



EXAMPLE VESSEL

IMO Number: 1234567 21st March 2019





PREAMBLE

The data used for this analysis is from publicly available sources, paid-subscription services, Class reports and from reports provided by the client. The final evaluation should be used for guidance only. Confirmation of first-hand data, facts and condition should always be supported by inspecting at least a sample of vessels in each class, plus any sister ships that give any concern.

This desktop report is intended for the sole use of the recipient and its purpose is to offer a remote-evaluation of the asset(s), inclusive of several assumptions, and has been issued prior to the conclusions of any physical inspections having been considered. The results are objectively determined, and the depth of the findings is in all respects limited to the quantity and quality of the data-set provided.

All details are given in good faith, and without guarantee.

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REFERENCES

- 1. Online Public Information: Equasis, Paris MOU, Managers and Shipyard Websites.
- 2. Subscription based Intelligence.
- 3. A recent Manager's inspection report from 27th January 2019.
- 4. Class Status report issued on 17th March 2019.
- 5. Example Vessel bridge, deck, and machinery equipment lists.



SUMMARY

The Example Vessel is a 4.5 year old, 1,700 TEU fully cellular, gearless container vessel. She was delivered in June 2014 and is due for her 1st special survey and dry docking in June 2019.

The vessel has had the same owner since new build and has been operated by five different companies. The vessel is currently under the Cypriot flag and has had no flag changes since new build. The vessel has remained with class DNV-GL since being built in 2014. The vessel has had only two vessel managers over her life which shows a good continuity of vessel management.

The vessel manager's recent vessel inspection report from 27th January 2019 along with the vessel equipment list and Class status report from 17th March 2019 were provided for review. The vessel manager report was limited in its scope and did not provide pictures of the vessel or in-depth detail regarding the various defects and deficiencies. It was also found to be very similar to the inspection report of the Example Sister Vessel, carried out 5 days earlier. Due to the provided data being very limited in its detail and scope a true assessment of the vessel condition is difficult and a visual inspection of the vessel is highly recommended.

From the limited documentation supplied, the vessel appears to be in good overall condition but with several deficiencies. The most notable of which was that the main engine thrust bearing was reported to be sustaining repetitive damage similar to her sister vessel the Example Sister Vessel, the steering gear was reported to be in poor condition with no further information provided and the cargo holds were reported to be in average condition but with no mention of corrosion, however corrosion is likely to be present and to require maintenance in dry dock. Hatch cover rubber seals and mechanical parts were also reported to be in average condition with work/repairs scheduled to be carried out during dry docking.

Review of the Class records was not possible due to access not being provided. However, from review of the Class status report issued in March 2019, the vessel was seen to be free from any Conditions of Class (CoC),

memos, observations or notes regarding required statutory upgrades.

The Port State Control (PSC) history of the vessel was found to be good with only 2 deficiencies and no detentions recorded in the 4 inspections carried out over the previous three years. The vessel has been trading in South East Asia over the previous 12 months in countries such as Vietnam, Thailand, China and South Korea.

Given the good condition of the vessel it is estimated that the OPEX levels are likely to be as per industry norms for vessels of a similar type, size and age.

Future CAPEX requirements include the 1st Special Survey docking due by 29th June 2019 at an estimated cost of USD 400,000.



PARTICULARS

Name	Example Vessel	
IMO Number/Call sign	1234567 / A1B2C3	
Vessel Type	Fully cellular gearless container vessel	
Age/built/Shipbuilder	4.5 years / 30th June 2014 / Example Shipbuilder	
Flag/ Class	Cyprus / DNV-GL	
Registered Owners/Managers /Charterer	Example Shipowner / Example Operater/Charterer	
Survey Status	Last drydocked (never) / 1st Special Survey due by 29th June 2019	
Crew	Information not provided	
Ballast Water Treatment System	Information not provided (Ballast Water Management Certificate states that the treatment method is via exchange)	
ECDIS	2 x TRANSAS stated as being installed on the bridge equipment list provided	
Speed and Consumption (*)	Service speed: 18.5 knots @ 45 t/24 hrs (As per sea trials)	
Dimensions	LOA 169.95 m / Beam 28.1 m / depth 14.2 m / draft 9.5 m	
Tonnage	23,558 DWT / GRT – 18,826 t / Lightship – 8,181 t	
Cargo Layout	The vessel is a fully cellular, gearless container vessel with a capacity of 1,700 TEU with 350 reefer capacity. All holds/bays are located forward of the accommodation.	
Machinery	Main Engine – Doosan MAN B&W 6S60ME-B8, 12,200 kW @ 100 rpm. Auxiliary Engines – 2 x Zhengjiang CME MAN 8L21/31, 1,760 kW @ 900 rpm (Tier II). 1 x Zhengjiang CME MAN 6L21/31, 1,320 kW @ 900 rpm (Tier II).	



DESIGN AND CONDITION

The vessel is a 1,700 TEU gearless, fully-cellular container vessel, with the ability to carry 350 reefer containers. She is not strengthened for the carriage of heavy cargo and has no ice class notations. She is fitted with one 6-cylinder Doosan MAN B&W main engine with an MCR of 12,400kW with a service speed stated at 18.5 knots, three auxiliary engines are also installed but with no shaft generator.

From review of the vessel manager inspection report conducted between 26th and 27th January 2019 the vessel's hull including both the boot top and top side areas were stated as being in average condition but with no further detail provided, however this is to be expected considering the stage at which the vessel is at in her dry docking cycle, with her next dry docking due in June 2019.

Unlike her sister vessel the Example Sister Vessel, the forecastle, poop and main deck were stated as being in good condition, however the windlass is stated as being in average condition along with a remark stating that a guarantee claim is to be issued but with no further details provided. The end of the starboard side accommodation ladder was reported to require strengthening and several railings and gratings on the lashing bridges need to be repaired

Ballast tanks and void spaces were reported to be in average condition, however in the sister vessel report this was linked to the condition of the cargo holds. It is likely that for a vessel of this age and quality of build that the ballast tanks would be in good overall condition.

The accommodation and galley were also stated as being in good condition with no stated defects or deficnies, however a separate report regarding the accommodation is mentioned in the inspection report and is recommended to be acquired form the vessel manager.

The bridge and navigation equipment were reported to be in good condition with no defects reported. The Bridge Navigation Watch Alarm System (BNWAS) software was reported to require an upgrade.

The engine was reported to be in good general condition with all important machinery reported to be within their overhaul/service intervals as per the Planned Maintenance System (PMS). The engine room tank tops were stated as being in average condition, however the report states that it is only the refreshing of paint coatings that is required. Similar to her sister vessel the Example Sister Vessel, reoccurring damage to the main engine thrust

bearing was mentioned which requires the engine manufacturers to be consulted. Similar issues on sister vessels are to be expected especially as they are installed with the same main machinery. One oil leakage from the auxiliary engines was identified in the report which was stated as being assigned to the vessel to repair. The boilers were stated as being in good condition but with 11 fire pipes in the auxiliary boiler reported to be blocked and are scheduled to be mechanically cleaned during the next scheduled dry docking. Similar to the Example Sister Vessel report, the steering gear is stated as being in poor condition with no further details provided other than a remark stating that an action plan is to be provided by the ship manager and that inspection gaps need to be cut into the steering gear hydraulic pump foundations. It is highly recommended that further details regarding the steering gear are requested. The stern tube arrangement is also reported to be in poor condition but with a retrofit to a new system stated as being required, this may be just to upgrade the stern tube to be VGP compliant for trading to the USA, but this can only be confirmed by the vessel manager.

The emergency fire pump visual condition was reported to require improvement and the electrical glands to be repaired. The fire dampers were reported as being in poor condition, which is likely due to them being seized as a result of poor lubrication, as greasing points are scheduled to be installed during the dry docking in June 2019.

Like the Example Sister Vessel, the cargo holds structure and coatings were reported to be in average condition but with no mention of corrosion and only sweeping and cleaning recommended by the vessel manager. However, due to the inaccessible nature of the cargo hold tank tops it is likely that spot corrosion has devolved similar to the sister vessel and that spot water blasting and recoating will likely be required in the cargo hold during dry docking. Cargo hold ventilation was also stated as being in average condition but with no further details provided in the ship manager report. Hatch cover rubber seals and mechanical parts were stated as being in average condition with a remark stating that work is to be carried out during dry docking.

A dry dock scope and repair list was reported to have been created and reviewed by the vessel manager which shows that the vessel managers are aware of the maintenance that is required to be carried out during dry docking and that action is being taken.



CONSTRUCTION

Like her sister vessel the 'Example Sister Vessel', this vessel was built at Example Shipbuilder, China to good specifications in 2014. According to the ship manager inspection report no significant structural defects were reported or identified, indicating that the original quality of steel work and welding was carried out to a good standard. However, this cannot be confirmed without visually inspecting the vessel, this judgment is based on the vessel manager's inspection report which is very brief. The vessel has no memos or conditions of class also indicating that the vessel is constructed to a good standard. The engine room machinery is provided by a combination of well-known European and far Eastern manufacturers who have good global servicing and

maintenance capabilities. This specific yard is one of the largest private shipyards and has only been operating since 2006 and has a capacity of 100,000 GT. Since opening the yard has built a total of 152 vessels, focusing on Smaller container vessels, medium sized bulk carriers and multi-purpose vessels.

CLASSIFICATION

Please note a full classification record review has not been undertaken since the access was not available.

Vessel carries the following basic class notations:

- 100 A5 Container ship BWM (D1) DG, ERS, IW, NAV-O,
- MC AUT, CM-PS, EP-D

There is no Ice Class notation but the vessel has the class notation CM-PS indicating that she is allowed to enter the extended Dry Docking (EDD) scheme and also EP-D which is a voluntary class notation assigned at newbuild indicating that the vessel exceeded

compliance with various environmental regulations and requirements at the time of newbuild.

There were no Conditions of Class (CoC) or Observations contained within the Class status report, and no memos or notes regarding the phase in of regulations.

No Inventory of Hazardous Materials or Green Passport was shown in the class status report.

CAPEX/OPEX PROJECTIONS

Dry Dockings

The next dry docking for the 1st special survey in June 2019 is estimated at USD 400,000 based on a Far Eastern shipyard and includes all survey and normal maintenance costs. It excludes owners upgrades and statutory compliance costs such as the installation of ballast water treatment system.

Intermediate drydocking

None required until 17.5 years old.

ECDIS

A TRANSIS NAVIPILOT 4000 is stated as being installed on board in the vessel's equipment list provided. However, it does not state if it is used as the primary and/or secondary means of navigation. This can only be confirmed if the Safety Equipment Certificate (SEC) Part E is sighted.



CAPEX/OPEX PROJECTIONS CONTINUED

Ballast Water Treatment System (BWT) Retrofit

No information regarding BWTS was provided, however it is very likely that no BWTS is installed with the Ballast Water Management Certificate (BWMC) stating that the treatment method is via exchange and the vessel having a 'D1' Class notation. If the vessel does not have a BWTS installed then it will not be required to be installed until the vessel's 2nd IOPP renewal survye in 2024.

ECA Zone/Low Sulphur Fuel (LSF)

Information regarding whether or not the vessel has any tanks converted to carry LSF was not provided and the vessel is not fitted with an exhaust gas cleaning system (scrubber). From January 2020, the vessel will either be required to use only low sulphur fuel (<0.5%) or be equipped with an exhaust gas cleaning system to continue using heavy fuel oil.

US EPA Vessel General Permit Compliance (VGP)

There was no evidence provided stating that the

vessel's stern tube is VGP compliant for trading to the united states. In the vessel manager report, it states that a retrofit of new system is to be conducted in the shipyard which may be to install an air seal or to fit Environmentally Friendly Lubricants (EAL) to assist the vessel in becoming VGP complaint. However, this should be confirmed with the vessel manager. If the vessel wishes to trade to the USA, various upgraded and modifications will have to be conducted.

Projects/Upgrades

No information provided.

OPEX

The estimated OPEX would be around 5,100 USD/Day. Managers have not supplied any financial data.

TRADING

The vessel has traded in the following locations over the last 12 months, mainly around South East Asia:

South Korea Thailand China Vietnam



RECOMMENDATIONS

	Item	Action
A	Repeated damage to the main engine thrust bearing was reported .	The ship manager stated that the engine manufacturer is required to be consulted to ascertain the reason for the repetitive damage.
A	The steering gear was stated as being in poor condition with an action plan yet to be approved by the vessel manager.	The reason for stating that the steering gear was in poor condition is to be ascertained.
A	The cargo holds were stated as being in average condition but with no mention of corrosion. It is likely that pot corrosion Is present due to the inaccessible nature of the cargo holds during service.	It is likely that spot water blasting and re-coating of the holds is required however this cannot be confirmed without inspecting the vessel.
1	No inventory of hazardous materials.	Shall be required by December 2020 for EU port entry.
1	No BWTS is installed on board.	BWTS will not be required to be installed until the 2nd IOPP renewal survey in 2024.
A	Condition of the engine room tank top and bilge coatings was reported to be average and to require maintenance.	Maintenance and re-coating to be carried out by vessel crew.
1	The boilers were stated as being in good condition but with 11 fire pipes in the auxiliary boiler reported to be blocked.	Mechanical cleaning was reported to be scheudled during the next scheduled dry docking.
1	Fire dampers were stated as being in poor condition with greasing points needing to be installed.	Greasing points scheduled to be installed during dry dock.
	The emergency fire pump visual condition was reported to require improvement and the electrical glands to be repaired.	Vessel crew to carry out maintenance.
1	Cargo hold ventilation and lighting was reported to be in average condition but with no further details provided.	Further information to be requested from the vessel manager.
	Hatch cover rubber seals and mechanical parts were stated as being in average condition with a remark stating that work is to be carried out during dry docking.	It is likely that the rubber seals need to be replaced due to over compression or damage, but this cannot be confirmed without inspecting the vessel.
	Starboard side accommodation ladder was reported to be require strengthening and several railings and gratings on the lashing bridges need to be repaired.	Vessel to carry out repairs.