

Industrial Systems for Gas Compression Solutions



API|618



BUREAU VERITAS Certification ISO 9001:2015

DALGAKIRAN SENSI

SENSI GAS SOLUTIONS

Since 1993, Dalgakıran Sensi Gas Solutions has been offering innovative solutions for world-class energy systems. We successfully combine years of experience with cutting-edge technologies, developing engineering solutions that provide robust support to key industrial sectors worldwide.

Our products are compliant with API 618 reciprocating gas compression standards.





Over 30 years of experience in oil and gas equipment and 60 years of experience in compressors technology.



With the strong global presence, applications on thousands of customer sites have been solved.



Dedicated R&D for implementing innovative technologies compliant with API 618 standards.

Comprehensive solutions from DALGAKIRAN

Development and Production: We design and manufacture reciprocating compressor components using the latest technologies to create reliable solutions.

Services and Maintenance: We provide a full range of services while minimizing downtime.

Modernization: We adapt existing equipment to enhance productivity, taking specific requirements of our customers into account.

Personnel Training: We organize training sessions for our customers to improve qualifications, reduce risks, and increase efficiency.

Equipment Rental: We offer rental services with full technical support, enabling effective adaptation to production needs.

DALGAKIRAN | SENSI GAS SOLUTIONS - your partner in reliability and innovation.

Full Production Cycle

Analysis of Customer Needs: We analyze specific requirements and prepare the most advantageous and optimal solutions, ensuring an ideal balance between cost, quality, and functionality.

Design and Development: We create technical drawings and 3D models, develop prototypes for testing, and select high-quality materials. We consider climatic conditions, loads, pressure, chemical resistance, environmental requirements, as well as the cost and availability of materials.

Parts Manufacturing: We use modern machines to ensure high precision in the processing of each part. Process automation allows for exceptionally accurate manufacturing. All parts are inspected for compliance with quality standards.



Precision and accuracy are fundamental pillars in the manufacturing of gas compressors, particularly for API 618 reciprocating gas compressors, where the demands of high-pressure industrial applications necessitate exacting standards. These qualities ensure the reliability, efficiency, and safety of compressors, which are critical for industries such as oil and gas, petrochemicals, and natural gas processing.

Testing and Quality Control: We provide a complete cycle of testing and quality control for our products. Hydraulic testing of pressure-bearing components is conducted at our certified testing stand. We also perform field tests to ensure the product meets the stated specifications.

Services and Customer Support: We offer service and support throughout the entire lifecycle of the equipment.

Reciprocating Gas Compressors

Designed for: Supporting technological processes during the operation of gas pumping units, compressing associated petroleum gas (APG) for injection into main pipelines, and serving as booster compressors for pre-compression of natural gas at gas-filling and other stations operating with low inlet pressure from gas networks. Additionally, they are used in air separation plants to produce nitrogen and oxygen.

Medium

- Natural Gas
- Associated Petroleum Gas (APG)
- Inert Gases and Mixed Gases
- Hydrogen
- Biogas
- Fuel Gas
- Air

Cooling

- Air-Cooled
- Liquid-Cooled

Lubrication

- With lubrication of cylinder piston groups
- With limited lubrication
- Without lubrication

Configuration

- Opposed
- Vertical

Initial Pressure

• From atmospheric pressure to 50 bar

Drive Type

- Diesel Engine
- Electric Motor
- Gas Combustion Engine

Performance

Up to 15,000 Nm³/h

Final Pressure

Up to 400 bar

MODELS



1.5SGI

Number of rows: Loading, t: **1,5** Max. power, kW: Max. performance, m³/h:



Number of rows: Loading, t: Max. power, kW: Max. performance, m³/h:

3SGH



Number of rows: Loading, t: Max. power, kW: Max. performance, m³/h:

6SGI ··



Number of rows: 2 Loading, t: 3 Max. power, kW: 160 Max. performance, m³/h: 2000



· 3SGHI

Number of rows: Loading, t: Max. power, kW: Max. performance, m³/h:



Number of rows: 2 Loading, t: 10 Max. power, kW: 500 Max. performance, m³/h: 8000

S – for SENSI manufacturer
Compressed medium: G – any gas A – air;
Compressor row configuration: I – two-row H – four-row HI – 6-row

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Skid-Mounted Compressors

Used for compressing gases without the use of oil for lubrication, ensuring the cleanliness of the compressed gas. They operate for up to 8,000 hours without maintenance.

Advantages

Explosion safety:

The absence of oil reduces the risk of explosions and fires, making them safe in hazardous environments.

Tailor-Made solutions:

Every compressor is customized to meet specific customer needs, ensuring maximum efficiency and performance.

Resistance to aggressive environments:

Special materials and coatings allow operation with aggressive gases without the risk of corrosion or equipment damage.

Energy efficiency at the core:

By integrating cutting-edge technologies and adhering to the stringent API 618 standards, we ensure our compressors deliver best performance while minimizing energy consumption.

Design Features

Frame:

A strong and convenient design for installation, ensuring stable operation of the unit.

Separator at the inlet:

Includes level sensors and automatic condensate removal.

Electric motor:

Explosion-proof, high efficiency asynchronous.

Cylinder block:

Modular design, adapted to the individual needs of the customer.



Tailor-Made Applications:

This station is designed for the efficient and safe compression of argon, ensuring stable operation across a wide temperature and pressure range with high reliability and performance.

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Mobile Compressor Solutions

DALGAKIRAN | SENSI GAS Stations on wheeled platforms are designed for gas compression from atmospheric pressure up to 400 bar. They are used in various industries, including oil extraction, gas processing and energy.

Designed For

- Injecting nitrogen or air into pipelines for leak testing
- Evacuating gas from emergency pipeline sections
- Testing, commissioning, and repairing oil and gas wells
- Producing nitrogen from air

The mobile compressor station MCS-120/40 is designed for the repair and testing of pipelines in main gas pipelines and for use in other technological processes in the oil and gas industry.

It includes a screw gas compressor LGCY-39/25C and a reciprocating gas compressor 3SAH2.5/21-121.

It is mounted on a truck chassis from with an 8x8 wheel formula.

The main equipment of MCS-120/40 is housed in a special container located on the vehicle chassis.



Gas-Set Compressors

Designed for gas compression at production sites in remote areas with limited infrastructure. They operate autonomously or in conjunction with similar units within a common system.

Advantages

- Transported by appropriate standard transport
 - Installed at the site in a short period
 - Do not require a pile foundation
 - Capability to operate in a fully autonomous mode



This station is designed for compressing associated petroleum gas (APG) and consists of two separate compartments:

> an electric generator compartment and a compressor compartment, separated by a barrier partition on a single frame.

> > The power source is a 250 kW alternating current generator with a gas combustion engine.







