

10 x 8,000 cbm LPG/Ethylene/Ammonia/VCM-Carriers

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for LAURITZEN KOSAN AS, Denmark

Project Data:

Shipyard:

SEKWANG Heavy Industries Co., Ltd., Korea

Year of completion: 2007-2009

Classification: BV

TGE’s scope:

EPCS-contract, gas handling system & cargo tanks ship design development



Vessel:

8,000 m³ semi ref. LPG carrier, type 2G

Length o.a.	115.00 m
Beam:	18.6 m
Draught (LPG):	8.65 m
Speed:	15.3 kn

Characteristics of gas plant:

Capacity:	8,000 m ³
Number of cargo tanks:	2
Material of cargo tanks:	5% Ni Steel
Cargoes:	LPG/Ethylene/Ammonia/VCM
Design temperature / pressure:	-104°C / 6.0 bar g acc. to IMO at sea
Maximum cargo density:	972 kg/m ³
Number of segregations:	2
Cargo manifolds:	2 liquid lines, 1 x 8", 1 x 6" ANSI 300 lbs flanges 2 vapour lines, 1 x 6", 1 x 4" ANSI 300 lbs flanges
Loading- / Unloadingrate:	960 m ³ /h
Deepwell pump	2 x 480 m ³ /h at 120 m LC
Booster pump	300 m ³ /h at 120 m LC
Number of cargo heater / vaporizer:	
1 indirect ethylene vaporiser	Capacity: 1,000 m ³ /h at 15°C sea water temp.
1 direct sea water heated LPG-heater / vaporiser	Capacity: 300 t/h Propane -42°C to 0°C at 15°C sea water, vapour 1,000 Nm ³ /h
Reliquefaction system:	Cascade / direct cycle 2 x refrigerant compressors (refrigerant R404A) 2 x cargo compressors
Cargo piping system:	Stainless steel
Compressed Dry Air System:	Capacity: 4,000 Nm ³ /h at 9.0 barg, atmospheric dew point -22°C

Fuel Gas Supply System for Dual Fuel Gen Set:

Capacity: 7 – 20 kg/h