

6,000 m³ Ethylene/Chem.-Carrier MT "Metaltanque III" for METALNAVE S.A., BRAZIL

Project Data:

Shipyard:

ESTALEIRO ITAJAI, Brazil

Year of completion: 1998

Classification: BV

TGE scope: EPCS-contract,
Gas handling system

Vessel:

6,000 m³ semi ref. Ethylene/ chem.
Carrier, type 2/2G

Length o.a.	114.0 m
Beam:	17.6 m
Depth (main deck):	9.8 m
Draught (LPG):	5.5 m
Speed:	15.0 kn



Characteristics of gas plant:

- Number of cargo tanks: 6,000 m³
3 (cylindrical type)
- Material: Stainless steel, AISI 316 LN
- Cargoes: Ethylene / LPG/NH₃/VCM/ Chemicals
- Design temperature / pressure: -104°C/ 5.0 bar g. acc. to IMO
3.4 bar g acc. to USCG
- Maximum cargo density: 1,840 kg/m³
- Number of segregations: 3
- Cargo manifolds: 3 liquid lines, 2 x 6", 1 x 8", ANSI 300 lbs flanges
3 vapour lines, 2 x 4", 1 x 6", ANSI 300 lbs flanges
- Loading- / Unloading-rate: 900 m³/h / 900 m³/h
- Deepwell pumps: 3 x 300/200 m³/h at 120/52 m LC
- Booster pumps: 1 x 300/150 m³/h at 120/30 m LC
- Number of cargo heater: 1 direct sea-water heated type
- Capacity: 150 m³/ Propane from -42°C to -0°C at 15°C
Sea-water temperature

Reliquefaction system:

Cascade cycle, refrigerant Propylene
2 x SULZER compressor
2 x MYCOM compressor

Cargo piping system:

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

Inertgas plant:

- Capacity: PSA type nitrogen generation
500 Nm³/h at 99.5 vol. % purity

Deck tanks:

- Capacity: 60 m³
- Design pressure / temperature: 18 bar g / - 104°C