

Oil Free Screw Compressors

Performance
through **experience**



Our Process Rotary Screw Compressor experience

Oil free

Petrochemical applications	over 1000 yrs operational experience
Vapour Recovery applications	over 1550 yrs operational experience
Contaminant (Dirty) Gases	over 100 yrs operational experience
Polymerising Gases	over 50 yrs operational experience



Oil Free Screw Compressors

An oil free package can be single or multistage configuration with optimal driver arrangement for best efficiency to suit your process requirements.

Features

- Designed to applicable API standards
- Positive displacement compression
- Compressor designed with sleeve journal and tilt pad thrust bearings
- Suitable for different configurations of compression seal system
- Compact size and weight
- Rotary action compression
- Water/solvent injection system available
- Flexibility of discharge orientation

Benefits

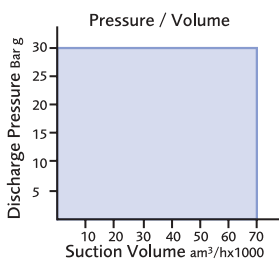
- Full compliance with oil & gas industry requirements
- No surging effect on gas stream
- Operational longevity and availability
- Process flexibility
- Low installation costs
- Vibration & Pulsation free running
- Very high levels of ARM (Availability Reliability & Maintainability)
- Maximum on line availability
- Minimal servicing requirement
- Suitable for extreme process duties for cleaning/discharge temperature control
- Space / cost effective systems

Typical applications

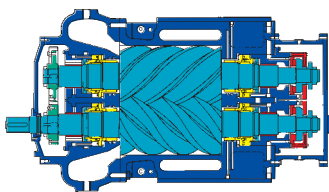
- Refineries
- Gas Gathering
- Petrochemical Plants
- Chemical Plants
- Synthetic Fertiliser Plants
- Synthetic Rubber Plants
- Mechanical Vapour Recompression (MVR)
- Offshore Platforms

Unique features and benefits

- Completely oil free delivery of gas
 - Suitable for a wide range of processes
- Flexibility of discharge orientation compactness of module design.
 - Top-in, top-out arrangement provides optimum compactness of module design
 - Top-in, bottom-out arrangement permits handling of high liquid and particulate entrainment



Pressure/Volume graph



Oil free compressor horizontal section

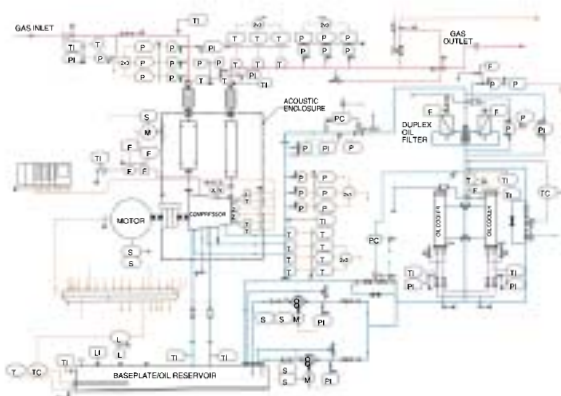
Oil Free Design Criteria

Range	127 204 255 408 510	2 L/D Ratios 2 L/D Ratios 2 L/D Ratios 2 L/D Ratios 2 L/D Ratios
Operating Speeds	2000 – 15000 RPM	
Pressure Ratio	7 / 1 (Single Stage)	
Capacity Range	300 – 26000 M ³ /HR	(70000 M ³ /HR)
Max Discharge Pressure	26 BAR A	
Max Discharge Temperature	225 DEG C	
Materials Casings	Cast Iron Nodular Iron Carbon Steel LT Carbon Steel 12% Chrome Steel (S.S.)	

Key

- Gas
- Oil
- Air
- Cooling Water
- Pneumatic Signal
- Electrical Signal

Typical piping and instrumentation diagram



Instrumentation

- F Flow
- L Level
- LI Level Indicator
- M Motor
- P Pressure
- PC Pressure Control
- PI Pressure Indicator
- S Speed
- T Temperature
- TC Temperature Control
- TI Temperature Indicator


Howden
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Howden Process Compressors
 Old Govan Road
 Renfrew PA4 8XJ
 United Kingdom

Telephone: +44 141 304 3500
 Facsimile: +44 141 304 3600
 Email: hpc.sales@howden.com
 Email: hpc.aftersales@howden.com
 Web: www.howden.com