Making our world more productive

Ande



additional equipment

Vent Recovery System

Saving Money, Saving Lives

The final process phase of the standardized Linde manufactured Nitrous Oxide production plant is the drying of the N_2O gas stream. As the end-product need to be stored, therefore liquefaction is required. According to the current technology, during the Nitrous Oxide product's liquefaction, a large amount of the inert gases is removed and exhausted to the atmosphere. A significant amount of N_2O is also vented (~80% of gas flow) with this flow.

To improve the production system's cost efficiency and sustainability, now Linde introduces a Vent Recovery System that can recycle 90% of the vented N_2O . This system is optimized for the standard low-pressure liquefaction system and includes a specially designed Coldbox and an optional collection tank if it is installed on ground level.





Liquefier

The liquefier is equipped with an additional refrigerator and designed for your actual Production Plant Capacity to store the produced Nitrous Oxide for your further usage.

Vent Recovery Unit

The system contains heat exchangers in a perlite filled box (Coldbox). It is designed as an autonomous unit it can be integrated with existing production plants.

Storage tank

The Nitrous oxide production chain can be equipped with a batch tank and/or a storage tank.

What can we offer?

- Autonomous Vent Recovery unit.
- An integrated control system, which can be connected to the control system of the N₂O production plant.
- Simple installation and small utility requirements refrigeration unit not required.
- Optimized capacity for your Production Plant requirements (~80...300 kg/h).

Why choose us?

- Up to 90 % N₂O savings. (60 tons annually in case of S300 plant -> 300 kg/hours volume capacity)
- Decreased carbon-dioxide footprint and possible avoidance of the Global Warning Potential Penalty. (1 kg $N_2 O = 300$ kg CO_2)
- Up to 90% recovered \hat{N}_{2} 0 vent gas
- We offer the best cost-effective Nitrous Oxide production plant with an integrated vent gas recovery system. Save money with our state-of-the-art technology.
- Our Recovery Unit has good benefits both on the environment and on operation savings.
- To join our sustainability program.