

78,000 m³ LPG-FSO MT "N'Kossa II" for A.P. MØLLER GROUP, Denmark

Project Data:

Shipyard:

ODENSE LINDØ, Denmark

Year of completion: 1996

Classification: BV

TGE 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
Depth (main deck):	20.4 m
Draught (LPG):	10.8 m

Characteristics of gas plant:

- Number of cargo tanks: 4
- Material: 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
- Loading rate: 800 mt/day propane + 500 mt/ day butane
- Deepwell pumps: 8 x 500 m³/h at 100 m LC
- Booster pumps: 1 x 250 m³/h at 120 m LC
- Number of cargo heater: 1
- Type: 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:

- Capacity: Combustion Generator
3.000 Nm³/h at 85 vol. % purity