

## SEMBAWANG SHIPYARD (SS)

<b>BERTH</b>	<b>LOA (m)</b>	<b>DEPTH A/S (m)</b>	<b>APPROACH DEPTH (m)</b>	<b>REMARKS</b>
SS8	350	9.0 (wm115)	10.7	Northwall - continuous wharf of length 849m
SS9	240	8.5 (wm580)	10.2	
SS10/11	250	6.3 (wm830)	8.6	
SS12	350	7.4 (wm720)	10.4	Westwall - continuous wharf of length 930m
SS12A	250	7.0 (wm 530)	10.4	
SS14	250	8.8	9.8	
SS16	220	7.4	9.8	East entrance of SPD
SS17	230	10.2	11.4	
SS18	190	10.6	11.4	
SS19	230	11.7	11.7	
SS20	290	11.6	11.6	
SS22	250	10.7	10.4	New berth south of western extension
SS23	253	11.2	11.4	New berth north of western extension
<b>DOCK</b>	<b>LOA (m)</b>	<b>WIDTH (m)</b>	<b>DEPTH OVER SILL (m)</b>	<b>TYPE</b>
Premier (SSPD)	384	64.0	5.5	Graving
King George VI (SSKG6)	319	39.6	10.3	Graving
Republic (SSFDR)	202	42.0	6.2	Floating
President (SSFDP)	290	48.0	7.0	Floating
Karimun Perdana (SSFDK)	230	34	7.0	Floating

### **GENERAL INFORMATION**

1. All movements refer to vessels under own power unless otherwise stated.
2. Night movements are not allowed unless approved by the Port Master.

3. Movements for vessel >250m could be deferred if wind velocity >15 knots.
4. Berthing alongside another vessel shall be conducted during daylight hours.
5. There shall be sufficient space for vessels and tugs to manoeuvre safely at all times. The manoeuvring vessel should have a minimum clearance of 3 beams or 60m whichever is more e.g. a vessel of 40m beam should have a total clearance of 120m.
6. Shipyards shall ensure that all personnel working in a drydock are evacuated, prior to a vessel being berthed or unberthed near the entrance of the drydock.
7. Shipyards shall ensure that a vessel berthed at the entrance to any of the dry docks (which are in operation) shall be of such a length as not to extend beyond length of the dock entrance.
8. Shipyards shall ensure that personnel working overside shall be cleared prior to a vessel passing that particular berth.
9. Triple-banking is not allowed for VLCCs.
10. The slack tide period shall be taken as two hour before and after the predicted times of low and high water.

11. **Premier Dock (SSPD)**

When there is a docking operation, maximum overhang at SS16 is 18 m..For undocking operation, maximum overhang is 37m.

12. **King George VI Dock (SSKG6)**

No restriction as long as the vessel does not have to make a steep angular approach to or from the dock. With the docking vessel's centreline in transit with the dock's centreline, there must be sufficient clearance on one side of the docking vessel for tugs to work perpendicular to the docking vessel's side.

## **PILOTAGE GUIDELINES**

### **1. Internal movements during non-daylight hours**

When approval from Port Master is granted for internal movement during non-daylight hours, the following shall be complied with:

<b>Vessel under tow</b>	<b>Vessel under power</b>
Movement restricted to vessel of $\leq 300\text{m}$	
Movement shall not encroach into the main channel	Movement from North wall berths /docks to West wall berths/docks /service pier and vice versa shall be programmed for slack tides and restricted to vessel of $\leq 240\text{m}$
Movement of vessel $>240\text{m}$ along the North wall berths/docks shall be programmed for slack tides	

### **2. Lighting**

There shall be adequate lightings, fenders and men to attend to the vessel.

### **3. North Pier (SS8 - SS11 and SS20)**

- (a) When 2 vessels are double-banked at SS8 and have a combined beam of  $>100\text{m}$ , the maximum LOA for vessel berthing and unberthing at SS9 to 11 is restricted to 260m. There must be a clearance of at least 3 beams for the vessel to manoeuvre pass SS8.
- (b) When 2 vessels are double-banked at SS8 or when SS8 and SS20 are occupied, vessels proceeding to SS9 - SS11 should have at least 50m clearance from SSFDR when the stern/bow is in line with the larger of the vessels alongside at SS8.

### **4. President Dock (SSFDP)**

There should be no vessels alongside SS20 when vessels are docking and undocking at SSFDP.

### **5. No Overhang**

There should be no overhanging at SS22 and SS23 which will obstruct the passage of vessel to SS12 or SSPD.

## 6. Berthing Clearance

The table below is the guidelines for the minimum distance to dead end or corner berth such as SSL10/11, SSL14,SSL16 or SSL22.

<b>LOA OF VESSEL (m)</b>	<b>MINIMUM DISTANCE (m) (TO END OF WHARF)</b>
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.

<b>LOA OF VESSEL (m) (Own Power)</b>	<b>MINIMUM OVERALL DISTANCE (m)</b>
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.

<b>LOA of vessel (m) (Under Tow)</b>	<b>Minimum overall distance (m)</b>
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

## **TUG ASSIGNMENT GUIDELINES**

Tugs requirements for vessels berthing and unberthing at Sembawang Shipyard.

<b>LENGTH OVERALL OF VESSEL (LOA)</b>	<b>NUMBER OF TUGS FOR VESSEL WITH ENGINE</b>	<b>NUMBER OF TUGS FOR VESSEL UNDER TOW</b>
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 tug	3 medium tug
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.