



# MULTIPURPOSE CARGO VESSELS

CARGO VESSEL SERIES



**DAMEN**

# COMBI FREIGHTERS AND COASTERS

CF 8200

## VERSATILE MULTIPURPOSE CARGO VESSELS

Damen has developed versatile multipurpose cargo vessels. The Combi Freighters and Coasters are designed to carry numerous types of cargo in line with today's markets. Key in Damen's design approach is the development of vessels that are fuel efficient and, thus, economical to operate and which generate a small environmental footprint.

Combi Freighters and Coasters are optimised for transporting dry cargo such as bulk, steel coils, forest products, project cargo, containers, breakbulk and general cargo.

From our portfolio, Damen is able to design, based on proven standards, the optimal vessel for its clients. Damen's Combi Freighters and Coasters are ideal vessels for reliable, year-round utilisation.

### HIGH QUALITY AND EASY TO OPERATE VESSELS

Combi Freighters and Coasters are based on proven designs. In the design process special attention was paid to the underwater shape, resulting in low resistance and good seakeeping, combined with excellent carrying capabilities. Our vessels are known for quality, low operational cost and high re-sale value.

- Efficient bow and hull shape enables reduced fuel consumption
- Superb stability and corresponding ease of operation
- Excellent ratio payload over deadweight
- Good blend of straightforward design and modern crew comfort requirements
- Wide variety of propulsion systems
- Customisable with large number of options

### EXCELLENT SEAKEEPING BEHAVIOUR

In the design process particular attention has been paid to the bow and hull of the Combi Freighter and Coaster series. The distinctive sleek bow and slender hull enables the vessel to sustain its speed and course in head seas, as well as helping to reduce fuel consumption. The bow design leads to less acceleration and slamming has been reduced to a very low level, improving crew comfort and safety.

### CUSTOMISATION

All vessels can be equipped with:

- Gasoil/HFO or (DF) LNG
- Hybrid propulsion
- Grain bulkheads
- Tweendeck panels, full or partial
- Controllable or fixed pitch propeller
- Ballast water treatment
- Ice class
- Selective catalytic reduction
- Scrubbers
- Cargo handling cranes
- Dangerous cargo



CF 13500



CF 11000



CF 3850



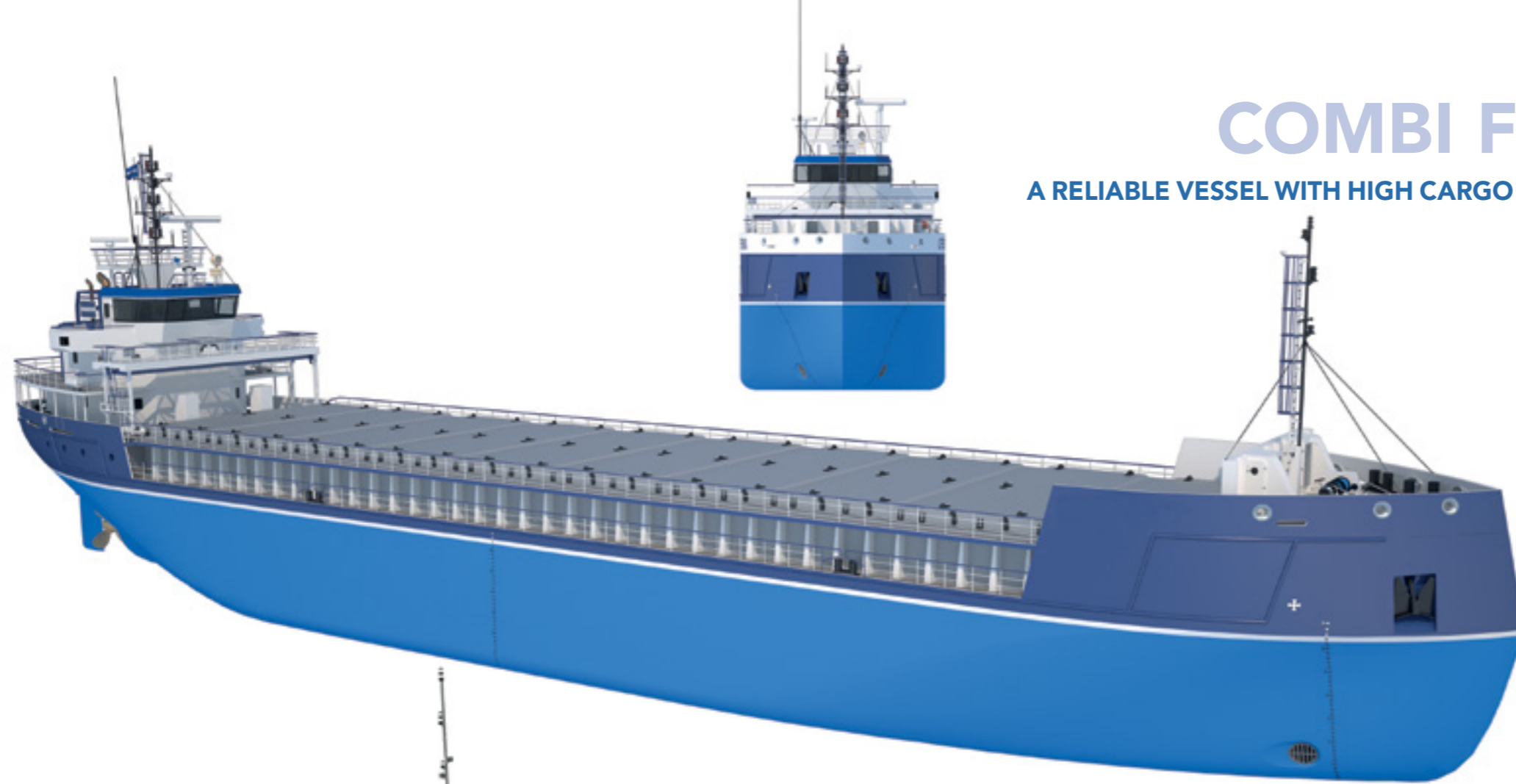
CC 2500

**DAMEN HAS A REPUTATION FOR DESIGNING AND BUILDING HIGH QUALITY AND EASY TO OPERATE MULTIPURPOSE CARGO VESSELS**

# COMBI FREIGHTER 5000

A RELIABLE VESSEL WITH HIGH CARGO CAPACITY AND LOW OPERATIONAL COSTS

In the design process of the Combi Freighter 5000 special attention has been paid to limiting the ship to below 3000 GT (volume). This excludes additional navigational requirements and decreases operational costs. With reduction of volume, Damen managed to maximize the cargo capacity to 5,100 tons.

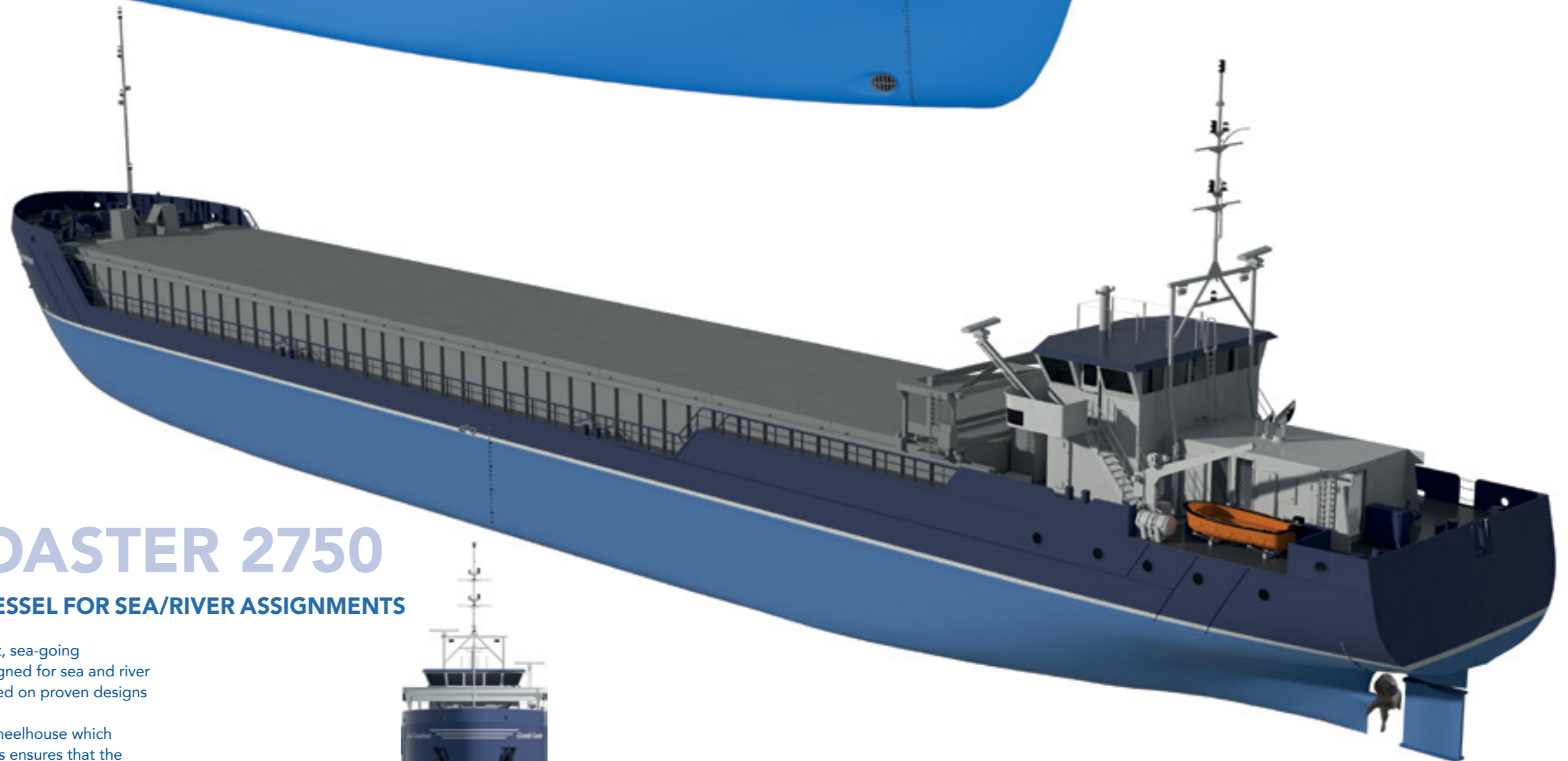


# COMBI COASTER 2750

FUEL EFFICIENT CARGO VESSEL FOR SEA/RIVER ASSIGNMENTS

The Combi Coaster 2750 is a fuel-efficient, sea-going multipurpose cargo vessel especially designed for sea and river assignments. The smooth hull form is based on proven designs and optimised for sea and river transport.

The CC2750 is available with a raisable wheelhouse which reduces the air draught to 6.4 metres. This ensures that the vessel can reach more destinations upstream. The single, box shaped hold gives the maximum possible volume and allows efficient cargo handling.



# WELL SUITED FOR REGULAR SHIPPING AND PROJECT CARGO



The cargo holds of the Combi Freighters and Coasters are designed and optimised for carrying a wide variety of general cargo types such as bulk, steel coils, forest products and project cargo. Combi Freighters and Coasters have the maximum cargo hold length in their class, an attractive feature, which enables them to carry more cargo.

The cargo holds are, as far as practical, box-shaped and suitable for handling containers, breakbulk and project cargo. The unobstructed deck offers the possibility to carry containers and extended project cargo.



## DESIGN OF WHEELHOUSE AND CREW ACCOMMODATION

The Cargo Vessel series are designed to the latest ergonomic and comfort standards. The wheelhouse offers the optimal view of the deck during cargo operations, sailing and when manoeuvring at close quarters. The accommodation, while

taking into account the need for efficiency, is modern and comfortable, taking into account the well-being of the crew. Noise and vibration have been reduced to a minimum through use of high quality materials.

**CF 19000**

Length overall (m)	159.99
Length p.p. (m)	152.34
Beam (m)	23.70
Depth to main deck (m)	11.95
Draught design(m)	8.41
Speed (kn)	14.9
Deadweight (t)	19,000

**CF 14000**

Length overall (m)	146.25
Length p.p. (m)	139.99
Beam (m)	20.10
Depth to main deck (m)	11.45
Draught design(m)	8.25
Speed (kn)	13.5
Deadweight (t)	14,000

**CF 13500**

Length overall (m)	146.25
Length p.p. (m)	139.99
Beam (m)	20.10
Depth to main deck (m)	11.45
Draught design(m)	8.25
Speed (kn)	15.3
Deadweight (t)	13,500

**CF 11000**

Length overall (m)	145.63
Length p.p. (m)	138.62
Beam (m)	18.25
Depth to main deck (m)	10.30
Draught design(m)	7.40
Speed (kn)	14.0
Deadweight (t)	11,000

**CF 9200**

Length overall (m)	130.92
Length p.p. (m)	128.92
Beam (m)	15.90
Depth to main deck (m)	8.80
Draught design(m)	7.21
Speed (kn)	13.3
Deadweight (t)	9,200

**CF 8200**

Length overall (m)	118.14
Length p.p. (m)	112.29
Beam (m)	15.90
Depth to main deck (m)	8.80
Draught design(m)	7.20
Speed (kn)	13.4
Deadweight (t)	8,100

**CF 6500**

Length overall (m)	109.54
Length p.p. (m)	107.65
Beam (m)	15.20
Depth to main deck (m)	7.15
Draught design(m)	6.10
Speed (kn)	10.0
Deadweight (t)	6,500

**CF 5000**

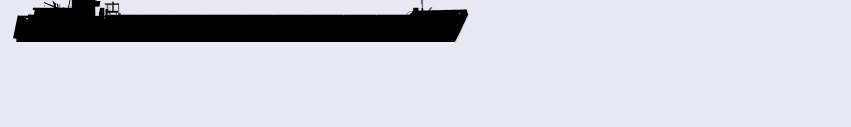
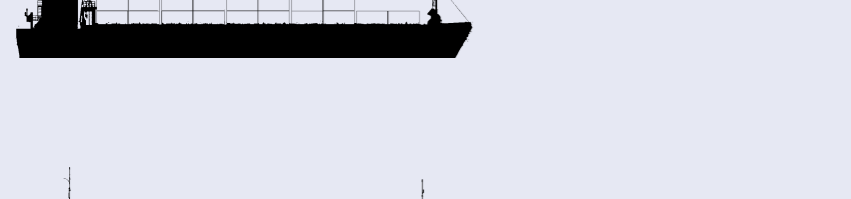
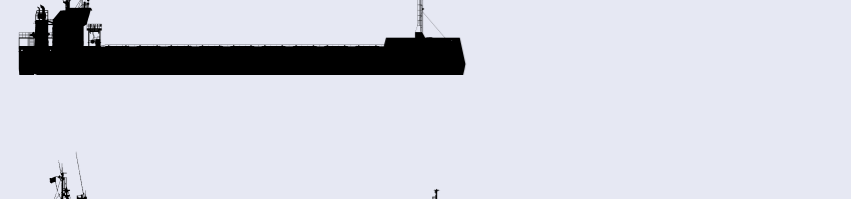
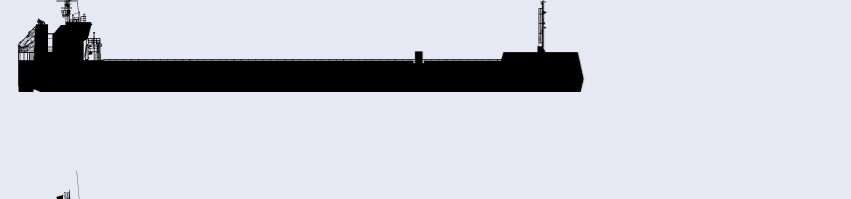
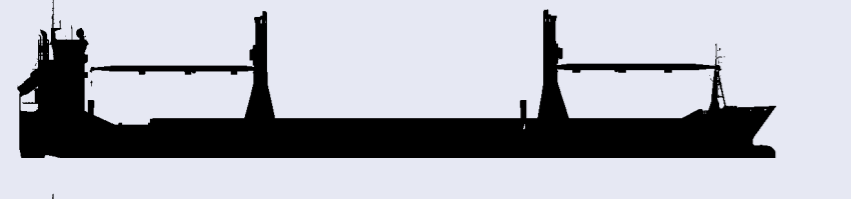
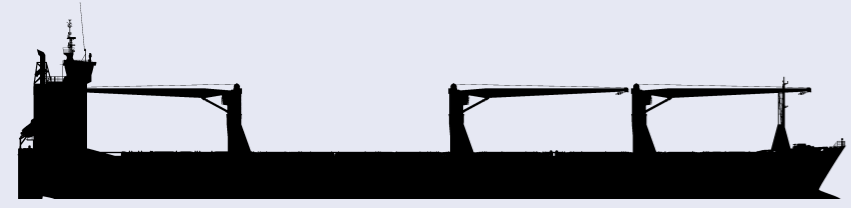
Length overall (m)	86.82
Length p.p. (m)	84.93
Beam (m)	15.20
Depth to main deck (m)	7.15
Draught design(m)	6.35
Speed (kn)	10.5
Deadweight (t)	5,100

**CF 3850**

Length overall (m)	88.60
Length p.p. (m)	84.99
Beam (m)	12.50
Depth to main deck (m)	7.00
Draught design(m)	5.42
Speed (kn)	12.5
Deadweight (t)	3,800

**CC 2750**

Length overall (m)	88.63
Length p.p. (m)	84.99
Beam (m)	11.30
Depth to main deck (m)	5.40
Draught design(m)	4.35
Speed (kn)	10.8
Deadweight (t)	2,750



## ENVIRONMENTAL CARE

During the design process, special attention was paid to sustainability. The combination of materials, workmanship and Damen's experience ensures a long lifetime for the vessel. The Damen mind-set during the design process is to minimise the impact vessels have on the environment. The starting point here is the correct hull because this is vital in reducing fuel consumption. Every tonne of fuel saved translates to reduction of emissions. The location of oil tanks, hull coatings, refrigerants, ballast water, waste heat recovery and other environmental features were given great attention.

- The multipurpose cargo vessels are supplied with a Green Passport, which gives an inventory of possible hazardous materials on board
- Fuel tanks are protected with cofferdams and the vessel has a Zero Dumping Certificate

### Optional

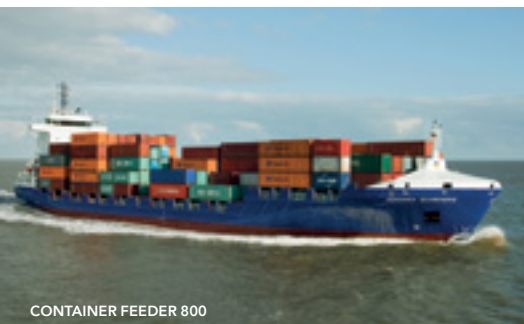
- Main engine and generator sets are running on natural gas (LNG); excellent handling of the pressure build-up in the LNG tanks
- Scrubber installation can help gain the benefits of HFO sailing and reduce emissions

## BUILDING ON SITE

Damen Technical Cooperation provides a prefabricated shipbuilding kit and can, on request, combine this with expert assistance, training and backup. By using standardised components it is possible to create a custom-built design, fulfilling specific local requirements.



● Damen yard/joint venture  
● Business cooperation  
● Partner yard



# MULTIPURPOSE CARGO VESSELS

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