

Making our world more productive



Special expertise and reliable deliveries

# Linde Nitrogen Services



# When you need more than nitrogen. Linde is a total supplier of gas and related equipment and services.

With Linde Nitrogen Services you will get professional planning, execution and follow-up with everything from special expertise to the right equipment and reliable deliveries.





Tailor-made solutions and close monitoring.



Safe and efficient unloading of liquified nitrogen from a truck to a tank.

## Faster and safer operations. Optimize your shutdowns with Linde Nitrogen Services.

### Our services includes

- Temporary nitrogen supply
- Temporary hydrogen supply
- Reactor Cooling and Reactor Hot Stripping
- Flaring LNG or other flammable gases tank

### Nitrogen services

- Purging with nitrogen
- Inerting with nitrogen
- Drying with nitrogen
- Blanketing with nitrogen
- Pressure testing with nitrogen
- Network buffering with nitrogen

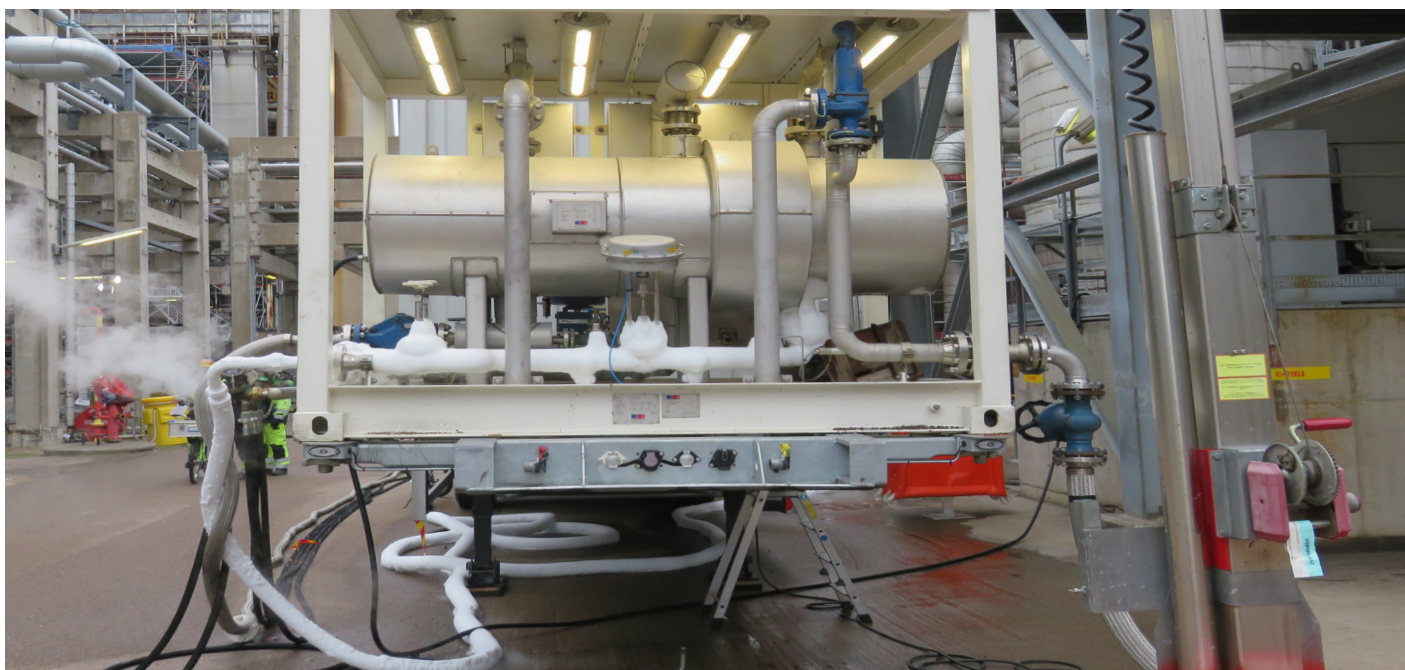
### LNG services

- Purging and inerting tanks
- Drying tanks
- Cooling tanks

### Helium leak testing

- Leak test planning
- Preparation and adjustment of required equipment for He-leak test
- On site preparation for leak test taping and work area
- Test/reporting/repair leaks during He-leak test
- Leak test conclusion





Linde's high flow nitrogen vaporizer in action, delivering 6 000 Nm<sup>3</sup>/h nitrogen at 6 bar g and +5 °C, for reactor cooling at a refinery.

## Why choose Linde Nitrogen Services? Your maintenance is provided safely and efficiently.

Linde is the largest supplier of nitrogen in Denmark, Finland, Norway and Sweden, and you can count on us whenever and wherever you need us. Nitrogen is often used in refineries because of its cost effectiveness, availability, and non-hazardous effects. Combined with our precisely controlled mobile pumping equipment, Linde can put nitrogen to work in a wide range of applications. We match the type of equipment used to each application for optimum economy, performance and safety. Linde can deliver nitrogen product to you via a manned Mobile Pumping Unit, based on any combination of the following conditions:

- Flow rates to 15 000 Nm<sup>3</sup>/h (for single pumping unit)
- Temperatures from -150 to 200 °C
- Pressures to 100 bar
- Volumes: unlimited

Every company must periodically perform varying extents of maintenance. Although this is often planned, there are unfortunate occasional urgent situations. Linde Nitrogen Services can handle both situations. We would be pleased to work with you on an action plan that enables you to quickly get back online without sacrificing any quality or safety.

**Linde Nitrogen Services contributes to:**

- Preventing fires and explosions
- Making maintenance work safer
- Reducing downtime for production plants
- Simplifying and streamlining cooling method
- An easy, one-stop solution



Drying and cooling tanks with liquified nitrogen at a LNG cruising ship, to prepare for the tanking process with natural gas.



Linde's high flow steam vaporizer delivers liquified nitrogen in large amounts and high temperatures, adjusted to meet our customers' specific demands.

## High competence and several years of experience. We can meet your demands.

To make a good choice, it is important to map out what kind of project and mission we are dealing with. A site visit will be necessary to make sure that all questions are clear, so we can give you the best advice and choice of equipment.

When you work with Linde, you benefit from our long experience with such services, and you get a total supplier of gas, equipment and expertise. We can also provide access to nitrogen, equipment and personnel in many locations. In addition, we can offer tailor-made solutions for both small and large customers.

Of course, we hold the necessary certificates for the different countries in which we operate.

We also undertake to lead projects from A to Z. Linde is a safe and reliable partner when you need nitrogen services!



# Getting ahead through innovation

With its innovative concepts, Linde is playing a pioneering role in the global market. As a technology leader, it is our task to constantly raise the bar. Traditionally driven by entrepreneurship, we are working steadily on new high-quality products and innovative processes.

Linde offers more. We create added value, clearly discernible competitive advantages, and greater profitability. Each concept is tailored specifically to meet our customers' requirements – offering standardized as well as customized solutions. This applies to all industries and all companies regardless of their size.

If you want to keep pace with tomorrow's competition, you need a partner by your side for whom top quality, process optimization, and enhanced productivity are part of daily business. However, we define partnership not merely as being there for you but being with you. After all, joint activities form the core of commercial success.

**Linde – making our world more productive**

[www.linde-gas.dk](http://www.linde-gas.dk), [www.linde-gas.ee](http://www.linde-gas.ee), [www.linde-gas.fi](http://www.linde-gas.fi), [www.linde-gas.is](http://www.linde-gas.is), [www.linde-gas.lt](http://www.linde-gas.lt), [www.linde-gas.lv](http://www.linde-gas.lv), [www.linde-gas.no](http://www.linde-gas.no),  
[www.linde-gas.se](http://www.linde-gas.se)