SEATRIUM TUAS SHIPYARD (YST)

BERTH	APPROACH DEPTH (m)	DEPTH A/S (m)	LENGTH OF BERTH (m)	REMARKS
YST01	12	12.0	146	Lesser depth exists 50m south of the berth box
YST02	9.8	8.3	375	
YST03	8.8	9.0	363	
YST05	9.1	9.0	363	
YST06	14.4/ 9.1	12.1/ 8.9	280/75	YST06 has a total length of 343m. Depth alongside is 12.1m for 260m of berth length from the western end of the pier. Beyond 280m the depth alongside is 8.9m
YST07	14.4	15.0/ 9.0	303	Depth alongside for these berths is 15.0m for 260m of berth length from the western end of the pier. Beyond 260m the depth alongside is 9.0m
YST08	14.4	14.1/ 8.1	303	Depth alongside for these berths is 14.1m for 260m of berth length from the western end of the pier. Beyond 260m the depth alongside is 8.1m
YST09	15.0	15.0/ 9.1	303	Depth alongside for these berths is 15.0m for 260m of berth length from the western end of the pier. Beyond 260m the depth alongside is 9.1m
YST10	15.0	15.0/ 9.0	303	Depth alongside for these berths is 15.0m for 260m of berth length from the western end of the pier. Beyond 260m

				the depth alongside is 9.0m
YST11	15.0	15.0	260	
YST12	9.1	9.0	403	
YST13	9.1	9.1	155	
YST14	9.1	8.9	308	
YST15	15.0	14.8	385	
YST16	12.0	14.8	385	
YST17	11.9	12.0	445	
YST19	13.4	9.0	236	

DOCK	LENGTH OF DOCK (m)	WIDTH OF DOCK (m)	DEPTH OVER SILL (m)	TYPE OF DOCK
YSTD1	350	66.0	8.5	Graving
YSTD2	360	89.0	8.5	Graving
YSTD3	412	66.0	11.0	Graving
YSTD4	350	66.0	8.5	Graving
YSTD5	260	52.0	8.0	Graving
YSTD6	260	52.0	8.0	Graving
YSTD7	262	110.0	12.0	Graving

A. **GENERAL INFORMATION**

- 1. Sembcorp Marine Tuas Shipyard is located along 80, Tuas South Boulevard Road.
- 2. Communication between Pilot/ tugs and Shipyard Dockmaster or wharf supervisor shall be via: Pilot Walkie-Talkie channel P05.
- 3. The approach into the shipyard is affected by cross current flowing in a northerly or southerly direction at the entrance to the shipyard. The flow is correlated to the ebbing or flood streaming tide of the West Johore Strait.
- 4. All movements refer to vessels under own power unless otherwise stated.
- 5. Night movement is permissible but restricted to the following condition:

- i) Vessel's LOA not greater than 200 metres (interim measures until lighting adequacy is being evaluated after the shipyard is in full operation).
- ii) Double banking is not allowed unless approved by the Port Master and adequate lightings shall be provided.
- iii) Docking and undocking movement shall be restricted to wind of 10 knots or less.
- iv) Night movement shall be carried out in slack water conditions in view that the vessel may be subjected to the cross current at the entrance to the basin of the shipyard.
- v) Vessel must have own power and towing is not allowed in the night.
- 6. Movements for vessel with LOA >250m could be deferred if wind velocity >15 knots.
- 7. Berthing alongside another vessel (ship to ship) shall be conducted during daylight hours.
- 8. There shall be sufficient space for vessels and tugs to manoeuvre safely at all times. Between piers or piers and wharf, the manoeuvring vessel should have a minimum clearance of at least 90m excluding manoeuvring vessel's beam to allow for tugs to assist effectively e.g. if the manoeuvring vessel has a beam of 45 metres, the total lateral manoeuvring space available should be 45m (beam of manoeuvring vessel) + 90m (tugs and towline) = 135 metres (total clearance prior entering the basin)
- 9. Shipyards shall ensure that no vessels are permitted to berth across the entrance of any dry docks.
- 10. Shipyards shall ensure that personnel working overside shall be cleared prior to a vessel passing that particular berth with less than 100 metres lateral distance.
- 11. No overhanging is allowed at YST02, YST06, YST07, YST08, YST09, YST10 and YST11.

B. <u>TUG ASSIGNMENT GUIDELINES</u>

LENGTH OVERALL OF VESSEL (LOA)	NUMBER OF TUGS FOR VESSEL WITH ENGINE	NUMBER OF TUGS FOR VESSEL UNDER TOW*
Up to 60 metres	1 small tug	2 small tugs
61 to 122 metres	2 small tugs	3 small tugs
123 to 180 metres	2 medium tugs	3 medium tugs
181 to 220 metres	2 big tugs	3 big tugs
221 to 280 metres 3 big tugs		4 big tugs
281 metres and above or GT>75,000	4 big tugs	5 big tugs
Jack up rig	N.A.	3 suitable big tugs
Semi-submersible rig	N.A.	4 suitable big tugs
Cumbersome tow and towing of vessels with unusual characteristics	N.A.	To be determine at the consultation meeting and briefing before vessel movement.
Line-tow barge of greater than 1000GT	N.A	1 additional tug of sufficient horsepower to be secured at the stern of the barge for stopping and to assist in manoeuvring when required.

^{*}Tug recommendation for vessel proceeding in and out of Dock.

C. PILOTAGE GUIDELINES

1 Berthing & Docking / Unberthing & undocking (Day)

No tidal stream restriction when the basin has greater than 5 beams lateral distance for vessel to manoeuvre.

When basin has less than 5 beams lateral distance, movement is restricted to cross current of less than 0.8 kts at the entrance to the basin.

In addition, the minimal lateral clearance described in paragraph A (8) applies.

2 Berthing & Docking / Unberthing & undocking (Night)

As an interim guideline, movements in the hour of darkness is restricted to vessel's LOA <200m for all movement in the yard unless approved by Port Master.

Guidelines for night movement described in paragraph A (5) shall applies.

3. Berthing Clearance

The table below is the guidelines for the minimum distance to dead end or corner berth such as YST03 or YST07.

LOA OF VESSEL (m)	MINIMUM DISTANCE (m) (TO END OF WHARF)
LOA <150m	15m
LOA >150 to 250m	20m
LOA >250 to 300m	25m
LOA >300 to 350m	30m
LOA >350 to 400m	35m
LOA >400	40m

The table below is the guidelines for the minimum overall clearance between vessels under own power during berthing and unberthing movements.

LOA OF VESSEL (m) (Own Power)	MINIMUM OVERALL DISTANCE (m)
LOA <100m	14m
LOA >100 to 180m	20m
LOA >180 to 220m	30m
LOA >220 to 300m	40m
LOA >300 to 350m	50m
LOA >250 to 400m	60m
LOA >400m	70m

The table below is the guidelines for the minimum overall clearance between vessels under tow during berthing and unberthing movements.

LOA of vessel (m) (Under Tow)	Minimum overall distance (m)
LOA <70m	20m
LOA >70 to 100m	30m
LOA >100 to 140m	40m
LOA >140 to 180m	60m
LOA >180 to 220m	80m
LOA >220 to 300m	100m
LOA >300 to 350m	120m
LOA >350 to 400m	140m
LOA >400m	160m

CHARTLET
Chartlet is for illustration purposes only, not to be used for navigation. For navigation, mariners are advised to use the appropriate BA nautical charts.

