

KEPPEL SHIPYARD LIMITED (BENOI YARD) - YH
[FORMERLY KNOWN AS HITACHI ZOSEN ROBIN SHIPYARD]

BERTH	DEPTH A/S (m)	APPROACH DEPTH (m)	LENGTH of BERTH(m)	REMARK
(YHQ1) Quay 1	5.6	7.0	217	
(YHQ2) Quay 2	8.9	5.5	352	
(YHQ3) Quay 3	7.2	5.5	270	
(YHQ4) Quay 4	6.4	5.5	224	
(YHL) Landing Quay	3.6	5.7	100	
(YHDK1) Dock 1	11.5	7.0	350	Width: 60m
(YHDK2) Dock 2	11.5	7.0	300	Width: 60m

PILOTAGE GUIDELINES

1 BERTHING/DOCKING & UNBERTHING/UNDOCKING (DAY)

No restriction

**2 BERTHING/DOCKING & UNBERTHING/UNDOCKING (NIGHT)
(A/S BERTH ONLY)**

(a) QUAYS 1, 2, 3, 4 AND LANDING QUAY

LOA ≤ 230m

No restriction

LOA > 230m

No movement

(b) DOCKS 1 & 2

LOA ≤ 230m

No restriction

LOA > 230m

No movement

Note: For vessel to pass a berth, the combined beam of vessels alongside the affected berth should not exceed the beam of 2 VLCCs.

3. Berthing Clearance

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

TUG ASSIGNMENT GUIDELINES

- 1 The table provides for the number of tugs to be assigned to a vessel when berthing/unberthing or shifting at the shipyard.
- 2 For vessels proceeding to a Floating Dock or Graving Dock, the shipyard may assign an additional tug.
- 3 For jack-up oil rigs, 3 suitable big tugs are recommended and for semi-submersibles 4 suitable big tugs are recommended.
- 4 The pilot may in consultation with the master, cancel or order additional tugs if necessary. For vessels equipped with a suitable thruster in good working condition, one tug at that position may be dispensed with.

- 5 The shipyard may arrange its own tugs for the movement. Please consult the respective shipyard for advice when ordering tugs.

LENGTH OVERALL OF VESSEL (LOA)	NUMBER OF TUGS FOR VESSELS WITH ENGINES	NUMBER OF TUGS FOR VESSELS UNDER TOW
Up to 60 metres	1 small tug	2 small tugs
61 to 100 metres	2 small tugs	3 small tugs
101 to 130 metres	1 small and 1 medium tug	2 small and 1 medium
131 to 150 metres	2 medium tugs	1 small and 2 medium tugs
151 to 180 metres	2 medium tugs	3 medium tugs
181 to 200 metres	1 medium and 1 big tug	3 medium tugs
201 to 260 metres	1 medium and 2 big tugs	2 medium and 2 big tugs
261 metres and above	3 big tugs	2 medium and 3 big tugs