

Linde

Let our solutions keep
you safely afloat offshore.

Reliable gas services from Linde Gas Benelux.

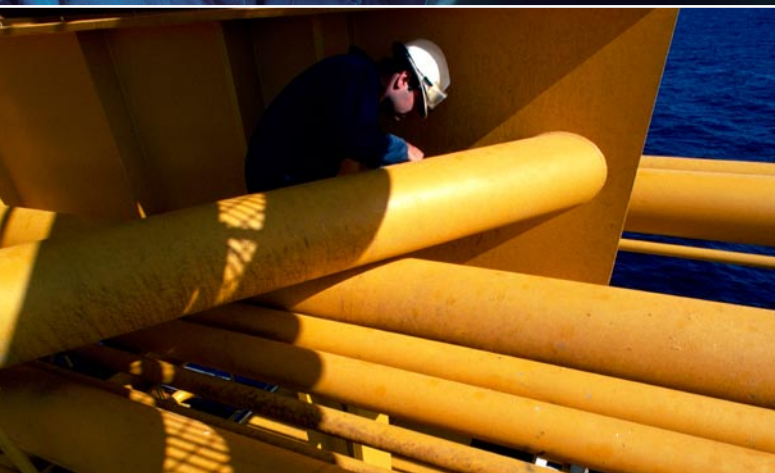
Offshore – your heart, our specialty.

For more than a century, offshore clients of Linde Gas have trusted the delivery reliability, efficiency, safety and know-how of the world market leader in the industrial and special gases you need for welding, cutting, preheating, purging and carrying out your analyses on location.



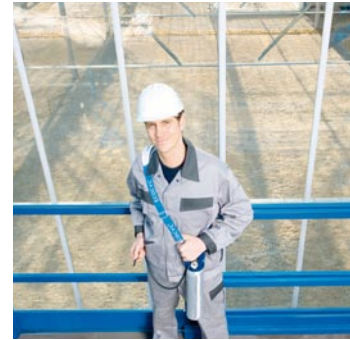
Anywhere you desire, Linde Gas Benelux can provide you with DNV-certified gas containers and special hoisting frames, and gases including acetylene, nitrogen, oxygen, argon and carbon dioxide. Safety is Linde's number one priority – always and everywhere, no exceptions. As such, our racks are certified according to offshore regulations such as NOGEPa and NEN-EN 12079.

This brochure shows you everything: from the well-considered ease with which Linde supports your activities through its first-rate 24-hour service to its knowledge and expertise in the field of gas, with a continual focus on international innovation. With safety as our chief concern.



ECOCYL®

The world's most compact and refillable 1 litre gas cylinders, featuring a pressure regulator with an integrated flow meter for monitoring the ambient air. Widely applicable, for use in maintenance work, leak detection, calibrating equipment or emissions – wherever and when-ever you require. Also suitable for difficult to reach places and ideal for checking your Personal Protective Equipment (PPE).



ODOROX®

A special oxygen from Linde with a conspicuous scent. The best way for you to receive advanced warning of the risk of fire and explosion as a result of an unintended increase in oxygen from leaks in hoses, valves or connectors. The smaller and more enclosed your workplace, the more suitable ODOROX® is.

VIVANTOS®

The new proven standard in ease, performance, precision and safety – no exceptions. More gas in fewer cylinders! Featuring a 300 bar, integrated, continuously adjustable pressure regulator and universal rapid-action coupling. Perfect for use anywhere, with ready-to-use gas cylinders on hand. You perform more in the same amount of time.



(ICC®) Individual Cylinder Control

Unscanned is unknown! This is the way you've always wanted it... Finally, you have certainty as to where which gas cylinder or cylinder rack is located, what is in it and when it has to be certified. For each cylinder, you see when and where it was delivered or returned. More safety, thanks to more insight.

Gas detection equipment

Through its subsidiary, Linde Gas Cryoservices, Linde offers both portable and stationary gas detection equipment that provides you advanced warning of an undesired drop in oxygen content or an increase of carbon dioxide in the ambient air.

Accessories

Accessories, like pressure-reducing valves with various adjustment ranges and greater capacity, low and high pressure hoses and all the welding and cutting tools you need.



The safe and efficient maintenance of your equipment, performed by Linde Nitrogen Services.

Linde Nitrogen Services is characterised by safety, efficiency and around-the-clock service. With highly qualified personnel and state-of-the-art equipment, Linde Nitrogen Services would like to act as co-engineer for industrial maintenance of offshore equipment in dock: a turnkey package of implementation personnel, engineering and pre-engineering, gas and – of course – specialist equipment, like high-pressure pump units, steam vaporisers and helium leak-testing devices.

Linde Nitrogen Services operates *24 hours a day, 7 days a week*. Our maintenance services package includes:

- ✓ **Purging** – removing gas and/or oxygen from pipe systems, process systems, ship's holds and storage tanks
- ✓ **Blanketing** – protecting hygroscopic, perishable, toxic or flammable products from oxygen and moisture with a 'blanket' of inert gas
- ✓ **Pressure testing** with nitrogen
- ✓ **Displacements** of pipelines
- ✓ **Sparging** – removing oxygen from oxidisable oils, fats and liquids
- ✓ **Drying** – removing moisture with hot nitrogen
- ✓ **Helium leak testing** with a mixture of nitrogen and helium
- ✓ **Pigging**
- ✓ **Pipe freezing.**

The advantage for you is that one company takes care of everything! Linde Nitrogen Services operates according to chemical industry requirements (ISO, VCA**, Steam-engineering, PED) and with specially designed equipment, such as the high-pressure pump unit (HPP) and the high temperature pump unit (HTP). The HPP unit is soundproof and suitable for operation in Zone 2.

Other equipment includes mobile purge units, 'flying purgers', various steam vaporisers, purge skids, pressure and flow meters, pipe-freezing equipment, helium leak-testing equipment, mobile cryocondensation units, suitable for Zone 2.

At Linde Nitrogen Services, a safe working environment is our highest priority. This translates into strict procedures for the work our employees carry out for you on location. Naturally, any additional safety requirements you desire can be implemented in our procedures and risk analyses.

Our safe working method has earned a special silver Safety Award from the European Industrial Gases Association (EIGA).



Linde Gas assortment in offshore racks and hoisting frames for individual cylinders.

Linde Gas supplies cylinder gases in special certified racks for the offshore industry, such as NOGEPa, DNV and NEN-EN 12079.

These special heavy frames protect the cylinders, manifolds and valves of the racks.

Description	Connection	Dimensions w x d x h	Gross weight (filled)	Content
Offshore racks of 18 cylinders				
Argon 4.6 offshore rack 18 x 50L	NEN 3268/RU 3 - W24.32	1.44 m x 1.05 m x 2.10 m	max. 2,000 kg	194 m ³
Acetylene offshore rack 18 x 50L	W28.8	1.44 m x 1.05 m x 2.10 m	max. 2,000 kg	146 kg
Nitrogen 3.0 offshore rack 18 x 50L	NEN 3268/RU 3 - W24.32	1.44 m x 1.05 m x 2.10 m	max. 2,000 kg	173 m ³
Oxygen 2.5 offshore rack 18 x 50L	NEN 3268/RI 2-G5/8"	1.44 m x 1.05 m x 2.10 m	max. 2,000 kg	194 m ³
Offshore racks of 16 cylinders				
Argon 4.6 offshore rack 16 x 50L	NEN 3268/RU 3 - W24.32	1.44 m x 0.90 m x 1.97 m	max. 2,000 kg	173 m ³
Acetylene offshore-rack 16 x 40L	W28.8	1.44 m x 0.90 m x 1.97 m	max. 2,000 kg	111 kg
Nitrogen 3.0 offshore rack 16 x 50L	NEN 3268/RU 3 - W24.32	1.44 m x 0.90 m x 1.97 m	max. 2,000 kg	154 m ³
Oxygen 2.5 offshore rack 16 x 50L	NEN 3268/RI 2 - G5/8"	1.44 m x 0.90 m x 1.97 m	max. 2,000 kg	173 m ³
Offshore racks of 14 cylinders				
Acetylene offshore rack 14 x 50L	W28.8	1.44 m x 0.90 m x 1.97 m	max. 2,000 kg	123 kg
Carbon dioxide 2.7 offshore rack 14 x 50L	NEN 3268/RU 1 - W21.8	1.44 m x 0.90 m x 1.97 m	max. 2,000 kg	525 kg
Hoisting frame for individual cylinders	Suitable for 16 high pressure or 8 propane cylinders	1.44 m x 1.10 m x 2.10 m	max. 500 kg (without cylinders)	

Offshore ODOROX® racks (scented oxygen) are available upon request. Please ask your account manager about this.



Progress through innovation.

With its innovative concepts, Linde Gas 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 Gas offers more. We create added value, clearly discernible competitive advantages and greater profitability.

Each concept is tailored specifically to meet our customer's 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 – ideas become solutions.

Linde Gas Benelux (Head Office)

1 Havenstraat, P.O. Box 78, NL-3100 AB Schiedam, The Netherlands
Phone +31 (0)10 246 14 70, Fax +31 (0)10 246 15 06
metaal.lg.nl@linde.com, www.lindegasbenelux.com

For Belgium: Linde Gas Belgium N.V.

85 Westvaardijk, B-1350 Grimbergen, Belgium
Phone +32 (2) 28 90 95 10, Fax +32 (2) 28 90 95 29
contact.lg.be@linde.com, www.lindegasbenelux.com

Linde Nitrogen Services

17 Havenstraat, P.O. Box 78, NL-3100 AB Schiedam, The Netherlands
info.lns.nl@linde.com, www.linde-nitrogen-services.com