



Alfa Laval inert gas solutions for LPG carriers

Protecting efficiency and product



Time is money when it comes to transporting liquefied petroleum gas (LPG). Being able to inert the tanks on the voyage to and from dry dock – or to do it on the spot when tank inspections or repair needs arise – is a valuable proposition. Alfa Laval understands the importance of availability, which is why we put so much effort into securing it.

When it comes to inert gas systems, availability is a key focus of our system design. The Alfa Laval Smit LPG system is specifically developed to ensure safety without costly and unnecessary delays, which means you can handle tighter delivery schedules and increasing demand. By offering more capacity for the footprint, the Smit LPG system lets you do the inerting faster and get to the work you profit from.

A compact match for your needs

Regardless whether your product is refrigerated or pressurized, the Smit LPG system can be fully adapted to your

vessel's requirements. Oxygen level, pressure, dew point and more can be optimized to meet your needs.

At the same time, the modular configuration of the Smit LPG system means a considerably reduced footprint. You pay only for the components you need, achieving a smaller system at a lower cost. The horizontal installation makes it easy to perform inspection and maintenance.

Completely soot-free

Due to the relatively low investment cost, most larger LPG carriers purchase combustion-based inert gas systems. The gas needs to be not only dry, however, but also free from soot. Maintaining product quality is especially important for LPG, since it often serves as a base for plastics, medicines and other specialized commodities.

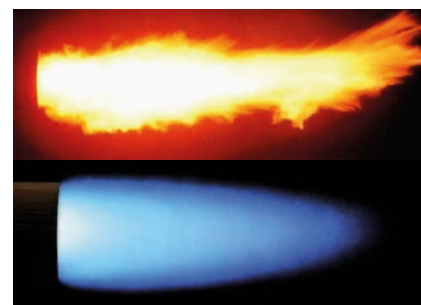
This is why the unique Ultramizing® combustion system is at the heart of every Smit LPG system. The Ultramizing

system ensures inert gas with low oxygen levels, low NOX emissions and no soot, thanks to special steam-atomizing and vaporizing burners.

Quality throughout

Quality is also assured by the Smit LPG sprayer systems, which are designed to avoid the creation of salt crystals from evaporating water. The dryers are laid out in such a way that the produced inert gas has a stable temperature and a dew point that is always below what is requested.

Conventional, strongly radiating, long oil flame producing soot.



Bluish-transparent oil flame characteristic of the Ultramizing® combustion principle.

Quick, easy touch control

Alfa Laval Touch Control is an integral part of the Smit LPG system, providing a complete graphical overview and quick access to functions and data. Any aspect of the system can be reached in just two touches of the screen.



To ensure availability, two touchscreens are delivered in a redundant solution: one on the main control panel, the other on the dryer. Both have full options. Likewise, the Smit LPG system is equipped with traditional physical buttons next to the touchscreens.

Alfa Laval Touch Control opens the door to future possibilities of remote monitoring. This will allow Alfa Laval to improve service over time, resulting in lower maintenance costs and still greater availability.

The Alfa Laval Smit LPG inert gas system

As the market leader in inert gas systems, Alfa Laval has provided them to hundreds of LPG carriers in the past 40 years. In the modular Smit LPG System, those decades of experience have been consolidated into a truly streamlined solution.



Design

Combustion + drying

Capacity range

3,000 – 25,000 m³/hr

Pressure

0.3 – 0.4 bar(g)

Fuel Type

DMA, DMB, DMZ

Typical dew point

-45°C after expansion to atmospheric

Typical gas composition

Oxygen	0.5 – 1.0 vol%
Carbon-dioxide	approx. 14 vol%
Carbon-oxide	max 100 ppm
Sulphur-oxides	max 10 ppm
Nitrogen	balance
Soot	0 (= complete absence)

Why choose Alfa Laval?

Alfa Laval is the standard-setter and market leader, having spent decades optimizing cargo safety under the Smit name. You get the highest reliability, both from our inert gas systems and from the organization that supports them.

- Over 50 years of experience with inert gas systems
- Highest material and component quality
- Worldwide access to service and spares
- 24/7 customer assistance hotline
- Service engineers who can be anywhere in the world within 24 hours
- Shipping of nearly any part without delay
- In-house operator training

How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com.