

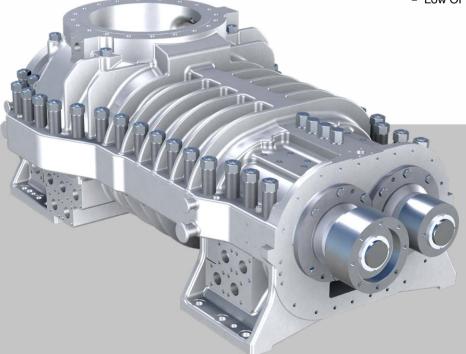
# Oil-free process gas screw compressors

**Experience, reliability and performance** 

MAN Energy Solutions is the leading manufacturer and service provider of Oil-free process gas screw compressors worldwide. A large number of units have been installed in refineries, offshore platforms, chemical plants and other applications where maximum reliability is essential. Whether handling hydrogen or challenging gases with high dust content or polymerization risk, MAN Energy Solutions screw compressors are the best choice.

### Benefits at a glance

- Oil-free compression
- Highest availability and reliability based on very robust design
- Customized for specific process requirements
- Ideal for low and variable molecular weights
- Proven service with electolyzers for green hydrogen
- Suitable for handling dirty and polymerizing gases
- Long overhaul intervals
- Low OPEX



## **Screw compressors**

### Overview of the MAN portfolio of oil-free screw compressors



SKUEL series Designed for very large volume flows. Horizontal split casing allows easy maintenance even for very large compressor sizes.

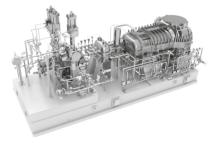
Volume flows: 4,000 - 100,000 m<sup>3</sup>/h (2,400 - 59,000 CFM)

Discharge pressure: ≤ 16 bar / ≤ 230 psia

### Package design

The modular compressor package design enables optimal adaptation to each customer's individual application needs. Key components such as compressor stages, drive, gearbox, oil supply and sealing systems are mounted on a common base frame.

With cutting-edge technology and digital features, MAN Energy Solutions provides a complete package for fast installation and commissioning - minimizing effort, time and costs throughout the lifecycle.





**CP series** The vertical split casing allows high-pressure operation.

Volume flows: 200 – 20,000 m<sup>3</sup>/h (120 – 12,000 CFM)

Discharge pressure: ≤ 52 bar / ≤ 750 psia

### **Advantages**

Gases with low molecular weight: MAN screw compressors are positive displacement compressors, and therefore ideal for light gases like hydrogen.

### Gases with varying molecular weight:

They are also an ideal technology for flare gas or recycle compressor applications.

### Dirty and polymerizing gases:

MAN screw compressors have a very rigid rotor and casing design. They can handle extremely dirty and dusty gases.

MAN screw compressors cover the full spectrum of industrial and oil & gas applications including:

- Hydrogen
- Green hydrogen (electrolyzer)
- Oil & gas production
- Refinery
- Flare gas recovery
- Butadiene extraction
- Styrene monomer production
- Power generation
- Soda ash production
- Steel production (coke oven gas)
- Refrigeration
- Hydrogen sulfide

### Upstream oil and gas offshore

With decades of experience, MAN Energy Solutions is assisting customers to design their floating production, storage, and offloading (FPSO) vessels and platforms for maximum efficiency and reliability. The efficient footprint of the screw compressor packages and the single-lift design are decisive advantages in offshore operation. The units are packaged as complete modules according to each project's specific requirements.

### Smart cost-cutting service

Remote support is built into the control cabinet, enabling smarter operations anywhere. Advanced digital features minimize downtime, and operation and maintenance costs while maximizing efficiency.

### **MAN Energy Solutions**

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