

Making our world more productive



# Gas is just the beginning.

We have the knowledge and experience to meet your offshore demands.



# A safe choice.

Linde aims to help customers reduce costs and improve all operations related to gases and associated equipment.

The offshore industry has experienced that long-term cooperation with a handful of suppliers is the best way to keep quality up and costs down. And the gas supplier is no exception. Well planned processes, binding cooperation provides safety and efficiency.

Within the oil industry, customers have very high expectations of their chosen supplier of gas and related equipment. Their expectations include everything from buying gas, the ability to deliver the goods as expected, logistics, technical support, safety trainings and service of equipment.

The offshore industry uses gas for many purposes: for cutting and welding, pressure testing and leakage testing, in their own processes, at infirmaries, laboratories and in connection with necessary analyses.

The gases are evaluated on the basis of quality, reliability and delivery.

Linde is a safe choice as we can meet your demands.



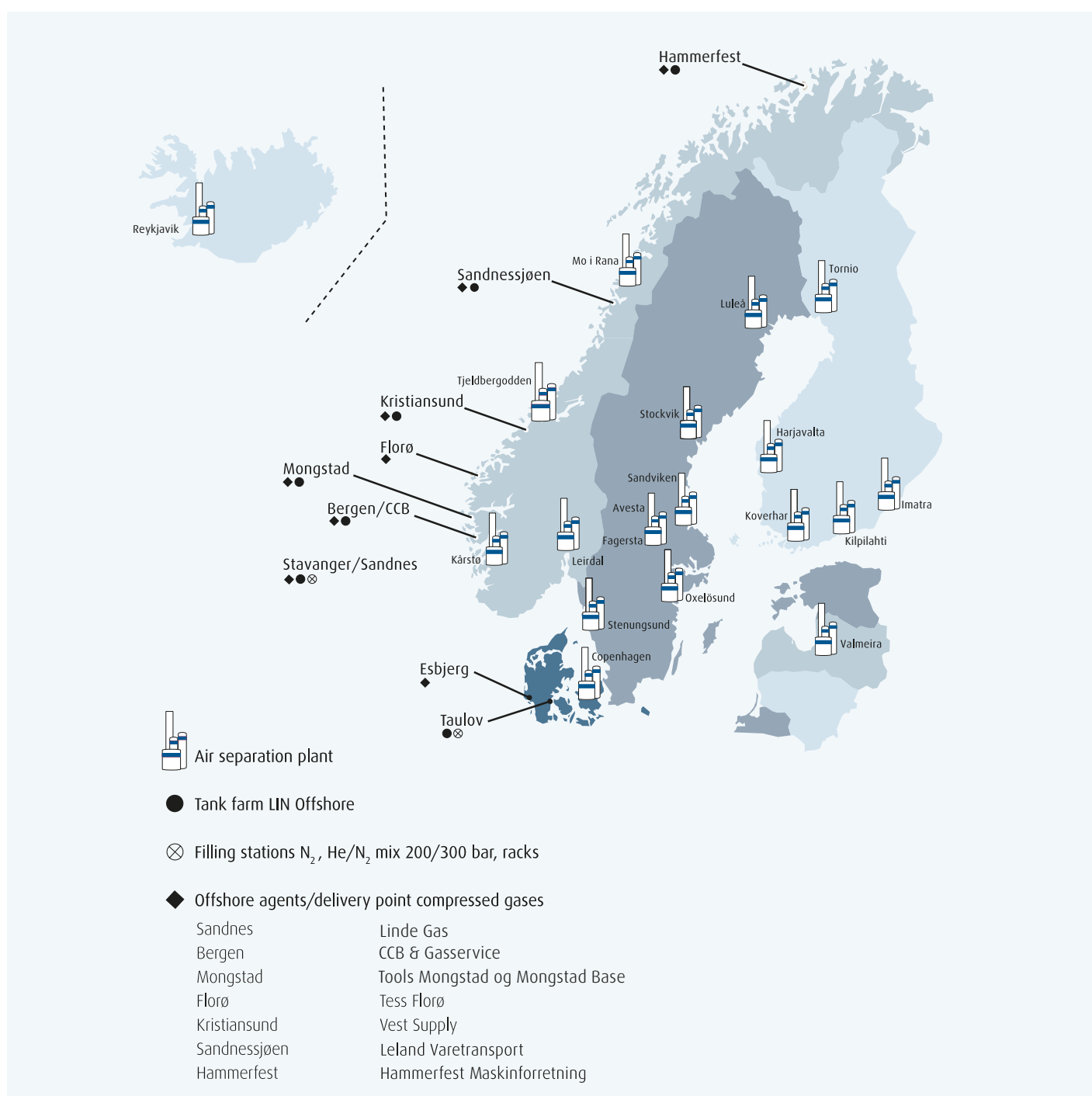
# Fast and reliable deliveries.

Linde offers solutions to offshore customers along the Norwegian coast and all countries around the North Sea.

Since we are present at every major offshore bases along the Norwegian coast we can promise fast and efficient deliveries to all our offshore customers.

Together with our sister companies BOC in United Kingdom and Linde Gas Benelux in the Netherlands we can deliver the gas related products and services you need within the offshore industry.

Visit our webpage to find your closest agent.



# We offer tanks and racks for various offshore demands.

Linde is represented in the offshore bases in Norway with stationary tanks for liquid nitrogen. We are therefore able to keep a high service level on our nitrogen deliveries and can fill your transportable tank containers locally within short delivery times.

Linde has for your disposal both standard (6 bar) and high (17 bar) pressure offshore cryo tanks with nitrogen for short and long term deliveries. Our offshore cryo tanks are approved according to DNV 2.7-1, and the container complies with the following requirements and regulations: EN12079 and EN13530-2.

Our manifold rack, UNM-16, has capacity of 16 pieces 50 liters cylinders connected to one outlet and is available with nitrogen and tracking gas (N<sub>2</sub>+1% Helium). Cylinder pressure is 300 bar. Other gases are delivered on demand.

300 bar bundles for nitrogen and nitrogen/helium mixtures are equipped with a NEVOC connection on the outlet. 200 bars cylinders, bundles and racks have outlets according to DIN 477.

UNM-64 has a capacity of 64 pieces with 50 litre cylinders connected to four outlets and is available with nitrogen and tracking gas (N<sub>2</sub> +1% Helium) Cylinder pressure is 300 bar.

Our transport rack has a capacity up to 16 pieces 50 litre (acetylen 41 liters) or 9 pieces of 33 kg propane cylinders or one Maxi propane cylinder. It is also possible to have 12 cylinder onshore packages as an option.

The transportation rack and the manifold racks comply with the following: DNV 2.7-1, EN 12079 and EN 13769, IMO/MSC and IMDG and ADR. All cylinders and racks to be delivered offshore undergo all necessary controls and are audited more frequently than those used onshore. This ensures their correct functioning and optimal safety.







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# Ensure proper equipment with quality.

Linde have a complete range of gas, cutting and welding equipment. The products are intended for welding, soldering, heating and cutting methods, where work is carried out by using fuel gases and oxygen.

We also offer complete equipment kit, where the users have the most common components gathered together in one place. These complete

kits make it easier for transportation in service and repair work. Linde has a complete range of central gas equipment for industrial gases. A complete system for efficient gas distribution consists of a central gas cylinder manifolds, a distribution system and tapping points.

Linde has the opportunity to offer a complete technical solution for central gas systems offshore. We have proper personell and equipment to perform the installation offshore. We can also provide yearly support and service on the existing equipment according to laws and regulations.

Linde's mobile maxi cylinder for propane is safe and easier to handle, more efficient to transport and a much better alternative than small cylinders and propane tanks. At large withdrawals for a limited time, two or more maxi cylinders can be connected in parallel.

We offer a complete refrigerant programme for the refrigeration industry, with solutions suited to our customers' varying requirements. The programme covers both natural refrigerants, and HFC and HFO. All cylinders are individually marked for traceability and may be combined with ACCURA® cylinder services as an advantage.

Our range consists of the most widely used refrigerants and a selection is available from our sales outlets.



# Safety is a crucial part when operating with gas.

At Linde we continuously improve the quality of our products and services to maintain a high level of safety and environmental protection. We offer a range of products and services which contributes to improved safety.

Among these we have our premium gases, MISON® shielding gases and ODOROX® odorized oxygen. MISON protects the welder from harmful ozone, and in addition often improves both the quality and the productivity. ODOROX is a product with an odour added to the oxygen so that it smells, and that way potentially risky leakages can be discovered.

There are risks associated with compressed gases, and these risks are not just limited to flammable or toxic gases. Risks are also associated with inert gases through oxygen displacement.

We pass on our know-how and experience by offering safety courses for your employees. Linde has specially trained, authorised instructors who professionally perform tailor-made courses at your site, or you can attend one of our open courses. For further details about scheduled courses, visit [www.linde.no](http://www.linde.no)





# Keep track of your gas products.

Managing gas equipment is easy, effective, and secure when you use ACCURA® gas management for equipment. We offer a straightforward web-based service that enables you to track and utilize information about the status of your gas equipment throughout your entire rental stock. Linde's rental items have an identification tag which is used in our daily operations.

The tag and the information registered in the ACCURA service give you readily access to detailed records on each rental item. ACCURA gas management for equipment means improved utilization and cost efficiency as well as higher levels of quality and safety.



# Special needs may require HiQ<sup>®</sup> specialty gases.

HiQ<sup>®</sup> is an established international brand of specialty gases within The Linde Group. HiQ includes an international product range of over 1000 articles to the way customers will experience the service and quality of Linde.

In addition to direct contact with an Account Manager, Linde offers its own centre with professional staff who serve our clients with HiQ<sup>®</sup> specialty gases needs.

HiQ specialty gases represent the best and most appropriate there is in the world of high-purity gases, accurate gas mixtures, precision-engineered gas supply system and the high-quality system needed

for optimum results. HiQ specialty gases are supplied to the highest standard of quality assured by ISO 9001 standards, and Linde has facilities accredited by ISO 17025:2005.

Linde also offers ECOCYL<sup>®</sup> portable cylinders, which are the world's most compact and refillable 1 litre gas cylinder, featuring a pressure regulator with an integrated flow meter for monitoring the ambient air.

It is widely applicable, for use in maintenance work, leak detection, calibrating equipment or emissions – wherever and whenever you require. It is also suitable for difficult to reach places and ideal for checking your personal protective equipment.



# Profit from our global network of local experts.

When you need the best knowledge and a gas installation to be integrated into your production, we offer complete project management from consulting to design and process from design to start-up. We can do tailor-made customer specific solutions.

Linde offers inspection, service and repair of centralgas systems for industrial gases, medical gases and speciality gases used in the offshore industry. We also do inspection, purging, testing and service on process equipment on transportable tank containers.

Our highly competent technicians are certified for offshore work. Safety and quality are always our number one priority. As our gas customer, you can profit from the broad knowledge and competence of our specialised application experts, in all gas consuming processes related to your specific industry.

Continuously increasing efficiency and productivity, while improving quality, are crucial if production processes are to remain competitive.

Linde's application experts are at the forefront of the technological development of gas consuming processes. They can provide valuable expertise that will further improve your processes – often by thinking out-of-the-box.

When knowledge of best practices, broad experience and customized solutions can be provided by a partner you can trust, why reinvent the wheel?



