

2 x 23,000 m³ LPG/NH₃-Carriers "Almarona, Almajedah" for Qatar Shipping Co., Doha, Qatar

Project Data:

Shipyard:

STX SHIPBUILDING Co.Ltd.,
Republic of Korea

Year of completion: 2003/2004

Classification: DNV

TGE scope: EPCS-contract, gas handling system & cargo tanks

Vessel:

23,000 m³ fully ref. LPG carrier,
type 2G

Length o.a.	164.8 m
Beam:	26.2 m
Depth (main deck):	15.3 m
Draught (LPG):	8.4 m
Speed:	16.5 kn



Characteristics of gas plant:

Capacity:	23,000 m ³
Number of cargo tanks:	3 (prismatic, IMO type A)
• Material:	low temperature carbon steel, NV2-4
Cargoes:	LPG/VCM/NH ₃
Design temperature / pressure:	-48°C / 0.25 bar g acc. to IMO at sea 0.45 bar g at harbour conditions
Maximum cargo density:	972 kg/m ³ (partial filling)
Number of segregations:	2
Cargo manifolds:	2 liquid lines, 2 x 12", ANSI 300 lbs flanges 2 vapour lines, 1 x 8", ANSI 300 lbs flanges
Loading-/Unloading-rate:	2,100 m ³ /h / 2,100 m ³ /h
• Deepwell pumps:	6 x 350 m ³ /h at 120 m LC
• Booster pumps:	2 x 350 m ³ /h at 120 m LC
Number of cargo heater:	1 direct sea-water heated type
• Capacity heater:	350 m ³ /h com. propane from -48°C to 0°C at +15°C sea-water temperature
• Capacity vaporiser:	2,100 Nm ³ /h com. Propane, cargo inlet temperature -42°C at + 15°C sea-water temperature

Reliquefaction system:

direct cycle
3 x SULZER compressor
Stainless steel, AISI 316L

Cargo piping system:

Inertgas plant:

• Capacity: Combustion type generation
2,000 Nm³/h at 99.5 vol. % purity

Inertgas plant:

• Capacity: Membrane type generation
100 Nm³/h