

5 x 22,000 m³ LEG/LPG-Carrier MT "Navigator Mars, Navigator Pluto, Navigator Venus, Navigator Saturn, Navigator Neptune" for NAVIGATOR HOLDINGS, USA

Project Data:

Shipyard:

JIANGNAN SHIPYARD, China

Year of completion: 1999/2000

Classification: GL

TGE scope:

EPCS-contract, gas handling system & cargo tanks

Vessel:

22,000 m³ semi ref.

LEG/LPG carrier, type 2G

Length o.a.	171.5 m
Beam:	24.2 m
Depth (main deck):	16.7 m
Draught (VCM):	11.0 m
Speed:	16.5kn



Characteristics of gas plant:

Number of cargo tanks:	22,000 m ³ 4 (bilobe type)
• Material:	5 % Ni steel, 12 Ni 19; DIN Mat.-No.: 1.5680
• Cargoes:	Ethylene/LPG/NH ₃ /VCM
• Design temperature / pressure	-104 °C/4.7/5.4 bar g acc. to IMO 3.4 bar g acc. to USCG
• Maximum cargo density:	972 kg/m ³
• Number of segregations:	3
• Cargo manifolds:	3 liquid lines, 1 x 8", 2 x 10", ANSI 300 lbs flanges 3 vapour lines, 1 x 4", 2 x 6", ANSI 300 lbs flanges
• Loading-/ Unloading-rate:	2,000 m ³ /h / 2.000 m ³ /h
• Deepwell pumps:	8 x 250 m ³ /h at 120 m LC
• Booster pumps:	2 x 500 m ³ /h at 120 m LC
• Number of cargo heater / vaporizer:	1 direct sea-water heated type
• Capacity:	400 m ³ /h Propane from -42°C to 0°C at 15°C sea-water temperature

Reliquefaction system:

cascade cycle, refrigerant Propylene
3 x SULZER compressor
3 x MYCOM compressor

Cargo piping system

Stainless steel, AISI 316 DIN Mat.-No.: 1.4571

Inertgas plant:

• Capacity
PSA type nitrogen generation
1,500 Nm³/h at 99.5 vol.% punity

Deck tanks:

• Capacity
125 m³
• Design pressure temperature:
18 bar g / -104 °C