

7,500 cbm LNG/LPG/Ethylene/Ammonia/VCM-Carrier
“Coral Methane”
for ANTHONY VEDER, The Netherlands

Project Data:

Shipyard:

Remontowa, Gdansk, Poland

Year of completion: 2009

Classification: BV

TGE’s scope:

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



Vessel:

7,500 m³ semi ref. LNG carrier, type 2G

Length o.a. 117.8 m
 Beam: 18.6 m
 Draught (LPG): 6.8 m
 Speed: 15.5 kn

Characteristics of gas plant:

Capacity:	7,500 m ³
Number of cargo tanks:	2
Material of cargo tanks:	AISI 304L
Cargoes:	LNG/LPG/Ethylene/Ammonia/VCM
Design temperature / pressure:	-163°C / 3.2 bar g acc. to IMO at sea
Maximum cargo density:	650 kg/m ³
Number of segregations:	2
Cargo manifolds:	3 liquid lines, 2 x 8”, 1 x 6” ANSI 300 lbs flanges 3 vapour lines, 2 x 6”, 1 x 4” ANSI 300 lbs flanges
Loading- / Unloadingrate:	900 m ³ /h (with vapour return)
Deepwell pump	2 x 450 m ³ /h at 120 m LC for LEG/LPG 2 x 450 m ³ /h at 210 m LC for LNG
Booster pump	1 x 450 m ³ /h at 120 m LC
Number of cargo heater / vaporizer:	
1 indirect ethylene vaporiser	Capacity: 900 m ³ /h at 15°C sea water temp.
1 direct sea water heated LPG-heater / vaporiser	Capacity: 174 t/h Propane from -42°C to 0°C at 15°C sea water, vapour 3 t/h
1 indirect LNG vaporiser	Capacity: vapour 1 t/h
Reliquefaction system:	Cascade / direct cycle (not including LNG) 2 x refrigerant compressors (refrigerant R404A) 2 x cargo compressors 1 suction gas heater for fuelgas
Cargo piping system:	Stainless steel
Nitrogen generation plant:	
Pressure swing adsorption	Capacity: 750 Nm ³ /h at 0.5 vol. % O ₂
Deck Tank:	Capacity: 1 x 80 m ³
Design Pressure / Temperature:	18 bar g/ -163°C