



★ **DISTRIBUTION**
CRYOSTAR



Natural Gas Vehicle Refuelling Stations ★

Our natural gas refuelling stations are the result of more than 30 years experience in the gas field. This experience allows us to develop refuelling solutions that meet customer requirements in terms of performance, reliability, safety, and cost efficiency.

★ *Characteristics*

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|------------------------------|--|
| Type of re-fuelling stations | LNG - LCNG |
| Type of filling | Fast fill |
| Gas | Natural gas or Biogas |
| Car type | Trucks, cars, buses, etc... |
| Filling pressure | Up to 400 bars (5800 psi) or more for CNG, 20 bars (290 psi) for LNG |
| Application | Public or private |
| Automatic management system | Managed by PLC |

★ *Applications*

Cryostar refuelling stations are available for LNG and CNG supply mode for the following filling applications:

- Cars
- Lift trucks
- Utility vehicles
- Buses
- Trucks
- Special vehicles, ferry boat, train, etc...

Our filling solution is dedicated to different types of vehicles running either on compressed natural gas or liquefied natural gas.

★ *Quality*

Each Cryostar system is thoroughly tested in our workshops, including:

- Pressure tests
- Electric, pneumatic and PLC tests
- Operational tests

Every Cryostar system is developed in compliance with the norms CE (PED, ATEX...)



★ Our solutions

Cryostar offers two systems: LNG and LCNG

- The **LNG** filling system, using a liquid natural gas (or biogas) storage tank, allows vehicle filling of liquefied gas at pressures up to 20 bars (290 psi).

The main advantage of using liquid natural gas is the reduction in the vehicles tank size. Natural gas (or biogas) in its liquid form takes up to 630 times less space than in gaseous form (at atmospheric pressure and ambient temperature), which, in turn, provides more autonomy to the vehicle. As a leader in the cryogenic field, Cryostar is recognized as a premium partner on the LNG fuelling market.

- The **LCNG** filling system, using a liquid natural gas (or biogas) storage tank, allows vehicle filling of both liquefied and compressed natural gas (up to 400 bars -5800 psi- or more).

The advantage of this system is the combination of two filling technologies (LNG and CNG) in one installation while using a liquid fuel storage, thus making it independent from the grid. In addition, the investment and maintenance costs of a LCNG station are by far lower than investing in 2 different stations for each filling mode (CNG & LNG). Furthermore, the operational costs, in terms of power consumption, of a **LCNG** fuelling station are approximately 4 times lower than those of a compressor equipped **CNG** fuelling station.

Cryostar re-fuelling stations include storage tanks, pumps, regulation systems, all required safety devices, and dispensers, all managed by a dedicated filling program for natural gas fuelling stations.



★ A customer service that meets your requirements

Cryostar understands the criticality of our customers' operations and the economic impact of any down time or lack of efficiency. Consequently, Cryostar has developed a well established and highly reactive customer service. Using the latest monitoring devices, such as remote maintenance, combined with Cryostar strategic locations around the world, we are able to immediately respond to our customers' need.

For installation and commissioning of our systems, Cryostar utilises its dedicated Customer Support Teams. This group of experts is in charge of coordinating turnkey projects, thus ensuring optimal and safest system operations.

Training is also our priority, using a team of dedicated experts that will train your operators on the critical aspects of both the filling station and the natural gas, ensuring a safe and efficient operation.

For more details please contact your local Cryostar representative



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