

LNG SATELLITE PLANTS

- **Modular or tailor made design**
- **Wide range of sizes from house heating to large-scale industrial applications**
- **Turn Key Installation**

Application:

- **Regasification plants**
for local community pipelines
for industry and other larger gas consumers
- **Liquefier storage and distribution plants**
Distribution with LNG road trailers
Distribution with coast-carriers
- **LNG refueling stations**
LNG stations for fueling LNG cars, locomotives, ships
LCNG fueling stations for CNG vehicles or CNG transporting vehicles
- **Coastal Receiving Plants for intermediate storage or direct usage of gas**



Chart Ferox built more than 60 satellite stations in the last 10 years based on 60 years experience with cryogenic equipment manufacturing and plant deliveries.



Chart Industries Group D&S

Chart Ferox, a.s. • Ústecká 30 • CZ-405 30 • Děčín 5
Tel.: +420-412-507 343 • Fax: +420-412-507 297
EN/500002/10MAR11 © Chart Ferox, a.s. All Rights Reserved

ferox-sales@chart-ind.com
www.chart-ferox.com

LNG SATELLITE PLANTS

Typical satellite plants consist on storage tank, vaporizers, interconnecting piping and control and emergency system:

Storage tanks

Vacuum insulated storage tanks offer reliable and consistent service with no moving parts; full flexibility by increasing or decreasing storage volume and no emission during normal operations.

Wide range of standard or customized engineered storage tanks with gross volumes from 21 to 1000 m³ of LNG.

Typical maximum working pressure is 11 or 18 bar for tanks with volume up to 60 m³ and 11 or 17 bar for tanks up to 108 m³ volume. The tanks with volume larger than 108 m³ have maximum working pressure 10 or 8 bar.

Models up to 500 m³ are available in vertical are available in vertical or horizontal configurations in order to accommodate local restrictions or architectural design considerations.

Multi-tank installations may be used when larger storage capacity is required.

All tanks are engineered for enhanced safety including dual relief valves and with all reliefs connected to a common vent stack.

Vaporizers

Chart Ferox offers both ambient air and water bath vaporizers.

Ambient air vaporizers are most economical since they do not need any energy supply.

Water bath vaporizers can be used when local supply of hot water or steam is available. Alternatively, a gas burner may be utilized to provide the required energy. This will consume approx 2% of the processed gas.

For back-up purposes, a combination of these systems is also available.

Interconnecting piping

Using a modular plant design, the piping is pre-manufactured to mate all components together.

The interconnecting piping connects all parts and components needed for fully automatic or semi-automatic operation in order to deliver gas at required pressure and temperature.

Control & Safety systems

The installation is controlled by a local control system. All process and safety sensors are connected to a local PLC to monitor and control proper and safe operation. Any defined unscheduled event will shut down the plant with alarm and warning signals transmitted to the PC screen and mobile phone of the responsible operator.

Installation

Chart Ferox can supply the required equipment or a complete Turn-Key installation.

For Turn-key, Chart Ferox will be responsible for the entire installation including commissioning and start-up and training of personnel.

Civil work and local authority permits can also be provided.

Standards & Codes

Equipment: PED; AD Merkblatt; ASME or other recognized codes.

Installation: EN 13645; NFPA 59A and/or other relevant codes and regulations.

