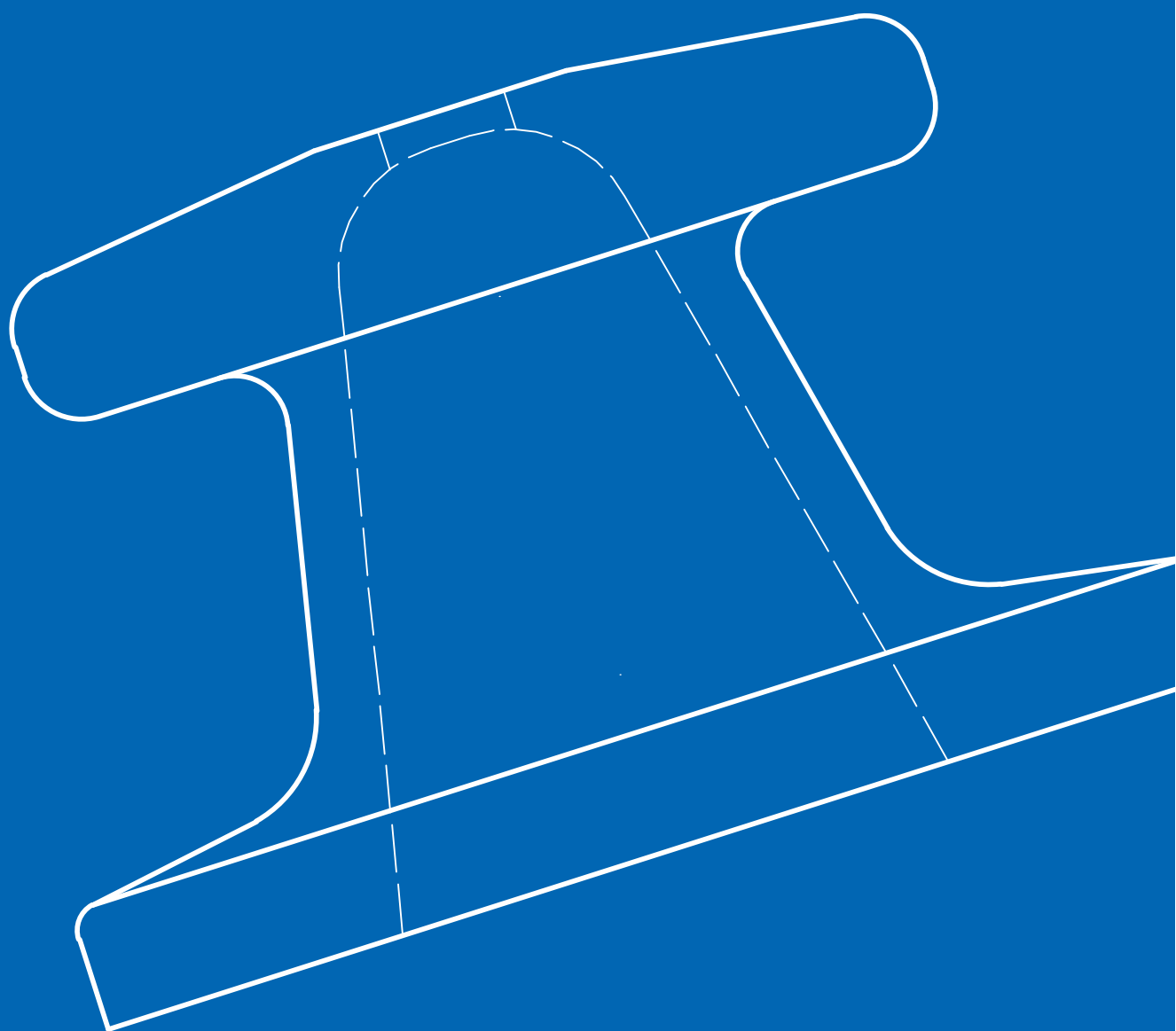
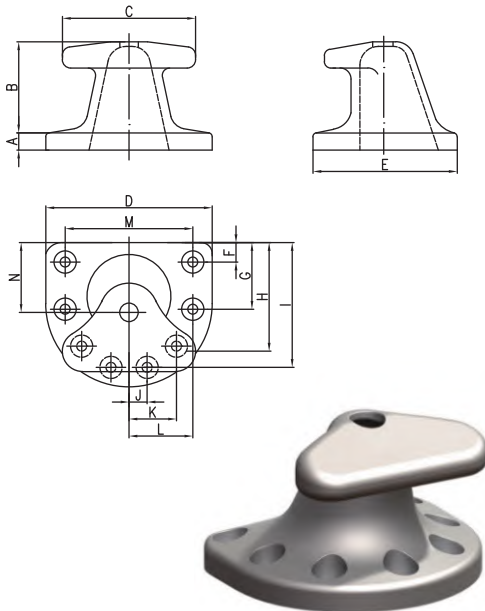


MOORING BOLLARD

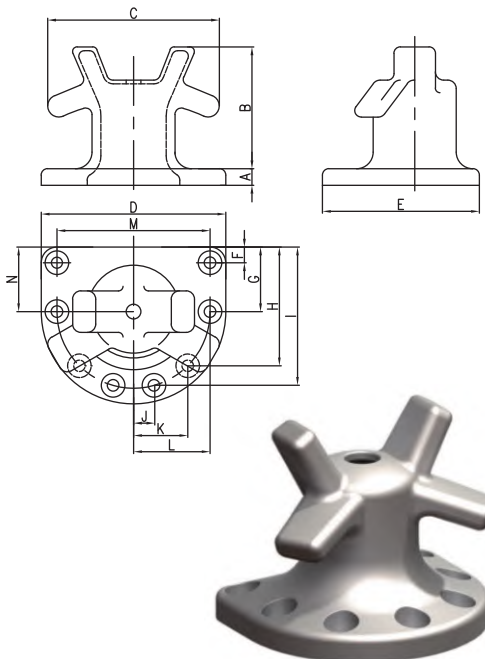


T-Head Bollard



Standard Bollard Capacity (tonnes)										
Dimension (mm)	TH10	TH15	TH20	TH30	TH50	TH75	TH100	TH125	TH150	TH200
A	45	52	54	57	70	80	80	87	93	97
B	200	220	240	250	308	355	415	460	490	520
C	305	335	350	365	450	520	610	670	720	765
D	380	420	440	460	565	650	762	838	900	950
E	330	365	380	400	490	560	660	726	780	825
F	45	50	51	53	65	75	90	100	105	110
G	-	-	-	-	-	-	305	335	360	350
H	-	-	230	245	300	300	500	550	590	560
I	240	265	330	340	420	460	570	630	675	695
J	103	115	-	-	-	105	-	-	-	120
K	-	-	152	159	196	240	195	215	230	300
L	-	-	-	-	-	-	290	320	345	365
M	292	320	336	350	435	500	585	645	690	730
N	190	208	218	226	280	320	380	415	445	475
Bolt Size	M24	M24	M24	M30	M36	M42	M42	M48	M48	M56
Bolt Length	450	450	450	450	600	600	600	750	750	915
Bolt Qty	4	4	5	5	5	6	7	7	7	8

Twin Horn Bollard(Staghorn Bollard)



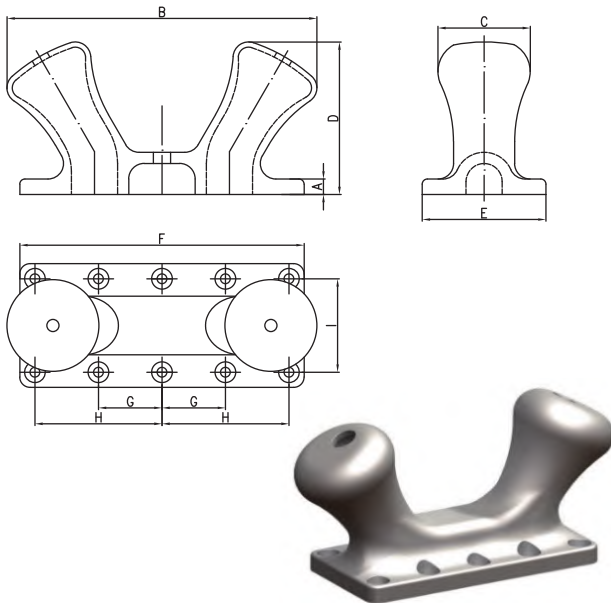
Standard Bollard Capacity (tonnes)						
Dimension (mm)	SH50	SH75	SH100	SH125	SH150	SH200
A	60	70	80	90	98	102
B	420	490	560	615	671	700
C	515	630	715	790	860	895
D	530	645	740	810	685	920
E	460	555	635	700	760	795
F	55	65	75	85	90	95
G	-	-	295	320	350	335
H	280	290	485	530	580	540
I	402	460	560	615	670	680
J	-	120	-	-	-	120
K	190	250	195	215	235	300
L	420	-	290	320	350	365
M	420	510	580	640	698	728
N	195	235	270	295	320	335
Bolt Size	M36	M42	M42	M48	M48	M56
Bolt Length	600	600	600	750	750	915
Bolt Qty	5	6	7	7	7	8

* Material: Cast Iron, Cast Steel and Ductile Iron (Spheroidal Graphite).

Mounting Hardware: Galvanized Grade 8.8 bolts, nuts and washers.

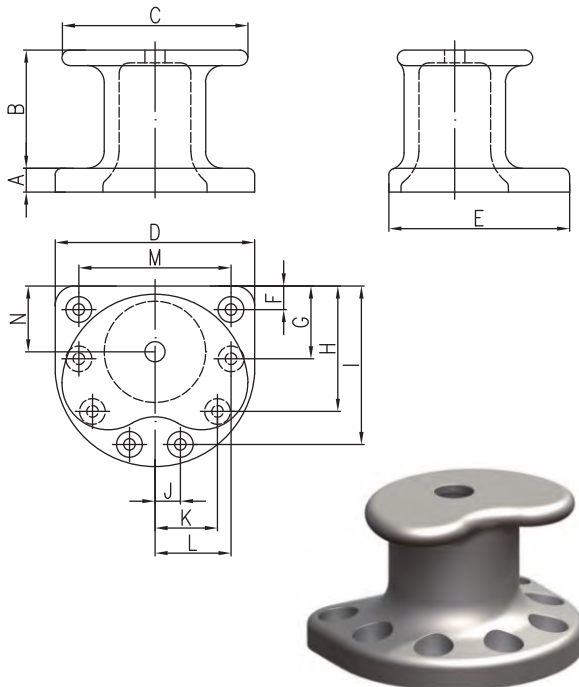
Surface and Paint: Fully painted or with rust preventative primer.

Double Bitt Bollard



Standard Bollard Capacity (tonnes)							
Dimension (mm)	DB30	DB50	DB75	DB100	DB125	DB150	DB200
A	45	56	62	73	80	90	100
B	780	940	1145	1345	1550	1685	1885
C	235	285	345	410	470	510	570
D	390	470	570	670	770	840	940
E	300	355	432	510	585	635	700
F	605	710	865	1016	1168	1270	1420
G	80	98	190	222	255	280	310
H	260	310	380	445	510	555	625
I	220	265	325	380	435	475	535
Bolt Size	M24	M30	M36	M42	M42	M48	M56
Bolt Length	450	450	450	600	600	750	915
Bolt Qty	8	8	10	10	10	10	10

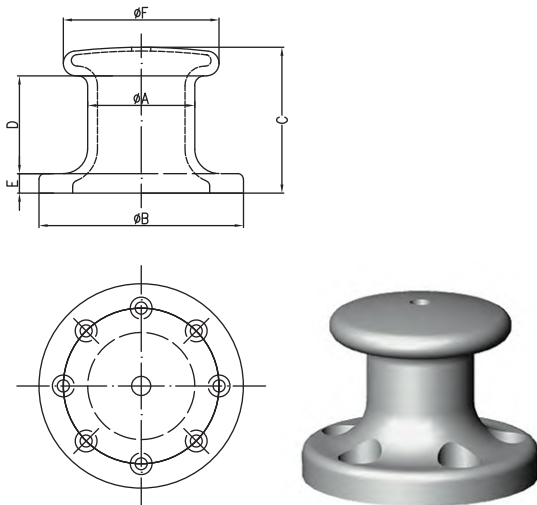
Kidney Shaped Bollard



Standard Bollard Capacity (tonnes)									
Dimension (mm)	KS15	KS20	KS30	KS50	KS75	KS100	KS125	KS150	KS200
A	40	50	55	60	70	80	90	95	110
B	195	215	260	265	300	340	375	410	460
C	275	330	385	415	480	550	605	660	760
D	325	390	455	490	570	650	715	780	900
E	290	345	400	430	500	575	635	690	795
F	50	60	70	75	90	100	110	120	140
G	-	-	-	-	240	275	300	325	345
H	-	215	260	230	380	435	480	525	545
I	215	300	350	355	440	500	550	600	675
J	88	-	-	-	-	-	-	-	112
K	-	135	155	185	145	165	185	200	285
L	-	-	-	-	220	250	275	300	345
M	250	300	350	375	435	500	550	600	690
N	125	150	175	190	220	250	275	300	345
Bolt Size	M24	M24	M30	M36	M36	M42	M48	M56	M56
Bolt Length	450	450	450	600	600	600	750	915	915
Bolt Qty	4	4	5	6	7	7	7	7	8

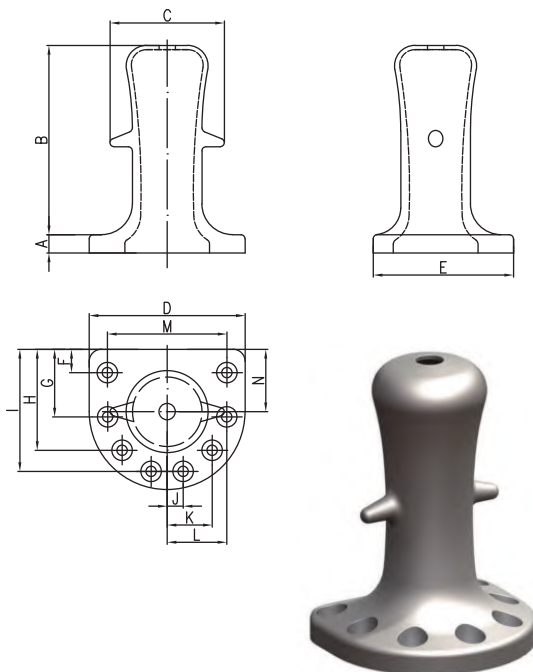
* Material: Cast Iron, Cast Steel and Ductile Iron (Spheroidal Graphite).
Mounting Hardware: Galvanized Grade 8.8 bolts, nuts and washers.
Surface and Paint: Fully painted or with rust preventative primer.

Pillar Bollard



Standard Bollard Capacity (tonnes)						
Dimension (mm)	PB15	PB30	PB50	PB75	PB100	PB150
A	229	254	305	457	559	559
B	381	559	610	914	1067	1067
C	368	426	533	864	762	762
D	254	254	305	648	510	510
E	51	83	114	102	102	102
F	356	432	508	610	813	813
Bolt Size	M24	M30	M30	M36	M45	M48
Bolt Length	450	450	450	600	800	1000
Bolt Qty	4	4	6	8	8	8

Single Bitt Bollard



Standard Bollard Capacity (tonnes)								
Dimension (mm)	SBB20	SBB30	SBB50	SBB75	SBB100	SBB125	SBB150	SBB200
A	55	60	70	82	90	92	96	110
B	455	540	685	830	925	1057	1155	1270
C	265	310	390	475	560	605	660	725
D	360	420	535	650	762	823	900	990
E	320	380	480	580	690	740	810	895
F	55	63	80	97	115	125	135	150
G	-	-	-	-	330	357	390	395
H	200	235	255	310	525	565	615	615
I	280	330	395	480	600	645	705	755
J	-	-	96	117	-	-	-	125
K	125	145	200	245	195	210	230	310
L	-	-	-	-	290	315	345	380
M	275	320	410	500	585	630	690	760
N	145	168	215	260	305	330	360	395
Bolt Size	M24	M30	M36	M42	M48	M48	M56	M56
Bolt Length	450	450	600	600	750	750	915	915
Bolt Qty	5	5	6	6	7	7	7	8

* Material: Cast Iron, Cast Steel and Ductile Iron (Spheroidal Graphite).
Mounting Hardware: Galvanized Grade 8.8 bolts, nuts and washers.
Surface and Paint: Fully painted or with rust preventative primer.