

INDIAN REGISTER OF SHIPPING

SURVEY RECOMMENDATION SHEET

SURVEY STATION: Mumbai (SIS)

Date : 04/04/2019

NAME OF SHIP/YARD/WORKS:

Surveys:- YARD NO 305 @ Ghodbunder - Sea trial -
(SHM - Resum Boat)

Recommendations:

As per the OAP - following sea trial & test carried out for the above said boat - Y-305

- 1) Bilge System trial - @ manual bilge pump (65 LPH) and 2) Electrical auto start bilge pump (125 LPH) trial found satisfactory.
- 2) Fuel Oil system trial - pipe vented satisfactorily.
- 3) Performance of trial of OBM - (Sea trial report)
- 4) Trial of Navigational Equipment - all lights as detailed in sea trial report & GPS Compas. vented satisfactorily.
- 5) Electrical panel trial found in order.
- 6) Endurance trial, Speed trial, Manoeuvring trial, Turning circle trial, Steering trial, Crash stop trial & Astern trial.

All trial found satisfactory, Report endorsed.

Signatures

Surveyor / s

Surveyee / s





TEST & TRIALS PROTOCOL

YARD NO: 305



6.0 M SNAPPER 22

OWNER : Savan Traders & Company
MANUFACTURER : SHM SHIPCARE
CLASS : IRS



Sr No.	Index	Date
	Test & Trials	
1	Machinery/ Electrical Items Verification	04/04/2019 ✓
2	Anchoring & Mooring Trials	04/04/2019 ✓
3	Speed Trial	04/04/2019 ✓
4	Endurance Trial	04/04/2019 ✓
5	Fuel consumption	04/04/2019 ✓
6	Maneuvering Trials	04/04/2019 ✓



PRINCIPAL PARTICULARS**6.0 M FAST SPEED BOAT (YARD – 305)**

Length Overall	-	7.00 mtrs
Length Hull	-	6.00 mtrs
Breadth	-	2.10 mtrs
Depth	-	0.90 mtrs
Draft	-	0.35 mtrs
Speed Max.	-	12 Knots
Construction	-	Fibreglass
Outboard	-	Twin engine 60 HP OBM.
Endurance	-	20 Nm
Carrying Capacity	-	06 person including crew
Classification Society	-	IRS
Fuel Tank Capacity	-	2X 52 Ltrs ✓



MACHINERY/ ELECTRICAL ITEMS VERIFICATION

Following machinery basin trials to be completed prior to commencing Sea Trials:-

	Machinery/ Eqpt	Remarks
A	Main engines following to be verified. i. Remote and local manual starting. ii. Dead man switch.	60 HP TWIN OBM✓ Model no. Tohatsu✓ Sr. No. Port 002834AG✓ Stbd 002833AG✓
b	Steering system: Hydraulic steering	Satisfactory✓
c	Main Engine gauges	Satisfactory✓
D	Fuel system: Analog gauges & dipstick	Satisfactory✓
E	Bilge System 1. 65 LPH Manual bilge pump 2. 125 LPM Electric Bilge pump	Satisfactory✓
g	Navigation Equipment 1. All round Light 2. Side light (P & S) 3. Search Light	Satisfactory✓

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IRS
C. S. R. Pandey

Document no. Y305/6M-S22/DT/02

ANCHORING & MOORING TRIALS

Anchoring Trial- To check operation of anchor and cable arrangement on boards the boat by manually lowering the anchor.

Mooring Trial - Engine run ahead in full throttle with boat securely moored. The trials carried out for half an hour duration and it is to ensure that the installed machinery operation is satisfactory.

Note if any structural damage to mooring points / fittings

Location: Ghodbandar, Thane

Date of Trials: 04/04/2019

Result: Satisfactory



Document no. Y305/6M-S22/ST/03

SPEED TRIALS**1. Speed Trials:**

- 1.1 Date and time of commencement of Trials: 04/04/2019
 1.2 Persons attending the Trials. Yard: Mr. Abdeali Netarwala
 IRS: Mr. Santosh M. Panchal
 1.3 Boat Condition: Full Load Person on board: 8
 1.4 Prevailing weather conditions; and site of trials: Calm weather
 1.5 Location of Trial: Ghodbandar
 1.6 Depth of water at trial location: 8-12 m
 1.7 Draught: FWD: 0.2 m AFT: 0.35 m
 1.8 **Speed Trials at 12 knots in full load condition-**

Run No.	Direction	Vessel Speed	Engine Speed	
		Over ground (01 NM)	Port	STBD
		(by GPS)	(RPM)	(RPM)
1 st	W	26.8	5000	5000
2 nd	A	24	5000	5000
3 rd	W	27.1	5000	5000
4 th	A	24.2	5000	5000

AVERAGE SPEED RECORDED BY GPS: 25.52 Knots**Date: 04/04/2019****SHM SHIPCARE****IRS**

Document no. Y305/6M-S22/ST/04

ENDURANCE TRIALS**Purpose**

To check engines and steering system performance during endurance trials of vessel.

1. No. of persons on board : 08
2. Draught : Fwd- 0.20 M, AFT- 0.35 M
3. Trial Commenced : 10:00 hrs , Trial Completed 12:00 hrs

Following parameters of engine recorded:

Sr No.	Time	RPM PORT	RPM STBD	Speed in Knots
1	10:00	1000	1000	4.8
2	10:15	2000	2000	6.8
3	10:30	3000	3000	11.2
4	11:00	4000	4000	19.5
5	11:30	5000	5000	27.2
6	12:00	5000	5000	27.0

Result : Satisfactory**Date: 04/04/2019****SHM SHIPCARE**

FUEL CONSUMPTION TRIALS**1. Fuel consumption** trials at cruising speed @ 12 Knots:

- 1.1 Date of Trials. : 04/04/2019
 1.2 Location of Trial : Ghodbandar
 1.3 Persons attending the Trials. Yard: Mr. Abdeali Netarwala
 IRS: Mr. Santosh M. Panchal
 1.4 RPM of Engines: 3000 (port); 3000 (stbd)

Time interval	Vessel Speed (in knots)	Engine Speed (in RPM)		Fuel Reading (from bridge console)	
	By GPS	Port	Stbd	Port	Stbd
12:30 hrs	12 Kn	3000	3000	16.8	16.8
13:00 hrs	12 Kn	3000	3000	10.5	9.45
Fuel consumption				6.3 ltrs	7.35 ltrs

Readings of fuel rate gauge provided in the wheel house was used to determine the fuel consumption. The vessel was run at an average engine rpm of 3000 for about half an hour to calculate approximately the endurance limit of the vessel as detailed below.

- Average speed of **12** knots
- Average of fuel rate of $13.65 \times 2 = 27.3$ LPH (Liters Per Hour) for both OBM observed in the wheel house console at engine rpm of 3000.
- For 2 hours operation @ 12 knots,
 - The total engine FO consumption for 1 hrs = 27.3 liters
 - Therefore, vessel's total Fuel oil consumption @ 12 knots for 2 hrs = $27.3 \times 2 = 54.6$ (Both OBM)
- Fuel oil capacity of F.O tanks provided is 52 liters per tank, making Total provided FO capacity = 104 liters
- Provided total tank capacity exceeds 2 hours endurance @ 12 knots requirement.

Date: 04/04/2019**SHM SHIPCARE****IRS**

CSM Panchal

MANEUVERING TRIALS**Turning Circle Trials:**

As a continuation of full power sea trials the following trials to be carried out. The boat shall be put hard over in turn to determine the turning circles to Port and to Starboard. The time require to complete the circle and the diameter of the turns (in boat length) to be recorded.

	Circle Time	Circle Diameter (Boat Length)	Speed
Hard Starboard	17 sec.	2.5 boat length	6 knots
Hard Port	15.7 sec.	2.5 boat length	6 knots

Crash Stop:

At normal cruising, the vessel is moved forward at a constant speed. During an emergency, the vessel must be stopped at the shortest possible time and distance so as to avoid a collision.

Following parameter recorded:

Ship Speed	26 knots
Wind Speed	6-8 knots
Time from control movement until vessel start astern to stop	8 sec
Distance Travelled	2.8 boat length

Astern Trials:

Astern trial carried out at 2000 RPM Running for 5 minutes and found satisfactory

Result:

Date : 04/04/2019

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