



# Case Study LNG #11

LNG Virtual Pipeline



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### Highlights:

Location — Madeira, Portugal

### Scope of Project:

- Chart worked in close collaboration with Gaslink and other Grupo Sousa companies
- Transport of LNG from mainland terminal to island power station in less than 1 week
- Power station provides the island with 240 to 450 GW/h of energy
- Equipment engineered and built at Chart Ferox facility in Czech Republic
- ISO-based system affords flexible solution that can be adapted to meet Madeira's future power demand

### Application:

Supply LNG to Madeira's natural gas fired power station operating 24/7/365. Madeira is an autonomous, archipelago of Portugal located off the northwest coast of Africa and not connected to the natural gas pipeline grid. LNG is loaded into ISO units at the import terminal in Sines, transported over-the-road to the port and then by vessel to Madeira where it is offloaded into an LNG tank farm and regasified on demand.

### Project Brief:

Provide a transport solution in accordance with the following criteria:

- Maximum LNG payload within worldwide 40 ft container envelope
- Road and ocean transport in accordance with ADR, RID, IMDG, ISO 1496-3 and EN 13530-2 codes
- Fill rate of 1200 litres per minute
- Discharge rate of 600 litres per minute
- Aggressive delivery schedule

### Solution:

55 units TVS-43-PB-10 ISO intermodal cryogenic containers with Chart Vacuum Technology®:

- Gross capacity: 43500 litres
- Tare weight: 11300 kg
- Max. gross weight: 34000 kg
- Design pressure: 10 barg/145 psig
- Hold time: 65+ days before reaching RV pressures
- Approvals: CSC, UN T75



SCAN CODE  
TO SEE LNG  
VIRTUAL  
PIPELINE  
IN ACTION

