

78,000 cbm LPG-FSO
'N'Kossa II'
for A.P. MØLLER, Denmark

Project Data: 803

Shipyard:

Odense Lindø, Denmark

Year of completion: 1996

Classification: BV

TGE's scope:

Chilling units, deck piping system, booster pump & cargo heater, HAZOP studies

Vessel:

78,000 m³ conversion to FSO

Length o.a. 261.1 m

Beam: 36.6 m

Draught (LPG): 10.8 m



Characteristics of gas plant:

Capacity: 78,000 m³

Number of cargo tanks: 4

Material of cargo tanks: Low temp. carbon-manganese steel

Cargoes: LPG

Design temperature / pressure: -46°C / 0.28 bar g acc. to IMO

Maximum cargo density: 610 kg/m³

Number of segregations: 2

Cargo manifolds: 2 liquid lines, 2 x 12" ANSI 150 lbs flanges
 2 vapour lines, 2 x 10" ANSI 150 lbs flanges

Loadingrate: 800 mt/day Propane + 500 mt/ day butane
 Deepwell pump 8 x 500 m³/h at 100 m LC
 Booster pump 1 x 250 m³/h at 120 m LC

Number of cargo heater / vaporizer: 1 direct sea-water heated
 Capacity: 145 t/h Propane from -42°C to 0°C at 15°C sea water temperature

Reliquefaction system: Direct cycle
 5 x oil free cargo compressor

Refrigeration system:
 3 chilling units, refrigerant propane

Cargo piping system: LTCS / stainless steel AISI 316

Inertgas plant:
 Combustion Generator Capacity: 3,000 Nm³/h at 85.0 vol. % purity