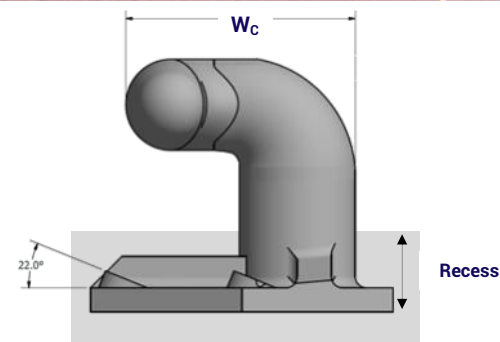


ESC T-HEAD BOLLARD—JAPANESE DESIGN

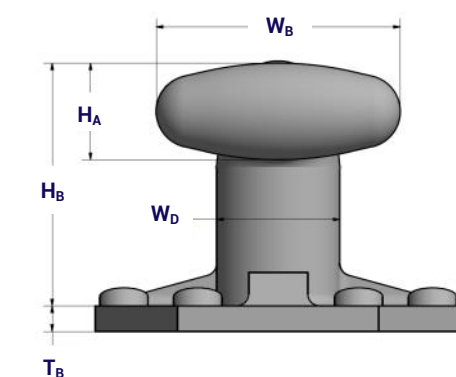
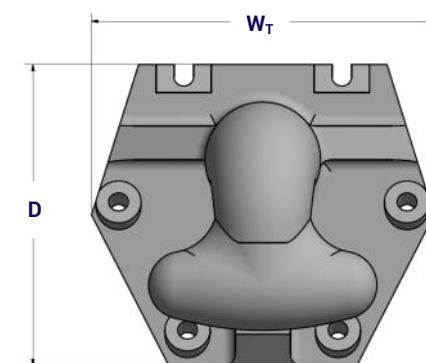
DATASHEET

ESC has produced heavy duty T-Head bollards—Japanese design for ports around Asia, as a time tested robust design.

- ✓ General purpose applications up to 200 tons
- ✓ Suitable for steeper rope angles
- ✓ Ideal for multi purpose berths



Dimension	Units	Bollard Capacity (Tons)											
		5	10	15	25	30	35	50	70	100	150	200	
W_T	mm	360	480	600	720	810	810	945	1130	1365	1765	2250	
D	mm	360	480	600	720	720	720	840	1000	1200	1600	2100	
W_B	mm	300	400	500	600	600	600	700	800	900	1100	1360	
W_D	mm	150	200	250	300	300	300	350	400	450	648	700	
T_B	mm	30	40	50	65	70	65	70	80	95	120	150	
H_A	mm	120	160	200	240	240	240	280	370	380	505	860	
H_B	mm	380	480	580	680	690	690	780	900	990	1260	1550	
H_C	mm	300	400	500	600	600	600	700	800	900	1100	1360	
Bolt length	mm	450	600	700	850	850	850	1000	1150	1300	1500	2160	
Bolts	-	M20	M27	M33	M42	M42	M42	M48	M56	M64	M72	M120	
Bolt Quantity	-	4	4	4	4	6	6	6	6	6	6	6	
Recess	mm	90	110	130	160	160	160	170	210	220	265	310	



MATERIAL SELECTION

MATERIALS	STANDARD(S)	GRADE (S)
Ductile Cast Iron (for body)	BS EN 1563 ASTM A 536 GB/T 1348	EN-GJS-450 to 500 65-45-12 to 80-55-6 QT450-10 to QT-600-3
Cast Steel (for body)	ASTM A148 ISO 1030 GB/T 11352	65-35 to 80-50 230-450 to 340-570 ZG230-450 to ZG340-640
Anchor Bolts (galvanized)	ISO 898 BS 3692 ASTM	Gr. 5.8 to 8.8 (galvanized) Gr. 5.8 to 8.8 (galvanized) ASTM F1554 Gr. 105 (galvanized)

Disclaimer

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OTHER DESIGNS

ESC is able to produce bollards of virtually any dimension. Shown here are just the standard range of bollards, but custom design bollards can be manufactured according to the client's design.

