

**'Orcana'**  
SPECIFICATIONS

**Type of vessel:** Dry cargo  
**Classification:** 1 + HULL + MACH General Cargo Ship unrestricted navigation +AUT-UMS MON-SHAFT, Heavy Cargo  
**Builder:** Barkmeijer Shipyards  
**Owner:** Scheepvaartbedrijf de Haan, the Netherlands  
**Length:** 89.99 metres  
**Length bp:** 84.98 metres  
**Beam:** 14.00 metres  
**Depth:** 7.15 metres  
**Draught:** 5.68 metres  
**Service speed:** 12 knots  
**Deadweight:** 4,500DWT  
**Gross:** 2,999GT  
**Containers (Hold):** 102TEU  
**(Deck):** 48TEU  
**Total:** 150TEU  
**Cargo (Hold):** 59,317m<sup>3</sup>  
**Water ballast:** 18,390m<sup>3</sup>  
**Potable water:** 880m<sup>3</sup>  
**Gas oil:** 3,700m<sup>3</sup>  
**Heavy fuel oil:** 1,500m<sup>3</sup>  
**Lube oil:** 700m<sup>3</sup>  
**Navigation:** GMDSS for regions A1+A2+A3  
**Engines:** MaK diesel 6M25, 1,800kW at 750rpm  
**Propeller:** Scana Volda CPP  
**Gearbox:** Scana Volda  
**Steering:** Van der Velde Marine Systems  
**Bow thruster:** 250kW Veth  
**Auxiliary power:** 400kVA, 400V, 50Hz shaft generator

# 'ORCANA'

## Versatile single deck dry cargo vessel

The 90-metre 'Orcana' was handed over to her owners Scheepvaartbedrijf de Haan, based in Delfzijl, the Netherlands, in November 2006.

The vessel, built by Stroobos-based Barkmeijer Shipyards, is a versatile single-hold dry cargo vessel for unrestricted services. The multi-purpose coastal vessel is the eleventh in the 4,500DWT series, and the fifth vessel operating on HFO 380cSt. The vessel has a total cargo capacity of 4,500 tonnes at a summer-draught of 5.68 metres.

Equipped for unrestricted navigation and transport of all kind of dry cargoes, the ship can also carry containers. The vessel is also equipped for the carriage of dangerous cargoes in bulk, and the tank top has been strengthened for the carriage of heavy steel coils and containers.

In the design of the ship, special attention has been paid to reduce vibration and noise levels. The combination of a tunnel construction in the aft ship and a

controllable pitch propeller made it necessary to develop a low-noise, high-skew propeller. The sea trials confirmed that these measures resulted in a very calm and quiet ship.

The ship features a raised forecastle and poop and a radius transom stern. The fore ship section with bulbous bow accommodates the bow thruster room, the paint store and fore peak compartment. The box-shape cargo hold is equipped with two movable bulkheads and covered with a one-side-fixed-pontoon-type hatch cover system. The ballast lines are routed through the double bottom pipe trunk.

The obstruction-free box-shape cargo hold has a capacity of 5,935m<sup>3</sup> and can be subdivided into separated hold sections by means of two movable bulkheads. This allows the carriage of a variety of cargoes including grain and other bulk cargoes, containers, steel coils and/or any combination of these cargoes.

The movable bulkheads, made by Roden Staal, are of the corrugated single wall type with a strong beam at the bottom and top of the bulkhead. For positioning the movable bulkheads there are sliding slots fitted on the hatch coaming. On the lower side the grain bulkheads will be positioned by means of container stacking cones in the available ISO-sockets.

The ten pontoon type hatch covers are of the one-side-fixed-type, made by Roden Staal, and allow a coaming deflection clearance of -20/+10mm. The hatch covers are designed to carry one tier of containers of 15-tonne line load and are fitted with dove tail foundations. The electro-hydraulic travelling hatch cover crane, also made by Roden Staal, handles both the hatch covers and the movable bulkheads.

The accommodation is designed for a complement of eight arranged over three decks. The accommodation includes a mess room, a galley, an office, some stores and one spare cabin. The complete accommodation is mechanically ventilated and climate controlled by an air-conditioning system.

In the accommodation, all bulkheads and ceilings and their linings are in accordance to fire protection method SOLAS I-C.

For further information contact: Barkmeijer Shipyards, the Netherlands. PH: +31 0 512 351 201, FX: +31 0 512 352 495, Email: shipyards@barkmeijer.nl, Web: www.barkmeijer.com

