

Gas Screw Compressors

API 619

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Screw gas compressors according to **API 619** standard are designed especially for the high safety requirements of gas compression and process cooling in the chemical, oil and gas industries. These compressors can be equipped with cast steel casings, maintenance-free tilting-pad thrust bearings, and double shaft seals. Rotor position and sleeve bearing temperature monitoring systems ensure enhanced operational reliability.

International Spec: Compliance with API 619

Flow rate: Up to 24,000 m³/hr (20.5 mmScfd)

Pressures: Up to 15 bar a (218 psia)

Power: Up to 4,000 kW (5,364 hp)

Speed: Up to 5,000 rpm



Key Technical Features

They are designed for the compression of natural and synthetic refrigerants in process cooling as well as for the compression of process gases. Further applications are the compression of natural gas and gas mixtures: e.g., as compression stations in natural gas and biogas plants.

Gases with low molecular weight:

A screw compressor is a positive displacement compressor and, therefore, ideal for handling light hydrogen gases. The problem of an increasing number of stages required for low molecular weight -as is the case with centrifugal compressors- does not apply to screw compressors.

Gases with varying molecular weight:

As molecular weight has only a small impact on the achievable pressure ratio-different to centrifugal compressors-the screw compressor is ideal for use in processes with fluctuating molecular weights.

Dirty and polymerizing gases:

Screw compressors have low rotor tip speeds and a very rigid rotor and casing design. They can even handle dirty and dusty gases.

Key Design Features

Process gas screw compressor systems are custom designed for process-critical applications. We produce a range of oil injected units as skid-mounted packages which offer a number of advantages a cross orange of applications that demand high efficiency and high discharge pressures.

Also we offer oil free screw compressors as bespoke designed, complete packaged systems. Oil free screw compressor are capable of handling gases with high levels of liquid or particulate matter, and are eminently suitable for hazardous gases or in applications where contamination is an issue.