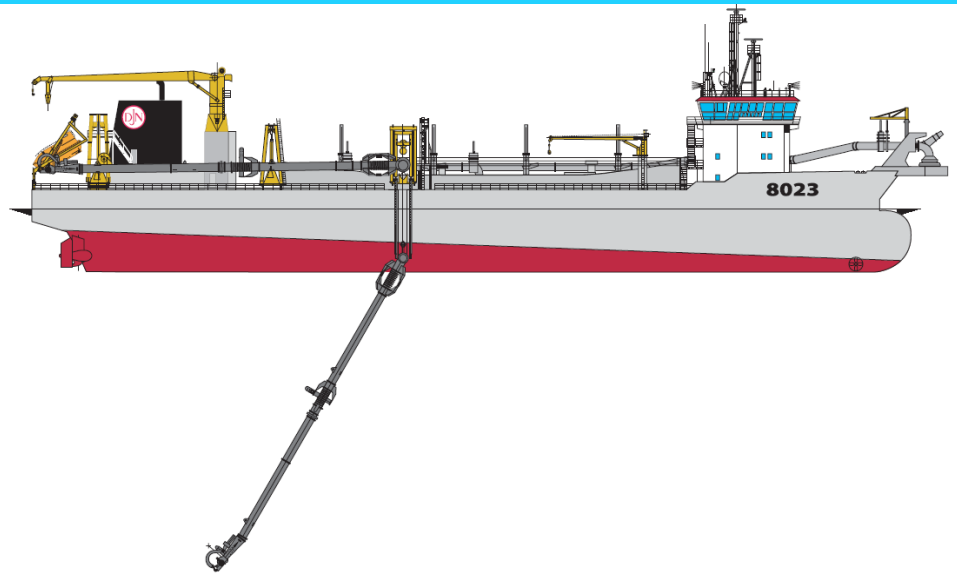


7 500 m³ TSHD

AL-IDRISI & VITUS BERING



Introduction

On August 10, 2006 the international dredging contractor Jan de Nul Group signed a contract with the South-Korean yard Heun Woo Steel Co. Ltd. to construct two 7 500 m³ trailing suction hopper dredgers. One of the vessels will be a replacement for the 7 000 m³ CRISTOFORO COLOMBO, which was lost during a typhoon in September 2004.

Before ordering the vessels, Vuyk Engineering Rotterdam prepared the main constructional drawings as well as diagrams for the dredging, machinery and general service systems on board.

The vessels are scheduled for delivery in 2008 and 2009.

Principal dimensions

Length overall	119.10	m
Length between perpendiculars	104.25	m
Breadth moulded	23.00	m
Depth moulded	10.75	m
Draught at summer load line	6.30	m
Draught at reduced freeboard	8.15	m
Accommodation	21	pers.

Capacity

Deadweight at design draught	11 800	ton
Hopper capacity	7 500	m ³
Speed at design draught	at least 14.0	kn

Dredging equipment

One trailing suction pipe; diameter	1 000	mm
Dredging depth	46.40	m
Dredge pump power during trailing	2 000	kW
Dredge pump power during discharging	4 000	kW
One jet water pump, electrically driven	1 500	kW

Fitted with:

- One row of box-shaped bottom doors
- One shallow water dumping door
- Self-emptying system
- Bow discharge

Machinery

• Two main diesel engines for propeller drive and alternator drive	2x 4 000	kW
• Two main shaft generators	2x 4 650	kVA
• One auxiliary diesel generator set	1x 1 000	kVA
• One emergency generator set	1x 150	kVA
• Two steerable thrusters with controllable pitch propellers	3 100	mm
• One bow thruster	1x 700	kW

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7 500 m³ TSHD

**AL-IDRISI
&
VITUS BERING**



One of the newbuildings will replace the lost trailing suction hopper dredger CRISTOFORO COLOMBO

Classification

Both dredgers will be certified by Bureau Veritas for the class:
I ✕ HULL ✕ MACH ✕ AUT-UMS
Hopper Dredger
Unrestricted Navigation
Dredging over 15 miles from shore

VER scope of work

On behalf of the Jan de Nul Group the following engineering was performed by Vuyk Engineering Rotterdam:

Constructional
Midship Section
Shell expansion
Construction Plans

Diagrams of

- Dredging system
- Jetwater system
- Glandwater and flushing water system
- Hot and cold water system
- Sanitary system
- Air- and sounding system
- Bilge system
- Fire-fighting / deckwash system
- Cooling water system
- Fuel oil system
- Lubrication oil system
- Compressed air system
- Thermal oil system

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