

# MERCHANT SHIPS PORTFOLIO

CREATING SOLUTIONS, CREATING FUTURE







# MERCHANT SHIPS PORTFOLIO

CREATING SOLUTIONS, CREATING FUTURE





# Smart Solutions for Safer Seas



180000 DWT BULK CARRIER



2500 TEU CARGO SHIP



5000 CBM LNG BUNKER TANKER



25000 DWT GENERAL CARGO SHIP



10000 DWT OIL&CHEMICAL TANKER



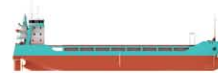
1800 PAX PASSENGER SHIP



18000 CBM ASPHALT TANKER



2600 DWT OIL&CHEMICAL TANKER



5000 DWT GENERAL CARGO SHIP



3500 DWT LPG TANKER



26000 DWT GENERAL CARGO SHIP



12500 DWT OIL&CHEMICAL TANKER



850 PAX DAY-FERRY



15000 DWT OIL&CHEMICAL TANKER



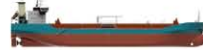
6400 DWT OIL&CHEMICAL TANKER



25000 DWT OIL&CHEMICAL TANKER



6825 CBM ASPHALT TANKER



7000 DWT OIL&CHEMICAL TANKER



300 PAX PASSENGER SHIP



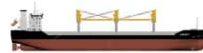
30 M FISHERIES RESEARCH VESSEL



16750 DWT GENERAL CARGO SHIP



3500 DWT OIL&CHEMICAL TANKER



20000 DWT BULK CARRIER



1900 TEU CONTAINER SHIP



OIL RECOVERY SHIP

Delta Marine founded in 1996 by a group of naval architects, is a ship design and consultancy firm established to meet the demands of engineering solutions for maritime sector and shipbuilding activities. The company provides design, engineering and consultancy services for building of merchant/naval, yachts and offshore structures.

From very beginning of its establishment, Delta Marine has begun to present integrated solutions covering basic design, production engineering, post-production services, advanced engineering analysis, project management, building supervision and consultancy. By following the latest developments both in professional and computer technologies Delta Marine's continuously improved service quality has drawn big interest from clients. Thus the company has become the most reputable ship design consultancy in Turkey and a favorite partner in World market.

Delta Marine always cares about working with a multidisciplinary staff who bring added value into each phase of the design process. Throughout the years the company has always acted as an academia from where many young engineers and technicians have graduated. Delta Marine relies on blending the experience with dynamism to establish a strong, focused and efficient team while embracing different approaches in a manner to reach professional perfection.

Delta Marine follows the approach of client-focused design development and expanding the corporate knowledge by benefiting from every feedback which happens in various projects. This philosophy has been proven many times so that the organization started to be known as a solution creator providing economical, safe, comfortable, aesthetic and environment-friendly products to maritime sector. Today Delta Marine is proud to present a big fleet sailing in different parts of the World's seas.





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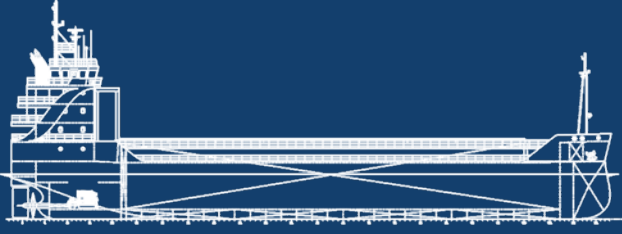
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# GENERAL CARGO SHIPS



# 5000 DWT GENERAL CARGO SHIP

This project is created as a single and box-shaped design to ease the loading/unloading operations. The operational costs are minimized by determination of special gross tonnage, engine power and crew capacity. The length of the ship is intentionally determined while optimized steel weight provides low level investment cost. During the design process the state-of-the-art technology has been used with computer aided naval architecture tools and advanced engineering applications have been carried out to create an economical, safe and comfortable unit.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 5000 DWT GENERAL CARGO SHIP

# SPECS



### Capacities

Cargo	6 260 m <sup>3</sup>
Water Ballast	1 600 m <sup>3</sup>
HFO	90 m <sup>3</sup>
MDO	26 m <sup>3</sup>
Fresh Water	44 m <sup>3</sup>



### Speed Consumption/Range

Design speed	12.5 knots
Consumption	6.2 t/day
Cruising range	3 750 nm



### Machinery Main Components

Main Engine	2 x 745 kW
Propeller	2 x 3 500 mm FPP
Diesel Generator	2 x 200 kW
Em'cy Diesel Generator	1 x 99 kW



### Complement

The accommodation area is to be arranged for 12 crews. Ten (10) single berth cabins and two (2) suits with separate bedroom are to be provided.

Lifesaving equipment is to be arranged for twelve (12) people.



### Main Dimensions

L <sub>OA</sub>	80.20 m
L <sub>BP</sub>	78.11 m
B (molded)	16.00 m
D (molded)	7.50 m
Draught (design)	6.00 m
Draught (scantling)	6.55 m



### Tonnage

DWT (at design)	4 600 t
DWT (at scantling)	5 200 t
GRT (app)	2 990
NT (app)	1 730

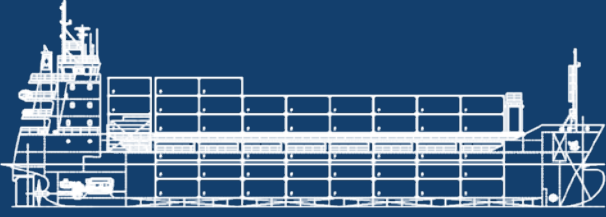
### SCOPE OF SERVICES

- 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

No References Yet





# 5000 DWT GENERAL CARGO SHIP

The vessel is designed as double hull, single screw propulsion, general cargo vessel for unrestricted navigation, being capable to carry general cargoes, bulk cargoes, steel coil and container. There is one (1) box-shaped cargo hold which eases the loading / unloading operations. There is one (1) gantry crane which serves pontoon type hatch covers. Cargo hold tank top is reinforced against the loads up to 12 t/m<sup>2</sup>. There is no structural element facing in the hold and this design brings the advantage of reduction in time for cleaning. The operational costs are minimized by determination of special gross tonnage, engine power and crew capacity. The length of the ship is intentionally determined while optimized steel weight provides low level investment cost. During the design process the state-of-the-art technology has been used with computer aided naval architecture tools and advanced engineering applications have been carried out to create an economical, safe and comfortable unit.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo.



CONTAINER



BULK CARRIER



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UTILITY



## 5000 DWT GENERAL CARGO SHIP

# SPECS



### Capacities

Cargo	5 900 m <sup>3</sup>
Water Ballast	1 930 m <sup>3</sup>
HFO	110 m <sup>3</sup>
MDO	25 m <sup>3</sup>
Fresh Water	33 m <sup>3</sup>



### Speed Consumption/Range

Design speed	11.0 knots
Consumption	5.0 t/day
Cruising range	4 750 nm



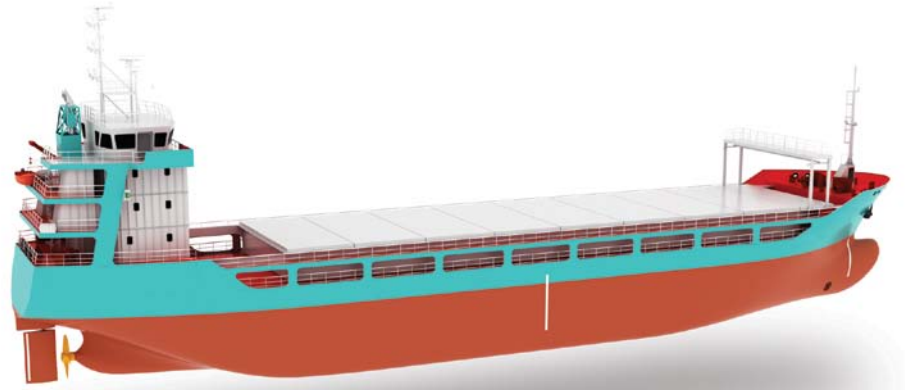
### Machinery Main Components

Main Engine	1 x 1 200 kW
Propeller	1 x 3 600 mm FPP
Diesel Generator	2 x 225 kW
Em'cy Diesel Generator	1 x 99 kW



### Complement

The accommodation area is to be arranged for 12 crews. Ten (10) single berth cabins and two (2) suits with separate bedroom are to be provided with private facilities.



### Main Dimensions

L <sub>OA</sub>	83.12 m
L <sub>BP</sub>	78.05 m
B (molded)	15.80 m
D (molded)	7.65 m
Draught (design)	6.00 m
Draught (scantling)	6.60 m



### Tonnage

DWT (at design)	4 670 t
DWT (at scantling)	5 000 t
GRT (app)	2 930
NT (app)	1 625

### 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

- TÜRK YILDIZI - 1
- TÜRK YILDIZI - 2
- TÜRK YILDIZI - 3



# 7500 DWT GENERAL CARGO SHIP

The project is mainly designed as single screw, double hull, box shaped two cargo holds, serving with folding type hatch covers and two deck cranes. She is designed for carriage of general cargoes, timber, paper, project cargoes, bulk cargoes such as coal, grain, dangerous cargo (Solas II-2 Reg 19) and container cargoes (optional) in holds up to 10 t/m<sup>2</sup>, on main deck and on hatch covers. Cargo holds are surrounded by double hull from side and bottom. Tank top and side lower plating are reinforced for grab discharge. During the design process the state-of-the-art technology has been used with computer aided naval architecture tools and advanced engineering applications have been carried out to create an economical, safe and comfortable unit.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 7500 DWT GENERAL CARGO SHIP

# SPECS



### Capacities

Cargo	9 770 m <sup>3</sup>
Water Ballast	2 900 m <sup>3</sup>
HFO	300 m <sup>3</sup>
MDO	80 m <sup>3</sup>
Fresh Water	80 m <sup>3</sup>



### Speed Consumption/Range

Design speed	12.5 knots
Consumption	8.8 t/day
Cruising range	9 000 nm



### Machinery

#### Main Components

Main Engine	1 x 2 040 kW
Propeller	1 x 3 900 mm FPP
Diesel Generator	3 x 450 kW
Em'cy Diesel Generator	1 x 99 kW



### Complement

The accommodation area is arranged for 16 crews (14 cabins with single berth, 2 suits with separate bedroom, 1 pilot/owner cabin).

Lifesaving equipment is arranged for twenty (20) people. Safety manning is twenty (20) people.



### Main Dimensions

L <sub>OA</sub>	113.85 m
L <sub>BP</sub>	106.20 m
B (molded)	18.20 m
D (molded)	8.50 m
Draught (design)	6.50 m
Draught (scantling)	6.50 m



### Tonnage

DWT (at design)	7 500 t
DWT (at scantling)	7 750 t

### 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

No References Yet



# 16 750 DWT GENERAL CARGO SHIP

While the hull form and propulsion parameters optimized to perfection and the steel material optimized for minimum weight this project's design is based on single two-stroke engine, fixed pitch highly efficient propeller, four pieces of box-shape holds, three pieces of cargo cranes (two pieces 30 t and one piece of 40 t), 20 t/m<sup>2</sup> tank-top load, Grab Discharge class notation, allowance to load dangerous goods, double skinned holds and bunker tanks, shallow draught and strengthened structure for iced sea areas. These sophisticated design properties provides building of a single screw, single deck, shallow draught ship able to make trade at worldwide level for carriage of general cargoes, steel coil, coal, grain, dangerous good etc.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo
- Ability to enter to ports with low draught
- Ability to sail in iced sea areas



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



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16 750 DWT GENERAL CARGO SHIP

# SPECS



### Capacities

Cargo	21 760 m <sup>3</sup>
Water Ballast	7 650 m <sup>3</sup>
HFO	640 m <sup>3</sup>
MDO	80 m <sup>3</sup>
Fresh Water	140 m <sup>3</sup>



### Speed Consumption/Range

Design speed	13.5 knots
Consumption	15.5 t/day
Cruising range	11 000 nm



### Machinery Main Components

Main Engine	1 x 4 440 kW
Propeller	1 x 3 950 mm FPP
Diesel Generator	3 x 475 kW
Em'cy Diesel Generator	1 x 99 kW



### Complement

The accommodation area is arranged for twenty (20) crews and one pilot/owner. Eighteen (18) single berth cabins, two (2) suits with separate bedrooms and one (1) cabin for pilot/owner are provided. Lifesaving equipment is arranged for twenty one (21) people. aaarranged for twenty one (21) people.



### Main Dimensions

L <sub>OA</sub>	152.50 m
L <sub>BP</sub>	146.00 m
B (molded)	22.50 m
D (molded)	10.80 m
Draught (design)	7.00 m
Draught (scantling)	7.75 m



### Tonnage

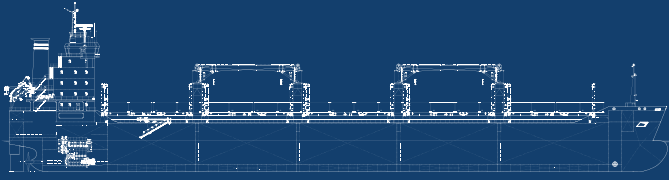
DWT (at design)	14 500 t
DWT (at scantling)	16 750 t
GRT (app)	11 600
NT (app)	5 700

### 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

- PEACE
- ZEALAND JULIANA
- YM EVEREST



# 25 000 DWT GENERAL CARGO SHIP

While the hull form and propulsion parameters optimized to perfection and the steel material optimized for minimum weight this projects design is based on single two-stroke engine, controllable pitch highly efficient propeller, five pieces of box-shaped cargo holds, four (4) pieces of 30 t cargo cranes, 18 t/m<sup>2</sup> tank-top load, Grab Discharge class notation, double skinned holds and bunker tanks and shallow draught. These sophisticated design properties enables building of a single screw, single deck, shallow draught ship able to make trade at worldwide level for carriage of general cargoes, steel coil, coal, grain, dangerous good, etc.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo
- Ability to enter to ports with low draught
- Ability to sail in iced sea areas



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 25 000 DWT GENERAL CARGO SHIP

# SPECS



### Capacities

Cargo	34 920 m <sup>3</sup>
Water Ballast	11 870 m <sup>3</sup>
HFO	1 000 m <sup>3</sup>
MDO	100 m <sup>3</sup>



### Speed Consumption/Range

Design speed	14.0 knots
Consumption	21.8 t/day
Cruising range	15 000 nm



### Machinery Main Components

Main Engine	1 x 6 300 kW
Propeller	1 x 5 000 mm CPP
Diesel Generator	3 x 475 kW
Em'cy Diesel Generator	1 x 99 kW



### Complement

The accommodation area is arranged for twenty two (22) crews and one pilot. Nineteen (19) single berth cabins, four (4) suits with separate bedrooms and additional two (2) spare cabins are provided.

Lifesaving equipment is arranged for twenty five (25) people.



### Main Dimensions

L <sub>OA</sub>	170.00 m
L <sub>BP</sub>	164.00 m
B (molded)	27.60 m
D (molded)	12.60 m
Draught (design)	8.00 m
Draught (scantling)	8.40 m



### Tonnage

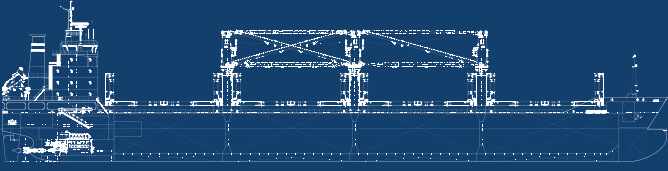
DWT (at design)	22 300 t
DWT (at scantling)	25 000 t

### 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

No References Yet



# 26 000 DWT GENERAL CARGO SHIP

While the hull form and propulsion parameters optimized to perfection and the steel material optimized for minimum weight, this project's design is based on single two-stroke engine, controllably pitch highly efficient propeller, four pieces of box-shaped holds, two (2) pieces of 30 t cargo cranes and one (1) piece of 40 t cargo crane, 20 t/m<sup>2</sup> tank-top load, Grab Discharge class notation, double skinned holds and bunker tanks and shallow draught. These sophisticated design properties enables building of a single screw, single deck, shallow draught ship able to make trade at worldwide level for carriage of general cargoes, steel coil, coal, grain, dangerous good, etc.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo
- Ability to enter to ports with low draught
- Ability to sail in iced sea areas





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 26 000 DWT GENERAL CARGO SHIP

# SPECS



### Capacities

Cargo	34 350 m <sup>3</sup>
Water Ballast	10 930 m <sup>3</sup>
HFO	1 020 m <sup>3</sup>
MDO	165 m <sup>3</sup>
Fresh Water	120 m <sup>3</sup>



### Speed Consumption/Range

Design speed	14.0 knots
Consumption	21.8 t/day
Cruising range	15 000 nm



### Machinery Main Components

Main Engine	1 x 6 300 kW
Propeller	1 x 5 600 mm CPP
Diesel Generator	3 x 475 kW
Em'cy Diesel Generator	1 x 99 kW



### Complement

The accommodation area is arranged for twenty one (21) crews and one pilot. Eighteen (18) single berth cabins, four (4) suits with separate bedrooms and additional two (2) spare cabins are provided.

Lifesaving equipment is arranged for twenty five (25) people.



### Main Dimensions

L <sub>OA</sub>	173.75 m
L <sub>BP</sub>	166.00 m
B (molded)	27.20 m
D (molded)	12.60 m
Draught (design)	8.50 m
Draught (scantling)	8.79 m



### Tonnage

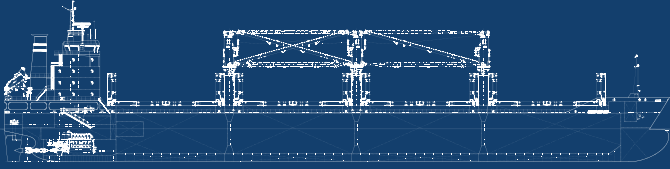
DWT (at design)	24 850 t
DWT (at scantling)	26 050 t
GRT	18 035
NT	8 560

### 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

- ZEALAND AMALIA
- ZEALAND MAXIMA



# 28 000 DWT GENERAL CARGO SHIP

While the hull form and propulsion parameters optimized to perfection and the steel material optimized for minimum weight this projects design is based on single two-stroke engine, controllable pitch highly efficient propeller, five pieces of box-shaped cargo holds, two (2) pieces of 30 t and one (1) piece of 40 t cargo cranes, 20 t/m<sup>2</sup> tank-top load, Grab Discharge class notation, double skinned holds and bunker tanks and shallow draught. These sophisticated design properties enables building of a single screw, single deck, able to make trade at worldwide level for carriage of general cargoes, steel coil, coal, grain, dangerous good, etc.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo
- Ability to enter to ports with low draught
- Ability to sail in iced sea areas





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 28 000 DWT GENERAL CARGO SHIP

# SPECS



### Capacities

Cargo	37 800 m <sup>3</sup>
Water Ballast	12 000 m <sup>3</sup>
HFO	1 100 m <sup>3</sup>
MDO	100 m <sup>3</sup>



### Speed Consumption/Range

Design speed	14.0 knots
Consumption	22.6 t/day
Cruising range	16 000 nm



### Machinery Main Components

Main Engine	1 x 5 800 kW
Propeller	1 x 5 000 mm FPP
Diesel Generator	3 x 475 kW
Em'cy Diesel Generator	1 x 99 kW



### Complement

The accommodation area is arranged for twenty two (22) crews and one pilot. Nineteen (19) single berth cabins, four (4) suits with separate bedrooms and additional two (2) spare cabins are provided.

Lifesaving equipment is arranged for twenty five (25) people.



### Main Dimensions

L <sub>OA</sub>	173.75 m
L <sub>BP</sub>	166.00 m
B (molded)	27.20 m
D (molded)	13.80 m
Draught (design)	8.75 m
Draught (scantling)	9.50 m



### Tonnage

DWT (at design)	25 000 t
DWT (at scantling)	28 000 t

### 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

No References Yet



# BULK CARRIERS



# 20 000 DWT BULK CARRIER

While the hull form and propulsion parameters optimized to perfection and the steel material optimized for minimum weight, this project's design is based on single two-stroke engine, fixed pitch highly efficient propeller, four pieces of box-shape holds, three (3) pieces of 30 t cargo cranes, 18 t/m<sup>2</sup>; tank-top load, Grab Discharge class notation, allowance to load dangerous goods and double skinned holds and bunker tanks. 24.5x18.2 m clear hatch openings give the vessel easy loading/unloading. Each cargo hold has mechanical ventilation system. These sophisticated design properties provides building of a single screw, single deck ship able to make trade at worldwide level for carriage of bulk cargoes such as coal, grain, ore, etc. as well as heavy cargoes.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo



CONTAINER



**BULK CARRIER**



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 20 000 DWT BULK CARRIER

# SPECS



### Capacities

Cargo	26 630 m <sup>3</sup>
Water Ballast	8 135 m <sup>3</sup>
HFO	750 m <sup>3</sup>
MDO	110 m <sup>3</sup>
Fresh Water	135 m <sup>3</sup>



### Speed Consumption/Range

Design speed	14.0 knots
Consumption	20.8 t/day
Cruising range	12 000 nm



### Machinery Main Components

Main Engine	1 x 5 920 kW
Propeller	1 x 4 300 mm FPP
Diesel Generator	3 x 575 kW
Em'cy Diesel Generator	1 x 150 kW



### Complement

The accommodation area is arranged for twenty (20) crews, one (1) repair man and one (1) pilot. Nine (9) single berth cabins, nine (9) double berth cabins, two (2) suits with separate bedrooms and additional two (2) cabins for repair man and pilot are provided. Lifesaving equipment is arranged for twenty two (22) people.



### Main Dimensions

L <sub>OA</sub>	157.90 m
L <sub>BP</sub>	151.50 m
B (molded)	23.20 m
D (molded)	12.50 m
Draught (design)	8.60 m
Draught (scantling)	9.00 m



### Tonnage

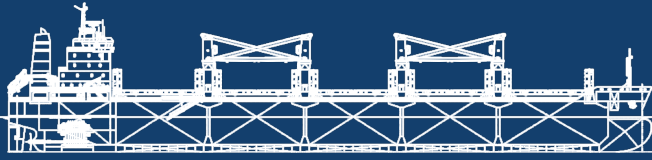
DWT (at design)	4 600 t
DWT (at scantling)	5 200 t
GRT (app)	2 990
NT (app)	1 730

### 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

- EYLUL K
- ISMAIL K



# 32000 DWT BULK CARRIER

While the hull form and propulsion parameters optimized to perfection and the steel material optimized for minimum weight, this projects design is based on single two-stroke engine, fixed pitch highly efficient propeller, four pieces of box-shape holds, four (4) pieces of 35 t cargo cranes, 20 t/m<sup>2</sup> tank-top load, allowance to load dangerous goods, compliance with CSR and double skinned holds and bunker tanks. These sophisticated design properties provides building of a single screw, single deck ship able to make trade at worldwide level for carriage of bulk cargoes such as grain, ore, cement, alumina, bauxite, mineral sand, steel coils, timber and certain dangerous cargoes.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo



CONTAINER



**BULK CARRIER**



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL

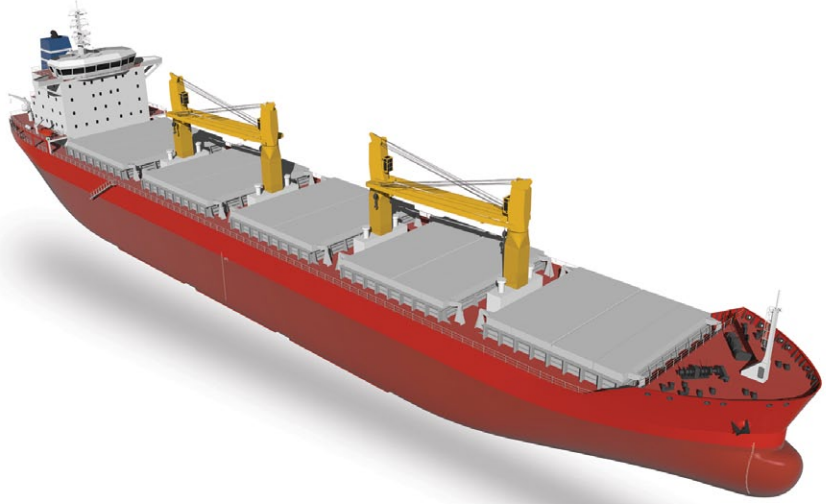


UTILITY



## 32 000 DWT BULK CARRIER

# SPECS



### Capacities

Cargo	42 000 m <sup>3</sup>
Water Ballast	21 500 m <sup>3</sup>
HFO	1 500 m <sup>3</sup>
MDO	200 m <sup>3</sup>
Fresh Water	200 m <sup>3</sup>



### Speed Consumption/Range

Design speed	14.0 knots
Consumption	20.9 t/day
Cruising range	21 500 nm



### Machinery Main Components

Main Engine	1 x 6 050 kW
Propeller	1 x 6 000 mm FPP
Diesel Generator	3 x 680 kW
Em'cy Diesel Generator	1 x 120kW



### Complement

The accommodation area is arranged for twenty three (23) crews and one (1) pilot. Nineteen (19) single berth cabins, four (4) suits with separate bedrooms and additional one (1) cabin for pilot are provided.

Lifesaving equipment is arranged for twenty two (24) people.



### Main Dimensions

L <sub>OA</sub>	180.00 m
L <sub>BP</sub>	174.00 m
B (molded)	28.00 m
D (molded)	14.15 m
Draught (design)	9.30 m
Draught (scantling)	9.80 m



### Tonnage

DWT (at design)	30 000 t
DWT (at scantling)	32 000 t
GRT (app)	21 200
NT (app)	11 200

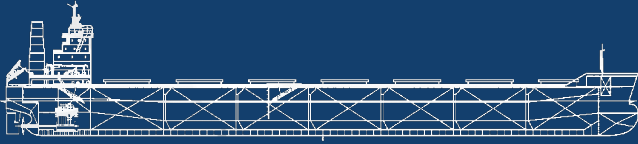
### SCOPE OF SERVICES

- 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

⚓ No References Yet





# 78 000 DWT BULK CARRIER

While the hull form and propulsion parameters optimized to perfection and the steel material optimized for minimum weight, this design is based on single two-stroke engine, fixed pitch highly efficient propeller, seven pieces of cargo holds, Grab Discharge class notation, compliance with CSR, double skinned holds and bunker tanks. These sophisticated design properties provides building of a single screw, single deck, gearless ship able to make trade at worldwide level for carriage of light bulk cargoes such as grain, coal, fertilizer as well as heavier cargoes like ore, bauxite in bulk.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Compliance with IACS CSR Rules
- Ability to carry various types of cargo





CONTAINER



**BULK CARRIER**



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 78 000 DWT BULK CARRIER

# SPECS



### Capacities

Cargo	86 670 m <sup>3</sup>
Water Ballast	38 750 m <sup>3</sup>
HFO	2 050 m <sup>3</sup>
MDO	150 m <sup>3</sup>
Fresh Water	200 m <sup>3</sup>



### Speed Consumption/Range

Design speed	13.0 knots
Consumption	30.0 t/day
Cruising range	15 000 nm



### Machinery Main Components

Main Engine	1 x 8 500 kW
Propeller	1 x 6500 mm FPP
Diesel Generator	3 x 750 kW
Em'cy Diesel Generator	1 x 150 kW



### Complement

The accommodation area is arranged for twenty eight (28) crews, one (1) owner, one (1) pilot and six (6) suits with separate bedrooms and additional three (3) cabins for pilot, owner and Suez crew are provided.

Lifesaving equipment is arranged for thirty six (36) people.



### Main Dimensions

L <sub>OA</sub>	230.00 m
L <sub>BP</sub>	223.70 m
B (molded)	38.00 m
D (molded)	17.50 m
Draught (design)	11.50 m
Draught (scantling)	12.00 m



### Tonnage

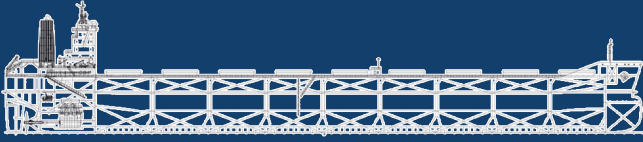
DWT (at design)	74 000 t
DWT (at scantling)	78 000 t
GRT (app)	45 300
NT (app)	21 650

### 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

⚓ No References Yet



# 180 000 DWT BULK CARRIER

While the hull form and propulsion parameters optimized to perfection and the steel material optimized for minimum weight this project's design is based on single two-stroke engine, fixed pitch highly efficient propeller, nine pieces of cargo holds, Grab Discharge class notation, compliance with CSR and double skinned holds and bunker tanks. These sophisticated design properties enables building of a single screw, single deck ship able to make trade at worldwide level for carriage of cargoes such as coal, ore, grain, etc and heavy cargoes.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo
- Compliance with IACS CSR Rules



CONTAINER



**BULK CARRIER**



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 180 000 DWT BULK CARRIER

# SPECS



### Capacities

Cargo	196 515 m <sup>3</sup>
Water Ballast	60 070 m <sup>3</sup>
HFO	4 465 m <sup>3</sup>
MDO	260 m <sup>3</sup>
Fresh Water	630 m <sup>3</sup>



### Speed Consumption/Range

Design speed	14.5 knots
Consumption	68.0 t/day
Cruising range	20 000 nm



### Machinery

#### Main Components

Main Engine	1 x 18 660 kW
Propeller	1 x 8 000 mm FPP
Diesel Generator	3 x 970 kW
Em'cy Diesel Generator	1 x 150 kW



### Complement

The accommodation area is arranged for thirty (30) crews with pilot cabin, owner cabin and Suez crew cabin. Twenty two (22) single berth cabins for crew, two (2) single berth cabins for junior officers, six (6) suites (three different types) with separate bedrooms for upper rank officers are fitted. Lifesaving equipment is arranged for thirty two (32) people.



### Main Dimensions

L <sub>OA</sub>	289.00 m
L <sub>BP</sub>	280.50 m
B (molded)	45.00 m
D (molded)	24.80 m
Draught (design)	16.10 m
Draught (scantling)	18.25 m



### Tonnage

DWT (at design)	155 000 t
DWT (at scantling)	181 000 t

### SCOPE OF SERVICES

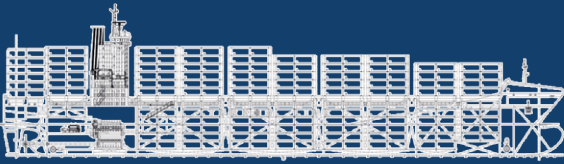
- Conceptual Design
- Contract Design
- Production Engineering
- Post Production Services
- DeltaLoad Ship Loading Software
- Advanced Engineering Analyses
- Project & Document Management
- Supervision Services
- Procurement Consultancy
- Feasibility Analyses

### REFERENCES

⚓ TBN (SEDEF NB158)



# CONTAINER SHIPS



# 1900 TEU CONTAINER SHIP

The vessel is designed as a single screw double skinned, gearless container ship for unrestricted navigation and service. She is capable to carry containers in box shaped holds and strengthened with continuous double bottom and double side hull construction. Hull structure is analysed by FEM tools for safety, weight optimization and vibration. The hull form, optimized with CFD analysis, is designed for minimum resistance, minimum fuel consumption at economical speed. 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
- Fast feeder



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



1900 TEU CONTAINER SHIP

# SPECS



## Capacities

Cargo	35 600 m <sup>3</sup>
Water Ballast	12 100 m <sup>3</sup>
HFO	2 050 m <sup>3</sup>
MDO	170 m <sup>3</sup>
Fresh Water	215 m <sup>3</sup>



## Speed Consumption/Range

Design speed	19.5 knots
Consumption	49.0 t/day
Cruising range	17 500 nm



## Machinery Main Components

Main Engine	1 x 13 280 kW
Propeller	1 x 5 900 mm FPP
Diesel Generator	3 x 740 kW
Em'cy Diesel Generator	1 x 300 kW



## Complement

The accommodation area is arranged for eighteen (18) crews, one (1) owner and one (1) pilot. Fourteen (14) single berth cabins, four (4) suits with separate bedrooms and two (2) cabins for pilot and owner are provided.

Lifesaving equipment is arranged for twenty (20) people.



## Main Dimensions

L <sub>OA</sub>	182.85 m
L <sub>BP</sub>	171.00 m
B (molded)	28.00 m
D (molded)	16.10 m
Draught (design)	10.00 m
Draught (scantling)	11.00 m



## Tonnage

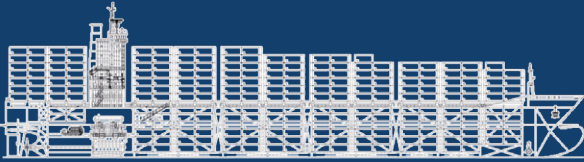
DWT (at design)	22 600 t
DWT (at scantling)	26 810 t
GRT (app)	21 090
NT (app)	8 600

## 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

- CAFER DEDE
- IBRAHIM DEDE
- KAAAN KALKAVAN
- MUKADDES KALKAVAN
- MUSTAFA DAYI
- NEVZAT KALKAVAN



# 2500 TEU CONTAINER SHIP

The vessel is designed as a single screw double skinned container ship for unrestricted navigation and service. She is capable to carry containers in box shaped holds and strength- ened with continuous double bottom and double side hull construction. Hull structure is analysed by FEM tools for safety, weight optimization and vibration. The hull form, optimized with CFD analysis, is designed for minimum resistance, minimum fuel consumption at economical speed. 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
- Fast feeder





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



2500 TEU CONTAINER SHIP

# SPECS



## Capacities

Cargo	45 257 m <sup>3</sup>
Water Ballast	14 260 m <sup>3</sup>
HFO	3 645 m <sup>3</sup>
MDO	187 m <sup>3</sup>
Fresh Water	197 m <sup>3</sup>



## Speed Consumption/Range

Design speed	19.0 knots
Consumption	61.0 t/day
Cruising range	24 000 nm



## Machinery Main Components

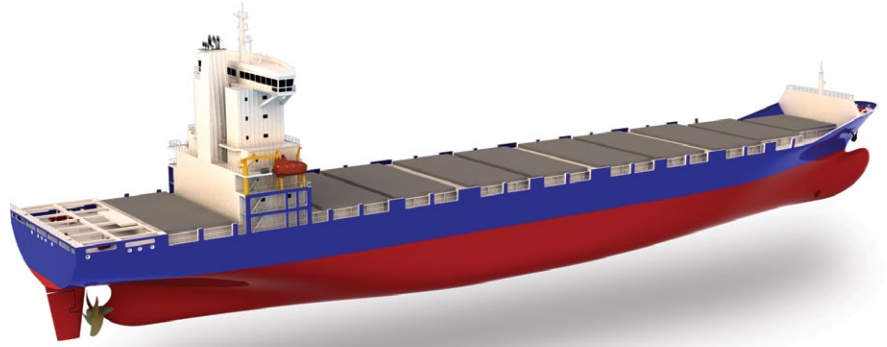
Main Engine	1 x 16 662 kW
Propeller	1 x 6 750 mm FPP
Diesel Generator	4 x 1 215 kW
Em'cy Diesel Generator	1 x 150 kW



## Complement

The accommodation area is arranged for twenty one (21) crews, one (1) owner and one (1) pilot. Seventeen (17) single berth cabins, four (4) suits with separate bedrooms and two (2) cabins for pilot and owner are provided.

Lifesaving equipment is arranged for twenty three (23) people.



## Main Dimensions

L <sub>OA</sub>	197.60 m
L <sub>BP</sub>	182.25 m
B (molded)	30.20 m
D (molded)	17.00 m
Draught (design)	11.00 m
Draught (scantling)	12.00 m



## Tonnage

DWT (at design)	31 370 t
DWT (at scantling)	36 300 t

## SCOPE OF SERVICES

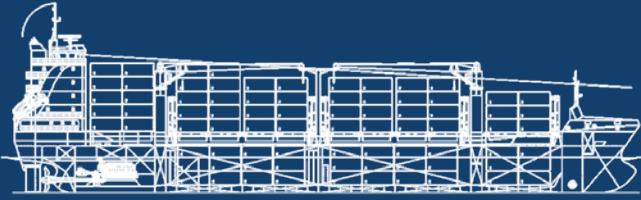
- Conceptual Design
- Contract Design
- Production Engineering
- Post Production Services
- DeltaLoad Ship Loading Software
- Advanced Engineering Analyses
- Project & Document Management
- Supervision Services
- Procurement Consultancy
- Feasibility Analyses

## REFERENCES

No References Yet



# MULTIPURPOSE CARGO SHIPS



# 6500 DWT

## MULTIPURPOSE CARGO SHIP

While the hull form and propulsion parameters optimized to perfection and the steel material optimized for minimum weight this project's design is based on single four-stroke engine, controllable pitch highly efficient propeller, three (3) cargo holds (two of them box-shaped), two (2) pieces of 45 t cargo cranes, 25 t/m<sup>2</sup> tank-top load, "Heavy Cargo" class notation, allowance to carry dangerous goods and double skinned holds and bunker tanks. These sophisticated design properties provides building of a single screw, single deck ship able to make trade at worldwide level for carriage of general cargoes, timber, paper, bulk cargoes such as coal, grain, steel coils, dangerous cargoes and container cargoes in holds, on main deck and on hatch covers.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



6500 DWT MULTIPURPOSE CARGO SHIP

# SPECS



## Capacities

Cargo	9 350 m <sup>3</sup>
Water Ballast	3 000 m <sup>3</sup>
HFO	735 m <sup>3</sup>
MDO	114 m <sup>3</sup>
Fresh Water	100 m <sup>3</sup>



## Speed Consumption/Range

Design speed	16.5 knots
Consumption	16.5 t/day
Cruising range	14 500 nm



## Machinery Main Components

Main Engine	1 x 4 500 kW
Propeller	1 x 4 800 mm FPP
Diesel Generator	3 x 450 kW
Em'cy Diesel Generator	1 x 99 kW
Shaft Generator	1 x 1 300 kW



## Complement

The accommodation area is arranged for twenty three (23) crews. Fourteen (14) single berth cabins, two (2) two berth cabins, three (3) suits with separate bedrooms and additional two (2) cabins for pilot and owner are provided.

Lifesaving equipment is arranged for twenty four (24) people.



## Main Dimensions

L <sub>OA</sub>	120.50 m
L <sub>BP</sub>	112.95 m
B (molded)	18.80 m
D (molded)	9.00 m
Draught (design)	6.50 m
Draught (scantling)	6.80 m



## Tonnage

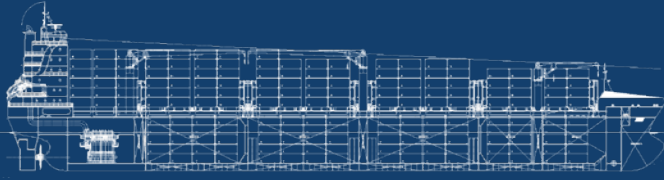
DWT (at design)	6 500 t
DWT (at scantling)	7 000 t

## 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

No References Yet



# 25000 DWT MULTIPURPOSE CARGO SHIP

While the hull form and propulsion parameters optimized to perfection and the steel material optimized for minimum weight this projects design is based on single two-stroke engine, controllable pitch highly efficient propeller, three (3) cargo holds (two of them box-shaped), two (2) pieces of 45t/30 m and one (1) piece of 45t/16 m cargo cranes, 25t/m<sup>2</sup> tank-top load, "Heavy Cargo" class notation, allowance to carry dangerous goods and double skinned holds and bunker tanks. These sophisticated design properties provides building of a single screw, single deck ship able to make trade at worldwide level for carriage of general cargoes, timber, paper, bulk cargoes such as coal, grain, steel coils, dangerous cargoes and container cargoes in holds, on main deck and on hatch covers.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



25000 DWT MULTIPURPOSE CARGO SHIP

# SPECS



## Capacities

Cargo	33 000 m <sup>3</sup>
Water Ballast	12 000 m <sup>3</sup>
HFO	2 500 m <sup>3</sup>
MDO	114 m <sup>3</sup>
Fresh Water	110 m <sup>3</sup>



## Speed Consumption/Range

Design speed	18.0 knots
Consumption	42.7 t/day
Cruising range	19 000 nm



## Machinery Main Components

Main Engine	1 x 12 000 kW
Propeller	1 x 6 700 mm CPP
Diesel Generator	3 x 1 000 kW
Em'cy Diesel Generator	1 x 150 kW



## Complement

The accommodation area is arranged for twenty four (24) crews, one (1) pilot and one (1) owner. Nineteen (19) single berth cabins, two (2) two berth cabins, three (3) suits with separate bedrooms and additional two (2) cabins for pilot and owner are provided.

Lifesaving equipment is arranged for twenty eight (28) people.



## Main Dimensions

L <sub>OA</sub>	180.50 m
L <sub>BP</sub>	170.20 m
B (molded)	25.60 m
D (molded)	14.50 m
Draught (design)	10.00 m
Draught (scantling)	10.40 m



## Tonnage

DWT (at design)	25 500 t
DWT (at scantling)	26 650 t

## 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

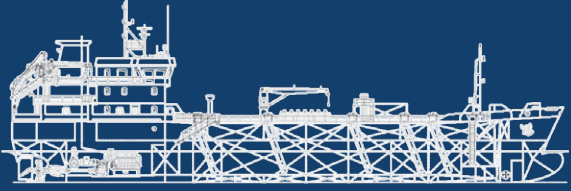
## REFERENCES

No References Yet





# OIL CHEMICAL TANKERS



# 1700 DWT OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as a single screw, double decked and ice strengthened oil product and chemical tanker for unrestricted navigation and service. She is capable to carry a large range of liquid IMO II & III type cargoes (acc.to IBC Code), petrochemical solvents, clean, dirty products, lube oils, mineral, vegetable oils with specific gravity up to 1.54 t/m<sup>3</sup> in twelve pieces of coated cargo tanks and two cylindrical slop tanks on deck. No structural element faces into the cargo tanks while one deep-well pump with complete segregation for each cargo tank and one vapour return line are provided. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Ability to sail in iced sea areas
- Enhanced safety with tween deck



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



1700 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	1 976 m <sup>3</sup>
Water Ballast	1 620 m <sup>3</sup>
MDO	184 m <sup>3</sup>
Fresh Water	44 m <sup>3</sup>



## Speed Consumption/Range

Design speed	12.0 knots
Consumption	7.5 t/day
Cruising range	6 000 nm



## Machinery Main Components

Main Engine	1 x 2 040 kW
Propeller	1 x 2 850 mm dia CPP
Diesel Generator	2 x 220 kW
Em'cy Diesel Generator	1 x 150 kW
Shaft Generator	1 x 540 kW



## Complement

The accommodation area is arranged for nine (9) crews. Totally eleven (11) single berth cabins, one (1) of them with separate bedroom. One (1) owner and one (1) charter rooms are provided.

Lifesaving equipment is arranged for twelve (12) people.



## Main Dimensions

L <sub>OA</sub>	77.20 m
L <sub>BP</sub>	72.25 m
B (molded)	13.40 m
D (molded)	8.35 m
Draught (design)	5.00 m
Draught (scantling)	5.00 m



## Tonnage

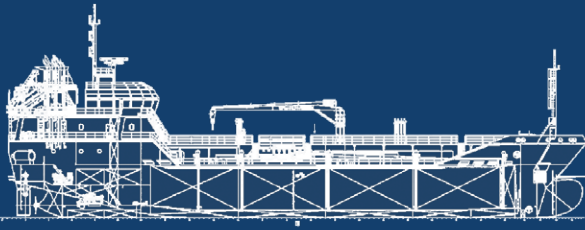
DWT (at design)	2 025 t
DWT (at scantling)	2 025 t
GRT (app)	2 195
NT (app)	660

## 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

ORASILA



# 2600 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as ice-strengthened, single decked, twin-screw motor ship with double bottom and double sides for unrestricted navigation and service. She is capable to carry a large range of liquid IMO II/III chemical cargoes, petrochemical solvents, clean/dirty products, lube oil mineral/vegetable oils in epoxy painted cargo and slop tanks, up to 1.54 t/m<sup>3</sup> specific gravity. 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. 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
- Ability to carry various types of cargo
- Ability to sail in iced sea areas
- Easy maintenance and overhauling
- Enhanced visibility with special wheelhouse design



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



2600 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	2 640 m <sup>3</sup>
Water Ballast	1 065 m <sup>3</sup>
DO	110 m <sup>3</sup>
Fresh Water	45 m <sup>3</sup>



## Speed Consumption/Range

Design speed	12.5 knots
Consumption	5.3 t/day
Cruising range	4 750 nm



## Machinery Main Components

Main Engine	2 x 577 kW
Propeller	2 x 2 100 mm FPP
Diesel Generator	3 x 270 kW
Em'cy Diesel Generator	1 x 99 kW



## Complement

The accommodation area is arranged for eleven (11) crews. Nine (9) single berth cabins, two(2) suits with separate bedrooms are provided.

Lifesaving equipment is arranged for twelve (12) people.



## Main Dimensions

L <sub>OA</sub>	72.62 m
L <sub>BP</sub>	66.67 m
B (molded)	13.40 m
D (molded)	6.40 m
Draught (design)	4.80 m
Draught (scantling)	5.20 m



## Tonnage

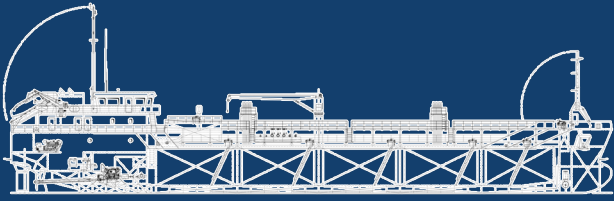
DWT (at design)	2 000 t
DWT (at scantling)	2 675 t
GRT (app)	1 760
NT (app)	700

## 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

- ELBA
- GAZPROMNEFT NORD-WEST



# 2850 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as ice-strengthened, single decked twin screw motor ship with double bottom and double skin with coated cargo tanks. She is capable to carry a large range of liquid IMO II, III chemical cargoes, petrochemical solvents, clean/dirty products, lube oil mineral/vegetable oils in epoxy painted cargo tanks, which is gravity up to 1.35 t/m<sup>3</sup> at 85 C. Hull structure is analysed by FEM tools for safety and weight optimization and hull form is designed for minimum resistance; overall design provides an environmentally friendly, cost-effective, reliable and flexible unit.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas
- Easy maintenance and overhauling



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



2850 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	3 070 m <sup>3</sup>
Water Ballast	1 300 m <sup>3</sup>
MDO	150 m <sup>3</sup>
Fresh Water	85 m <sup>3</sup>



## Speed Consumption/Range

Design speed	11.0 knots
Consumption	5.5 t/day
Cruising range	4 500 nm



## Machinery Main Components

Main Engine	2 x 746 kW
Propeller	2 x 2 100 mm FPP
Diesel Generator	2 x 280 kW
Em'cy Diesel Generator	1 x 150 kW



## Complement

The accommodation area is arranged for eight (8) crews. 8 single berth cabins with separate private facilities are provided.

Lifesaving equipment is arranged for ten (10) people.



## Main Dimensions

L <sub>OA</sub>	82.30 m
L <sub>BP</sub>	78.80 m
B (molded)	12.50 m
D (molded)	6.10 m
Draught (design)	4.70 m
Draught (scantling)	4.75 m



## Tonnage

DWT (at design)	2 745 t
DWT (at scantling)	2 810 t
GRT (app)	1 860
NT (app)	825

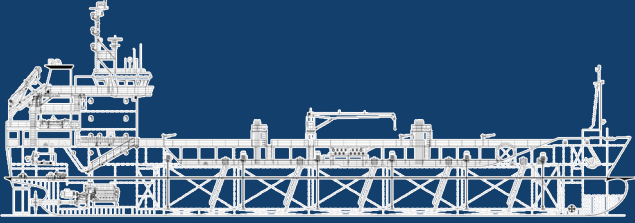
## SCOPE OF SERVICES

- 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

GAZPROMNEFT ZUID WEST





# 3500 DWT OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as ice-strengthened, single decked, single screw motor ship with double bottom and double sides for unrestricted navigation and service, and capable to carry a large range of liquid IMO II, III chemical cargoes, petrochemical solvents, clean/dirty products, lube oil mineral/vegetable oils in epoxy painted cargo and slop tanks, which is gravity up to 1.54 t/m<sup>3</sup>. Hull structure is analysed by FEM tools for safety and weight optimization and no structural elements face into the cargo tanks. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 3500 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



### Capacities

Cargo	4 400 m <sup>3</sup>
Water Ballast	1 475 m <sup>3</sup>
HFO	190 m <sup>3</sup>
MDO	30 m <sup>3</sup>
Fresh Water	60 m <sup>3</sup>



### Speed Consumption/Range

Design speed	13.0 knots
Consumption	6.8 t/day
Cruising range	7 200 nm



### Machinery Main Components

Main Engine	1 x 1 850 kW
Propeller	1 x 3 500 mm dia CPP
Diesel Generator	3 x 300 kW
Em'cy Diesel Generator	1 x 100 kW



### Complement

The accommodation area is arranged for seventeen (17) personnel and a pilot. Thirteen (13) single berth cabins, one (1) cabin with two (2) bunk beds, two (2) suits with separate bedrooms and one (1) pilot room are provided.

Lifesaving equipment is arranged for twenty (20) people.



### Main Dimensions

L <sub>OA</sub>	92.86 m
L <sub>BP</sub>	86.65 m
B (molded)	14.10 m
D (molded)	7.20 m
Draught (design)	5.50 m
Draught (scantling)	5.70 m



### Tonnage

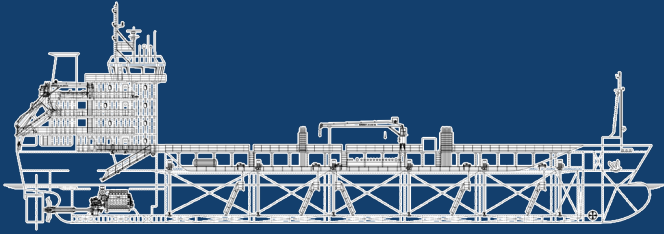
DWT (at design)	3 250 t
DWT (at scantling)	3 500 t
GRT (app)	2 600
NT (app)	1 100

### 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

- ALEV KAMAN
- ORAHOPE
- SOFIE THERESA
- ATLANTIS ARMONA
- SUSANNE THERESA
- RIKKE THERESA
- ATLANTIS ALDABRA
- BROVIG BORA
- PALLAS GLORY
- ATLANTIS ALVARADO
- EBRU-S
- TUGRUL-S
- FS ODIN
- TROY
- SEPEN
- CANSU Y
- HALDOZ
- TOLI



# 3500 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as ice-strengthened, single decked, single screw motor ship with double bottom and double sides for unrestricted navigation and service, and capable to carry a large range of liquid IMO II, III chemical cargoes, petrochemical solvents, clean/dirty products, lube oil mineral/vegetable oils in epoxy painted cargo and slop tanks, which is gravity up to 1.54 t/m<sup>3</sup>. Hull structure is analysed by FEM tools for safety and weight optimization and no structural elements face into the cargo tanks. Overall design provides an environment- friendly, cost-effective, reliable and flexible unit.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL

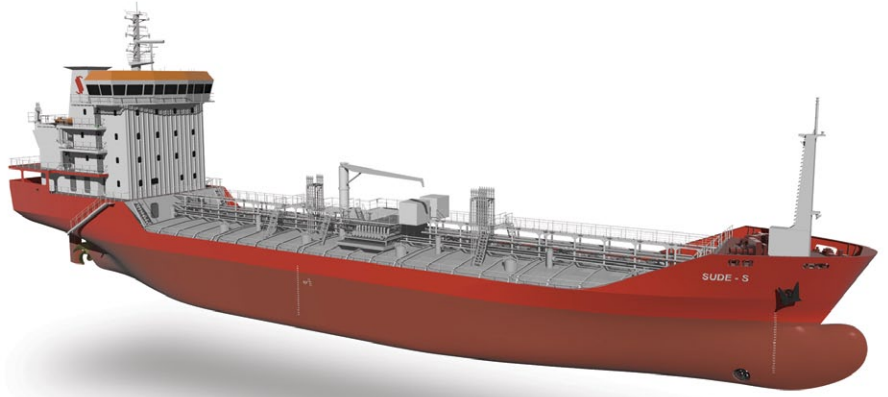


UTILITY



3500 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	4 280 m <sup>3</sup>
Water Ballast	1 625 m <sup>3</sup>
HFO	200 m <sup>3</sup>
MDO	47 m <sup>3</sup>
Fresh Water	65 m <sup>3</sup>



## Speed Consumption/Range

Design speed	13.0 knots
Consumption	7.2 t/day
Cruising range	7 500 nm



## Machinery Main Components

Main Engine	1 x 1 850 kW
Propeller	1 x 3 500 mm dia CPP
Diesel Generator	3 x 300 kW
Em'cy Diesel Generator	1 x 100 kW



## Complement

The accommodation area is arranged for seventeen (17) people and a pilot. Thirteen (13) single berth cabins, one (1) cabin with 2 bunk beds, two (2) suits with separate bedrooms and one (1) pilot room are provided.

Lifesaving equipment is arranged for twenty (20) people.



## Main Dimensions

L <sub>OA</sub>	93.11 m
L <sub>BP</sub>	86.65 m
B (molded)	14.50 m
D (molded)	7.20 m
Draught (design)	5.50 m
Draught (scantling)	5.70 m



## Tonnage

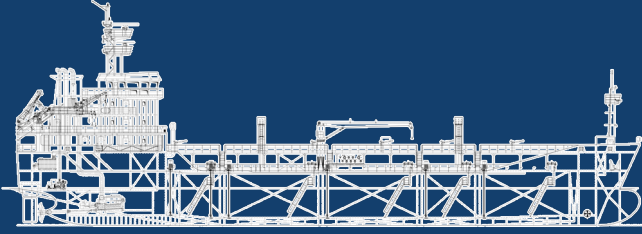
DWT (at design)	3 300 t
DWT (at scantling)	3 550 t
GRT (app)	2 800
NT (app)	1 175

## 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

📍 SUDE-S



# 3500 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as single decked, double hull unit for unrestricted navigation to carry a large range of liquid IMO II, III chemical cargoes, petrochemical solvents, clean/dirty products, lube oil, mineral/vegetable oils in epoxy painted cargo and slop tanks. The propulsion is maintained with twin system working independently and each consisting of a diesel engine, a shaft, a CP propeller and a rudder. Hull structure is analysed by FEM tools for safety and weight optimization and no structural elements face into the cargo tanks. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit. One deep-well pump for each tank and complete segregation for each cargo tank, one vapour return line are installed.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



3500 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	4 580 m <sup>3</sup>
Water Ballast	1 970 m <sup>3</sup>
MDO	170 m <sup>3</sup>
Fresh Water	45 m <sup>3</sup>



## Speed Consumption/Range

Design speed	11.6 knots
Consumption	7.0 t/day
Cruising range	5 000 nm



## Machinery Main Components

Main Engine	2 x 960 kW
Propeller	1 x 2 600 mm dia CPP
Diesel Generator	1 x 280 kW
Em'cy Diesel Generator	1 x 175 kW



## Complement

The accommodation area is arranged for twelve (12) person- nel. 3 double berth and 9 single berth cabins with separate private facilities are provided.



## Main Dimensions

L <sub>OA</sub>	90.00 m
L <sub>BP</sub>	85.30 m
B (molded)	14.60 m
D (molded)	7.60 m
Draught (design)	5.30 m
Draught (scantling)	5.40 m



## Tonnage

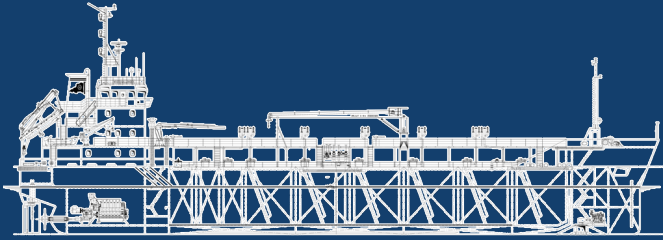
DWT (at design)	3 400 t
DWT (at scantling)	3 550 t
GRT (app)	2 999
NT (app)	1 125

## 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

- OW COPENHAGEN
- OW AALBORG
- ALGOMA DARTMOUTH
- RN TAURUS
- CLIPPER BRICCO
- CT WICKLOW



# 4500 DWT OIL PRODUCT TANKER

The vessel is single decked, single screw motor ship with double bottom and double sides for shipping in extended european trading area and capable to carry a large range of liquid IMO II, III chemical cargoes, petrochemical solvents, clean/dirty products, lube oil mineral/vegetable oils in fourteen (14) epoxy painted cargo tanks. Hull construction will be withstand the cargo at 0.98 t/m<sup>3</sup>. The hull form is designed for minimum resistance, overall design provides an environ- mentally friendly, cost-effective, reliable and flexible unit. Cargo pump room installation, four segregation, one vapour return line are provided.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 4500 DWT OILPRODUCT TANKER

# SPECS



### Capacities

Cargo	5 090 m <sup>3</sup>
Water Ballast	2 167 m <sup>3</sup>
MDO	244 m <sup>3</sup>
Fresh Water	83 m <sup>3</sup>



### Speed Consumption/Range

Design speed	11.5 knots
Consumption	6.8 t/day
Cruising range	9 000 nm



### Machinery Main Components

Main Engine	1 x 1 850 kW
Propeller	1 x 2 900 mm dia CPP
Diesel Generator	2 x 312 kW
Em'cy Diesel Generator	1 x 80 kW



### Complement

8 single berth and 1 double berth cabins with separate private facilities are provided.



### Main Dimensions

L <sub>OA</sub>	84.95 m
L <sub>BP</sub>	80.80 m
B (molded)	15.00 m
D (molded)	8.60 m
Draught (design)	6.30 m
Draught (scantling)	6.30 m



### Tonnage (Approx)

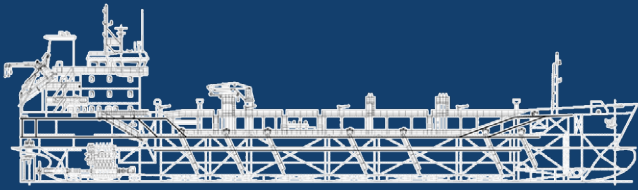
DWT (at design)	4 500 t
DWT (at scantling)	4 500 t
GRT (app)	2 960
NT (app)	1 355

### 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

- WHITCHALLENGER
- WHITCHAMPION



# 4500 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as ice-strengthened, single decked, single screw motor ship with double bottom and double sides for unrestricted navigation and service. She is capable to carry a large range of liquid IMO II, III chemical cargoes, petrochemical solvents, clean/dirty products, lube oil mineral/vegetable oils in epoxy painted cargo and slop tanks, which is gravity up to 1.54 t/m<sup>3</sup>. Pipe tunnel in double bottom keeps the ballast valves dry. Hull structure is analysed by FEM tools for safety and weight optimization and no structural elements face into the cargo tanks. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit. The ship is fitted with cargo pump room installation and three segregations.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



4500 DWT OILPRODUCT  
& CHEMICAL TANKER

# SPECS



## Capacities

Cargo	5 445 m <sup>3</sup>
Water Ballast	2 266 m <sup>3</sup>
HFO	240 m <sup>3</sup>
MDO	51 m <sup>3</sup>
Fresh Water	77 m <sup>3</sup>



## Speed Consumption/Range

Design speed	15.0 knots
Consumption	11.3 t/day
Cruising range	6 750 nm



## Machinery Main Components

Main Engine	1 x 3 250 kW
Propeller	1 x 3 300 mm dia CPP
Diesel Generator	3 x 380 kW
Em'cy Diesel Generator	1 x 150 kW



## Complement

The accommodation area is arranged for ten (10) crews.

Lifesaving equipment is arranged for twelve (12) people.



## Main Dimensions

L <sub>OA</sub>	106.20 m
L <sub>BP</sub>	100.70 m
B (molded)	15.60 m
D (molded)	7.80 m
Draught (design)	5.90 m
Draught (scantling)	6.30 m



## Tonnage (Approx)

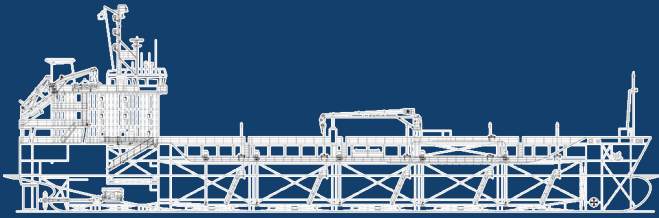
DWT (at design)	4 460 t
DWT (at scantling)	4 598 t
GRT (app)	3 710
NT (app)	1 495

## 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

- ORAHOLM
- ORASUND
- ORATANK



# 4750 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as single decked, double bottom and double skinned, single screw chemical tanker capable to carry a large range of liquid cargoes IMO II class as well as petroleum products and vegetable oils, gravity upto 1.54 t/m<sup>3</sup>, in ten (10) cargo and two (2) slop smooth-walled coated cargo tanks. No steel structure facing into the cargo tanks. The hull form is designed for minimum resistance, overall design provides an environmentally friendly, cost-effective, reliable and flexible unit. One deep-well pump for each tank and complete segregation, one vapour return line.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



4750 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	5 480 m <sup>3</sup>
Water Ballast	1 755 m <sup>3</sup>
HFO	245 m <sup>3</sup>
MDO	55 m <sup>3</sup>
Fresh Water	130 m <sup>3</sup>



## Speed Consumption/Range

Design speed	13.0 knots
Consumption	8.1 t/day
Cruising range	7 600 nm



## Machinery Main Components

Main Engine	1 x 2 205 kW
Propeller	1 x 3 850 mm dia CPP
Diesel Generator	3 x 380 kW
Em'cy Diesel Generator	1 x 150 kW



## Complement

Complement is for 14 people, safety manning 14. The accommodation area is arranged for fourteen (14) personnel. Twelve (12) single berth cabins and two (2) suits with separate bedrooms are provided. Also a pilot cabin is provided. Lifesaving equipment is arranged for eighteen (18) people.



## Main Dimensions

L <sub>OA</sub>	99.84 m
L <sub>BP</sub>	94.76 m
B (molded)	15.60 m
D (molded)	7.60 m
Draught (design)	5.70 m
Draught (scantling)	6.10 m



## Tonnage (Approx)

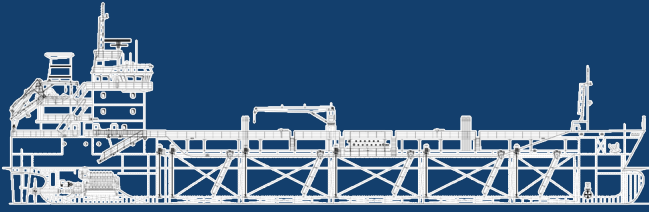
DWT (at design)	4 330 t
DWT (at scantling)	4 865 t
GRT (app)	3 480
NT (app)	1 500

## 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

⚓ VARKAN MARMARA



# 4850 DWT

## OIL PRODUCT & CHEMICAL TANKER

Single decked, single screw motor ship is designed with double bottom, double skin and coated cargo tanks. No steel structure facing into the cargo tanks. The hull form is designed for minimum resistance, overall design provides an environmentally friendly, cost-effective, reliable and flexible unit. One deep-well pump tank and complete segregation for each cargo tank and one vapour return line are provided.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



4850 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	5 750 m <sup>3</sup>
Water Ballast	1 950 m <sup>3</sup>
HFO	205 m <sup>3</sup>
MDO	60 m <sup>3</sup>
Fresh Water	80 m <sup>3</sup>



## Speed Consumption/Range

Design speed	14.0 knots
Consumption	8.8 t/day
Cruising range	8 700 nm



## Machinery Main Components

Main Engine	1 x 2 400 kW
Propeller	1 x 3 500 mm dia CPP
Diesel Generator	3 x 400 kW
Em'cy Diesel Generator	1 x 99 kW



## Complement

The accommodation area is to be arranged for sixteen (16) personnel.



## Main Dimensions

L <sub>OA</sub>	102.90 m
L <sub>BP</sub>	98.15 m
B (molded)	15.60 m
D (molded)	7.60 m
Draught (design)	5.80 m
Draught (scantling)	6.00 m



## Tonnage (Approx)

DWT (at design)	4 550 t
DWT (at scantling)	4 835 t
GRT (app)	3 400
NT (app)	1 530

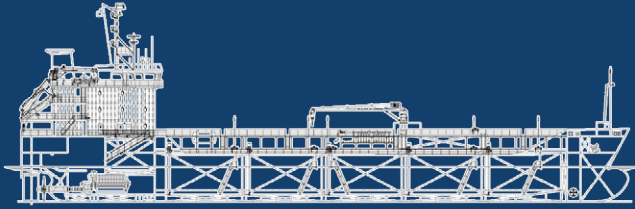
## SCOPE OF SERVICES

- 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

- MAR ISA
- MAR MARIA
- PAN AGILITY





# 5000 DWT OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as ice-strengthened, single decked, single screw motor ship with double bottom and double sides for unrestricted navigation and service. She is capable of carrying IMO II chemical cargoes, petrochemical solvents, clean, dirty products, lube oils, mineral, vegetable oils with specific gravity up to 1.54 t/m<sup>3</sup> in epoxy coated, smooth walled 10 pieces of cargo and two cylindrical slop tanks on deck. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



5000 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	5 470 m <sup>3</sup>
Water Ballast	1 750 m <sup>3</sup>
HFO	250 m <sup>3</sup>
MDO	55 m <sup>3</sup>
Fresh Water	320 m <sup>3</sup>



## Speed Consumption/Range

Design speed	13.0 knots
Consumption	8.0 t/day
Cruising range	8 320 nm



## Machinery Main Components

Main Engine	1 x 1 080 kW
Propeller	2 x 2 600 mm dia CPP
Diesel Generator	1 x 250 kW
Em'cy Diesel Generator	1 x 154 kW



## Complement

Complement is for 14 people, safety manning 14. The accommodation area is arranged for fourteen (14) personnel. Twelve (12) single berth cabins and two (2) suits with separate bedrooms are provided. Also a pilot cabin is provided.

Lifesaving equipment is arranged for eighteen (18) people.



## Main Dimensions

L <sub>OA</sub>	99.84 m
L <sub>BP</sub>	94.76 m
B (molded)	15.60 m
D (molded)	7.60 m
Draught (design)	5.70 m
Draught (scantling)	6.10 m



## Tonnage (Approx)

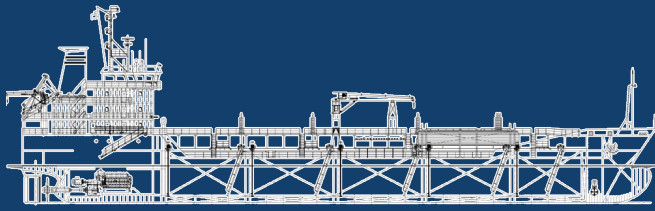
DWT (at design)	4 550 t
DWT (at scantling)	5 000 t
GRT (app)	3 300
NT (app)	1 500

## 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

- CIMIL
- ANZER



# 5700 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as single screw, oil product chemical tanker with cargo tanks made out of duplex stainless steel. Vessel is designed for unrestricted navigation and service, being capable to carry a large range of liquid IMO II type cargoes (acc. to IBC Code), oil products and aggressive acid cargoes such as sulfuric and phosphoric acid, complex cargoes like molasses, methanol and wine with specific gravity up to 2.00 t/m<sup>3</sup>. Hull structure is analysed by FEM tools for safety and weight optimization. No structural elements face into the cargo tanks. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit. The ship is fitted with cargo pump room installation and three segregations.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Ability to carry various types of cargo (e.g. aggressive acids)
- Ability to sail in iced sea areas
- Stainless steel cargo tanks with high mechanical properties





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



5700 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



### Capacities

Cargo	6 585 m <sup>3</sup>
Water Ballast	2 390 m <sup>3</sup>
HFO	252 m <sup>3</sup>
MDO	63 m <sup>3</sup>
Fresh Water	80 m <sup>3</sup>



### Speed Consumption/Range

Design speed	13.0 knots
Consumption	10.6 t/day
Cruising range	6 100 nm



### Machinery Main Components

Main Engine	1 x 3 000 kW
Propeller	1 x 3 950 mm dia CPP
Diesel Generator	3 x 450 kW
Em'cy Diesel Generator	1 x 150 kW



### Complement

The accommodation area is to be arranged for 18 personnel. Fifteen (15) single berth cabins and three (3) suits with separate bedrooms are provided.

Lifesaving equipment is to be arranged for eighteen (18) persons.



### Main Dimensions

L <sub>OA</sub>	105.50 m
L <sub>BP</sub>	99.35 m
B (molded)	16.80 m
D (molded)	7.40 m
Draught (design)	6.10 m
Draught (scantling)	6.30 m



### Tonnage (Approx)

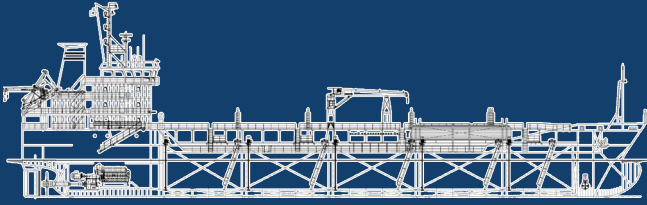
DWT (at design)	5 340 t
DWT (at scantling)	5 620 t
GRT (app)	3 890
NT (app)	2 320

### 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

- AYSE S
- DENIZ S



# 5800 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as single screw, oil product chemical tanker for unrestricted navigation and service, being capable to carry a large range of liquid IMO II type cargoes (acc. to IBC Code) and oil products and withstands cargoes with specific gravity up to 1.54 t/m<sup>3</sup>. Cargo area is divided into ten (10) cargo tanks by means of oil-tight corrugated transverse bulkheads and a longitudinal bulkhead in CL. The vessel is also provided with slop tank located in cargo area. No structural elements face into the cargo tanks. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit. The ship is fitted with cargo pump room installation and complete segregations.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



5800 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	6 585 m <sup>3</sup>
Water Ballast	2 333 m <sup>3</sup>
HFO	254 m <sup>3</sup>
MDO	65 m <sup>3</sup>
Fresh Water	80 m <sup>3</sup>



## Speed Consumption/Range

Design speed	13.5 knots
Consumption	10.0 t/day
Cruising range	7 000 nm



## Machinery Main Components

Main Engine	1 x 2 720 kW
Propeller	1 x 3 900 mm dia CPP
Diesel Generator	3 x 370 kW
Em'cy Diesel Generator	1 x 100 kW



## Complement

The accommodation area is to be arranged for 18 personnel. Fifteen (15) single berth cabins and three (3) suits with separate bedrooms are provided.

Lifesaving equipment is to be arranged for eighteen (18) persons.



## Main Dimensions

L <sub>OA</sub>	105.50 m
L <sub>BP</sub>	99.35 m
B (molded)	16.80 m
D (molded)	7.40 m
Draught (design)	6.20 m
Draught (scantling)	6.30 m



## Tonnage (Approx)

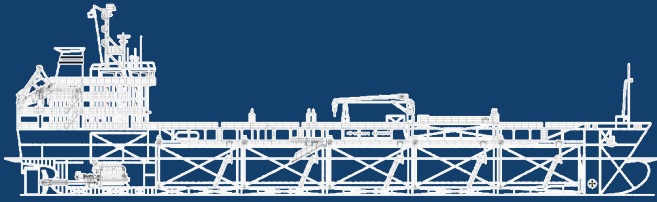
DWT (at design)	5 650 t
DWT (at scantling)	5 760 t
GRT (app)	4 000
NT (app)	1 820

## 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

- ANGIMAR
- TRANS MARMARA
- FS SOLENE
- YM VENUS
- OZ-AY 4
- FS CLARA
- ST PAULINE
- MONTAUK
- YIGIT BEY
- LILAC
- YM EARTH
- NIYAZI-S
- OZDEN-S
- FETEKOZ
- ASC
- AZRA S
- ERAS
- KARDEMIR
- LS ANNE
- LS JAMIE
- FILYOZ



# 6400 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as ice-strengthened, single decked, single screw motor ship with double bottom and double sides for unrestricted navigation and service. She is capable to carry a large range of liquid IMO II, III chemical cargoes, petrochemical solvents, clean/dirty products, lube oil mineral/vegetable oils in epoxy painted cargo and slop tanks, which is gravity up to 1.54 t/m<sup>3</sup>. No structural elements face into the cargo tanks. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas
- Enhanced Cargo Carriage Capacity



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



6400 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



### Capacities

Cargo	7 180 m <sup>3</sup>
Water Ballast	2 360 m <sup>3</sup>
HFO	320 m <sup>3</sup>
MDO	60 m <sup>3</sup>
Fresh Water	67 m <sup>3</sup>



### Speed Consumption/Range

Design speed	14.0 knots
Consumption	10.0 t/day
Cruising range	8 600 nm



### Machinery Main Components

Main Engine	1 x 2 720 kW
Propeller	1 x 3 950 mm dia CPP
Diesel Generator	3 x 370 kW
Em'cy Diesel Generator	1 x 150 kW



### Complement

The accommodation area is arranged for fourteen (14) crews and a pilot. Twelve (12) single berth cabins, two (2) suits with separate bedrooms and one (1) pilot room are provided. Lifesaving equipment is arranged for fifteen (15) people. Safety manning is for fourteen (14) people.



### Main Dimensions

L <sub>OA</sub>	109.00 m
L <sub>BP</sub>	102.30 m
B (molded)	16.80 m
D (molded)	8.30 m
Draught (design)	6.20 m
Draught (scantling)	6.65 m



### Tonnage (Approx)

DWT (at design)	5 870 t
DWT (at scantling)	6 400 t
GRT (app)	4 250
NT (app)	1 990

### 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

- ⚓ DEFNE S
- ⚓ EKIN S
- ⚓ GAZELA
- ⚓ GUNGA
- ⚓ TANA
- ⚓ YM MERCURY
- ⚓ YM MARS
- ⚓ ATLANTIS ALHAMBRA
- ⚓ ATLANTIS ANDAMAN
- ⚓ ERRIA V



# 6700 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as ice-strengthened, single decked, single screw motor ship with double bottom and double sides for unrestricted navigation and service. She is capable to carry a large range of liquid IMO II, III chemical cargoes, petrochemical solvents, clean/dirty products, lube oil mineral/vegetable oils in epoxy painted cargo and slop tanks, which is gravity up to 1.54 t/m<sup>3</sup>. No structural elements face into the cargo tanks. The ship is fitted with one deep-well pump for each tank, complete segregation and one vapour return line. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



6700 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	7 435 m <sup>3</sup>
Water Ballast	2 550 m <sup>3</sup>
HFO	350 m <sup>3</sup>
MDO	100 m <sup>3</sup>
Fresh Water	100 m <sup>3</sup>



## Speed Consumption/Range

Design speed	14.0 knots
Consumption	12.9 t/day
Cruising range	8 700 nm



## Machinery Main Components

Main Engine	1 x 3 700 kW
Propeller	1 x 3 800 mm dia CPP
Diesel Generator	3 x 400 kW
Em'cy Diesel Generator	1 x 100 kW



## Complement

The accommodation area is arranged for nineteen (19) personnel. Ten (10) single berth cabins, two (2) double berth and five (5) suits with separate bedrooms are provided.

Lifesaving equipment is arranged for twenty (20) people.



## Main Dimensions

L <sub>OA</sub>	114.00 m
L <sub>BP</sub>	106.00 m
B (molded)	16.90 m
D (molded)	8.40 m
Draught (design)	6.75 m
Draught (scantling)	6.80 m



## Tonnage (Approx)

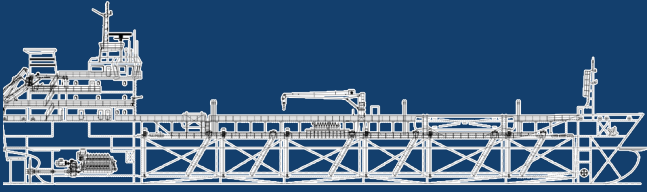
DWT (at design)	6 525 t
DWT (at scantling)	6 750 t
GRT (app)	4 335
NT (app)	2 060

## 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

- ⚓ MAR ROCIO
- ⚓ C.P. 38
- ⚓ ALFATEM
- ⚓ AMAK SWAN
- ⚓ STAR 1
- ⚓ SILVER
- ⚓ HEINRICH
- ⚓ PANDA PG
- ⚓ TESSA PG



# 7000 DWT OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as ice-strengthened, single decked, single screw motor ship with double bottom and double sides for unrestricted navigation and service. She is capable to carry a large range of liquid IMO II, III chemical cargoes, petrochemical solvents, clean/dirty products, lube oil mineral/vegetable oils with specific gravity up to 1.54 t/m<sup>3</sup>, in phenolic epoxy coated, smooth walled cargo tanks and slop tanks. Hull structure is analysed by FEM tools for safety and weight optimization and no structural elements face into the cargo tanks. 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
- Ability to carry various types of cargo
- Ability to sail in iced sea areas





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



7000 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	8 050 m <sup>3</sup>
Water Ballast	2 800 m <sup>3</sup>
HFO	420 m <sup>3</sup>
MDO	90 m <sup>3</sup>
Fresh Water	50 m <sup>3</sup>



## Speed Consumption/Range

Design speed	14.0 knots
Consumption	14.1 t/day
Cruising range	9 000 nm



## Machinery Main Components

Main Engine	1 x 3 840 kW
Propeller	1 x 4 200 mm dia CP
Diesel Generator	3 x 400 kW
Em'cy Diesel Generator	1 x 100 kW



## Complement

The accommodation area is arranged for fifteen (15) crews and a pilot. Eleven (11) single berth cabins, two (2) double berth cabins, two (2) suits with separate bedrooms and one (1) double berth owner/pilot room are provided. Lifesaving equipment is arranged for eighteen (18) and safety manning for fifteen (15) people.



## Main Dimensions

L <sub>OA</sub>	119.10 m
L <sub>BP</sub>	111.60 m
B (molded)	16.90 m
D (molded)	8.40 m
Draught (design)	6.65 m
Draught (scantling)	6.75 m



## Tonnage (Approx)

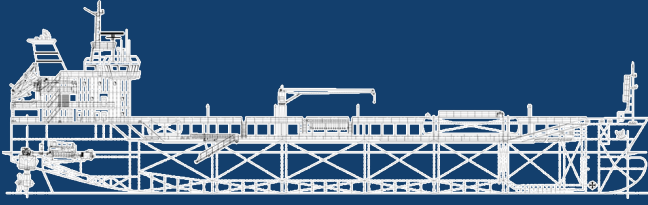
DWT (at design)	6 820 t
DWT (at scantling)	6 975 t
GRT (app)	4 200
NT (app)	2 100

## 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

- MARINUS
- BRO GOTHIA
- AMARANT
- PAUL E
- MORINA
- GASCOGNE
- GUILDO
- AMANDA
- BRO GOLIATH
- COVADONGA
- IEVOLI FAST
- PURPLE GEM
- ACACIA
- TREFIN LEADER
- ALGOCANADA
- ALGONOVA
- MARDENIZ
- KARDENIZ
- KORMEL
- EMEK S



# 10 000 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as single decked, twin screw motor ship with double bottom and double skin with coated cargo tanks. Designed for unrestricted navigation and service, the ship is capable to carry a large range of liquid IMO II type cargoes (acc. to IBC Code), vegetable oils, oil products and withstands cargoes with specific gravity up to 1.54 t/m<sup>3</sup>. Hull structure is analysed by FEM tools for safety, weight optimization and vibration. No steel structure facing into the cargo tanks. The hull form is designed for minimum resistance, overall design provides an environmentally friendly, cost-effective, reliable and flexible unit. One deep-well pump is installed for each tank while complete segregation for each cargo tank is provided with one vapour return line.

### BENEFITS

- Compliance with environmental requirements
- Ability to carry various types of cargo
- Redundant propulsion system with twin engines
- Enhanced maneuverability
- Easy maintenance and overhauling
- Operational flexibility



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



10 000 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	11 335 m <sup>3</sup>
Water Ballast	4 155 m <sup>3</sup>
HFO	630 m <sup>3</sup>
MDO	116 m <sup>3</sup>
Fresh Water	71 m <sup>3</sup>



## Speed Consumption/Range

Design speed	14.0 knots
Consumption	19.8 t/day
Cruising range	9 000 nm



## Machinery Main Components

Main Engine	2 x 2 700 kW
Propeller	2 x 3 250 mm Azimuth
Diesel Generator	1 x 500 kW
Em'cy Diesel Generator	1 x 340 kW



## Complement

The accommodation area is arranged for nineteen (19) personnel. 9 individual cabins with private facilities, 2 double cabin with private facilities and 4 cabins with bunk-bed are provided.



## Main Dimensions

L <sub>OA</sub>	117.00 m
L <sub>BP</sub>	111.60 m
B (molded)	21.00 m
D (molded)	9.50 m
Draught (design)	6.50 m
Draught (scantling)	7.75 m



## Tonnage (Approx)

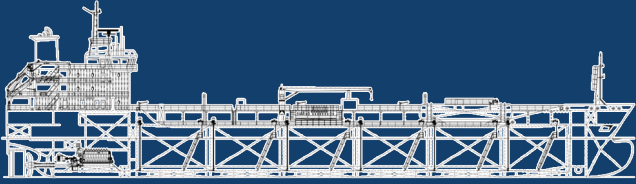
DWT (at design)	8 025 t
DWT (at scantling)	10 475 t
GRT (app)	6 860
NT (app)	3 420

## 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

- ECO III
- CORK
- CT LONGFORD
- OVIT



# 11 000 DWT OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as ice-strengthened, single decked, single screw motor ship with double bottom and double sides for unrestricted navigation and service. She is capable to carry a large range of liquid IMO II, III chemical cargoes, petrochemical solvents, clean/dirty products, lube oil mineral/vegetable oils in twelve (12) epoxy painted cargo and two (2) pcs of slop tanks installed on maindeck with specific gravity up to 1.54 t/m<sup>3</sup>. Hull structure is analysed by FEM tools for safety, weight optimization and vibration. No structural elements face into the cargo tanks. The hull form, optimized with CFD analysis, is designed for minimum resistance and fuel consumption. 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
- Ability to carry various types of cargo
- Ability to sail in iced sea areas



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



11 000 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



### Capacities

Cargo	12 725 m <sup>3</sup>
Water Ballast	4 400 m <sup>3</sup>
HFO	580 m <sup>3</sup>
MDO	100 m <sup>3</sup>
Fresh Water	90 m <sup>3</sup>



### Speed Consumption/Range

Design speed	15.0 knots
Consumption	16.0 t/day
Cruising range	11 000 nm



### Machinery Main Components

Main Engine	1 x 4 320 kW
Propeller	1 x 4 800 mm dia CPPDiesel
Generator	3 x 600 kW
Em'cy Diesel Generator	1 x 150 kW



### Complement

The accommodation area is arranged for eighteen (18) crews. Eleven (11) single berth cabins, five (5) double berth and two (2) suits with separate bedrooms are provided.

Lifesaving equipment is arranged for twenty (20) people.



### Main Dimensions

L <sub>OA</sub>	129.50 m
L <sub>BP</sub>	122.70 m
B (molded)	19.80 m
D (molded)	10.40 m
Draught (design)	7.85 m
Draught (scantling)	8.15 m



### Tonnage (Approx)

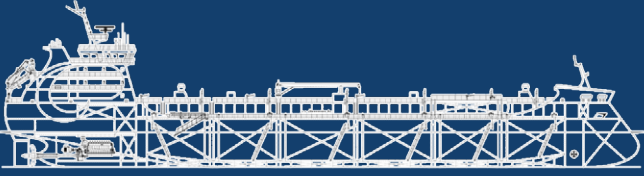
DWT (at design)	10 600 t
DWT (at scantling)	11 300 t
GRT (app)	7 315
NT (app)	3 590

### 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

- TARNBRIS
- ATLANTIK MIRACLE
- SAPPHIRE T
- SAKARYA
- DUMLUPINAR
- VARKAN AKDENIZ



# 12 000 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as chemical/oil product tanker being capable to carry a large range of liquid IMO II & III type cargoes (acc. to IBC Code), petrochemical solvents, vegetable oils, with specific gravity up to 1.54 t/m<sup>3</sup>, in twelve (12) pcs of phenolic epoxy coated, smooth walled cargo tanks and two (2) pcs of slop tanks installed on deck. No structural elements face into the cargo tanks. The hull form, optimized with CFD analysis, is designed for minimum resistance and fuel consumption. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Ability to carry various types of cargo
- Easy maintenance and overhauling
- Efficient propulsion system





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



12 000 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



### Capacities

Cargo	14 200 m <sup>3</sup>
Water Ballast	4 800 m <sup>3</sup>
HFO	1 000 m <sup>3</sup>
MDO	150 m <sup>3</sup>
Fresh Water	100 m <sup>3</sup>



### Speed Consumption/Range

Design speed	18.0 knots
Consumption	32.0 t/day
Cruising range	12 500 nm



### Machinery Main Components

Main Engine	2 x 4 250 kW
Propeller	2 x 4 800 mm CPP
Diesel Generator	3 x 600 kW
Em'cy Diesel Generator	1 x 125 kW



### Complement

The accommodation area is arranged for seventeen (17) personnel and one pilot/owner. Sixteen (16) single berth cabins, two (2) suits with separate bedrooms are provided. A hospital is arranged.

Lifesaving equipment is provided for twenty (20) people. Safety manning is for seventeen (17) people.



### Main Dimensions

L <sub>OA</sub>	144.20 m
L <sub>BP</sub>	138.65 m
B (molded)	20.00 m
D (molded)	11.00 m
Draught (design)	8.00 m
Draught (scantling)	8.20 m



### Tonnage (Approx)

DWT (at design)	12 000 t
DWT (at scantling)	12 500 t

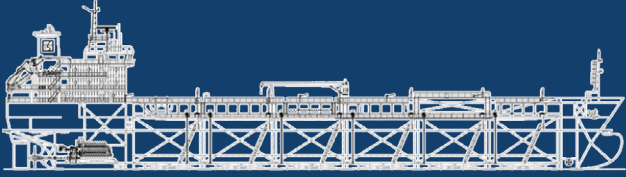
### SCOPE OF SERVICES

- 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

⚓ No References Yet





# 12500 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as a single screw, oil product and chemical tanker for unrestricted navigation and service. She is capable to carry a large range of liquid IMO II & III type cargoes (acc.to IBC Code), petrochemical solvents, clean, dirty products, lube oils, mineral, vegetable oils with specific gravity up to 1,54 t/m<sup>3</sup> in twelve pieces of epoxy coated cargo tanks and two cylindrical slop tanks on deck. 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. 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
- Ability to carry various types of cargo
- Ability to sail in iced sea areas



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



12 500 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	14 730 m <sup>3</sup>
Water Ballast	4 870 m <sup>3</sup>
HFO	630 m <sup>3</sup>
MDO	90 m <sup>3</sup>
Fresh Water	100 m <sup>3</sup>



## Speed Consumption/Range

Design speed	14.8 knots
Consumption	16.6 t/day
Cruising range	10 400 nm



## Machinery Main Components

Main Engine	1 x 4 500 kW
Propeller	1 x 4 750 mm dia CPP
Diesel Generator	3 x 750 kW
Em'cy Diesel Generator	1 x 165 kW



## Complement

The accommodation area is arranged for eighteen (18) crews. Sixteen (16) single berth cabins and two (2) suits with separate bedrooms are provided.

Lifesaving equipment is arranged for twenty (20) people.



## Main Dimensions

L <sub>OA</sub>	135.60 m
L <sub>BP</sub>	127.65 m
B (molded)	20.60 m
D (molded)	11.00 m
Draught (design)	8.20 m
Draught (scantling)	8.50 m



## Tonnage (Approx)

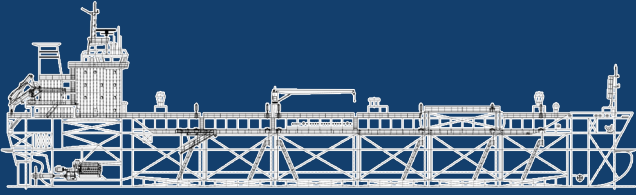
DWT (at design)	12 430 t
DWT (at scantling)	13 215 t
GRT	8 390
NT	4 175

## 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

- ⚓ MIRANDA
- ⚓ ATLANTIK GLORY
- ⚓ TBN (SELAH NB57)



# 13 500 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as ice-strengthened, single decked, twin screw motor ship with double bottom and double sides for unrestricted navigation and service. She is capable to carry a large range of liquid IMO II, III chemical cargoes, petrochemical solvents, clean/dirty products, lube oil mineral/vegetable oils in epoxy painted cargo and slop tanks, with specific gravity up to 1.54 t/m<sup>3</sup>. Hull structure is analysed by FEM tools for safety, weight optimization and vibration. No structural elements face into the cargo tanks. The hull form, optimized with CFD analysis, is designed for minimum resistance and fuel consumption. 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
- Ability to carry various types of cargo
- Ability to sail in iced sea areas
- Redundant propulsion system with twin engines



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 13 500 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



### Capacities

Cargo	15 266 m <sup>3</sup>
Water Ballast	5 427 m <sup>3</sup>
HFO	769 m <sup>3</sup>
MDO	83 m <sup>3</sup>
Fresh Water	360 m <sup>3</sup>



### Speed Consumption/Range

Design speed	14.0 knots
Consumption	20.0 t/day
Cruising range	14 000 nm



### Machinery Main Components

Main Engine	2 x 2 720 kW
Propeller	2 x 3 900 mm dia CPP
Diesel Generator	2 x 400 kW
Em'cy Diesel Generator	1 x 180 kW



### Complement

The accommodation area is arranged for nineteen (19) crews and a pilot. Eighteen (18) single berth cabins and two (2) suits with separate bedrooms are provided.

Lifesaving equipment is arranged for twenty (20) people.



### Main Dimensions

L <sub>OA</sub>	132.60 m
L <sub>BP</sub>	125.60 m
B (molded)	21.00 m
D (molded)	11.00 m
Draught (design)	7.90 m
Draught (scantling)	8.40 m



### Tonnage (Approx)

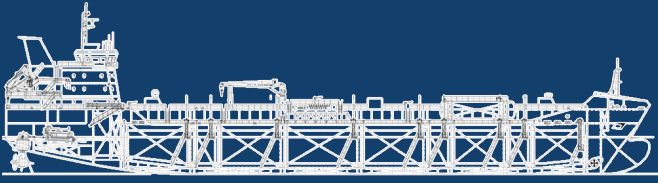
DWT (at design)	12 500 t
DWT (at scantling)	13 500 t

### 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

⚓ TBN (YARDIMCI NB68)



# 15 000 DWT

## OIL PRODUCT & CHEMICAL TANKER

The ice-classed and single decked ship is equipped with innovative azimuth propulsion system with two units. The ship is designed for unrestricted navigation and service, being capable to carry a large range of liquid IMO II type cargoes (acc. to IBC Code), vegetable oils, oil products and withstands cargoes with specific gravity up to 1.90 t/m<sup>3</sup>. The hull structure is strengthened with double bottom and double skin. Hull structure is analysed by FEM tools for safety, weight optimization and vibration. No structural elements face into the cargo tanks. The hull form, optimized with CFD analysis, is designed for minimum resistance and fuel consumption. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit. One deep-well pump is installed for each tank while complete segregation for each cargo tank is provided with one vapour return line.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas
- Innovative propulsion system
- Easy maintenance and overhauling
- State-of-the-art automation system



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



15 000 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	18 300 m <sup>3</sup>
Water Ballast	6 265 m <sup>3</sup>
HFO	750 m <sup>3</sup>
MDO	35 m <sup>3</sup>
Fresh Water	100 m <sup>3</sup>



## Speed Consumption/Range

Design speed	14.5 knots
Consumption	26.4 t/day
Cruising range	9 100 nm



## Machinery Main Components

Main Engine	2 x 3 600 kW
Propeller	2 x 3 400 mm Rudder Prop.
Diesel Generator	1 x 432 kW
Em'cy Diesel Generator	1 x 150 kW



## Complement

The accommodation area is arranged for nineteen (19) crews and a pilot, Eleven (11) single berth cabins, six (6) double berth and two (2) suits with separate bedrooms are provided.

Lifesaving equipment is arranged for twenty (20) people.



## Main Dimensions

L <sub>OA</sub>	148.00 m
L <sub>BP</sub>	139.50 m
B (molded)	21.60 m
D (molded)	11.30 m
Draught (design)	8.50 m
Draught (scantling)	8.60 m



## Tonnage

DWT (at design)	15 300 t
DWT (at scantling)	15 600 t
GRT	10 800
NT	5 200

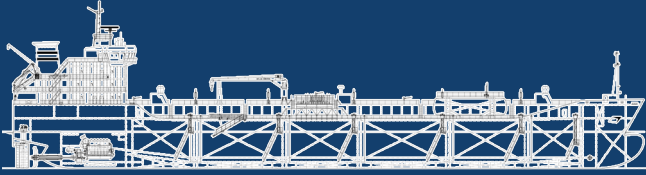
## SCOPE OF SERVICES

- 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

- FIONIA SWAN
- LS JACOBA
- PULI II





# 16 000 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed ice-strengthened, single decked, single screw motor ship with double bottom and double skin with coated cargo tanks. The ship is designed for unrestricted navigation and service, being capable to carry a large range of liquid IMO II type cargoes (acc. to IBC Code), vegetable oils, oil products and withstands cargoes with specific gravity up to 1.54 t/m<sup>3</sup>. Cargo area is divided into twelve (12) cargo tanks. The vessel is also provided with two (2) independent deck slop tanks located on maindeck. The hull structure is strengthened with double bottom and double skin. Hull structure is analysed by FEM tools for safety, weight optimization and vibration. No structural elements face into the cargo tanks. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas
- Easy maintenance and overhauling





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



16 000 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	18 438 m <sup>3</sup>
Water Ballast	6 484 m <sup>3</sup>
HFO	724 m <sup>3</sup>
MDO	114 m <sup>3</sup>
Fresh Water	118 m <sup>3</sup>



## Speed Consumption/Range

Design speed	14.0 knots
Consumption	19.2 t/day
Cruising range	11 600 nm



## Machinery Main Components

Main Engine	1 x 5 400 kW
Propeller	1 x 4 800 mm CPP
Diesel Generator	3 x 590 kW
Em'cy Diesel Generator	1 x 150 kW



## Complement

The accommodation area is arranged for nineteen (19) crews and a pilot. Seventeen (17) single berth cabins and two (2) suits with separate bedrooms are provided.

Lifesaving equipment is arranged for twenty (20) people.



## Main Dimensions

L <sub>OA</sub>	148.00 m
L <sub>BP</sub>	139.50 m
B (molded)	21.60 m
D (molded)	11.30 m
Draught (design)	8.50 m
Draught (scantling)	8.60 m



## Tonnage

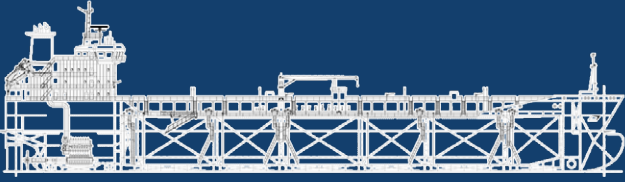
DWT (at design)	15 710 t
DWT (at scantling)	16 000 t
GRT	10 900
NT	5 260

## 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

- YM JUPITER
- YM SATURN



# 20 000 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as single screw, oil product chemical tanker for unrestricted navigation and service, being capable to carry a large range of liquid IMO II type cargoes (acc. to IBC Code) and oil products and withstands cargoes with specific gravity up to 1.54 t/m<sup>3</sup> at 66 C. Ballast pipe tunnel is arranged at centre of ballast tanks. The hull form is designed for minimum resistance and overall design provides an environmentally friendly, cost-effective, reliable and flexible unit. One deep-well pump and complete segregation for each cargo tank and one vapour return line are provided.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo
- Ability to sail in iced sea areas



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL

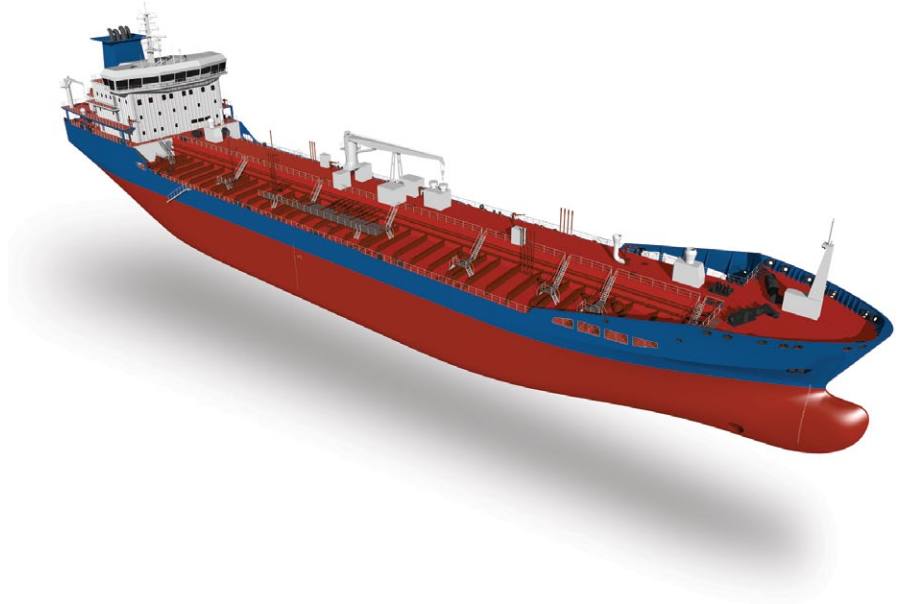


UTILITY



20 000 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	22 150 m <sup>3</sup>
Water Ballast	8 250 m <sup>3</sup>
HFO	900 m <sup>3</sup>
MDO	180 m <sup>3</sup>
Fresh Water	140 m <sup>3</sup>



## Speed Consumption/Range

Design speed	14.0 knots
Consumption	20.8 t/day
Cruising range	12 500 nm



## Machinery Main Components

Main Engine	1 x 5 920 kW
Propeller	1 x 4 250 mm dia CPP
Diesel Generator	3 x 750 kW
Em'cy Diesel Generator	1 x 165 kW



## Complement

The accommodation area is arranged for eighteen (18) personnel. Eleven (11) single berth cabins, six (6) double berth and two (2) suits with separate bedrooms are provided.

Lifesaving equipment is arranged for nineteen (19) people.



## Main Dimensions

L <sub>OA</sub>	149.95 m
L <sub>BP</sub>	142.80 m
B (molded)	23.20 m
D (molded)	13.05 m
Draught (design)	9.20 m
Draught (scantling)	9.95 m



## Tonnage

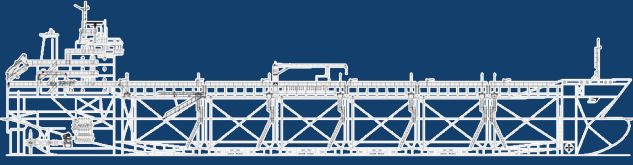
DWT (at design)	17 800 t
DWT (at scantling)	20 000 t
GRT	13 000
NT	6 350

## 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

- ⚓ LETIZIA EFFE
- ⚓ MALMO
- ⚓ MADEIRO
- ⚓ ECE NUR K
- ⚓ GUNES K
- ⚓ ICDAS-09
- ⚓ ICDAS-11
- ⚓ SOLANDO
- ⚓ SOLERO
- ⚓ TBN (YARDIMCI NB60)



# 29 000 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as twin screw, oil product and chemical tanker for unrestricted navigation and service, being capable to carry a large range of liquid IMO II&III type cargoes (acc. to IBC Code), petrochemical solvents, clean & dirty oil products, lubrication oils, mineral and vegetable oils, etc. and withstands cargoes with specific gravity up to 1.025 t/m<sup>3</sup>. The hull form, optimized with CFD analysis, is designed for minimum resistance and fuel consumption. 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
- Ability to carry various types of cargo
- Ability to sail in iced sea areas
- Stainless steel cargo tanks with high mechanical properties



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



29 000 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	32 000 m <sup>3</sup>
Water Ballast	12 500 m <sup>3</sup>
HFO	750 m <sup>3</sup>
MDO	90 m <sup>3</sup>
Fresh Water	125 m <sup>3</sup>



## Speed Consumption/Range

Design speed	14.0 knots
Consumption	21.4 t/day
Cruising range	10 000 nm



## Machinery Main Components

Main Engine	2 x 2 925 kW
Propeller	2 x 4 200 mm dia CPP
Diesel Generator	3 x 750 kW
Em'cy Diesel Generator	1 x 200 kW



## Complement

The accommodation area is arranged for twenty (20) crews and one pilot/owner. Sixteen (16) single berth cabins, four (4) suits with separate bedrooms are provided together with a Suez Room with bunks for six (6) people.

Lifesaving equipment is arranged for twenty five (25) people.



## Main Dimensions

L <sub>OA</sub>	162.50 m
L <sub>BP</sub>	151.60 m
B (molded)	27.50 m
D (molded)	15.00 m
Draught (design)	9.50 m
Draught (scantling)	10.80 m



## Tonnage

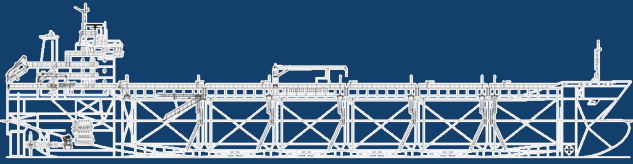
DWT (at design)	24 000 t
DWT (at scantling)	29 000 t
GRT	17 300

## 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

⚓ No References Yet



# 39 000 DWT

## OIL PRODUCT & CHEMICAL TANKER

The vessel is designed as a double screw, stainless steel cargo tanks, oil product & chemical tanker for unrestricted navigation and service and being capable to carry specially petrochemical solvents, clean, dirty products, IMO II chemical cargoes (acc. to IBC code), lube oils, mineral, and vegetable oils with specific gravity up to 1.54 t/m<sup>3</sup> at 66°C. The hull form, optimized with CFD analysis, is designed for minimum resistance and fuel consumption. CFD 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
- Ability to carry various types of cargo
- Ability to sail in iced sea areas
- Stainless steel cargo tanks with high mechanical properties





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL

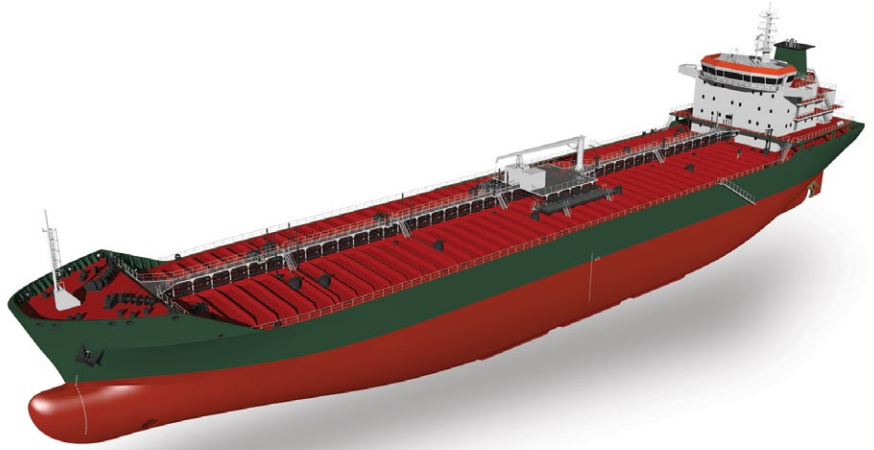


UTILITY



39 000 DWT OILPRODUCT & CHEMICAL TANKER

# SPECS



## Capacities

Cargo	40 500 m <sup>3</sup>
Water Ballast	14 300 m <sup>3</sup>
HFO	1 100 m <sup>3</sup>
MDO	180 m <sup>3</sup>
Fresh Water	300 m <sup>3</sup>



## Speed Consumption/Range

Design speed	14.0 knots
Consumption	18.4 t/day
Cruising range	18 000 nm



## Machinery Main Components

Main Engine	2 x 3 200 kW
Propeller	2 x 6 400 mm dia CPP
Diesel Generator	2 x 800 kW
Em'cy Diesel Generator	1 x 200 kW



## Complement

Complement is for 21 people. The accommodation area is arranged for nineteen (19) people, pilot and Suez Crew.



## Main Dimensions

L <sub>OA</sub>	179.00 m
L <sub>BP</sub>	167.00 m
B (molded)	30.40 m
D (molded)	15.00 m
Draught (design)	9.50 m
Draught (scantling)	10.80 m



## Tonnage

DWT (at design)	28 000 t
DWT (at scantling)	39 000 t
GRT	21 200
NT	11 850

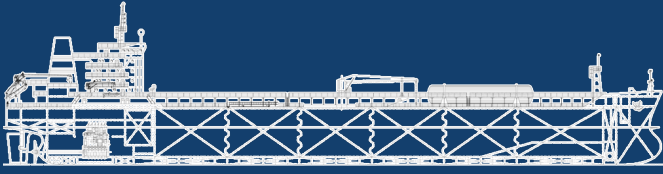
## SCOPE OF SERVICES

- 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

⚓ No References Yet





# 40 000 DWT OIL PRODUCT TANKER

The vessel is designed as single decked, single screw motor ship with double bottom and double sides for unrestricted navigation and service. She is capable to carry a large range of petroleum liquid cargoes, crude oil, clean/dirty products in cargo and slop tanks, with specific gravity up to 1.025 t/m<sup>3</sup>. Hull structure is analysed by FEM tools for safety, weight optimization and vibration. No structural elements face into the cargo tanks except deck. 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
- Operational flexibility



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 40 000 DWT OILPRODUCT TANKER

## SPECS



## Capacities

Cargo	40 792 m <sup>3</sup>
Water Ballast	18 636 m <sup>3</sup>
HFO	1 161 m <sup>3</sup>
MDO	129 m <sup>3</sup>
Fresh Water	223 m <sup>3</sup>



## Speed Consumption/Range

Design speed	14.5 knots
Consumption	26.7 t/day
Cruising range	13 000 nm

Machinery  
Main Components

Main Engine	1 x 7 650 kW
Propeller	Keyless FPP
Diesel Generator	3 x 660 kW
Em'cy Diesel Generator	1 x 300 kW



## Complement

The accommodation area is arranged for twenty four (24) crews and a pilot. Twenty four (24) single berth cabins, two (2) double berth and five (5) suits with separate bedrooms are provided.

Lifesaving equipment is arranged for twenty four (24) people.



## Main Dimensions

L <sub>OA</sub>	176.00 m
L <sub>BP</sub>	169.00 m
B (molded)	32.00 m
D (molded)	15.10 m
Draught (design)	10.00 m
Draught (scantling)	11.20 m



## Tonnage

DWT (at design)	34 590 t
DWT (at scantling)	40 111 t
GRT	22 950
NT	11 740

## SCOPE OF SERVICES

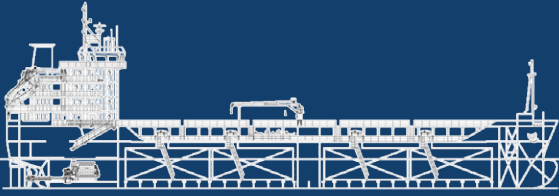
- Conceptual Design
- Contract Design
- Production Engineering
- Post Production Services
- DeltaLoad Ship Loading Software
- Advanced Engineering Analyses
- Project & Document Management
- Supervision Services
- Procurement Consultancy
- Feasibility Analyses

## REFERENCES

∆ H.İ. KAPTANOĞLU



# ASPHALT TANKERS



# 3500 CBM ASPHALT TANKER

The vessel is designed as mainly single screw, double side, single bottom in the cargo area, two independent tank group, into cargo holds separated by midship pump room. She is capable to carry bitumen at 180°C with gravity up to 1.04 t/m<sup>3</sup>, oil products and IMO II type cargoes at 60°C with gravity up to 1.04 t/m<sup>3</sup>. Two independent cargo tanks each divided into four tanks by corrugated bulkheads are installed on single bottom webs via supporting pads which have sliding and insulating ability. Additionally, tanks are to be supported by anti-rolling, anti-flooding and anti-pitching keys to absorb list, trim, acceleration and buoyancy loads. Two different compatible cargoes can be handled simultaneously. 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
- Ability to carry various types of cargo
- No thermal stress on hull structure



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 3500 CBM ASPHALT TANKER

# SPECS



### Capacities

Cargo	3 500 m <sup>3</sup>
Water Ballast	1 765 m <sup>3</sup>
HFO	197 m <sup>3</sup>
MDO	60 m <sup>3</sup>
Fresh Water	56 m <sup>3</sup>



### Speed Consumption/Range

Design speed	13.0 knots
Consumption	7.0 t/day
Cruising range	7 000 nm



### Machinery Main Components

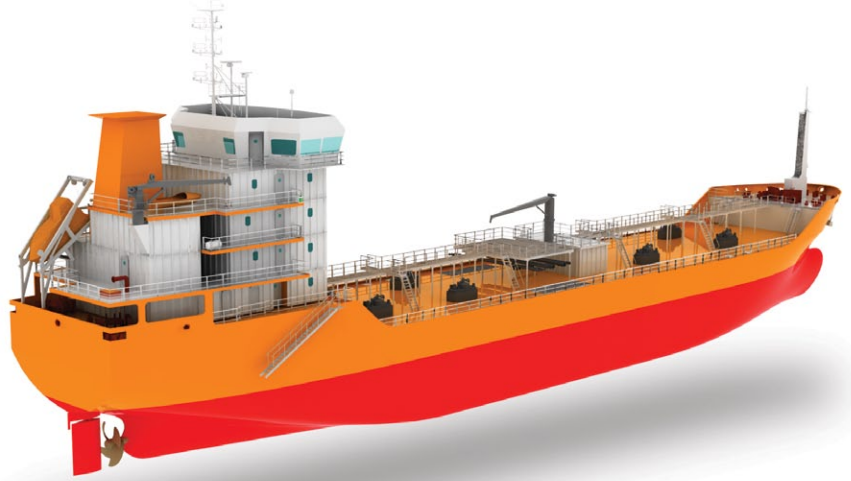
Main Engine	1 x 2 040 kW
Propeller	1 x 3 400 mm FPP
Diesel Generator	3 x 300 kW
Em'cy Diesel Generator	1 x 99 kW



### Complement

The accommodation area is arranged for eighteen (18) crews (including pilot).

Safety manning is eighteen (18) people.



### Main Dimensions

L <sub>OA</sub>	97.70 m
L <sub>BP</sub>	93.00 m
B (molded)	15.50 m
D (molded)	8.20 m
Draught (design)	5.10 m
Draught (scantling)	5.90 m



### Tonnage

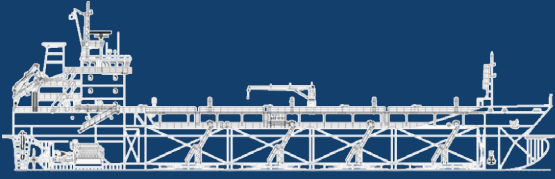
DWT (at design)	3 500 t
DWT (at scantling)	4 500 t
GRT (app)	3 570

### 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

No References Yet



# 6000 CBM ASPHALT TANKER

The vessel is designed as a single screw, asphalt and oil product tanker for unrestricted navigation and service. She is capable to carry asphalt at 170°C, oil products and IMO II type cargoes with gravity up to 1.40 t/m<sup>3</sup> in eight pieces of cargo tanks located in the cargo area and semi-integrated to hull structure. Hull structure is analysed by FEM tools for safety and weight optimization. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit. Cargo pump room installation, four segregations, one vapour return line are among the particulars of the ship.

## BENEFITS

Low fuel consumption  
Compliance with environmental requirements  
Low operating cost  
Low initial investment cost  
Ability to carry various types of cargo  
No thermal stress on hull structure  
Maximized cargo volume with semi-integrated tanks





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 6000 CBM ASPHALT TANKER

# SPECS



### Capacities

Cargo	6 050 m <sup>3</sup>
Water Ballast	2 750 m <sup>3</sup>
HFO	400 m <sup>3</sup>
MDO	75 m <sup>3</sup>
Fresh Water	70 m <sup>3</sup>



### Speed Consumption/Range

Design speed	14.0 knots
Consumption	12.3 t/day
Cruising range	8 000 nm



### Machinery

#### Main Components

Main Engine	1 x 3 360 kW
Propeller	1 x 4 200 mm FPP
Diesel Generator	3 x 300 kW
Em'cy Diesel Generator	1 x 99 kW



### Complement

The accommodation area is arranged for sixteen (16) crews, fourteen (14) single berth cabins, two (2) suits with separate bedrooms are provided.

Lifesaving equipment is arranged for twenty (20) people.



### Main Dimensions

L <sub>OA</sub>	105.50 m
L <sub>BP</sub>	98.50 m
B (molded)	16.80 m
D (molded)	8.20 m
Draught (design)	6.50 m
Draught (scantling)	6.50 m



### Tonnage

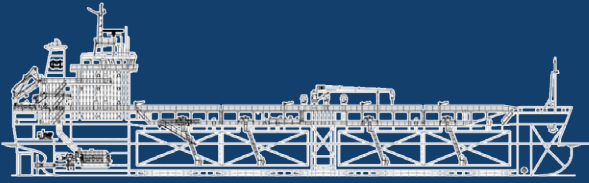
DWT (at design)	5 900 t
DWT (at scantling)	5 900 t
GRT (app)	3 920
NT (app)	1 670

### 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

- MAR VICTORIA
- MAR PAULA



# 6750 CBM ASPHALT TANKER

The vessel is designed as a single screw, asphalt and oil product tanker for unrestricted navigation and service. She is capable to carry asphalt at 250 C, oil products and coal tar, coal tar pitch(molten), coal tar naphta solvent, creosote cargoes with gravity up to 1.20 t/m<sup>3</sup> in two pieces of independent cargo tanks located in the cargo area independently from hull structure. 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. 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



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 6750 CBM ASPHALT TANKER

# SPECS



### Capacities

Cargo	6 750 m <sup>3</sup>
Water Ballast	3 630m <sup>3</sup>
HFO	375 m <sup>3</sup>
MDO	90 m <sup>3</sup>
Fresh Water	235 m <sup>3</sup>



### Speed Consumption/Range

Design speed	12.0 knots
Consumption	11.3 t/day
Cruising range	8 000 nm



### Machinery Main Components

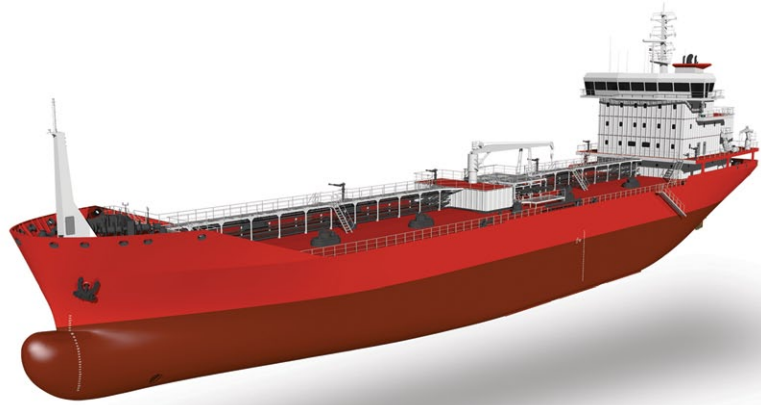
Main Engine	1 x 3 060 kW
Propeller	1 x 3 800 mm FPP
Diesel Generator	3 x 580 kW
Em'cy Diesel Generator	1 x 150 kW



### Complement

The accommodation area is arranged for eighteen (18) crews and a pilot. Eleven (11) single berth cabins, two (2) double berth cabins, two (2) suits with separate bedrooms and one (1) double berth owner/pilot room are provided.

Lifesaving equipment is arranged for nineteen (19) people.



### Main Dimensions

L <sub>OA</sub>	115.00 m
L <sub>BP</sub>	109.40 m
B (molded)	19.00 m
D (molded)	10.25 m
Draught (design)	6.80 m
Draught (scantling)	7.50 m



### Tonnage

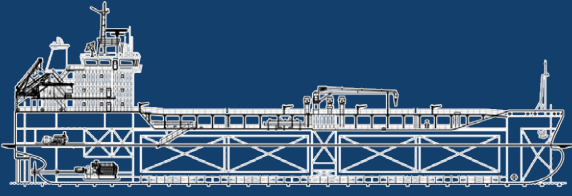
DWT (at design)	7 160 t
DWT (at scantling)	8 475 t
GRT (app)	6 025
NT (app)	1 810

### 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

BLACK SHARK



# 6825 CBM

## ASPHALT TANKER

The vessel is designed as a single screw, asphalt and oil product tanker for unrestricted navigation and service. She is capable to carry asphalt at 250 C, oil products and coal tar, coal tar pitch(molten), coal tar naphta solvent, creosote cargoes with gravity up to 1.20 t/m<sup>3</sup> in two pieces of independent cargo tanks located in the cargo area independently from hull structure. Cargo handling system is designed for four segregations based on double valve segregation. The propulsion plant is twin in-single out system so that main engines connected to the one the reduction gear and reduction gear is connected to the intermediate shaft. 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. 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



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 6825 CBM ASPHALT TANKER

# SPECS



### Capacities

Cargo	6 820 m <sup>3</sup>
Water Ballast	3 675 m <sup>3</sup>
HFO	500 m <sup>3</sup>
MDO	100 m <sup>3</sup>
Fresh Water	130 m <sup>3</sup>



### Speed Consumption/Range

Design speed	14.0 knots
Consumption	5.0 t/day
Cruising range	9 000 nm



### Machinery Main Components

Main Engine	2 x 2 040 kW
Propeller	1 x 4 000 mm FPP
Diesel Generator	2 x 600 kW
Em'cy Diesel Generator	1 x 150 kW



### Complement

The accommodation area is arranged for eighteen (18) crews and a pilot. Eleven (11) single berth cabins, two (2) double berth cabins, two (2) suits with separate bedrooms and one (1) double berth owner/pilot room are provided. Lifesaving equipment is arranged for nineteen (19) people.



### Main Dimensions

L <sub>OA</sub>	110.00 m
L <sub>BP</sub>	105.70 m
B (molded)	19.50 m
D (molded)	10.25 m
Draught (design)	6.80 m
Draught (scantling)	7.60 m



### Tonnage

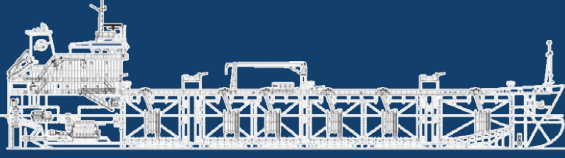
DWT (at design)	6 870 t
DWT (at scantling)	8 350 t
GRT (app)	6 388

### 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

CASTILLO DE PAMBRE



# 11 000 CBM ASPHALT TANKER

The vessel is designed as a single screw, asphalt and oil product tanker for unrestricted navigation and service. She is capable to carry asphalt at 250 C, oil products and molten sulphur at 150 C with gravity up to 1.80 t/m<sup>3</sup> in four (4) pcs cargo tanks located in the cargo area independently from hull structure. Cargo tanks are carried on special supporting structure and the movements are restricted by special keys. Single decked motor ship has triple bottom and triple skin with uncoated cargo 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. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- No thermal stress on hull structure
- Low maintenance period
- Extra safety with triple hull structure
- Cargo tanks dedicated for sulphur & bitumen





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 11 000 CBM ASPHALT TANKER

# SPECS



### Capacities

Cargo	11 090 m <sup>3</sup>
Water Ballast	4 725 m <sup>3</sup>
HFO	800 m <sup>3</sup>
MDO	90 m <sup>3</sup>
Fresh Water	120 m <sup>3</sup>



### Speed Consumption/Range

Design speed	14.5 knots
Consumption	19.3 t/day
Cruising range	12 500 nm



### Machinery Main Components

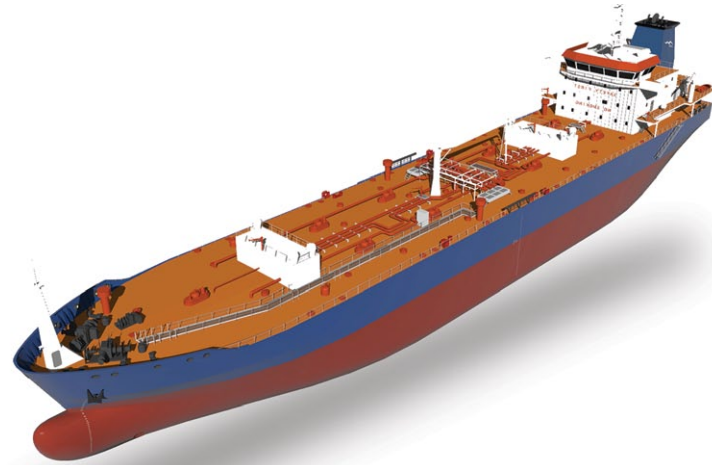
Main Engine	1 x 5 400 kW
Propeller	1 x 4 400 mm FPP
Diesel Generator	3 x 750 kW
Em'cy Diesel Generator	1 x 150 kW



### Complement

The accommodation area is arranged for twenty (20) crews. Eleven (11) single berth cabins, three (3) double berth cabins, three (3) suits with separate bedrooms are provided.

Lifesaving equipment is arranged for twenty (20) people.



### Main Dimensions

L <sub>OA</sub>	129.00 m
L <sub>BP</sub>	123.90 m
B (molded)	22.00 m
D (molded)	12.50 m
Draught (design)	7.80 m
Draught (scantling)	8.20 m



### Tonnage

DWT (at design)	11 450 t
DWT (at scantling)	12 500 t
GRT (app)	9 416
NT (app)	2 824

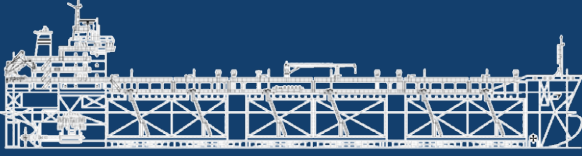
### SCOPE OF SERVICES

- 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

ST CHARLOTTE





# 18000 CBM

## ASPHALT TANKER

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/m<sup>3</sup> 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



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 18 000 CBM ASPHALT TANKER

# SPECS



### Capacities

Cargo	18 000 m <sup>3</sup>
Water Ballast	9 900m <sup>3</sup>
HFO	1 000 m <sup>3</sup>
MDO	130 m <sup>3</sup>
Fresh Water	150 m <sup>3</sup>



### 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



### Complement

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

Lifesaving equipment is arranged for 20 people.



### Main Dimensions

L <sub>OA</sub>	155.00 m
L <sub>BP</sub>	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

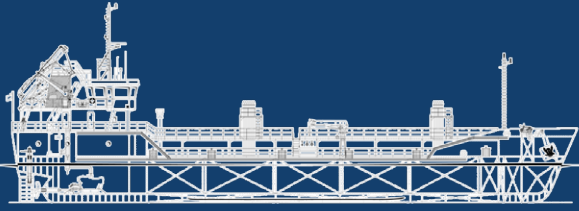
- Conceptual Design
- Contract Design
- Production Engineering
- Post Production Services
- DeltaLoad Ship Loading Software
- Advanced Engineering Analyses
- Project & Document Management
- Supervision Services
- Procurement Consultancy
- Feasibility Analyses

### REFERENCES

- T.ESRA
- T.AYLIN



# BUNKER TANKERS



# 1100 DWT BUNKER TANKER

The vessel is designed as single screw, IMO III chemical and oil product / bunker tanker for being capable to carry a large range of liquid IMO III type cargoes and clean/dirty products, lube oil, mineral and vegetable oils, with specific gravity up to 0.98 t/m<sup>3</sup>, in phenolic epoxy coated cargo / slop tanks. Five (5) pairs of cargo tanks and one integrated slop tank divided with corrugated longitudinal bulkheads are provided with double bottom and single side in way of cargo tanks. No structural elements face into the cargo tanks. 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
- Easy maintenance and overhauling



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 1100 DWT BUNKER TANKER

# SPECS



### Capacities

Cargo	1 200 m <sup>3</sup>
Water Ballast	405 m <sup>3</sup>
MDO	47 m <sup>3</sup>
Fresh Water	17 m <sup>3</sup>



### Speed Consumption/Range

Design speed	11.0 knots
Consumption	2.7 t/day
Cruising range	4 500 nm



### Machinery Main Components

Main Engine	1 x 662 kW
Propeller	1 x 2150 mm dia FPP
Diesel Generator	3 x 150 kW



### Complement

The accommodation area is arranged for nine (9) crews. Three (3) single berth and three (3) double-decker cabins with separate private facilities are provided.

Lifesaving equipment is arranged for twelve (12) people.



### Main Dimensions

L <sub>OA</sub>	57.80 m
L <sub>BP</sub>	54.40 m
B (molded)	9.60 m
D (molded)	4.50 m
Draught (design)	3.87 m



### Tonnage

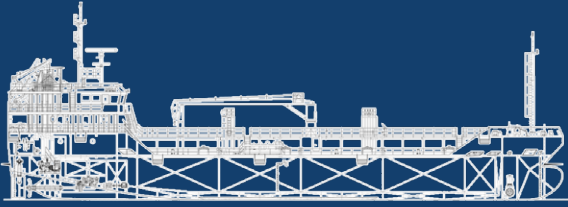
DWT (at design)	1 095 t
DWT (at scantling)	1 115 t
GRT (app)	587
NT	313

### 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

- OLJAREN
- DADIVA



# 1600 DWT BUNKER TANKER

The vessel is designed as twin screw, IMO III chemical and oil product/bunkering tanker for carrying a large range of liquid IMO III type cargoes and clean/dirty products, lube oil, mineral and vegetable oils, with specific gravity up to 1.25 t/m<sup>3</sup>, in phenolic epoxy coated cargo/slop tanks. Four (4) pairs of cargo tanks and one slop tank divided with corrugated longitudinal bulkheads are provided with double bottom and double sides in way of cargo tanks. No structural elements face into the cargo tanks. 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
- Easy maintenance and overhauling





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 1600 DWT BUNKER TANKER

# SPECS



### Capacities

Cargo	1 595 m <sup>3</sup>
Water Ballast	750 m <sup>3</sup>
MDO	54 m <sup>3</sup>
Fresh Water	30 m <sup>3</sup>



### Speed Consumption/Range

Design speed	11.5 knots
Consumption	3.5 t/day
Cruising range	3 000 nm



### Machinery Main Components

Main Engine	2 x 485 kW
Propeller	2 x 2000 mm dia FPP
Diesel Generator	3 x 500 kW
Em'cy Diesel Generator	1 x 320 kW



### Complement

The accommodation area is arranged for eight (8) crews. Eight (8) single berth cabins with single private facilities are provided.

Lifesaving equipment is arranged for twelve (12) people.



### Main Dimensions

L <sub>OA</sub>	65.00 m
L <sub>BP</sub>	61.57 m
B (molded)	11.50 m
D (molded)	5.00 m
Draught (design)	4.20 m
Draught (scantling)	4.20 m



### Tonnage

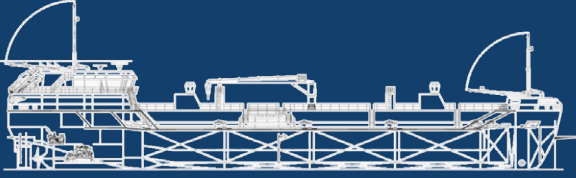
DWT (at design)	1 600 t
DWT (at scantling)	1 600 t
GRT	993

### 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

No References Yet



# 3600 DWT BUNKER TANKER

The specialised single decked, twin rudder propeller vessel is designed for bunkering and ship to ship operations, to carry petroleum products with flash point above 60°C, up to 3 (three) grades of specific cargo with the gravity no more than 1.025 t/m<sup>3</sup> at 75°C. Four (4) pair of cargo tanks and one (1) slop smooth-walled tank, divided with vertical transverse and horizontal corrugated longitudinal bulkheads are provided with double bottom, and double sides in way of cargo tanks. No steel structure facing into the cargo tanks except main deck. Electric motor driven, frequency controlled, twin screw, capacities 2x300 m<sup>3</sup>/h 110 mlc and 1x100 m<sup>3</sup>/h 110 mlc (fresh water base) cargo pumps to be installed. Two main pumps able to run simultaneously at full capacity. Discharge time not more than 7 hours.

## BENEFITS

- Low fuel consumption
- Sensitivity and coherence with the environment
- Low operating cost
- Easy maintenance and overhauling
- Low initial investment cost
- Ability to sail in iced sea areas



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 3600 DWT BUNKER TANKER

# SPECS



### Capacities

LNG Cargo	3 700 m <sup>3</sup>
Water Ballast	1 500 m <sup>3</sup>
HFO	200 m <sup>3</sup>
Fresh Water	60 m <sup>3</sup>



### Speed Consumption/Range

Design speed	12.5 knots
Consumption	9.9 t/day
Cruising range	4 500 nm



### Machinery

#### Main Components

Main Engine	2 x 1 200 kW
Propeller	2 x 3000 mm dia FPP
Diesel Generator	3 x 230 kW
Em'cy Diesel Generator	1 x 125 kW



### Complement

The accommodation area is arranged for eleven (11) personnel. Nine (9) single berth cabins and two (2) suits with separate bedrooms are provided.

Lifesaving equipment is arranged for twelve (12) people. Safe manning is 11 people.



### Main Dimensions

L <sub>OA</sub>	85.50 m
L <sub>BP</sub>	81.70 m
B (molded)	16.10 m
Draught (design)	5.00 m



### Tonnage

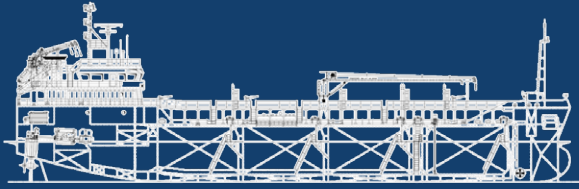
DWT (at design)	3 600 t
GRT	2 500 t
NT	980 t

### 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

No References Yet



# 3900 DWT BUNKER TANKER

The specialised single decked, twin rudder propeller vessel is designed for bunkering and ship to ship operations, to carry petroleum products with flash point above 60 C, up to 5 (five) grades of specific cargo with the gravity no more than 1.03 t/m<sup>3</sup> at 75 C. Four (4) pair of cargo tanks and one (1) slop smooth-walled tank, divided with vertical transverse and horizontal corrugated longitudinal bulkheads are provided with double bottom, and double sides in way of cargo tanks. No steel structure facing into the cargo tanks. One deep-well pump is fitted for each MDO tank, cargo pump room arranged for pumps serving for HFO tanks and one vapour return line is provided.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Easy maintenance and overhauling
- Ability to sail in iced sea areas



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 3900 DWT BUNKER TANKER

# SPECS



### Capacities

LNG Cargo	4 260 m <sup>3</sup>
Water Ballast	1 820 m <sup>3</sup>
MDO	140 m <sup>3</sup>
LO	9 m <sup>3</sup>
Fresh Water	130 m <sup>3</sup>



### Speed Consumption/Range

Design speed	11.0 knots
Consumption	8.0 t/day
Cruising range	3 200 nm



### Machinery

#### Main Components

Main Engine	2 x 1 080 kW
Propeller	2 x 2000 mm dia CPP
Diesel Generator	3 x 500 kW
Em'cy Diesel Generator	1 x 320 kW



### Complement

The accommodation area is arranged for ten (10) crews. Seven (7) single berth cabins and three (3) double berth are provided.

Lifesaving equipment is arranged for twelve (12) people.



### Main Dimensions

L <sub>OA</sub>	79.90 m
L <sub>BP</sub>	76.10 m
B (molded)	15.00 m
D (molded)	8.00 m
Draught (design)	5.90 m
Draught (scantling)	6.00 m



### Tonnage

DWT (at design)	3 910 t
DWT (at scantling)	4 015 t
GRT	2 747 t
NT	1 180 t

### 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

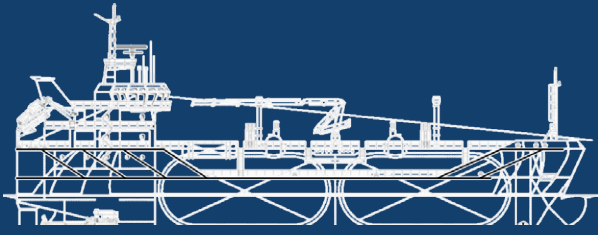
### REFERENCES

- FS CAMILLE
- AWANUIA



# LIQUIFIED GAS CARRIERS





# 2500 DWT LNG&OIL BUNKER TANKER

The vessel is designed as a twin screw, double hull LNG bunkering vessel, powered by dual-fuel engines for worldwide trade, however with special emphasis on the emerging north European LNG bunker market. Two (2) insulated independent Type C LNG cargo tanks are provided with a total capacity of 2,800 cbm. Each tank has one (1) frequency controlled cryogenic deep well pump securing efficient cargo handling with high capacity. The cargo system is designed with multi client, multi customer capabilities and continuous measuring of quality and quantity during loading and discharge/delivery to customers. The vessel can also deliver MGO/Diesel to customers. Operational flexibility, environmental concern and awareness and with possibilities to adapt to future regulations are the basic objectives of the design, which has been developed based on an in-depth and thorough understanding of the bunker market and the development of the market for LNG as marine fuel.

## BENEFITS

- Efficiency in fuel consumption & EEDI
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to sail in iced sea areas
- Easy maintenance and overhauling
- Operational flexibility
- Consideration of future regulations



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 2500 DWT LNG & OIL BUNKER TANKER

# SPECS



### Capacities

LNG Cargo	2 800 m <sup>3</sup>
Liquid Cargo	890 m <sup>3</sup>
Water Ballast	1 600 m <sup>3</sup>
DO	200 m <sup>3</sup>
Fresh Water	70 m <sup>3</sup>



### Speed Consumption/Range

Design speed	13.0 knots
Consumption (85% MCR, 5% tolerance)	
LNG Mode	7.5 t/day LNG+0.17 t/day DIESEL
Liquid Fuel Mode	8.8 t/day DIESEL



### Machinery

#### Main Components

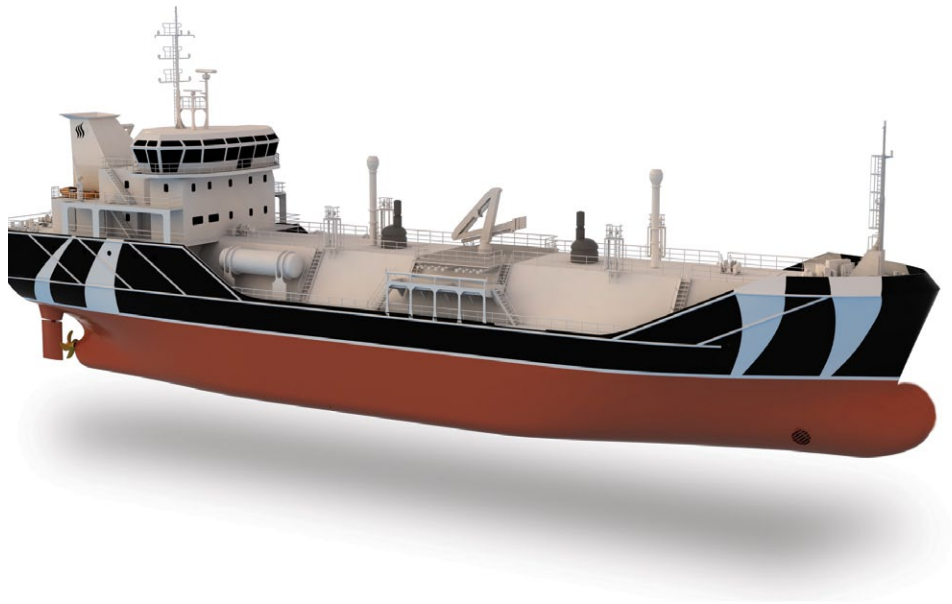
Main Engine	2 x 1 056 kW
Propeller	2 x 3 000 mm dia CPP
Diesel Generator	1 x TBA kW
Em'cy Diesel Generator	1 x 99 kW
LNG	2 x 300 m <sup>3</sup> /h @ 8 bar
MDO	2 x 150 m <sup>3</sup> /h @10 bar



### Complement

The accommodation area is arranged for fourteen (14) crew and pilot/owner. Twelve (12) pieces of single berth cabins, two (2) pieces of suits with separate bedrooms and one cabin for pilot/owner are provided.

Lifesaving equipment is arranged for sixteen (16) people.



### Main Dimensions

L <sub>OA</sub>	79.30 m
L <sub>BP</sub>	74.50 m
B (molded)	16.00 m
D (molded)	8.30 m
Draught (design)	5.80 m



### Tonnage

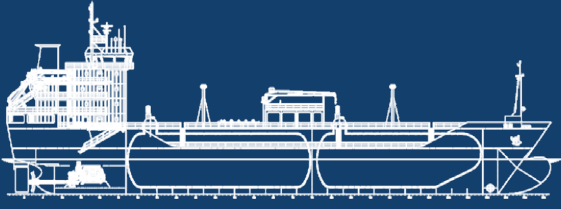
DWT (at design)	2 500 t
DWT (at scantling)	3 800 t
NT	1 140

### 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

No References Yet



# 3500 DWT LPG CARRIER

3500 CBM LPG Carrier is a 2 PG class ship, able to carry LPG, petrochemical gases and ammonia in two (2) pieces of semi refrigerated C type cargo tank designed for 10 bar pressure and -48 C temperature. During the design process advanced engineering tools have been used for hull form and weight optimization with a view to reduce the building and operation costs. Additionally environment-friendly approach and comfort criteria have been considered as main design inputs.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Ability to carry various types of cargo



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 3500 DWT LPG CARRIER SHIP

# SPECS



### Capacities

LNG Cargo	3 500 m <sup>3</sup>
Water Ballast	1 900 m <sup>3</sup>
HFO	205 m <sup>3</sup>
MDO	54 m <sup>3</sup>
Fresh Water	80 m <sup>3</sup>



### Speed Consumption/Range

Design speed	14.0 knots
Consumption	9.0 t/day
Cruising range	6 500 nm



### Machinery

#### Main Components

Main Engine	1 x 2 380 kW
Propeller	2 x 3 800 mm CPP
Diesel Generator	3 x 300 kW
Em'cy Diesel Generator	1 x 99 kW



### Complement

The accommodation area is arranged for seventeen (17) crews and one pilot. Thirteen (13) single berth cabins, a double berth cabin and two (2) suits with separate bedrooms are provided.

Lifesaving equipment is arranged for eighteen (18) people.



### Main Dimensions

L <sub>OA</sub>	94.00 m
L <sub>BP</sub>	86.60 m
B (molded)	15.50 m
D (molded)	7.80 m
Draught (design)	6.00 m
Draught (scantling)	6.40 m



### Tonnage

DWT (at design)	3 500 t
DWT (at scantling)	4 000 t

### SCOPE OF SERVICES

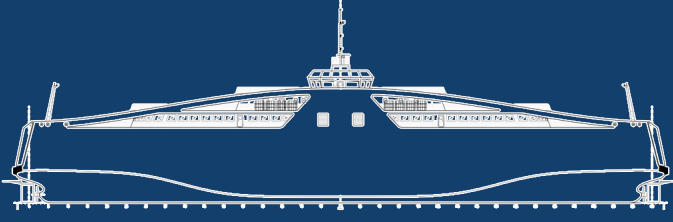
- Conceptual Design
- Contract Design
- Production Engineering
- Post Production Services
- DeltaLoad Ship Loading Software
- Advanced Engineering Analyses
- Project & Document Management
- Supervision Services
- Procurement Consultancy
- Feasibility Analyses

### REFERENCES

No References Yet



# PASSENGER SHIPS



# 1250 PAX

## TRIMARAN DAY FERRY

Day-ferry is designed for daily cruises with sailing, loading and unloading ability from both sides and for ports with restricted maneuvering possibilities. The ship, equipped with redundant propulsion and maneuvering systems, has high sea-keeping particulars and trimaran hull structure creating low resistance, thus low fuel consumption. Passenger saloon is arranged for 850 pax while 400 pax can be accommodated on open deck. The passenger saloon is fitted with HVAC equipment for winter and summer conditions, high comfort in terms of vibration and noise and panoramic view. CP propellers installed at both ends of the ship are connected to a single engine via reduction, shaft and coupling. Depending on the cruising direction only one propeller is activated while the other's blades are placed parallel to streamlines for minimum resistance. Two pump-jets enabling 360° propulsion provides excellent maneuverability and also they are substitute to main propulsion system with generators in case of breakdown.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Low initial investment cost
- Operational flexibility





CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 1250 PAX TRIMARAN DAY FERRY

# SPECS



### Capacities

Passenger	Indoor Seated: 850 Pax Outdoor Seated: 400 Pax
Car	200
Car + Truck	166 + 16
MDO	250 m <sup>3</sup>
Fresh Water	50 m <sup>3</sup>



### Speed Consumption/Range

Design speed	16.0 knots
Consumption	14.7 t/day
Cruising range	4 500 nm



### Machinery Main Components

Main Engine	1 x 4 000 kW
Propeller	1 x 2 500 mm CPP
Diesel Generator	3 x 550 kW
Shaft Generator	2 x 300 kW
Em'cy Diesel Generator	1 x 90 kW



### Complement

The accommodation area is arranged for ten (10) crews. Ten (10) single berth cabins with separate private facilities are provided.



### Main Dimensions

L <sub>OA</sub>	99.90 m
L <sub>BP</sub>	96.00 m
B (molded)	28.00 m
D (molded)	6.00 m
Draught (design)	3.50 m
Draught (scantling)	3.50 m



### Tonnage

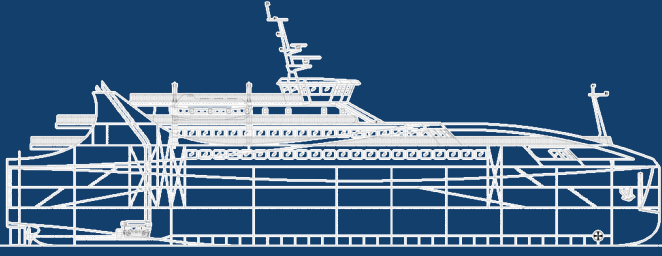
DWT (at design)	850 t
DWT (at scantling)	850 t
GRT (app)	10 300
NT	3 090

### 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

No References Yet



# 1430 PAX

## ROPAX FERRY

Day ferry is an innovative design of a RoPax ferry that is tailor made project especially for the trade in Marmara Sea. Operational flexibility of highest degree is one of the most important characteristics of the design. This gives the operator the opportunity to focus on high passenger capacity in summer season and more cargo flexibility during the winter. Furthermore high reliability and low operating costs are among the key aspects of the ship. Advanced design features create a pleasant atmosphere in all public areas and thus makes the trip an agreeable travelling experience. The hull form, optimized with CFD analysis, is designed for minimum resistance and fuel consumption. 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
- Easy maintenance and overhauling
- Operational flexibility



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



INDUSTRIAL



UTILITY



## 1430 PAX ROPAX FERRY

# SPECS



### Capacities

Passenger	Indoor Seated: 850 Pax Outdoor Seated: 580 Pax
Car	150
Car + Truck	106 + 16
MDO	250 m <sup>3</sup>
Fresh Water	250 m <sup>3</sup>



### Speed Consumption/Range

Design speed	14.0 knots
Consumption	11.8 t/day
Cruising range	5 000 nm



### Machinery Main Components

Main Engine	2 x 1 600 kW
Propeller	2 x 2 300 mm CPP
Diesel Generator	3 x 500 kW
Em'cy Diesel Generator	1 x 99 kW



### Complement

The accommodation area is arranged for twelve (12) crews. Twelve (12) single berth cabins, are provided.



### Main Dimensions

L <sub>OA</sub>	85.00 m
L <sub>BP</sub>	83.60 m
B (molded)	20.70 m
D (molded)	5.00 m
Draught (design)	3.30 m



### Tonnage

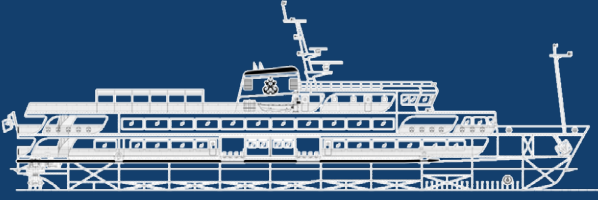
DWT (at design)	1 000 t
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### SCOPE OF SERVICES

- 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

No References Yet



# 1800 PAX PASSENGER SHIP

The vessel which is selected by voting on internet within the “Istanbul Let’s Select Your Ferry” campaign, keeps traditional lines of conventional Istanbul’s passenger ships. The vessel is equipped with modern diesel-electric drive system allowing big saving on the engine power and thus very low emission levels and minimized noise. This environment-friendly of quiet ship has spacious accommodation, large panoramic windows, effective air conditioning systems and large open deck areas free from vibration. Special design features such as passenger ramps, smooth floors, wide aisles and special toilets for disabled people create a pleasant atmosphere in all public areas. Hull structure is analysed by FEM tools for safety, weight optimization and vibration. The hull form, optimized with CFD analysis, is designed for minimum resistance and fuel consumption. 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
- Easy maintenance and overhauling
- Innovative propulsion system



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## 1800 PAX PASSENGER SHIP

# SPECS



### Capacities

Passenger	Indoor Seated: 703 Pax Outdoor Seated: 588 Pax Standing: 509 Total: 1800 Paxs
Water Ballast	142.80 m <sup>3</sup>
MDO	60.40 m <sup>3</sup>
Fresh Water	4.0 m <sup>3</sup>



### Speed Consumption/Range

Design speed	14.0 knots
Consumption	6.0 t/day
Cruising range	3 000 nm



### Machinery Main Components

Main Engine	4 x 420 kW
Propeller	2 x 1 400 mm Azimuth
Bow Thruster	200 kW
Em'cy Diesel Generator	1 x 150 kW



### Complement

The accommodation area is arranged for six (6) personel. Two (2) single berth cabins and two (2) double berth cabins with separate private facilities are provided.



### Main Dimensions

L <sub>OA</sub>	67.96 m
L <sub>BP</sub>	63.38 m
B (molded)	13.00 m
D (molded)	3.70 m
Draught (design)	2.50 m
Draught (scantling)	2.80 m



### Tonnage

DWT (at design)	115 t
DWT (at scantling)	300 t
GRT	741

### 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

- SH FATİH
- SH KADIKÖY
- SH BEYOĞLU
- SH BEYKOZ
- SH SARIYER



# BARGES & DOCKS



# 8500 DWT FLOATING DRY DOCK

The floating dock is designed to performing all kinds of maintenance and overhauling operations (ship equipment removal/replacement, handling, maintenance operations and testing) for vessels up to 8.500 tonnes of displacement. Docking space for ships is up to 135 m length, 19 m breadth and 6 m draft. Maximum deck load for clear deck area is 12 t/m<sup>3</sup>.

The floating dock is equipped with two (2) travelling cranes with maximum lifting capacity 20 tonnes.



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## 8500 DWT FLOATING DRY DOCK

# SPECS



### Capacities

Cargo	8 500 t
Water Ballast	26 500 m <sup>3</sup>
HFO	N/A
MDO	60 m <sup>3</sup>
Fresh Water	50 m <sup>3</sup>



### Speed Consumption/Range

Design speed	N/A
Consumption	N/A
Cruising range	N/A



### Machinery Main Components

Main Engine	N/A
Propeller	N/A
Diesel Generator	N/A
Em'cy Diesel Generator	1 x 500 kW



### Complement

The accommodation area is arranged for eighteen (18) personnel with nine (9) bunk berth cabins.



### Main Dimensions

L <sub>OA</sub>	175.00 m
L <sub>BP</sub>	160.00 m
B (molded)	37.50 m
D (molded)	16.50 m
Draught (design)	3.00 m
Draught (scantling)	12.00 m



### Tonnage

### SCOPE OF SERVICES

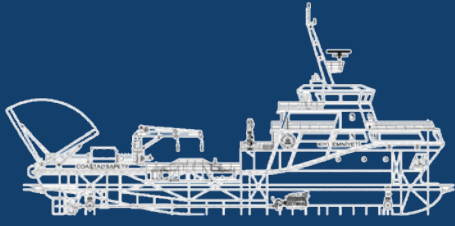
- Conceptual Design
- Contract Design
- Production Engineering
- Post Production Services
- DeltaLoad Ship Loading Software
- Advanced Engineering Analyses
- Project & Document Management
- Supervision Services
- Procurement Consultancy
- Feasibility Analyses

### REFERENCES

- SEDEF NB177
- SEDEF NB178



# SERVICE SHIPS



# 53 M

## OIL RECOVERY SHIP

Vessel with steel hull and superstructure is designed to recover spilled oil, prevent sea pollution and handle buoy. Fitted with all the equipment necessary to implement effective and quick oil clean-up operations the ship has two (2) rigid sweeping arms with ropes and cables and tow cranes including winches, hydraulic controls for sweeping arms. Recovering spilled oil capacity is 200m<sup>3</sup> for an hour and 400 m<sup>3</sup> in total.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Easy maintenance and overhauling
- Operational flexibility
- Multiple functionality
- Efficient propulsion system



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



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UTILITY



## 53 M OIL RECOVERY SHIP

# SPECS



### Capacities

Cargo	422 m <sup>3</sup>
Water Ballast	269 m <sup>3</sup>
MDO	75 m <sup>3</sup>
Fresh Water	40 m <sup>3</sup>



### Speed Consumption/Range

Design speed	13.0 knots
Consumption	9.1 t/day
Cruising range	1 850 nm



### Machinery Main Components

Main Engine	2 x 1 170 kW
Propeller	2 x 1 695 mm CPP
Diesel Generator	3 x 450 kW
Em'cy Diesel Generator	1 x 116 kW



### Complement

Accommodation is arranged for thirteen (13) persons. Five (5) two berth cabins, two (2) suits with separate private facilities and a owner cabin are provided.



### Main Dimensions

L <sub>OA</sub>	52.95 m
L <sub>BP</sub>	46.90 m
B (molded)	12.00 m
D (molded)	5.50 m
Draught (design)	3.80 m
Draught (scantling)	4.00 m



### Tonnage

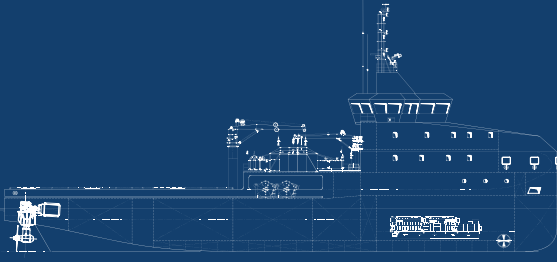
DWT (at design)	597 t
DWT (at scantling)	700 t
GRT (app)	939
NT (app)	281

### 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

SEYIT ONBASI



# 63 M

## OIL SUPPLY RECOVERY SHIP

The vessel with steel hull and superstructure is designed as twin screw oil supply recovery ship for various purposes such as detection and recovering oil spill; transportation of fresh water, diesel oil, stores, materials and equipment; external fire fighting; movement between platforms and shore; rescue men fallen overboard; towing, drilling and work-over rig in unrestricted service area. Fitted with all necessary equipment for quick and effective oil clean-up and fire-fighting, the vessel is driven by efficient diesel electric propulsion with twin azimuth thrusters. Two rigid sweeping arms are installed for oil recovery while dynamic positioning capability is maintained by two azimuth and one bow thruster. Designed for 24/7 continuous operation and 10 days at stand-by position as station, the vessel has a total spilled oil capacity of 1.050 m<sup>3</sup>.

### BENEFITS

- Compliance with environmental requirements
- Low operating cost
- Easy maintenance and overhauling
- Operational flexibility
- Multiple functionality
- Efficient propulsion system





CONTAINER



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## 63 M OIL SUPPLY RECOVERY SHIP

# SPECS



### Capacities

Oil Spill Collecting Tanks	1050 m <sup>3</sup>
Cargo D/O Tanks	320 m <sup>3</sup>
Cargo F/W Tanks	350 m <sup>3</sup>
Water Ballast	700 m <sup>3</sup>
MDO	110 m <sup>3</sup>
Fresh Water	40 m <sup>3</sup>



### Speed Consumption/Range

Design speed	17 knots
Consumption	26.0 t/day
Cruising range	1 250 nm



### Machinery

#### Main Components

Main Engine	4 x 1 600 kW
Propeller	2 x 2 850 mm CPP
Diesel Generator	2 x 2 750 kW
Em'cy Diesel Generator	1 x 99 kW



### Complement

Accommodation is arranged for twenty two (22) people. Nine (9) double berthed cabins, four (4) single berthed cabins with separate private facilities are provided.



### Main Dimensions

L <sub>OA</sub>	62.90 m
L <sub>BP</sub>	60.00 m
B (molded)	15.00 m
D (molded)	6.00 m
Draught (design)	4.20 m
Draught (service)	3.60 m
Draught (scantling)	4.90 m



### Tonnage

DWT (at design)	1 300 t
DWT (at scantling)	1 950 t
DWT (at service)	800 t
GRT	1 810
NT (app)	543

### SCOPE OF SERVICES

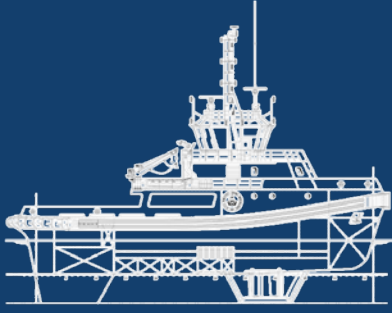
- Conceptual Design
- Contract Design
- Production Engineering
- Post Production Services
- DeltaLoad Ship Loading Software
- Advanced Engineering Analyses
- Project & Document Management
- Supervision Services
- Procurement Consultancy
- Feasibility Analyses

### REFERENCES

No References Yet



# TUGBOATS



# 60 TON BP TUGBOAT

Vessel with steel hull and superstructure is designed for towing operations, pushing operations, line handling, general handling and fire fighting . The vessel is equipped with Voith Schneider propulsion system for superior manoeuvrability. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Easy maintenance and overhauling
- Operational flexibility
- Efficient propulsion system



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



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UTILITY



## 60 TON BP TUGBOAT

# SPECS



### Capacities

Cargo	60 tons (Bollards Pull Ahead)
Water Ballast	60 m <sup>3</sup>
MDO	100 m <sup>3</sup>
Fresh Water	50 m <sup>3</sup>



### Speed Consumption/Range

Design speed	up to 14.0 knots
Consumption	0.85 t/day
Cruising range	1 350 nm



### Machinery Main Components

Main Engine	2 x 2 610 kW
Propeller	2 x Voith Cycloidal
Diesel Generator	2 x 150 kW



### Complement

Accommodation is arranged for ten (10) persons. Four (4) single bed cabins with separate private facilities and three (3) double decker cabins are provided.

Lifesaving equipment is arranged for sixteen (16) people.



### Main Dimensions

L <sub>OA</sub>	33.75 m
L <sub>BP</sub>	31.55 m
B (molded)	12.60 m
D (molded)	5.20 m
Draught (design)	3.10 m
Draught (scantling)	3.30 m



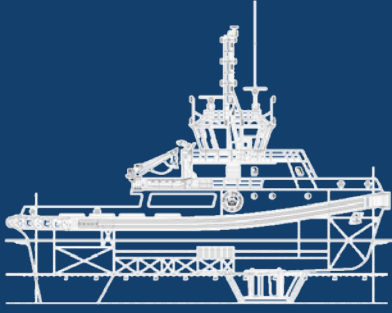
### Tonnage

### 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

No References Yet



# 80 TON BP TUGBOAT

Vessel with steel hull and superstructure is designed for towing operations, pushing operations, line handling, general handling and fire fighting . The vessel is equipped with Voith Schneider propulsion system for superior manoeuvrability. Overall design provides an environment-friendly, cost-effective, reliable and flexible unit.

## BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Easy maintenance and overhauling
- Operational flexibility
- Efficient propulsion system



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



TANKER



PASSENGER



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UTILITY



## 80 TON BP TUGBOAT

# SPECS



### Capacities

Cargo	80 tons (Bollards Pull Ahead)
Water Ballast	60 m <sup>3</sup>
MDO	130 m <sup>3</sup>
Fresh Water	50 m <sup>3</sup>



### Speed Consumption/Range

Design speed	up to 14.0 knots
Consumption	1.1 t/day
Cruising range	1 350 nm



### Machinery Main Components

Main Engine	2 x 3 600 kW
Propeller	2 x Voith Cycloidal Rudder
Diesel Generator	2 x 150 kW



### Complement

Accommodation is arranged for ten (10) persons. Four (4) single bed cabins with separate private facilities and three (3) double decker cabins are provided.

Lifesaving equipment is arranged for sixteen (16) people.



### Main Dimensions

L <sub>OA</sub>	37.50 m
L <sub>BP</sub>	34.55 m
B (molded)	14.00 m
D (molded)	5.60 m
Draught (design)	3.80 m
Draught (scantling)	4.00 m



### Tonnage

### SCOPE OF SERVICES

- Conceptual Design
- Contract Design
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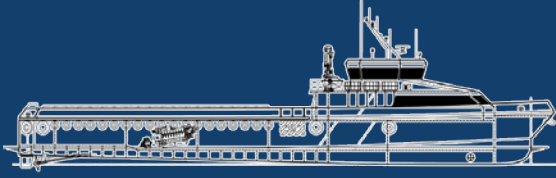
### REFERENCES

No References Yet





# CREW SHIPS



# 82 PAX

## CREW SHIP

Utility vessel is designed for support production operations, providing storage space, emergency standby, and transporting personnel between platforms. This powerful vessel with optimized weight can travel at up to 25 knots.

### BENEFITS

- Low fuel consumption
- Compliance with environmental requirements
- Low operating cost
- Easy maintenance and overhauling
- Operational flexibility
- Multiple functionality



CONTAINER



BULK CARRIER



GENERAL CARGO



MULTIPURPOSE



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PASSENGER



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UTILITY



## 82 PAX CREW SHIP

# SPECS



### Capacities

Cargo	72 Pax
HFO	123 m <sup>3</sup>
Fresh Water	100 m <sup>3</sup>



### Speed Consumption/Range

Design speed	25.0 knots
Consumption	13.6 t/day



### Machinery Main Components

Main Engine	2 x 1 850 kW
Propeller	2 x 1 300 mm FPP
Diesel Generator	3 x 200 kW
Em'cy Diesel Generator	1 x 45 kW



### Complement

The accommodation area is arranged for eight (8) crews in seven (7) cabins.

Suitable for 72 passenger seating.



### Main Dimensions

L <sub>OA</sub>	45.00 m
L <sub>BP</sub>	42.00 m
B (molded)	8.50 m
D (molded)	3.70 m
Draught (design)	1.45 m
Draught (scantling)	2.10 m



### Tonnage

DWT (at design)	58 t
DWT (at scantling)	175 t

### 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

No References Yet

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