The vessel is designed as single screw, asphalt/oil tanker for unrestricted navigation, being capable to carry oil products (FP above 60°C), asphalt/bitumen with gravity up to 1.30 t/m³ at 250°C in four pcs cargo tank blocks independent from hull structure. Cargo tanks are carried on special supporting structure and the movements are restricted by special keys. Cargo area arrangement includes a continuous main deck, four independent cargo tank blocks, double bottom and side tanks for ballast and cargo pump rooms. Cargo operations flexibility is enhanced by loading/unloading of three different substances at full segregation and shore connection for all tanks. Structural elements face into the cargo tanks and complete hull structure is analysed by FEM tools for safety and weight optimization. The hull form, optimized with CFD analysis, is designed for minimum resistance and fuel consumption. Special attention is paid on design for minimizing noise and vibration levels onboard to maximize comfort of crew. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit.

**BENEFITS**

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- No thermal stress on hull structure
- Low maintenance period
- Extra safety with triple hull structure
18 000 CBM ASPHALT TANKER

SPECS

**Capacities**
- Cargo: 18 000 m³
- Water Ballast: 9 900 m³
- HFO: 1 000 m³
- MDO: 130 m³
- Fresh Water: 150 m³

**Speed Consumption/Range**
- Design speed: 14.0 knots
- Consumption: 12.2 t/day
- Cruising range: 15 500 nm

**Machinery Main Components**
- Main Engine: 1 x 5 640 kW
- Propeller: 1 x 4 500 mm CPP
- Diesel Generator: 3 x 1200 kW
- Em’cy Diesel Generator: 1 x 150 kW

**Main Dimensions**
- $L_{OA}$: 155.00 m
- $L_{BP}$: 149.00 m
- $B$ (molded): 25.00 m
- $D$ (molded): 14.60 m
- Draught (design): 9.20 m
- Draught (scantling): 9.50 m

**Tonnage**
- DWT (at design): 18 500 t
- DWT (at scantling): 19 995 t
- GRT (app): 15 500
- NT (app): 4 650

**SCOPE OF SERVICES**
- Conceptual Design
- Contract Design
- Production Engineering
- Post Production Services
- DeltaLoad Ship Loading Software
- Advanced Engineering Analyses
- Project & Document Management
- Supervision Services
- Procurement Consultancy
- Feasibility Analyses

**REFERENCES**
- T.ESRA
- T.AYLIN

The accommodation area is arranged for 19 cabin with private facilities including pilot cabin. Accommodation includes hospital.

Lifesaving equipment is arranged for 20 people.