

2 x 16,500 m³ Ethylene/LPG/Ammonia-Carrier MT "Formosa Crystal/ Formosa Diamond" for Formosa Plastics Marine Co., Taiwan

Project Data:

Shipyard:

JIANGNAN SHIPYARD; China

Year of completion: 2006

Classification: DNV

TGE scope:

EPCS-contract, gas handling system & cargo tanks

Vessel:

16,500 m³ semi ref. Ethylene carrier, type 2G



Length o.a.	155.0 m
Beam:	23.1 m
Depth (main deck):	12.7 m
Draught (LPG):	9.8 m
Speed:	16.0 kn

Characteristics of gas plant:

Capacity:

16,500 m³

Number of cargo tanks:

3 (bilobe type)

• Material:

Low alloy 5 % Ni-steel 12 Ni 19, DIN Mat.-No.: 1.5680

Cargoes:

LPG/Ethylene/VCM/NH₃

Design temperature / pressure:

-104°C/ 4.9 bar g acc. to IMO

3.5 bar g acc. to USCG

Maximum cargo density:

972 kg/m³

Number of segregations:

2

Cargo manifolds:

2 liquid lines, 10", 8" ANSI 300 lbs flanges

2 vapour lines, 8", 6" ANSI 300 lbs flanges

Loading-/Unloading-rate:

1,500 m³/h / 1.500 m³/h

• Deepwell pumps:

6 x 250 m³/h at 120 m LC

• Booster pumps:

2 x 450 m³/h at 120 m LC

Number of cargo heater/vaporizer:

1 direct sea-water heated titanium plate type

• Capacity:

380 m³/h propane from -42°C to 0°C at 15°C sea-water temp.

Reliquefaction system:

Cascade cycle, refrigerant R 404 A

3 x cargo compressor / 2 x refrigerant screw compressor

Cargo piping system:

Stainless steel, AISI 316L

Inertgas plant:

PSA type nitrogen generation

• Capacity:

1,200 Nm³/h at 99.5 vol. % N₂