Maximizing reliability for large-scale LNG

Over 45 years of LNG machinery experience allows Atlas Copco Gas and Process to offer 98+% reliability and availability for LNG compressors and expanders

HANDLE THE PRESSURE
Proven reliability in large-scale LNG processing

Downtime can result in major revenue disruptions. Trust Atlas Copco Gas and Process’ time-tested designs to maximize your plant uptime and reliability.

Our extensive knowledge in items like seals, bearings and rotor stability allows us to design rotating machinery that’s up to the task of your most demanding process. We offer industry-leading 98+% reliability rates, as well as extended maintenance intervals compared to traditional compression technology. Quality components and advanced design — both intended to keep your large-scale plant moving.

We are present in 180 countries worldwide, with a broad portfolio of reference machines through which we can customize your solution. No matter where you are, Atlas Copco Gas and Process can deliver the solution that is perfectly matched to your LNG process, and back it up with global Aftermarket support that keeps you in production.

Flexible process equipment that lowers OPEX

Energy costs can equal up to 50% of your plants’ OPEX costs. By selecting the right compression technology, you can lower that figure by 10% to 12%. Combining technologies like inlet and diffuser guide vanes with Atlas Copco’s custom-engineered impellers gives you the precise control over your process, that enables to operate the plant as efficiently as possible.

Handle the Pressure with Atlas Copco Gas and Process

Over 70 years and with more than 8,000 running reference units, Atlas Copco Gas and Process can custom-engineer turbocompressors and turboexpanders that offer the highest reliability, availability and efficiency in the LNG market, no matter how large your plant is.

Integrally geared technology makes it possible

By operating up to 4 pinions through common drive gears, integrally geared technology allows optimal speed to the impellers, which results in the industry’s leading efficiency and low energy use. The horizontally split gearbox provides easy access to bearings, gearing and instrumentation for faster maintenance.

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Proven reliability in large-scale LNG processing

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Our extensive knowledge in turbines, bearings and rotor stability allows us to design rotating machinery that’s up to the task of your most demanding process. We offer industry-leading lifetime reliability rates, as well as extended maintenance intervals compared to traditional compression technology. Quality components and advanced design — both intended to keep your large-scale plant moving.

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Flexible process equipment that lowers OPEX

Energy costs can equate up to 50% of your plant’s OPEX costs. By selecting the right compression technology, you can lower that figure by 15% to 30%. Combining technologies like single and multi-stage compressors, with innovative and efficient designs, we ensure we’re doing what it takes to lower your energy costs.

Maximize uptime in multiple applications

From wellstream to shipment, Atlas Copco Gas and Process can provide rotating machinery for your entire natural gas / LNG value chain. Below are just some of the examples where we can help you handle the pressure.

- Reliability that minimizes downtime and keeps you in production.
- Lower CAPEX costs from single skid installation and lower OPEX costs through maximum availability and efficiency.
- The flexibility of modular designs that are expandable and customizable.
- Simplified maintenance and emergency service through our internationally recognized Aftermarket department.

Choose the large-scale LNG solution for your needs

Cryogenic boil-off gas (BOG) compressors / vapor return blowers

Atlas Copco Gas and Process cryogenic BOG / VRG compressors rely on centrifugal technology and are used in offshore and onshore liquefaction plants, LNG storage, and regasification plants. Features include:
- Ability to maintain optimal tank pressure and temperature
- Maximum availability and efficiency
- 1, 2, 4 or 6 compression stages

Compressors

- Cryogenic dry gas seals (long or tandem) and carbon ring seals
- Low, medium or high pressure

Expanders

Our turboexpanders play vital roles in gas pretreatment and LNG production in onshore and FLNG plants. Available in oil or magnetic bearing options.
- Maximum reliability

EFG / EFG Recycle / Regen / Lean Gas / Process Gas Compressors

Atlas Copco Gas and Process compressors handle extreme conditions to deliver maximum reliability, availability and flexibility. We engineer our integrally geared compressors to perform even in the most challenging environments.
- ISG (single or tandem) for minimal gas leakage
- Maximum flexibility through ISV / DSG / ITV control
- Space, energy and operational cost savings

Table: Large Scale Applications

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