

Case Study LNG #19

LNG Drop and Go Regas DAGR™ 2.0 **Regasification Station**



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LNG@chartindustries.com

P/N 21237272

Highlights:

Location — Near Queretaro, Mexico

Scope of Project:

- (1) Skidded horizontal 15,000 gallon storage tank
- (2) Skidded vertical ambient air vaporizers with selector valves
- Site capable of peak flow rate of 21,000 scfh.
- Startup, commissioning, and on-site training of system equipment
- Project Completion: January 2018

Application:

LNG virtual pipeline supplying natural gas to a commercial agricultural enterprise without access to a gas pipeline.

Project Background:

The end user wanted to eliminate using more expensive and polluting LPG to generate power in their greenhouse operation. It was important for them to have an intervention-free solution through the local LNG supplier delivering to the site and replenishing the storage tanks.

System Configuration:

Chart's complete system stores and vaporizes LNG to supply the end user with natural gas at the point of use, exactly as if they were connected to the pipeline grid. It comprises of 15,000 gallons of on-site storage, two vertical ambient air vaporizers, a process skid and LNG offload module.

Accomplishments:

Fully shop built and tested equipment supplied skid mounted to eliminate site civil requirements.

- Site installation completed in one day.
- · Single crane lift at site.
- · Fully automated, cellular monitoring.
- Meets NFPA 59A: 2016 Edition Chapter 13.







DAGR[™] 2.0 REGASIFICATION STATION

DROP AND GO REGAS (DAGR) FOR LIQUEFIED NATURAL GAS

Vaporizer Skid + Easy Connecting Brackets + LNG Storage Skid = DAGR Station





Ambient Air Vaporizers Skid 102 x 576 x 102 in (259 x 1463 x 259 mm) 45,000 lbs (20,430 kg)



LNG Storage Skid

535 x 115 x 145 in (1359 x 292 x 368 mm) 58,100 lbs (26,377 kg)

LNG Drop and Go Regasification (DAGR™) Station

The Chart LNG Drop and Go Regasification (DAGR™) Station is designed to vaporize LNG to provide natural gas for use downstream of the system. The system consists of the following:

- One horizontal 15,000 gallon tank
- Two vertical ambient air vaporizers
- A process skid and LNG offload module

The site will be capable of a peak flow rate of 21,000 scfh. Note that the maximum sustainable uptime, as well as the amount of downtime required for the vaporizers to thaw between operations is dependent on ambient conditions. The control panel houses a PLC and Human/Machine Interface (HMI) that controls the system functions. The control system will automatically balance between top and bottom filling while offloading to maintain the desired tank pressure. While supplying liquid, the control system will determine when to pressure build and when to economize to maintain the desired tank pressure. All functions will be accomplished with minimal input from the operator.

Product Details for DAGR™ 2.0

- 15,000 gallons (59.1 m³) gross LNG storage
- Full transport delivery
- Single pressure transfer offload (optional offload pump adder)
- Dual ambient air vaporizers with automated switching system
 - 21,000 max scfh flow
 - Options for flows up to 75,000 scfh
- Final line pressure control manifold
- 30 psig discharge pressure (option up to 155 psig)
- 24/7 operation
- 20°F approach to ambient temp outlet gas (optional trim heater adder)
- Startup support and training

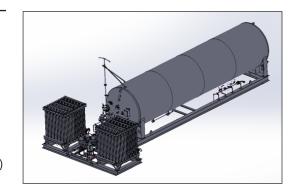


Chart Inc.

U.S.: 1-800-838-0856 Worldwide: 1-952-758-4484



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