

## Introduction

Linde CryoPlants Ltd. is a subsidiary of The Linde Group based in UK.

The Linde Group is a world leading gases and engineering company with around 50,500 employees in more than 100 countries worldwide. Linde have supplied more than 3,000 air separation plants and maintain the highest standards of service.

Linde CryoPlants Ltd. design and manufacture a range of containerised cryogenic air separation plants that provide high purity oxygen.

# Comprehensive services that ensure a high level of client and customer care include:

- A world-wide network of Linde offices or agencies
- Teams of plant designers and consultants
- World-wide aftersales services
- Supervision of erection and start-up services
- Full product training
- Plant maintenance contracts

## Concept

The LOX 40 and 80 are standard series plant for on-site generation of high purity oxygen for industrial and medical applications. The LOX 40 produces 40 Nm³/hr and the LOX 80 produces 80 Nm³/hr (2.5 tpd) of liquid oxygen and comprises factory assembled modular units installed into a 40ft ISO type equipment container. This construction allows quick simple installation on site.

The plant is suitable for world-wide installation and is air cooled as standard.

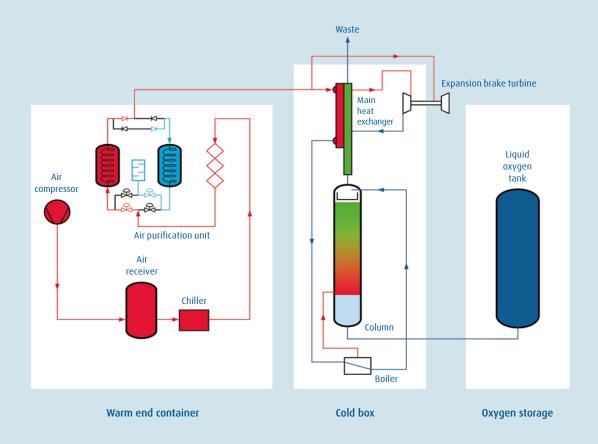
The LOX plants produce high purity liquid oxygen into a liquid tank. Oxygen gas for cylinders filling can be produced from stored liquid by means of a high pressure liquid pump and evaporation unit.

LOX 80 is suitable for:

- Hospitals
- Cylinder filling
- Industrial welding
- Steel industry
- Chemicals
- Metallurgy
- Oil and gas







Flow diagram of the LOX

## LOX plant features

- Compact design and simple installation
- Containerised design for reduced installation time at site
- Air cooled plants as standard, water cooling is optional
- Automatic plant operation
- Remote plant status and reporting capability as standard
- Telementry support available from Linde CryoPlants
- Oxygen purity 99.8 % for medical and welding applications
- Liquid oxygen product pressure to customer specifications
- Both gaseous and liquid oxygen available from the plant
- Additional options for direct integration into a pipeline
- High pressure cylinder filling rig available as an optional item
- PLC controlled with touch screen control panel
- Fail safe operation in the event of malfunction

# LOX process

Atmospheric air is filtered and compressed. Carbon dioxide water and residual oil are removed in an air purification unit. The air then passes into a cold box where it is cooled, liquefied and distilled to yield high purity liquid oxygen, which is collected in a liquid storage tank. Liquid can be either transferred into transportable tanks or compressed into a liquid pump and vaporised to provide ambient temperature gaseous oxygen for cylinder filling.

# About Us.

Linde CryoPlants Ltd., a subsidiary of The Linde Group based in UK, specialises in the manufacture of compact air separation plants. Such plants are designed to meet the needs of our customers in a variety of different industries.

The core product of the portfolio centres on a range of nitrogen generation plants. Linde CryoPlants standard designs are containerised which help reduce installation time and cost at site.

Thermal losses in the production process are overcome by the use of an in house designed and manufactured expansion air brake turbine or liquid injection, depending on the plant type selected. Such plants are economical and enjoy an excellent reputation for reliability and quality. Linde CryoPlants also manufacture a range of dedicated liquid oxygen producing plants that are designed with the needs of a hospital installation or alternatively those of a dedicated cylinder filling station in mind. Once again these plants are containerised and use the same in house design of expansion brake turbine. In addition, Linde CryoPlants Ltd. manufactures a range of dedicated liquid oxygen plants that are designed with the needs of both research and industrial users in mind, these plants also use the same in house design of expansion brake turbine.

Linde CryoPlants have enjoyed considerable success in the sales of their product range worldwide and welcome discussion on your application to see how we can become your preferred partner of choice for your air separation needs.

## **ENQUIRIES:**

Should you wish to enquire about Linde plants, please visit our website or contact us at the following address:

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