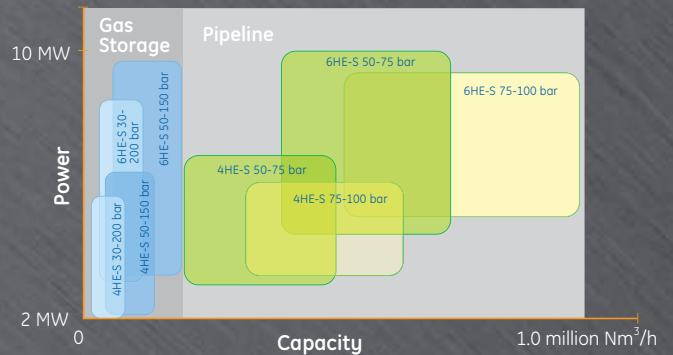
The HE-S line offers three frame sizes – including the world's first reciprocating compressor in the 9-10 MW natural gas segment capable of direct coupling with large gas engines.

Highly reliable HE-S units streamline operations and reduce costs by requiring fewer compressors for the same duty. They are suitable for low and high-speed API 618 and API 11P applications, and are the ideal solution for moderate-speed API 618 service.

Design features

- 670 kN (150,000 lbf) max crosshead pin load
- 6 m/s (1,180 fpm) max average piston speed
- 800 rpm max
- 15,300 kW (20500 HP) nominal max power at full speed (6 throws)
- 2-4-6 throws available

Application range



Frame size	Throws	Max. Power (kW)	Max. Rod Load (kN)	Max. Stroke (mm)	Max. Speed (rpm)
HE-S	2-6	15,300	670	330	800

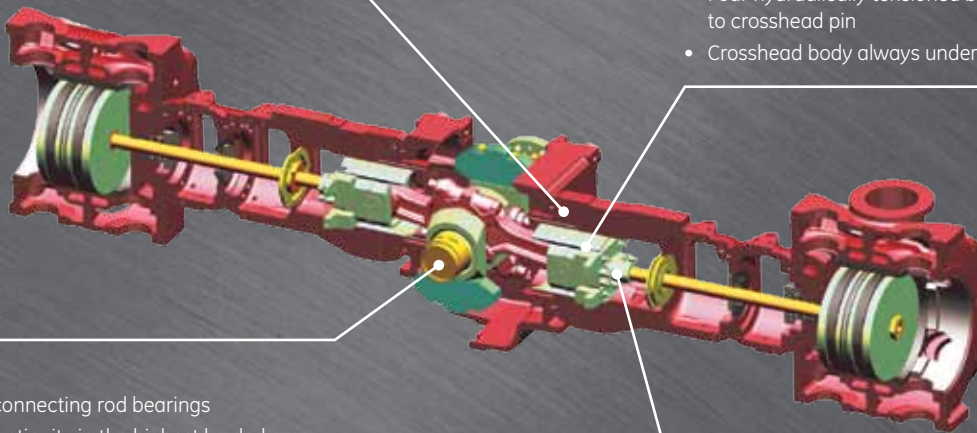
Overall dimensions	Length	Height	Width, cylinders excluded	Shaft center line
2 throws (mm)	1,495	1,510	3,760	1,200
4 throws (mm)	3,045	1,510	3,760	1,200
6 throws (mm)	4,595	1,510	3,760	1,200

Crankcase and sliding body

- Heavily ribbed high-strength ductile iron
- High stiffness to maintain correct alignment of all moving and stationary parts
- Ductile iron crosshead guides with external ribbing
- Steel space bars for stiffening
- Designed for maintainability

Crosshead

- Fully machined forged steel body
- Piston rod hydraulically connected to flange
- Four hydraulically tensioned bolts connect the flange to crosshead pin
- Crosshead body always under full compression



Bearings

- Tri-metal main and connecting rod bearings
- No geometrical discontinuity in the highest loaded area
- Mounted with split line in vertical position
- Big-end bearings identical to journal bearings for spare optimization

Crankshaft

- High strength forged steel, one piece, precision ground
- Bolted-on counterweights to reduce unbalanced rotating inertial forces
- Lube oil holes and all discontinuities carefully smoothed and polished to reduce stresses



GE imagination at work

ge.com/oilandgas