

4 x 35,000 cbm LEG/LPG/Ammonia-Carriers
'Navigator Aurora', 'Navigator Eclipse', 'Navigator Nova' & 'Navigator Prominence'
for NAVIGATOR GAS, United Kingdom

Project Data: 2626A/P, B/Q, C/R, D/S
Shipyard:
 Jiangnan Shipyard Group Co., Ltd., China
Year of completion: 2016-2017
Classification: ABS
TGE's scope:
 EPCS-contract, gas handling system incl. cargo tanks and LNG fuel gas system for ME-GI engine and LNG fuel tanks



Vessel:
 35,000 m³ semi ref. LEG carrier, type 2G
 Length o.a. 179.89 m
 Beam: 29.6 m
 Draught (LPG): 11 m

Characteristics of gas plant:

Capacity:	35,000 m ³
Number of cargo tanks:	3 (bilobe type)
Material of cargo tanks:	5% Ni Steel
Cargoes:	LEG/LPG/VCM/Ammonia
Design temperature / pressure:	-104°C / 4.16 bar g acc. to IMO at sea
Maximum cargo density:	690 kg/m ³
Number of segregations:	2
Cargo manifolds:	2 liquid lines, 1 x 14", 1 x 10" ANSI 300 lbs flanges 2 vapour lines, 1 x 10", 1 x 6" ANSI 150 lbs flanges
Loading- / Unloadingrate:	4,000 m ³ /h / 3,300 m ³ /h
Deepwell pump	6 x 550 m ³ /h at 120 m LC
Booster pump	2 x 550 m ³ /h at 120 m LC
Number of cargo heater / vaporizer:	2 (1xLPG, 1x Ethylene)
1 purge condenser	Shell & tube for LPG & Ethylene
Reliquefaction system:	Cascade / direct cycle 2 x refrigerant compressors (refrigerant Propylene) 3 x cargo compressors
Cargo piping system:	Stainless steel, AISI 316L
Inertgas plant:	PSA type Capacity: 1,500 Nm ³ at 99.5 vol. % N ₂
Deck Tank:	Capacity: 1 x 200 m ³
Design Pressure / Temperature	18 bar g/-104°C
LNG fuel gas system:	2x 1,000 m ³ LNG fuel gas tanks, high pressure fuel gas system for MAN ME-GI dual fuel main engine and low pressure fuel gas system for 4-stroke dual fuel auxiliary engines