

PRE-PURCHASE ASSESSMENT  
**PRELIMINARY REPORT**  
MV SINOTECH MARINE  
(BULK CARRIER)



IMO NO.	1234567
Port of Registry	LIBERIA
Year of Built	30/07/2010
Builder Yard	HYUNDAI MIPO DOCKYARD CO LTD
Classification	LLOYDS REGISTER
Vessel State	PORTSIDE ALONGSIDE, DISCHARGING
Date of Inspection	21-22 JAN 2020
Port of Inspection	SAMALAJU, MALAYSIA
Inspection Company	SINOTECH MARINE
Inspection Type	PRE- PURCHASE INSPECTION
Client	CONFIDENTIAL

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## 1. PREAMBLE

MV SINOTECH MARINE, was attended by SINOTECH MARINE appointed surveyor, on 22<sup>nd</sup> January 2020 at Samalaju, Malaysia for the pre-purchase condition assessment on behalf of her potential buyer. The Vessel arrived in LADEN condition and berthed at HANDYMAX 4 in BINTULU SAMALAJU PORT, MALAYSIA, alongside her PORTSIDE ALONGSIDE. The STARBOARD shipside was NOT VISIBLE from the berth or onboard ship. At the time of inspection vessel was loading alumina powder cargo using SHORE crane.

Surveyor inspected No.2 and 5 cargo holds and FPT, No. 1TST (Top side only) P/S, and APT Ballast tanks. MV SINOTECH MARINE is manned by officers and crew from Ukraine (1), Russia (4), UAE (1), Jordan (3), Philippines (11), Total 20 crew including Master. Deck and Engine logbooks, Oil Record book, not produced to the surveyors nor any copy given or allowed to take photo.

## 2. VESSEL DESCRIPTION

### BASIC PARTICULARS

Ship Owner	SINOTECH MARINE HONG KONG
Ship Manager	SINOTECH MARINE
Charterer	CHARTER COMPLETED.
No. of Crew & Nationality	20 crew, 5 nationalities (Ukraine, Russia, UAE, Jordan, Philippines)
Min. Safe Manning Requirement	10 persons
Previous Name (s)	N/A

### CLASSIFICATION

Class Notation	100A1 Bulk Carrier, CSR, BC-A, GRAB [20], Hold Nos. 2 and 4 May Be Empty, ESP, Ship Right ACS(B), *IWS, LI, LMC, UMS
Class Period Expiry	3/01/2021
Date of Delivery	4/01/2011
Last Special Survey	4/01/2011
Last Dry-Docking Survey	30/11/2015
Dockyard (Last Docking)	DRYDOCKS WORLD, DUBAI
Last Bottom Inspection	29/08/2018

## SPECIFICATIONS

Length Overall (LOA) in meters	186.4 M
Beam in meters	27.83 M
Depth (Molded) in meters	15.60 M
Summer Deadweight	36490 MT
GRT	22691 MT
NRT	12334 MT
Summer Draft in meters	10.918 M (Ext Scant)
Summer Displacement	44980 MT

## PROPULSION & POWER PLANTS

Propulsion Engine Maker & Model	HYUNDAI B&W 6S46MC-C7 (ENGINE NO. AA4167)
MCR & NCR	7860KW@129rpm & 6680KW@122.2 rpm
ME Cylinder Lubricator Type & Model	ATLAS CYLINDER LUBRICATOR 15F WITH LCD
ME Turbocharger Model & RPM	MET53MA
Propeller	KEYLESS FPP, DIA 5.6M, 4 BLADES, MEAN PITCH 3916.31M
No. of Diesel Generator Sets	3 NOS
D/G Maker & Model	HYUNDAI HIMSEN -EMD 6H17/28
Rating (KW, RPM)	640 KW, 900 RPM
Alternator (Maker & Model)	HYUNDAI HFC7 504-84K
Rating (KVA, Hz)	750KVA, 60HZ, 450V
Aux. Boiler (Maker, Model, Rating)	KANGRIN, MC3205P15, 1200/HR
Shaft Alternator/Turbo Alternator	N/A
Steering Gear (Maker & Type)	Flutek/Kawasaki, Type: FE21-072-T050, 2Ram, 4-Cylinder Rapson –Slide type
Bow Thrusters (Nos. & Rating)	NOT AVAILABLE

## CARGO STORAGE & HANDLING

Deck Crane (Nos. Maker, Capacity)	4 NOS, MACGREGOR, GLB 3025-2/2425GR, SWL
Hatch Covers (Nos. & Maker)	5 x 4 PONTOON TYPE MACGREGOR, WEATHERTIGHT HYD. FOLDING TYPE
Grabs (No., Maker, Capacity)	5 (4x10T, 1x12T), GUVEN GRAB AND MACHINE LTD, RADIO REMOTE CONTROL GRAB

No. of Cargo Holds	5 nos.
Cargo Capacities in (Grain & Bale) m <sup>3</sup>	HOLD/BALE/GRAIN (MT): 1/8028.3/8118.7, 2/9980.3/10155.5, 3/9635.4/9812.1, 4/9982.110166.8, 5/9557.4/9658.5

## CAPACITIES

Total Heavy Fuel Oil Capacity	NO1 HFO TK (S).NO2 HFO TK (P&S).NO3 HFO TK (P&S), CAPACITY 1210.9 m <sup>3</sup> , Service + Settling
Total Diesel Oil Capacity	NO1 HFO TK (P). CAPACITY 244.29 M <sup>3</sup> +SERVICE + SETTLING
Total Ballast Capacity in m <sup>3</sup>	10647.3 M <sup>3</sup>
Total Fresh Water Storage Capacity in m <sup>3</sup>	308.5 M3
Total Lube Oil Storage Capacity in m <sup>3</sup>	9500 LTRS

## NAVIGATION & SAFETY

ECDIS (Nos., Maker, Model)	2 Nos, JRC, JAN-901B
Radars (Maker, Models)	MAKER: JRC; MODEL: JMA-9132-SA (S-BAND); JMA-9122-6XA (X-BAND)
VDR (Maker & Model)	NETWAVE, NW6000
Magnetic Compass (Maker, Model)	SARACOM, SR165
Gyro Compass (Maker, Model)	TOKYO KEIKI, TG-800 & SPERRY MK37 MOD D1.16
MF/HF Radio (Maker, Model)	JRC, NCM-2150
No of Lifeboats/Capacities	1 FREE FALL LIFEBOAT WITH 29 PERSONS CAPACITY, MAKER: HYUNDAI, MODEL: HDFN-35T
Rescue Boat /Capacity	01 NOS, CAPACITY: 6 PERSONS, MAKER: VIKING, MODEL: RR-40
No of Life Rafts/Capacities	04 NOS, CAPACITY: 16P EACH, 01 NO. 06 P, RFD (3 YEARLY INSPECTION/SERVICE)
Fixed FFA (Engine Room)	FIXED CO2 SYSTEM FOR E/R AND CARGO HOLD, CO2 CYL 45 KG X 122 EA
Fixed FFA for Cargo Holds	FIXED CO2 SYSTEM FOR E/R AND CARGO HOLD, CO2 CYL 45 KG X 122 EA
Hyper Mist System Engine Room	MAKER: TANKTECH, MODEL: WATER MIST CALPEDA MXV 40-810-60, P/P CAPCITY: 12M3/HR
Ballast Water Treatment System	NOT AVAILABLE

### 3. VESSEL OVERVIEW

	ITEM	YES/ NO	COMMENT
1	Any visible major defect or damage to Hull or Machineries?	No	
2	Is Ballast Water Treatment System Installed?	No	No BWTS on board. Still maintaining D1
3	Any outstanding condition of Class or Memoranda?	No	No outstanding COC but a few Actionable items outstanding to
4	Whether last bottom survey was done in Dry-dock?	No	IWS
5	Whether Docking survey due in next 2 years?	Yes	Docking survey is due November 15, 2020.
6	Any major capital expenditure due in next 1 year?	Yes	2nd Special due 3/1/2021. Drydocking survey and BWTS installation.
7	Any PSC detention in last 5 years?	No	The latest PSC Inspection in China, 02 deficiencies, both were rectified. No other PSC reports were shown to surveyor.
8	Any change of ISM manager or Ship ownership in last 5 years?	No	
9	Any change of Classification society in last 5 years?	Yes	Last transfer of class from DNV to LR. Last annual done by LR on 21 Nov 2019
10	Whether ECDIS fitted as primary means of Navigation?	Yes	ECDIS Fitted for Primary and backup for navigation.
11	Normal Cargo Crane operation witnessed?	Yes	Vessel was discharging with shore soot. All 4 vessel's cranes were swung outside to starboard side for the conveyor boom could be placed in cargo hold.
12	Are electronic lubricators fitted for M/E Cylinder Lubrication?	Yes	
13	Excessive used spares of ME / DG / Cranes onboard?	No	
14	Is there exhaust cleaning scrubber installed?	No	

15	Expected Fuel Oil bunker (with Sulfur > 0.5%), as on December last 2019.	Yes	Vessel has already approved Piping and class verification for compliance of low Sulphur Fuel oil.
16	Is Ship Implementation Plan for 2020 Los Sulphur compliance in place?	Yes	
17	Any fouling of visible part of Hull external?	No	
18	Whether Ship operates in UMS?	Yes	

### Comments

No visible dents or damage noted on hull & machinery. Some places paint damages happened, and rust stains are visible on the portside hull (which only could be seen from wharf) specially on parallel body due to suspect rubbing with hard fenders or tugs. No sign of slime/algae/barnacles noted on the underwater hull up to about 6.4m to 10.2m (Summer draft).

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## 4. VESSEL UP-GRADATION ASSESSMENT

### CODES

R: Major Repair or Up-gradation required

M: Minor Repair or Up-gradation required

G: No Repair or Up-gradation required

A: Moderate Repair or Up-gradation required

E: Effective Routine Maintenance required

Sr.	Areas	R	A	M	E	G
1	External Hull			X		
2	Main Deck Plating			X		
3	Mooring Machineries			X		
4	Hydraulic Piping on Deck			X		
5	SW Pipes, Air Vents on Deck			X		
6	Accommodation block & Ventilators			X		
7	Cargo hold bulkheads and Fittings, tank tops, ladders			X		
8	Hatch Cover packing, hydraulic system			X		
9	Cargo cranes, Wires, Pulley & Jibs				X	
10	Cargo Grabs					
11	LSA and FFA Equipment				X	
12	Ballast Tanks and Void spaces				X	
13	Main Propulsion Engine				X	
14	Diesel Generators				X	
15	Fuel Oil and Lube Oil Piping and fittings in E/R				X	
16	Sea Water Piping, Coolers, Filters in ER				X	
17	General Leakages in ER				X	
18	MARPOL Compliance	X				



## 5. IMMEDIATE CONCERNS

### a. HULL & STRUCTURE

Sr.	ITEM	CONCERN?	COMMENT
1	Hull External	Yes	No visible dents or damage noted but many spot corrosion/scratches/rubbing marks are visible on the portside hull (which could only be seen properly as vessel was portside alongside) specially on parallel body part which could be due to hard fenders rubbing/tug pushing. No sign of slime/algae/barnacles noted on the underwater hull portside up to about 6.4m to 10.918m (Summer draft). Stbd. side could not be seen from wharf or even deck.
2	Weather Decks & Fittings	No	Normal maintenance is ongoing.
3	Fore peak Store	Yes	Stores and spares needed to be arranged properly. Suez Canal light was lying down on towing ropes in an unsecured manner.
4	Mast houses & Deck Stores	Yes	Forecastle store and Aft store need to be rearranged.
5	Forecastle Deck	Yes	Anchor hose pipes and Spurling pipe covers are missing. Suez light is not secured properly.
6	Poop Deck	Yes	Aft mooring winch tray plug not closed/missing.
7	Cargo Holds	Yes	Light damages of Grab marks on the tank tops and side tank bulkheads.
8	Ballast Tanks & Void spaces	Yes	Some air pockets and erection joints have paint failures. Some grab bumps on DB tank top parts made paint cracks. No cracks on steel plate.
9	Accommodation	No	
10	Bridge & Monkey Island	No	
11	Engine Compartment	No	
12	Steering Compartment	No	
13	Vents & Sounding Pipes	Yes	FO tank vents have rusty appearances.
14	Funnel & Flaps	No	
15	Mushroom Vents,	No	
16	Port holes, Ventilators	Yes	Moderate rust on portholes

17	Bunker Manifolds	Yes	Rust found on the bunker valves and flanges. Drip tray plug was not in place.
18	Rudder	No	
19	Propeller		Not visible
20	Anchors & Cables	No	
21	Gangways and Ladders	No	
22	UT Gauging	No	
23	UV Testing for Sealing	No	N/A, use EAL type oils.

## b. MACHINERIES & EQUIPMENT

Sr. No	ITEM	CONCERN?	COMMENT
1	Navigation Equipment	No	Sighted without any visible defects
2	Main Engine Plant	No	not seen in operation, was unable to see the logbook, no oil, water, gas, air leak found. Bilges absolutely clean and dry.
3	Diesel Generators Plant	No	AE No. 2 was running, 1 and 3 were in St by and 2nd St by mode. Engine pit very clean and TC exhaust clean.
4	Electric distribution Plant	No	No alarm came during my presence on board though all machinery plants running smooth.
5	Steam Plant	No	Boiler was on auto mode and burner flame color found seen good. Was test results are within limits.
6	Piping, Valves & Heat Exchangers	No	One drop of steam condensate was found falling from a pipe very high above in front of the engine control room. 2E will take care of it after sailing.
7	SW /LO/FO /FW Pumps	No	No leakages found from the glands.
8	Bilge Piping, OWS, & Sewage system	No	Tank top found clean and dry.
9	Incinerator	No	As per ship's staff the incinerator is in good condition. Visually checked, in good condition.
10	Main Engine Shafting	No	Greased nicely, no corrosion, Plummer block oil looks very clean
11	Steering Gear	No	No visible leakage
12	Hot well, Condensers	No	No oil or dirt on water surface, no steam overflow to engine room from hot well top indicating Condenser

13	Hydraulic Power Packs	No	No leakage.
14	Windlass & Mooring Winches	No	windlass and winch control levers were at neutral but not locked in stop position. All fairleads are free. All bollards, fairleads, are marked with SWL.
15	Deck Cranes	No	Cleaned and well maintained. Swivel bearings are adequately lubricated. Last used for loading in Russian port 30 days ago.
16	Hatch Cover	No	Topside is excellent. Some fashion plates and rain channels spot de-rusting and painting.
17	Grab	No	4x10 tons + 1x12ton (variable capacity, stowed is secured position.
18	Ballast Pumps	No	No stains or leak around shaft gland while pump was running.
19	Fixed Gas Detector		N/A

### c. FIRE SAFETY & LIFE SAVING EQUIPMENT

Sr.	ITEM	CONCERN?	COMMENT
1	Deck Firefighting	No	Sea Water, visually found in good condition
2	Engine Room Firefighting	No	Fixed CO2 System, all portable fire extinguishers, CO2 nozzles, Sprinkler heads are in well maintained condition
3	Cargo Hold Fire firefighting	No	Fixed CO2 System, Vessel carrying 2 extra complete sets of breathing apparatus and firefighting suits for DG cargo.
4	Local Fire Fighting-	No	Water mist system, visually checked, found in good condition
5	Engine Room	No	Clean, tidy without any visible defects.
6	Lifeboats	No	Visually checked without any defects. Lifeboat engine found in good condition
7	Life Rafts & MOB	No	
8	Emergency Fire Pump	No	No leakage
9	Emergency Generator /Batteries	No	Found in good condition
10	Fire station	No	

#### d. FORTHCOMING COMPLIANCES

Sr.	ITEM	CONCERN?	COMMENT
1	Low Sulphur Cap	Yes	Complying IMO 2020 Sulphur Cap. But vessel may require retrofitting additional cooling condensers, FO Chillers.
2	Ballast Water Treatment Plant	Yes	Not Available, but to be fitted next IOPP Renewal due 3/1/2021.
3	Exhaust Cleaning Scrubber	Yes	Not Available. Vessel using compliant Fuel.
4	Hazardous Material Inventory	Yes	To be approved by the class before end of 2020.

#### e. OPERATIONAL POSITION

Sr.	ITEM	DESCRIPTION
1	Dry-docking Position	Drydocking due 29 Nov 2020.
2	Condition of Class	NIL
3	Speed & Fuel Consumption	NCR/29.7 MT/126rpm, 75%/25.5MT/120.9 rpm, 50%/18.8MT, 105.8 rpm
4	Class Status	Classed, Lloyd's Register

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## 6. PRELIMINARY SUMMARY

Based on the physical superficial inspection of the vessel and the documents presented by the crew for inspection, the vessel is considered between fair to good condition. Vessel was seen with following issues which need to be considered before considering her for the secondhand purchase.

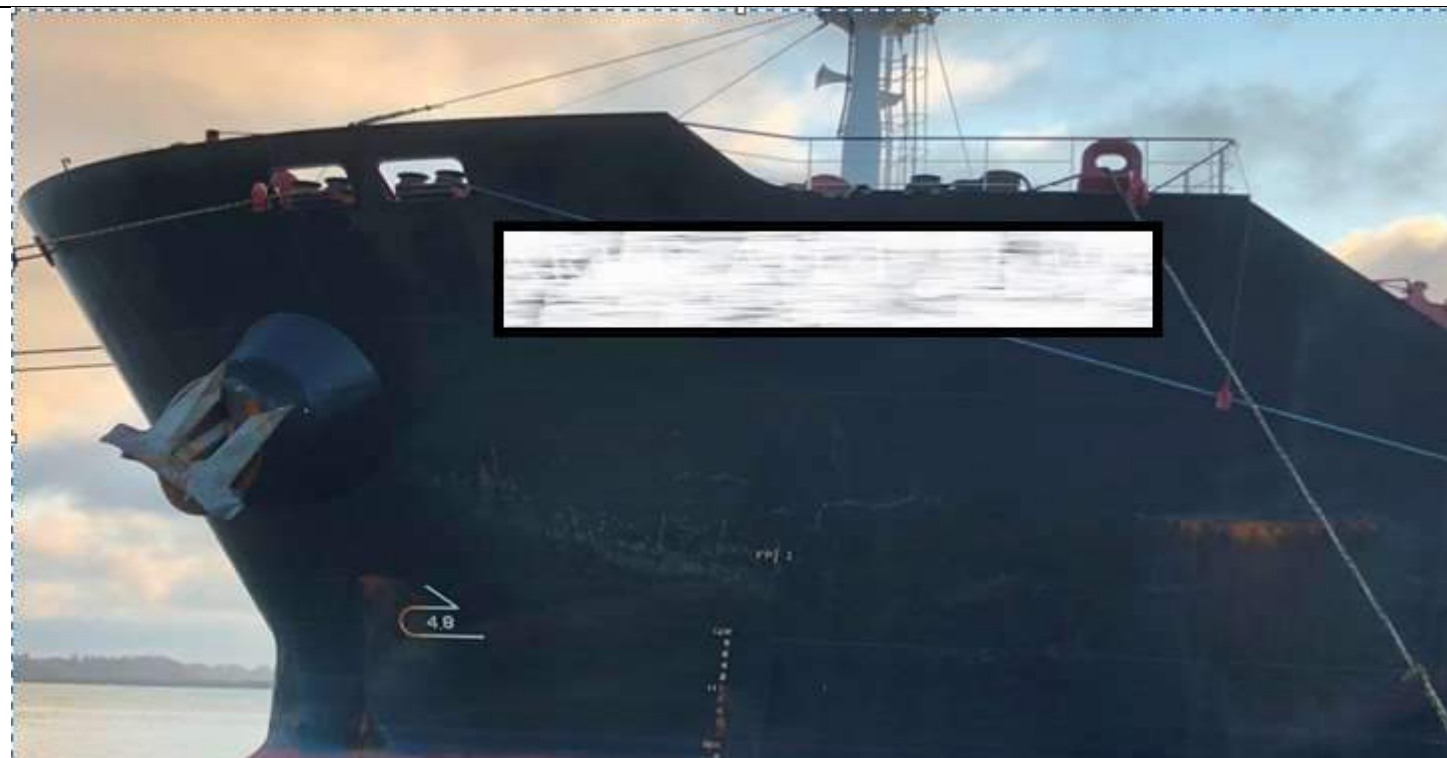
- 1- Vessel is not fitted with the BWTS as required by D2 compliance. The due date for the installation is 3<sup>rd</sup> Jan 2021, during second special, renewal of IOPP certificate.
- 2- Vessel is close to 2<sup>nd</sup> special survey in less than 1 year.
- 3- Hull external has some coating loss but not a major concern as ship will be going for docking within a year.
- 4- Vessel is not fitted with Exhaust cleaning Scrubber; compliant fuel is the only option.
- 5- On main deck found isolated rust and paint coating loss to be addressed. A continuous deck maintenance would be required by the crew.
- 6- Spot rust on the hatch covers and channels found. Underside of the hatch covers found with spot rust.

Vessel is fitted with 4 grabs. Main Engine has electronic cylinder oil injection. There are two ECDIS fitted as primary and secondary means of navigation. Overall, vessel condition is satisfactory except minor maintenance issues highlighted above. There was no physical damage to the vessel noted during the inspection, vessel is actively trading worldwide.

Surveyor: Capt. Alamgir  
 Reviewed By: Mr. Freddy Ortecano

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**7. PHOTOGRAPHS****BOW****STERN**

**FORECASTLE DECK****POOP DECK**



**MAIN DECK PORT**



**MAIN DECK STBD**



**HATCH COVER TOP****CARGO HOLD FROM TOP**



**CARGO HOLD BULKHEAD****BRIDGE**

### FUNNEL & BRIDGE WING



### GALLEY



**BALLAST TANK INTERNAL****BALLAST TANK INTERNAL**



**MAIN ENGINE CYLINDER HEAD**



**GENERATORS**



ANY MAJOR DEFECT



ANY MAJOR DEFECT





## 11. Disclaimer

Whilst every reasonable effort has been made to survey the vessel concerned in accordance with instructions, neither SINOTECH Marine Corporation (HK) LTD. nor the Inspector conducting the inspection, accept any responsibility whatsoever for failure to survey or inspect any item of hull or machinery that is not reasonable, accessible or available for inspection, or (in the case of machinery) opened up for inspection and having regard always to the condition of the vessel and its location, whether or not the machinery was seen in operation and the time available for the carrying out of the Survey.

This report is without prejudice to any stakeholder of the vessel. This report contains facts observed by the inspector and information shared by the Master/ CE/ crew of vessel. No observation (indicating apparent damage to equipment or malfunction of machinery) in this report has been investigated to ascertain the cause or extent of damage/ defect. The inspector and his employer is not responsible for any claims based on interpretation of information in this report.

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## **Appendix**

Nil

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