

Widening CSD AL MAHAAR

Introduction

Main dimensions as 'Amazone'

Main particulars as 'Al Mahaar'



In 2005 the ownership of the Belgian cutter suction dredger 'Amazone' was transferred from Dredging International of Antwerp to Qatar Dredging Company Q.S.C. of Doha and the vessel was renamed 'Al Mahaar'.

In order to enable dredging in more shallow waters, it was decided to widen the dredger with permanent side pontoons to an overall breadth of 29.44 m, reducing her draft to approx. 3.5 metres.

This decision was taken after studying several possibilities. Between the dredger and new side pontoons, cofferdams are provided, as well as ballast provisions to allow dredging on the original depth.

Length overall	103.00	m
Length pontoon	76.30	m
Breadth overall	19.09	m
Breadth moulded	19.00	m
Moulded depth	6.00	m
Draft	4.57	m

Owner	Qatar Dredging Company Q.S.C., Doha
Built by	Boelwerf at Temse. Belgium
Yard number	1522
Year built / upgraded	1986 / 2005
Port of registry	Doha. Qatar
Class	Bureau Veritas I ✕HULL ✕MACH Dredger No Propulsion Unrestricted Navigation

Length overall	103.00	m
Length pontoon	76.30	m
Breadth overall	29.62	m
Breadth moulded	29.50	m
Moulded depth	5.97	m
Draft	4.56	m

• 1x MAN. type 9L 40/45 for main generator drive	4 840	kW
• 1x MAN. type 9L 40/45 for dredge pump drive	4 840	kW
• 2x MAN. type D2566 MTE. each for auxiliary generator drive	147	kW
• 1x Caterpillar. type 3512 for hydraulic power pack cutter drive	1 250	kW
Total installed power	11 224	kW

Suction & discharge diameter	850	mm
Cutter power	2 200	kW
Dredging depth	30.00	m

Vuyk Engineering Rotterdam B.V.
Naval architects. Marine engineers. Consultants

P.O. Box 1. De Linie 7
2900 AA Capelle aan den IJssel
Phone +31 (0)10 450 25 00
Fax +31 (0)10 458 72 45
Email vuyk@vuykrotterdam.com
Website www.vuykrotterdam.com

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VER scope of work

The VER scope of work included:

- Studying several options to reduce dredger's draft to enable dredging in more shallow water, including design report.
- Cost estimate for the construction of the side pontoons .
- Technical specification for the construction of the side pontoons
- Dry-docking specification of the 'Al Mahaar'
- Midship Section and construction drawings of side pontoons
- Assembly drawing of dredger with side pontoons
- Piping, valves and sea inlet chests in side pontoons , complete with connections to main pontoon
- General Arrangement Plan, Mooring Plan, Deck Arrangement, Docking Plan, Cathodic Protection Plan, Railing Arrangement
- Draft survey of 'Al Mahaar' at Qatar before widening
- Calculations of bending moments, longitudinal strength, stability, etc.



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