



## Alfa Laval inert gas solutions for product tankers

### Securing safety and efficiency



**Two things play a major role in how profitable your product tanker can be. One is flexibility, the other is keeping costs to a minimum. Both depend on certain equipment, such as your inert gas system during offloading. Alfa Laval understands the importance of reliability in operation and predictability in maintenance, which is why our inert gas systems can be found on almost 2000 vessels.**

Your product tanker's inert gas system is vital to safety and efficiency during off-loading. We designed the Alfa Laval Smit Combustion system – our main solution for the product tanker market – to be both reliable and efficient in every way.

#### **Reliability matters**

On a typical product tanker, the inert gas system operates around 750 hours per year. To avoid costly delays and penalties, it must work whenever needed, despite continuous exposure to high temperatures and seawater. This is why Alfa Laval uses durable materials and best-quality

components, and why we back up our inert gas systems with proven maintenance solutions.

#### **Fuel and money saved**

Alfa Laval also values fuel efficiency, which is important for both your tanker's economy and the environment. The Smit Combustion system prevents the loss of inert gas through the water discharge, so that the fuel you burn does not go to waste. This is a unique feature among inert gas generators.

Still more fuel is saved by the Automatic Fuel Efficiency Module (AFEM), which constantly adjusts the production to current needs. Only the right amount of inert gas is produced, with the AFEM regulating the fuel quantity to compensate for ambient factors and keep the oxygen percentage stable.

#### **Completely soot-free**

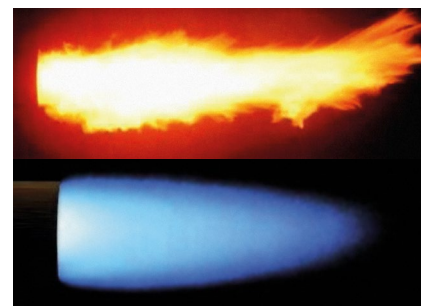
Inert gas quality is important as well. If the tank is dirtied by soot, you risk extra cleaning that slows you down

– or rejections and claims that cost you money.

This is why the patented Ultramizing® combustion system is at the heart of every Smit Combustion system. The special burners of the Ultramizing system ensure inert gas production with low NOx emissions and no soot.

Quality is further assured by sprayer systems that avoid creating salt crystals through water evaporation.

Conventional, strongly radiating, long oil flame producing soot.



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



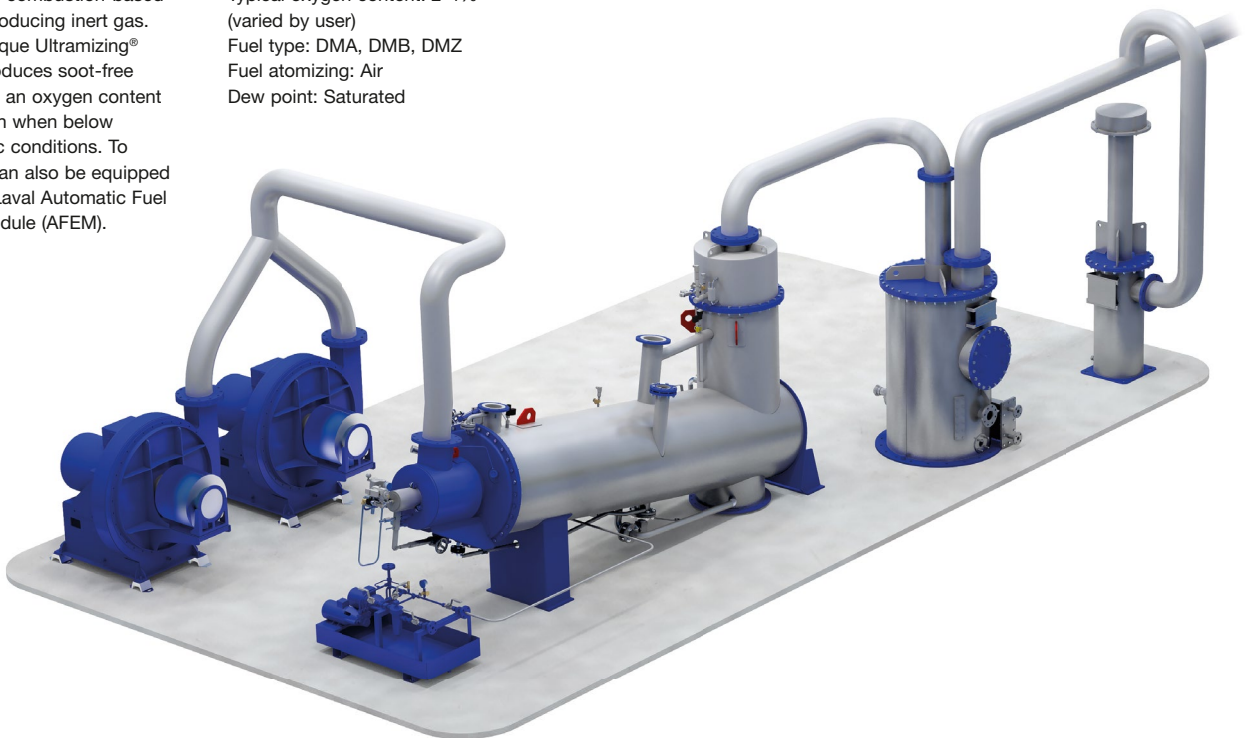
### When speed is of the essence

The containerized Alfa Laval Portinert® inert gas system is engineered for easy transport, placement and connection. The system can be lifted or flown to a ship for installation wherever and whenever needed, for example in an emergency.

### The Alfa Laval Smit Combustion inert gas system

The Smit Combustion system is a low-pressure, combustion-based system for producing inert gas. Using the unique Ultramizing® system, it produces soot-free inert gas with an oxygen content of 2-4%, even when below stoichiometric conditions. To save fuel, it can also be equipped with an Alfa Laval Automatic Fuel Efficiency Module (AFEM).

Capacity: 1000-20,000 m<sup>3</sup>/h  
 Design: Combustion  
 Pressure: 0.15 or 0.25 bar(g)  
 Typical oxygen content: 2-4% (varied by user)  
 Fuel type: DMA, DMB, DMZ  
 Fuel atomizing: Air  
 Dew point: Saturated



### 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 and onsite 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](http://www.alfalaval.com).