
MV SINOTECH MARINE CONDITION ASSESSMENT INSPECTION REPORT PART A

CONTAINER CARRIER



Port: Tarragona to Sagunto, Spain

Date: 8-9th July 2019

Inspection Company: Sinotech Marine

Issued to XXXXXXXXX, GmbH, Germany

NOTES TO READER

This condition assessment report has been prepared and issued by SINOTECH Marine Hong Kong for the sole use of the SINOTECH Marine's Customer. The purpose of this report is to offer an independent evaluation of the condition of the subject vessel, as found during the superficial Inspection of the vessel and in the independent opinion of the attending Surveyor/Inspector. The report is subject to any restrictions applied to the access of information, vessel areas, and/or records as described here in the report, and it is also subjected to the level of cooperation extended by the Ship Crew to the surveyor during the inspection. All details are given in good faith, and without guarantee. This report has been prepared and issued by SINOTECH Marine Corporation Hong Kong Ltd. to its Customer in accordance with the SINOTECH Standard Terms and Conditions which are available on our website www.sinotechmarine.com.

SINOTECH MARINE REPORTS

PART A – An Executive Summary

The Purpose of this part of the report is to provide the Client an Overview of the vessel condition. This section includes SINOTECH Marine grading of the vessel condition, highlight key areas of concerns, major vessel defects, scope of further improvement, and positive aspects of vessel design, features, equipment, machineries and any other benefit or advantage of the vessel.

PART B – Detailed Condition Evaluation Report

This part of the report provides detailed information on the vessel, condition of the vessel various areas, visible part of the hull & shell plating, superstructure, machineries, equipment and outfitting on-board a vessel. In this part, evaluation of the condition of the various parts of the vessel is reflected on a scale of 1 to 4. 1 is considered poor and 4 as excellent. In addition, this section provides a ship-type specific condition evaluation of specific areas or equipment or machineries of the ship. This part covers cargo storage, cargo gears, hull & structure, and related machineries, systems and controls

PART C - Specific Requirements

This part deals with client specific requirements which are not covered under vessel general condition assessment and specific to customer requirements such as Spare parts & LO, Fuel oil inventories, Annual OPEX, sampling, testing, witness, Inspection of class history.

EXECUTIVE SUMMARY

M/V XXXXXX is a container vessel, was inspected at sea on voyage from Tarragona to Sagunto and also in Sagunto alongside on 8-9 July 2019 for the pre-purchase condition assessment. Built on 01 April 2000, she is under DNV-GL Classification and flying Portuguese flag. Vessel is owned by Bernard Becker GmbH & Co.kg and in-house managed. Chartered by Naviera Direct Africa Linea S.A., her last special survey and docking was carried out on May 2018. Vessel class period is valid until 31 March 2020. Vessel has a compliment of 17 crew from Russia and Philippines (minimum safe manning requirement 10 crew). Vessel found generally in satisfactory condition considering her age of 19 years. However, she was seen with exceptions such as highlighted in the section defects and areas of concerns. Vessel is not fitted with BWTS. Vessel will require installation of BWTS in next dry docking. There is dual ECDIS on board. Vessel hull external, Main deck, pontoons, comings, deck piping and superstructure were seen without any significant damage or defect. Vessel 3 cargo holds, and 7 ballast tanks were inspected from inside and found overall satisfactory condition. Vessel cranes are in operating condition. Vessel external hull require blasting and painting in the next docking. There was no marine growth found on the visible part of underwater hull. Overall, Vessel Maintenance Position was satisfactory. Vessel condition well corresponds to her age. Vessel can be technically considered for the 2nd hand purchase.

Indicative Cost of Upgradation for next 2-3 years

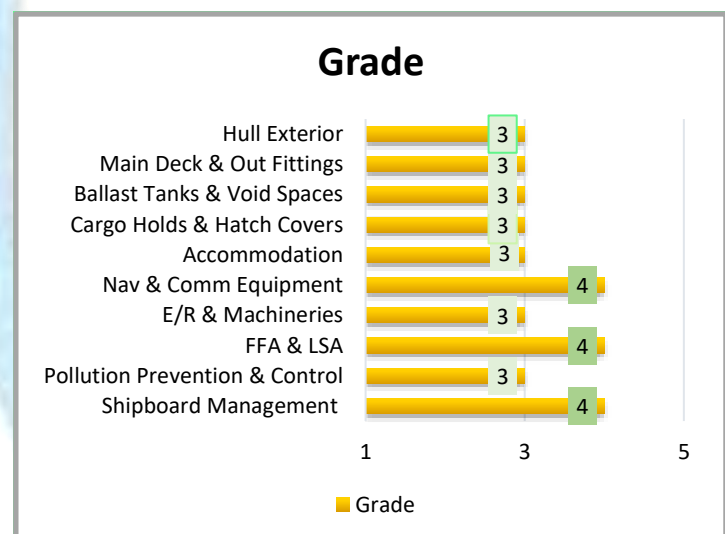
| Part-A | Total Estimated Cost |
|-----------------------------------|--------------------------------|
| Installation of BWTS | \$600,000 |
| Part-B | |
| Additional Repair/ Maintenance | \$216,000 |
| Dry-Docking | \$ 400,000 (special DD) |
| Estimated Total | \$1216,000 |



Description of the Grades

| | |
|-----------------------|--|
| 1 (unsatisfactory) | Condition of inadequate strength or operational efficiency. Immediate extensive repair or renewal required to restore vessel serviceability. |
| 2 (Poor) | Significant defect or damage present that require remedial action. |
| 3 (Fair) | Obvious wear & tear, and other moderate deficiencies, require some level of corrective actions or repair works |
| 4 (Good) | Non-significant wear & tear or minor defect, no immediate corrective action required |
| 5 (Very Good) | Unimpaired condition without wear or deviation from original strength or operating efficiency |

Average Grade 3.3/5.0 (Fair)



Vessel Principal Particulars

| | | | |
|---------------------------|---|---|--|
| Ship's Name | XXXXXXXXXX | Boiler: Make & Type | Composite Boiler -Marine Metal Poland VT 720/441 |
| IMO Number | 9999999 | Rating /Capacity | Oil Fired Side -3.5 T/H |
| Ship built as | Hull 8125/10 | Shaft/Turbine alternator | N/A |
| Vessel Type | Feeder Container | Bow Thrusters | ABBZAMECH MARINE N16 /590kW |
| Classification Society | DNV-GL | Ballast water treatment system | Not Fitted |
| Class Notations | +100 AS E Containership SOLAS II-2 Reg-19 +MC E AUT | Type of Propeller | FIXED PITCH PROPELER 4 Blades |
| GRT | 14,241 | Deck Crane/Cargo gears: Make | 2 Pcs NMF DK II 8751 K II 45026/40028 |
| Summer DWT | 18,403 | Safe working Load | 40-45 DEPRNDING ON ANGLE SAFETY LIMIT |
| Last docking | 15 May 2018 | No's of Cargo holds | 4 |
| Last Class Special Survey | April 2015 | Total cargo Capacity | 1,129 TEU 436 TEU- Hold/693 TEU DK Plugs – DK 152 Holds 36 |
| Flag/Port of Registry | Portugal Madeira | ECDISC: Make & Type | TRANSAS RS 6B |
| Last docking Yard | Algeciras | Automation Level | WODWORD/NOR CONTROL, UMS |
| Year Of delivery | April. 2000 | No of Crew | 17 (Russian & Filipino) |
| Builder | Stocznia Gdanska Poland | Fire extinguishing system for Cargo Holds | CO2 AND WATER SPRAY HOLD # 1 |
| Registered Owner | VALIANT SHIPPING CO. LTD. | Fixed FFA Engine Room | CO2 |
| Charterer | Naviera Direct África Línea S.A. | | |
| ISM Managers | Bernd Becker K.G. Germany | | |
| Main Engine type | MAN B&W 7S50MC | | |
| Power rating | 10010KW at 127RPM | | |
| Cylinder Lubricator type | Mechanical Type | | |
| Aux Engines | 3 Sets of Wartsila 6L20, 760KW/set | | |

Areas of Concerns, Recommendations & Features

| | | | | | | | |
|--|---|--|---|--|--|--|--|
| | Critical Defect Urgent Remedial Action Required | | Significant Defect May lead to a high future cost | | Minor Defect, low cost defect, could be an Industry recommendation | | A good Design or operational feature of the ship. |
|--|---|--|---|--|--|--|--|

| 1 | Description | Action Timeline | Approx. Cost US\$ |
|---|--|-----------------|-------------------|
| | Installation of Ballast Water Management System. | -2022 | \$600,000 |
| | Hatch cross catwalks plating found in general rusted and damaged with deformation requiring major renewals. Often a PSC detention item, especially for vessels more than 15 years of age calling EU ports. | | \$20000 |
| | External hull need painting but vessel is going to dry dock next year and it will be fixed. | | Included DD cost |
| | Shell plating set-in to maximum depth approximately 30 mm over an area of 500 mm wide extending eight frames after frame no.5, located at third strake below poop deck. Internals affected. It is recommended, the damage to be examined and dealt by class. | | \$10000 |
| | Ballast Tank repairs/upgradation | | \$50,000 |
| | Arrest Fuel Leakages in the Main Engine | | Included in DD |
| | All three generator 12000 hours overhauls are overdue | | \$40000 |
| | Spares for reversing cylinder not available onboard Therefore, could not be serviced during last dry-docking | | \$2000 |
| | Main Engine cylinder lubricator leakage arrested by using spares from additional lubricator. New set of spare lubricators is required. | | \$2000 |
| | Main Engine Overdue Maintenance Piston Overhaul #1, #2, #4, #5, # 6 & #7 | | \$70,000 |
| | Cylinder Cover of Unit #1 Overhaul overdue | | \$2000 |
| | Cylinder Liner overhaul of #2,5,6 | | \$10000 |
| | UT thickness Gauging Assessment | | \$10000 |

Total Approximate Cost of Upgradation (Indicative based on superficial survey): \$816,500

(The above cost is indicative cost for the upgradation in addition to routine maintenance and surveys and opinion of surveyor subject to change basis actual determination of scope and repair location)

Vessel Condition Summary

Speed & Fuel Consumption Data

Ship's speed- daily fuel consumption performance data below is based on informed by the ship crew.

| Condition | Speed | RPM | Ship's Logs MT/Day | | Charter Party MT/day | |
|-------------------------|-------|-------------|-----------------------|--------|-------------------------|----|
| | KN | | FO | DO | FO | DO |
| Ballast | | | MT | MT | MT | MT |
| Loaded | 18.0 | 90 % MCR | MT | MT | 43.5 MT | MT |
| Idle at Port | | | MT | 4.8 MT | MT | MT |
| Active at Port | | | MT | 6.0 MT | MT | MT |
| ECO Speed - Laden | 13.5 | 93 | 23.6 MT | MT | 24.0 MT | MT |

Comments: Information as presented by ship staff.

For 75 reefer plugs the Fuel Consumption is about 5.5 MT IFO in Aux Engines.

Charter Party Speeds and FO consumptions (even keel and 8.5 m draft)

17 KN- 36.5mt IFO 14 KN - 26.5 mt IFO

16 KN - 30.5mt IFO 13 KN - 23.5 mt IFO

15 KN- 28mt IFO 12 KN - 20.5 mt IFO

As per the Log book ship is operating at reduced speed (93) RPM and fuel consumption is in range of 23.5-24.0 mt IFO per day

Lube Oil Consumption

M/E cylinder oil: 310 litres per day 98 RPM (Mechanical Lubricator with Gravity Tank)

M/E system oil (MECC): about 500 litres per month on average

A/E system oil (AECC): about 100-200 litres per month on average

Class Status

| | |
|----------------------------|---|
| CLASS NAME | |
| LAST CLASS REPORT | 12- July-2019 |
| CURRENT CONDITION OF CLASS | Nil |
| CURRENT MEMORANDA OF CLASS | Memoranda for de-coupling of IOPP certificate to be consulted with Flag State, if flag state is changed before re-coupling (Harmonization). |

Comments – No flag state dispensations or exemption shown

Ultrasonic Thickness Gauging Result

| | |
|-----------------|---|
| REPORT ABSTRACT | No record of Ultrasonic Thickness Gauging available onboard. Ship Master advised to request Shipowner for the UT thickness report. However, a new UT Gauging Inspection is advised as the vessel is 19 years old. |
|-----------------|---|

HULL EXTERNALS

Grade: 3 (Fair)

Reason: Last docking in May 2018. There is external hull coating loss. Hull blasting and full coating will be required. There is a dent present on hull shell plating in the aft.

- Hull Coating condition was fair with rust marks at boot top area from mid ship to aft throughout the length of the ship. There is a dent in the aft of the ship. Though it is not affecting ship operation but needs to be assessed by class for the possible repair.
- Draft Marks Forward, midship and aft were clearly visible, though touch up painting is required.
- Gangway port side was rigged and appeared in good condition.
- Mid ship Marking was visible but spot rust marks were present.
- Anchor and anchor chain were appeared in normal condition. No visible thinning of cable.
- Boot top area was having rubbing marks from fender operation.
- Anti-fouling paint condition was appearing fair. No sea growth or fouling.

- Bulbous bow was in good condition, no dent or deformation.
- Rudder, Propeller tips, rudder stock were not visible at the time of inspection.

FOC'SLE DECK & POOP DECK

Grade: 4 (Good)

Reason: Condition found satisfactory no immediate action required.

- Paint condition was good without any significant rust marks.
- Bulwark were in good condition.
- Mooring Bollard, fairleads/rollers were in good working condition and free to rotate.
- Forward Mast was well painted.
- Hawse pipes were in good conditions with man guards fitted.
- Windlass and Mooring Winches hydraulic pipes were observed without any leakage. Brakes were in good condition. No rust marks observed.
- Anchor cable and stopper both P & S observed in good condition.
- Air Vent, sounding pipes and fire hydrant were having minor rust spots but acceptable.
- All save all trays were in good condition with plugs in place.
- No structural damage or cracks observed.
- Forecastle and Poop deck need thorough wash.

MAIN DECK & FITTINGS

Grade: 3 (Fair)

Reason: *Cross Decks not well maintained*

- Main Deck is well maintained without any rust or corrosion of deck plating and fittings except poor condition of walkways between pontoons.
- Deck Hydraulic pipe, Seawater Pipes, Cable Conduits are well maintained without any leakage.
- Hatch Coamings were in good condition with compression bar intact without any damage and hatch cover seating area observed to be in good condition.
- Air vents, Sounding Pipes, Trays are well maintained
- Bunker davit and Manifolds, trays, vents are well maintained.
- Cross decks are well maintained.

- Scupper plugs were ready for use during hatch cover operation.
- Superstructure & Mast houses are well maintained & painted.
- Bosun Stores & paint locker are nicely arranged.
- Mushroom vents and ventilators are well maintained with mesh in place.
- Watertight doors functional and easy to operate.

CARGO HOLDS, HATCH COVERS, CARGO GEARS

Grade: 3 (Fair)

Reason: Minor deformation, rust and coating loss observed.

- Vessel has two cargo cranes recently used, appeared in satisfactory condition.
- Hatch covers pontoon type appeared normal condition, no significant rust condition.
- Hatch cover rubber packing apparently in good condition without any damage.
- Hatch cover drain channels were in good condition with drain holes clear.
- Hatch cover cleats, coaming, rollers and channels, hinges are maintained in good condition.
- Cargo Hold Tank top was painting and in fair condition with minor deformation or dents. There was minor rust visible.
- Bulkhead seen with slight coating damage but not significant, stack bars intact but slightly rusted. Overall condition fair.

BALLAST TANKS AND VOID SPACES

Grade: 3 (Fair)

Reason: Satisfactory condition. No immediate action required.

- Fore Peak, After Peak, 4 P/S wing tanks, 4 C DB tanks, 2 P/S wings tanks, 1 P/S wing tanks were inspected.
- In general, ballast tanks are in fair condition. Considering vessel age, tanks condition is acceptable.
- Anodes are intact and good condition.
- There is visible rust and minor wastage on the edges of the frame. Rust and wastage is visible on pipe flanges.
- Rust and wastage is more significant in the top area. There are blisters, coating damages in the top areas that will need to be rectified in upcoming dry-docking.
- There are renewed steel sections and support brackets visible in the top part are having significant coating loss may require renewal in next docking.

ACCOMMODATION

Grade: 3 (Fair)

Reason: *Rust and deterioration of Accommodation block is visible.*

- Accommodation Block was seen with scattered rust spot underside of bridge wings, portholes, and frame edges. Need de-rusting and painting.
- Air con Room is well maintained. Compressor and blowers observed to be in good operating condition. Ducts are well maintained.
- Freeze rooms condition checked and observed temperatures of Meat/Fish/Veg/Dairy Rooms are well maintained and rooms are arranged and maintained nicely.
- Hot plates in galley were found in good operating condition.
- Mess rooms, laundry, changing rooms, toilets, dayrooms, ship's office observed very clean and neatly maintained.
- Alley ways were clean & fire doors were self-closing type doors.
- Weather doors observed to be in good condition with marking for open/close directions.
- Hospital was maintained in good condition with medical inventory maintained.

NAVIGATION AND COMMUNICATION SYSTEM

Grade: 4 (Good)

Reason: *Satisfactory condition*

- Magnetic compass was in good operating condition with Deflection curves measured without any error.
- HM/FM Radio, Radars, GPS, BANWAS, AIS, VDR/SVDR, SATC, Echo sounder, Steering & Gyro Compass were observed in good operating condition.
- Two Transas ECDIS is fitted with charts as a backup arrangement.
- Latest Notices to Mariners & Publications were available on board.
- Navigation is done from Bridge Manoeuvring Panel. Vessel is UMS class
- All ship's clocks are synchronised.
- Cargo Holds fire detection Panel was in working condition.

ENGINE ROOM & MACHINERIES

Grade: 3 (Fair)

Reason: Overdue Maintenance of Main Engine and Generators

- Main Engine performance report shows normal parameters for lube oil, water, and exhaust temperatures at 116 rpm and 17.5 KN speed in calm sea condition. Peak pressure is in range of 120-123 bars and compression pressure in range of 97-100 bars confirm normal condition of piston rings.
- Main engine Maintenance: Main Engine Piston overhaul for Unit 1,2,5,6,7 overdue. Overhaul of Unit #1 Cylinder cover. Cylinder Liners for Unit 2,5,6 are also due for maintenance.
- Main Engine Bearing Clearance: as per the last bearing clearance measurement record dated May 2018 during dry-docking are satisfactory and within permissible range. Cod rod bearing clearance are also reported within the normal range. The measurement was carried out by external repair company.
- Main Engine Turbocharger was overhauled in the last dry-dock with satisfactory measurements and clearances.
- The service report of two units # 3 & 4 was reviewed and as per report the condition of liners and piston crowns is good. Line of unit 3 was pulled out for the inspection of O ring and was found to be good. Liner wear of these two units reportedly well within the range.
- Main engine manoeuvring system was also serviced by the external repair party during last Dry-dock. Reversing cylinder was not touched during maintenance. Only clearance measurement was done. Since no repair kit was available onboard to carry out service.
- Leakage from Cylinder lubricator was attended by using spares from spare lubricator spares for the lubricators are not available onboard.
- Generator overhauls: All three generators are overdue for the maintenance. Generator service report dated April 2015 suggest renewal of Liners for GE #2 & #3 but no information if these liners were renewed. In 2014, the GE #3 was seized due to complete breakdown of the Unit #4.
- All three Generators Performance report reviewed and exhaust temperatures, peak pressure were normal. A difference of 5 bar & 6 bars between max and

minimum peak pressure in (AE #2 &3 respectively) is slightly on higher side to be adjusted by ship staff to reduce the difference.

- Stern tube and Tail shaft were not renewed or dismantled during last docking. It will be required to pull out tail shaft at next special survey.
- Lube oil Analysis Report are currently satisfactory, but it is noted that in GE #1 the Lubricant become critically bad in just 2300 hours.
- Leakages and general housekeeping: There were leakages of fuel oil visible on the units 3,4 & 5 and slight traces of oil near the aft bilges.
- Megger test results show insulation within 50-100MW resistance is acceptable.
- The latest crankshaft deflection report for ME analysed and found normal deflection and within permissible range.

POLLUTION PREVENTION AND CONTROL

Grade: 3 (Fair)

Reason: No BWTS fitted or exemption onboard. Condition of existing equipment is good. MEPC 66(33) compliant OCM to be upgraded.

- OWS is not MEPC 107(49) compliant it is MEPC 60(33) compliant. Otherwise operation is normal (NFV, type PPT BWS-5000).
- Teamtec- Golar Incinerator Refractory observed intact without any damage. Burner observed without any sign of leakage. Operation of Incinerator is verified from ORB.
- Sewage Plant (overboard valve, Structure, Operation from flow of liquid)
- SOPEP Locker inventory is maintained as per SOLAS requirement.
- BWTS is not installed on board. Installation due date in 2022 at next renewal survey for IOPP.

FIREFIGHTING & LIFESAVING APPLIANCES

Grade: 4 (Good)

Reason: Condition found Satisfactory.

- There is a freefall lifeboat with Capacity 20 persons. There is a Rescue boat with capacity of six persons.
- Vessel has mandatory life rafts in the forward and aft and life buoys as required and in appeared in good condition.
- Ventilators, funnel flaps and dampers found in good condition.

- Life jackets, SART, EPIRB, Muster Station, MOB, emergency light, Emergency Generator and Batteries all appeared to be normal.
- Vessel has CO2 System for Engine and Cargo holds.
- There is no localised firefighting system such as hyper mist system for ME, Generators or Boiler and Incinerators. All areas inside engine room are protected by CO2 and portable firefighting system.
- Emergency fire pump appeared in normal condition. Firehoses, couplings, hydrants all appeared in normal condition and well maintained.
- Fire alarm panel did not show any error alarm or abnormality.

Shipboard Management

Grade: 4 (Good)

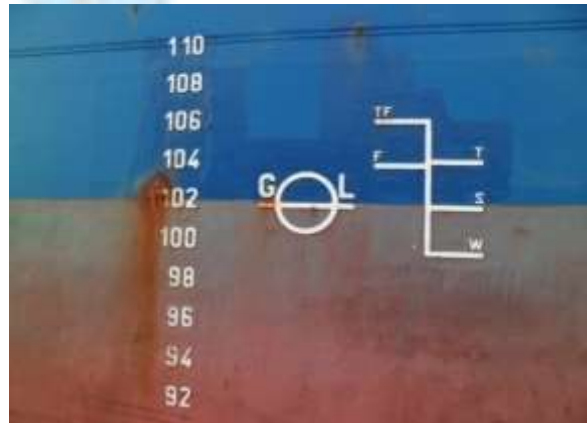
Reason: Satisfactory. No immediate action required.

- Last PSC Inspection reports verified and found no major deficiency or detention of vessel.
- Flag State Inspection reports verified and found no major deficiency or detention of vessel.
- Level of Critical spares reportedly to be maintained on board for Main Engine, generators, safety and Marpol items.
- Loading Computer is in ship's office. Reportedly working fine.
- Portable Gas Measuring Equipment was in good operating condition and it was used for tank entries.
- Crew Welfare is taken care by management company. Good safety culture is observed on board with all crew wearing proper safety gears.
- All vessel trading certificates, documents and Plans sighted on board.
- Garbage Record Book, ORB and Ballast Water Management is maintained as per regulations.

| Machineries | Total Running Hours | Running Hour Since Last Overhaul |
|-------------|---------------------|--|
| Main Engine | 81499 | 1# 18358, 2# 26270, 3# 4125, 4# 4127, 5# 26270, 6# 26279, 7# 26270 |
| AE 1 | 76170 | 14568 |
| AE 2 | 66 253 | 11865 |
| AE 3 | 64278 | 14661 |

Representative Photographs

Hull External



Main Deck



Cargo Holds



Life Saving Appliances



Navigation Bridge Deck



Accommodation



Ballast Tanks



Engine Room



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 stake holder of the vessel. This report contains facts observed by the inspector and information shared by the Master/ CE/ crew of vessel and independent opinion of surveyor. 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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