

Floating Applications

Reciprocating Process Compressor

We offer an extensive array of compression solutions to meet a wide range of duties and applications such as gas lift, CO_2 injection, natural gas injection, export gas, CO_2 recycle, low and high-pressure separation, and fuel gas.

We have more than 60 years of experience supplying reciprocating gas compressors for offshore applications including FPSO, TLP, SPARs, FLNG, etc. These have primarily been electric motor-driven, horizontally-opposed, high-speed reciprocating compressors operating at medium speeds.

- 50+ FPSO installations
- Eight different frame sizes with 2-4-6 crank throws, allowable rod loads from 15,400 lbs (68.5 kN) to 90,000 lbs (400 kN) and up to 11,000 hp (8,206 kW)
- Cylinders up to 28 in. (711 mm) in diameter with pressures exceeding 10,000 psig (689.5 bar)
- Slow-speed, longer stroke process reciprocating compressors are also available with up to 10 crank throws and 45,000 HP (33,570 kW)

We engineer and manufacture our own compressor valves and regulation devices as well as a full suite of capacity control solutions.

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Other options and features include:

- Rugged frame design
  - Integrally cast frame extensions (crosshead housings)
  - Optimal load transfer
  - Heavy ribbing
  - Counterweighted crankshaft for 2- and 4-throw machines
  - Opposing throws balanced within 1 lb or less
- Flexible cylinder design
  - Jacketed or non-jacketed
  - With or without liners
  - Lube or non-lube
  - Combo piston rings or rider bands
  - PF (plate-type) or Magnum® (mini-poppet-style) valves
- Overall
  - High reliability
  - Optimized efficiency
  - Long time between service intervals
  - Compact design
  - Low vibration

Reciprocating Compressor Ratings

Frame	Crank Throws		Stroke		RPM	Max Allowable Continuous Combined Rod Load Rating		Max Nominal Rated Power	
		in.		mm		lbs	kN	HP	kW
A-VIP	2/4	3.5/4.5		89/114	1,800/1,500	15,400	70	1,300	970
B-VIP	2/4	5/6		127/152	1,500/1,200	24,200	110	2,140	1,600
C-VIP	2/4	4/5/6		102/127/152	1,800/1,500/1,200	33,000	150	2,880	2,150
MOS	2/4/6	5/6/7		127/152/177	1,500/1,200/1,000	45,000	200	4,400	3,280
HOS	2/4/6	5/6/7		127/152/177	1,500/1,200/1,000	60,000	270	6,000	4,480
HOSS	2/4/6	5/6/7		152/178	1,500/1,200/1,000	75,000	335	7,800	5,820









Case Reference	
Client	PETRONAS/Petrovietnam
Project	LP and MP Compression
Location	FPSO/Offshore Vietnam
Scope of Supply	6HOS4 with (2) 26.5 in. x (2) 12.25 in.

Case Reference	
Client	Modec/OSX
Project	Gas Injection Compression
Location	FPSO/Offshore Brazil
Scope of Supply	5HOS2 with 13 in. x 8 in.

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