

About the vessel

The MMA Crystal is a key marine asset for MMA. The vessel has a strong track record in South East Asia and Australasia carrying out various towing and anchor handling scopes and now operates in Taiwan.

The vessel is fitted with 35T A-Frame and working class ROV as well as extensive survey equipment capable of geophysical and geotechnical operations.

MMA Crystal 克里司朵



Anchor Handling Tug Supply and Survey

Contact MMA	Offshore
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Australia	South East Asia
Head Office	Singapore Office
Level 10 12-14 The Esplanade Perth WA 6000	9 Raffles Place, #15-02 Republic Plaza Singapore 048619
Ph: +61 8 9431 7431 Fax: +61 8 9431 7432	Ph: +65 6265 1010 Fax: +65 6864 5555

Aberdeen Office 30 Abercrombie Court Prospect Road, Arnhall Business Park Westhill Aberdeenshire United Kingdom AB32 6FE

Ph: +44 1224 659950 Fax: +44 1224 659951

United Kingdom

General	Dimensions		
Official No	016607	LOA	70.05 m
Call Sign	BHJ J	Breadth - moulded	17 m
IMO No	9594212	Depth - moulded	7.5 m
Year Built	2012	Draft	6.1 m
Port of Registry	Tai Chung (台中)	GRT	2,763 T
Flag	Taiwan	NRT	829 T
Class	Republic of China	Deadweight	2,515 T
Class (Secondary)	American Bureau of Shipping	Free Deck Area (A-Frame fitted)	275 m ²
	A1, Offshore Support Vessel	Free Deck Area (A-Frame removed)	450 m ²
Notation	(AH), Fire Fighting Vessel Class 1, Towing Vessel, ₩AMS, ₩DPS-2	Deck Strength	7.5 T/m ²
		Mezzanine Deck	84 m² @ 2T m² / W 12m x L 7m

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Performance			M
2112	5115	7.005	
BHP	BHP	7,965	M
Speed - Maximum	Knots	14	B
Speed - Economical	Knots	10	St
Bollard Pull	Т	102.14	SI
			G
Tank Capacity			
			E
Fuel Oil	m³	698.7	P
Fresh Water	m ³	514.1	P
Potable Water	m ³	514.1 (same to FW)	D
Foam	m ³	15.7	
Ballast Water	m ³	1,336.4	
Liquid Mud	m ³	382	С
Cement	m ³	200	U
Dispersant	m ³	15.7	
Dry Bulk	m ³	(Refer to Cement)	C
Methanol	m ³	NÁ	
			To

Discharge Rates

Fuel Oil	1 x 117 m³/hr @ 80 m head
Fresh Water	1 x 120 m³/hr @ 90 m head
Ballast / Drill Water	1 x 120 m3/hr @ 90 m head
Potable Water	1 x 120 m3/hr @ 90 m head
Dry Bulk	2 x 20 m³/hr @ 5 bar
Liquid Mud / Brine	2 x 75 m³/hr @ 95 m head

Machinery / Propulsion	
Main Engines Bow Thruster	2 x MAK 9M25, 2,970 kW 2 x 600 kW tunnel type
Stern Thruster Shaft Generators	1 x 600 kW tunnel type 2 x 1,800 kW 2 x Volvo Penta D12 MG.
Generators Emergency Generators	370 kW 1 x 99 ekW @ 1,800 rpm
Propulsion Power Supply Details	2 x CPP 440 V / 60 Hz
Deck Equipment	
Crane	PALFINGER Hyd Deck Crane PTM 400 (2 T @ 12m / 5.9 T @ 2.2m)
Capstan	2 x Electrohydraulic Brattvaag
Towing Winch	1 x Rolls Royce Electro Hydraulic Waterfall
Capacity	200 T @ 0-10 m/min
Wire Capacity	58 mm x 1400 m
Brake Holding	250 T
Anchor Handling Winch	1 x Rolls Royce Electro Hydraulic Waterfall
Capacity	200
Wire Capacity	76 mm x 800 m
Brake Holding	250 T
Shark Jaw	1 x 300 tonne Karmfork
Towing Pin	2 x 300 tonne Karmoy
Tugger Winch	2 x 12 tonne Hydraulic
Wire Capacity	24mm x 220 m
Brake Holding	15 T
Stern Roller	2.2 m x 4.8 m (250 tonne capacity)
Deck Voltage & Sockets - Quantity & Voltage	2 x 440V, 2 x 220V

A-Frame		S
SWL	35 T	В
Height (underside cross member)	11.7 m	Fo
Reach outboard	4 m	R
Rescue Boat & Fire Fighting		
Rescue Boat FiFi Class	1 x 6 person Neuvisa RR-40 RB Class 1	
Dynamic Positioning		S
DP - System DGPS - Quantity Fanbeam - Quantity	MT Class II DYNPOS / DP2 2 x Fugro 1 x Cyscan	
HiPAP	Sonardyne Ranger2 (HPT5000)	
Accommodation		С
Cabin (2 Berth) Cabin (Single Berth) Total Accommodation	Qty 18 10 46 Pax	N
Communication Equipment		G
Navtex Receiver AIS	Qty 1 1	R
Watch Alarm SSB Intercom	1	0
Intercom Inmarsat-C EPIRB	2	W
GMDSS VHF Radio (MF/HF) GMDSS Handheld VHF	2 x VHF, 1 x MF/HF 3	

	Subsea / ROV Equipment	
85 T	Bridge Survey Room	1 (online navigation)
7 m	Forecastle Deck Survey Rooms	2 (1 x client, 1 x
4 m	ROV	survey) Swift10 Work Class ROV system
		Quinsey Survey Navigation System
son RB		2 x Veripos LD8 DGNSS
ss 1	Survey	Sonardyne Ranger 2 USBL for subsea acoustic tracking
POS DP2		Teledyne Meridian Surveyor Gyro Compass
ugro scan ger2		Over the side pole for multi-sensor options Intellian V130NX VSAT
000)	Communications	Robustal R2000-EL42 4G Modem
Qty		Clear Comms
18 10	Navigation Equipment	
Pax	Magnetic Compass Gyro Compass c/w Autopilot	Qty 1 3
Qty	GPS Navigator Radar	1 2
1	Speed Log	1
1	Other Equipment	
1 2 1	Water Maker	2 x 5 m³/day

TRANSFORMING THE WAY MARINE SERVICES ARE DELIVERED