

3 x 9.000 m³ LPG/ Ethylene/ Ammonia/ VCM-Carriers "Christoph Schulte, Happy Condor, Thetagas" for SCHULTE GROUP, Germany

Project Data:

Shipyard:

STX Shipbuilding Co., Ltd., Korea

Year of completion: 2007

Classification: DNV

TGE's scope:

EPCS-contract, gas handling system

Vessel:

9.000 m³ semi ref. LPG carrier, type 2G

Length o.a.	120,40 m
Beam:	19,80 m
Draught (LPG):	7,65 m
Speed:	16,0 kn



Characteristics of gas plant:

Capacity:	9.000 m ³
Number of cargo tanks:	2
Material:	5 % Ni Steel
Cargoes:	LPG/Ethylene/Ammonia/VCM
Design temperature / pressure:	-104°C/ 5,5 bar g acc. to IMO at sea
Maximum cargo density:	972 kg/m ³
Number of segregations:	2
Cargo manifolds:	2 liquid lines, 8", 6" ANSI 300 lbs flanges 2 vapour lines, 4", 6" ANSI 300 lbs flanges
Loading-/Unloading-rate:	900 m ³ /h
Deepwell pump:	2 x 450 m ³ /h/at 120 m LC
Booster pump:	2 x 225 m ³ /h at 120 m LC
Cargo heating / vaporising equipment:	1 indirect ethylene vaporiser 900 m ³ /h at 15°C sea water temp. 1 direct sea water heated LPG-heater / vaporiser 200 t/h propane – 45°C to 0°C at 15°C sea water, vapour 2t/h

Reliquefaction system:

Cascade / direct cycle
2 x refrigerant compressors (refrigerant R 404 A)
2 x cargo compressors
1 purge gas condenser
Stainless steel,

Cargo piping system:

Nitrogen generation plant:

Capacity: Pressure swing adsorption
750 Nm³/h at 0,5 vol. % O₂

Deck Tanks:

Capacity: 1
90 m³
Design Pressure / Temperature: 18 bar g/ -104°C