



Deck Equipment Introduction

Zalda Technology is a world leader in harbor berthing and mooring system. However, in our 17 years working with ship owners, ship yards, and deck equipment companies, we also designed, developed, and manufactured deck equipments such as deck bollards - bitts, roller fairleads, chock, ladders, and chain stopper s etc..

Components	Standard Materials	Available Materials	Standard Surface Treatment
Structural	ASTM A36	ASTM BS EN JIS AUS Grades	SSPC-10 Zinc – Coal Tar Epoxy Coating
Cast Steel	ASTM A27	ASTM BS EN JIS AUS Grades	SSPC-10 Zinc – Coal Tar Epoxy Coating
Connections	ASTM A307	ASTM BS EN JIS AUS Grades	HDG Per ASTM A123 / A153

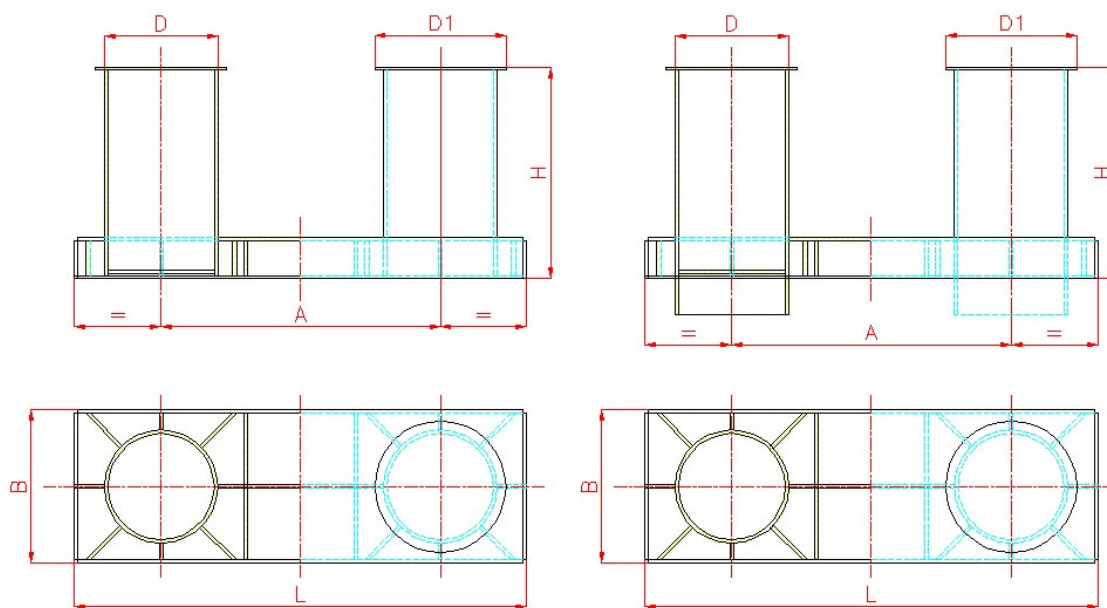
- Certification by all major classification societies available. Zalda Technology recommend ABS (American Bureau of Shipping)
- Welding per AWS D1.1 by AWS certified welders
- ASTM-AISI BS EN JIS AUS gray iron / carbon steel / stainless steel / alloy steel / bronze / aluminum grades available for various components
- Custom design available



Double Bitt Type 1

Post Nominal Dia.	Cable Fracture Load	Max. Diameter of Suitable Cable					Main Size					A	Weight
		Wire Rope			Hemp Rope Dia.	Syntheti c Rope Dia.	D	D1	L	B	H		
		6x24	6x30	6x37									
100	29	7.4	8.7	-	20	14	114	145	445	165	150	250	19
125	39	9.3	8.7	8.7	24	18	140	180	540	195	190	315	29
160	49	9.3	11	8.7	28	20	168	210	670	225	250	400	45
200	78	13	13	13	36	26	219	270	860	290	300	500	80
250	118	15	17.5	15	42	30	273	330	1065	360	380	630	141
315	196	20.5	21.5	19.5	55	39	325	385	1300	430	480	800	264
355	255	24	24	21.5	65	45	351	425	1475	480	530	890	358
400	314	26	28	24	75	53	402	485	1630	550	600	1000	499
450	382	30	30	28	80	56	450	545	1840	620	680	1130	680
500	451	32	32.5	30	90	64	508	610	2040	690	750	1250	911
560	549	33.5	36.5	32.5	100	70	560	670	2240	750	830	1380	1208
630	686	37.5	39	36.5	110	77	610	730	2510	820	940	1570	1601
710	804	41	43	39	120	84	712	840	2840	960	1050	1750	2252
800	981	44.5	47.5	43	-	-	813	940	3240	1100	1200	2000	3071

All Dimensions in MM All Weights in KG

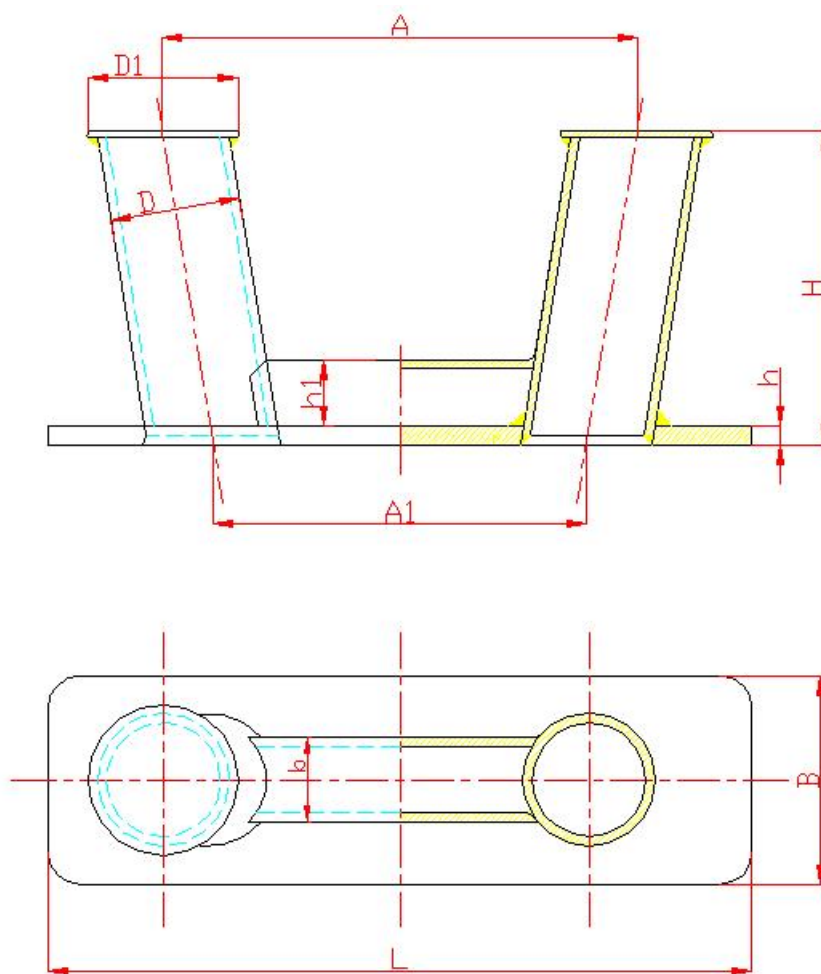




Double Bitt Type 2

Wire Rope Max Dia	Hemp Rope Max. Circ.	D	L	B	H	A	A1	b	D1	h	h1	Weight
8.7	75	50	310	100	170	205	166	32	65	9	26	5
11.5	90	75	430	125	215	296	238	50	90	12	43	11.5
13.5	100	100	540	160	240	364	290	65	115	14	51	19.2

All Dimensions in MM All Weights in KG

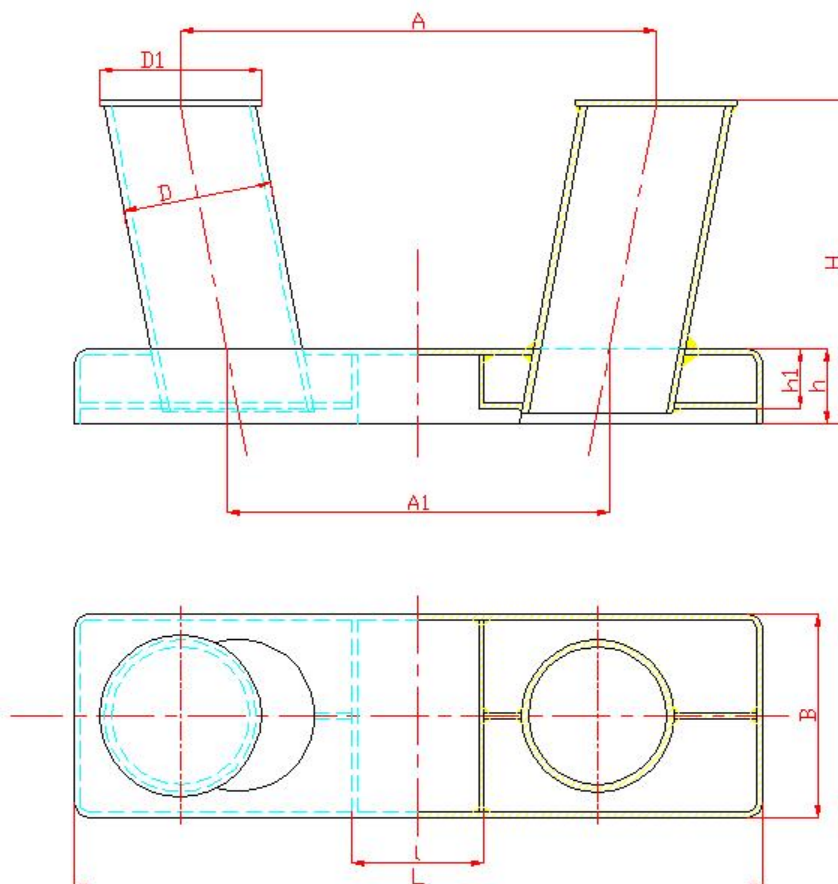




Double Bitt Type 3

Wire Rope Max Dia	Hemp Rope Max. Circ.	D	L	B	H	A	A1	D1	h	h1	l	Weight
15.5	125	125	660	170	295	458	380	140	80	65	135	25.2
17.5	150	150	750	200	348	525	432	165	90	75	150	33.3
19.5	170	175	850	235	394	630	524	190	100	85	200	49.2
22.5	200	200	950	270	436	676	564	220	110	92	210	68.8
26	225	250	1150	340	540	795	640	270	125	100	220	95.7

All Dimensions in MM All Weights in KG

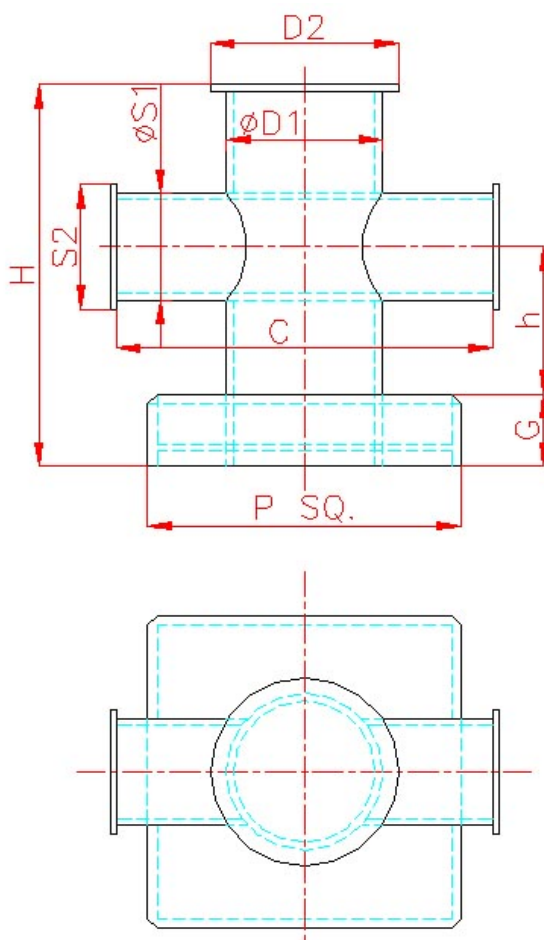




Cross Bitt

Max Load (MT)	D1	D2	S1	S2	C	G	H	h	P
25T	273	323	140	190	580	125	657	260	500
40T	324	400	168	225	725	150	825	330	630
50T	350	426	194	240	820	165	881	350	720
64T	406	480	219	265	950	175	1013	410	800
80T	457	520	254	304	1070	185	1104	450	900
92T	500	600	300	376	1200	200	1220	500	1000

All Dimensions in MM All Weights in KG



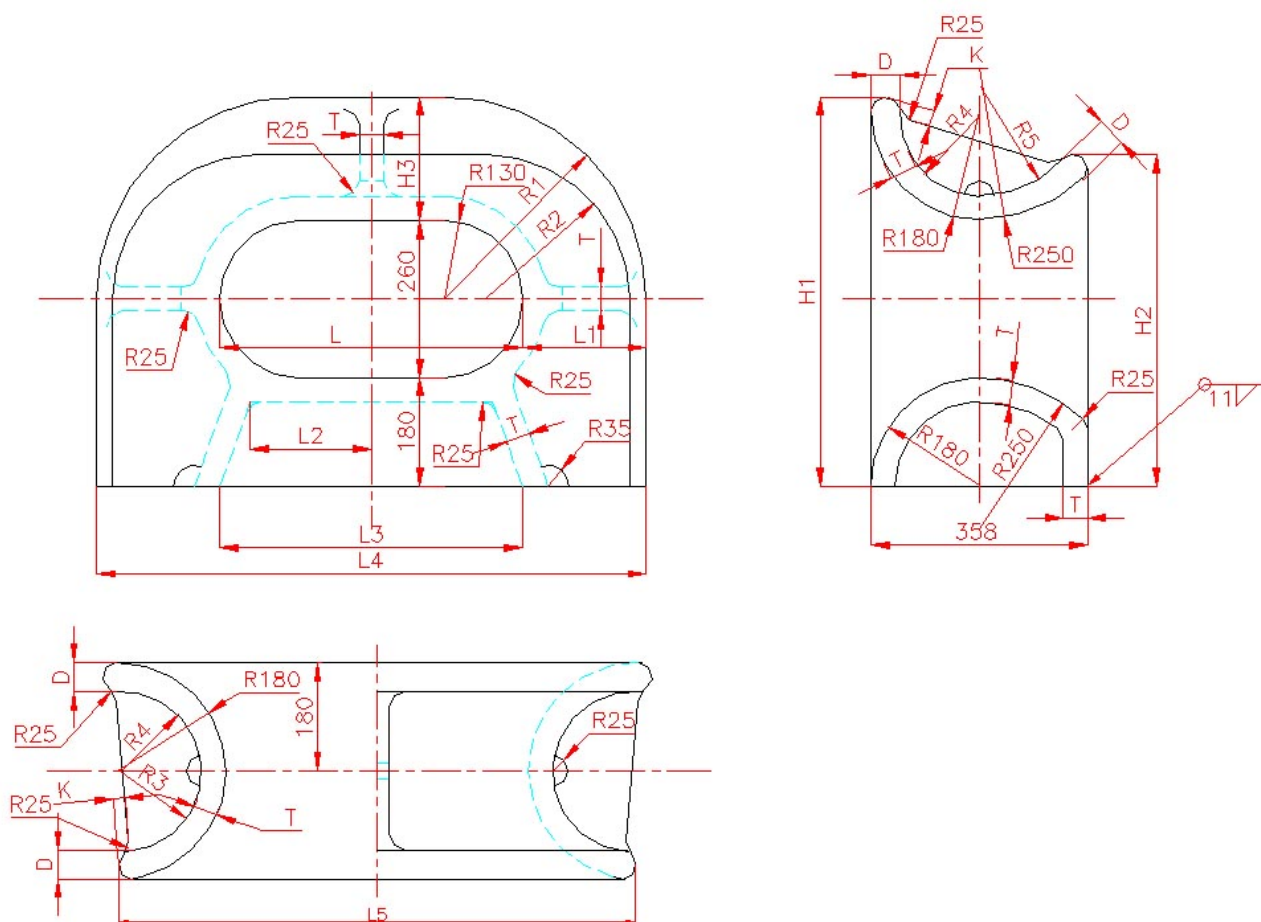
- These bollards can be loaded with one towing ropes laid in a single sling over the bitt and with a breaking strength not exceeding the values in the table.



PANAMA CHOCK Type 1

Nominal Size	L	L1	L2	L3	L4	L5	D	H1	H2	H3	R1	R2	R3	R4	R5	K	T	Weight
310	310	199	105	310	708	652	38	639	541	199	329	231	140	142	195	15	32	253
360	360	200	130	360	760	704	40	640	542	200	330	232	138	140	192	15	34	289
400	400	202	150	400	804	750	44	642	545	202	332	235	134	136	185	20	36	323
450	450	203	175	450	856	802	46	643	547	203	333	237	132	134	182	20	38	351
500	500	204	200	500	908	854	48	644	549	204	334	239	130	132	180	20	40	395

All Dimensions in MM All Weights in KG

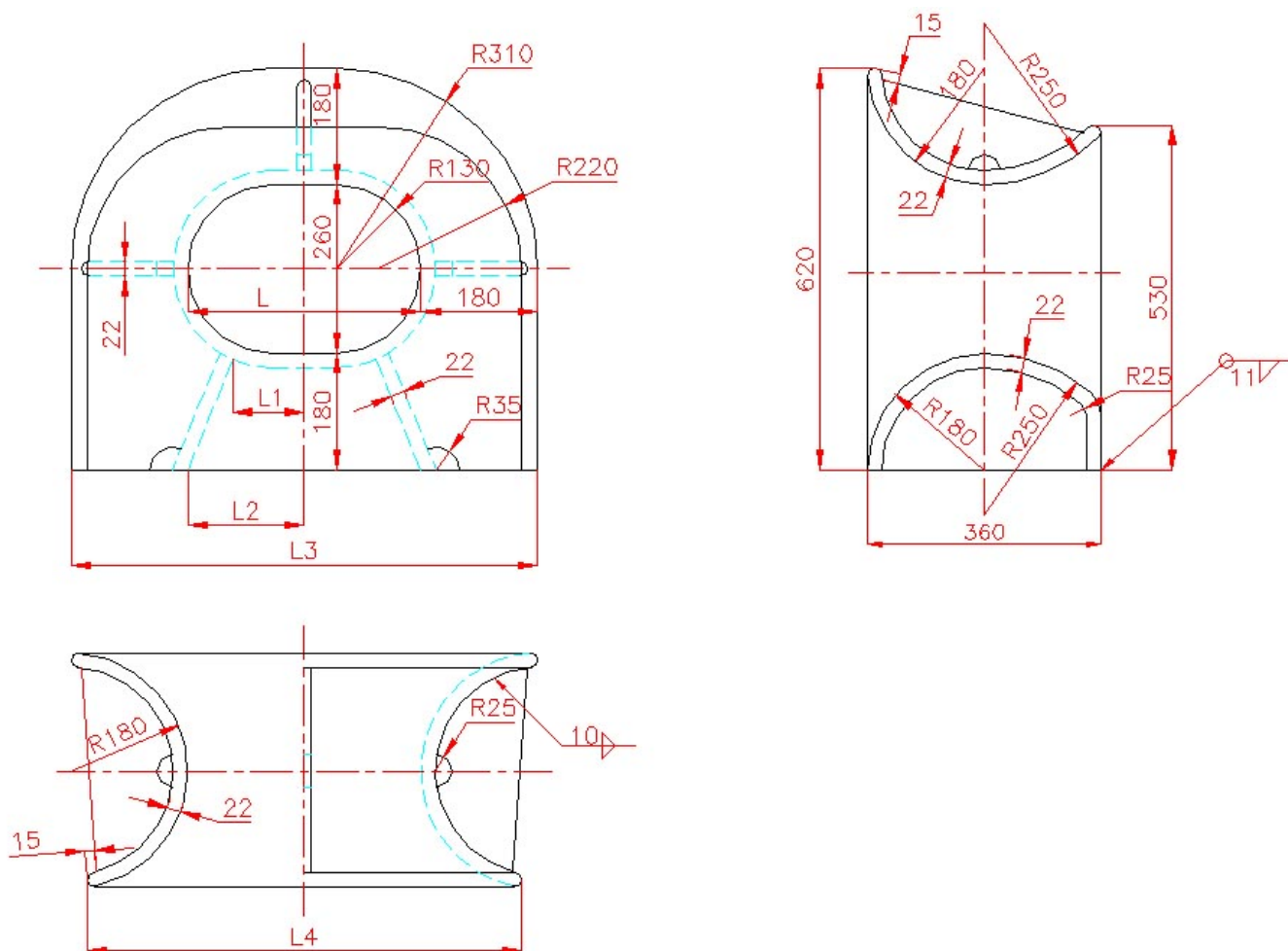




PANAMA CHOCK Type 2

Nominal Size	L	L1	L2	L3	L4	Weight
310	310	85	155	670	620	190
360	360	110	180	720	670	207

All Dimensions in MM All Weights in KG

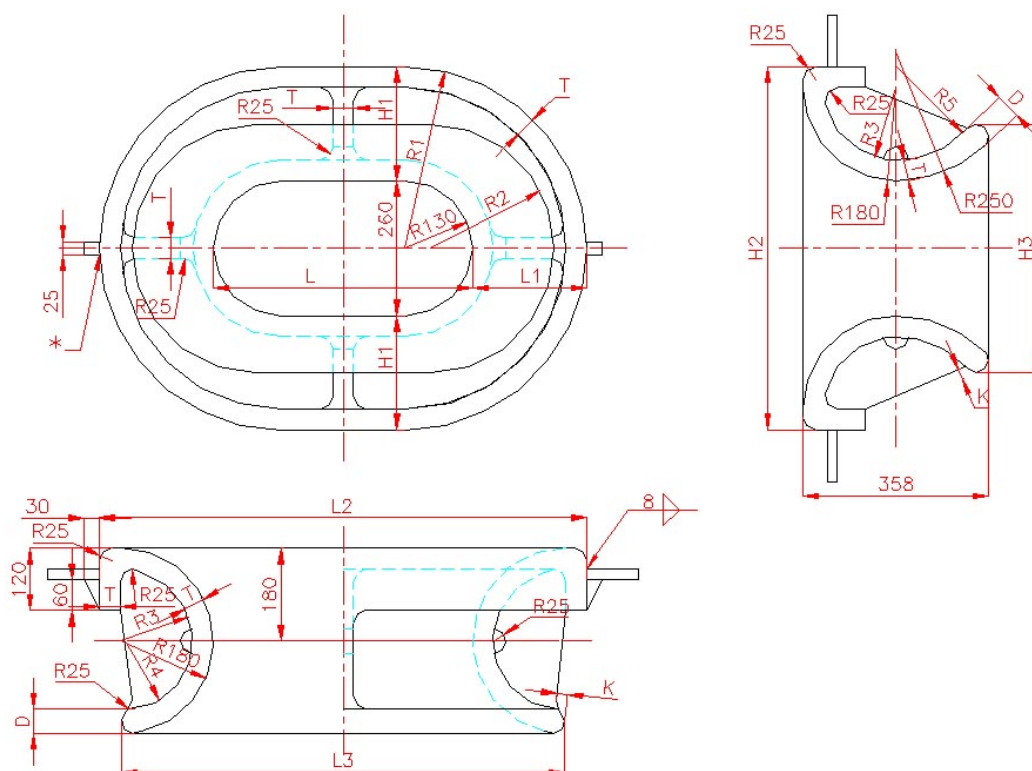




PANAMA CHOCK Type 3

Nominal Size	L	L1	L2	L3	D	H1	H2	H3	R1	R2	R3	R4	R5	K	T	Weight
310	310	212	734	652	38	212	684	462	342	231	148	140	195	15	32	276
360	360	214	788	704	40	214	688	464	344	232	146	138	192	15	34	305
400	400	216	832	750	44	216	692	470	346	235	144	134	185	20	36	344
450	450	218	886	802	46	218	696	474	348	237	142	132	182	20	38	385
500	500	220	940	854	48	220	700	478	350	239	140	130	180	20	40	422

All Dimensions in MM All Weights in KG

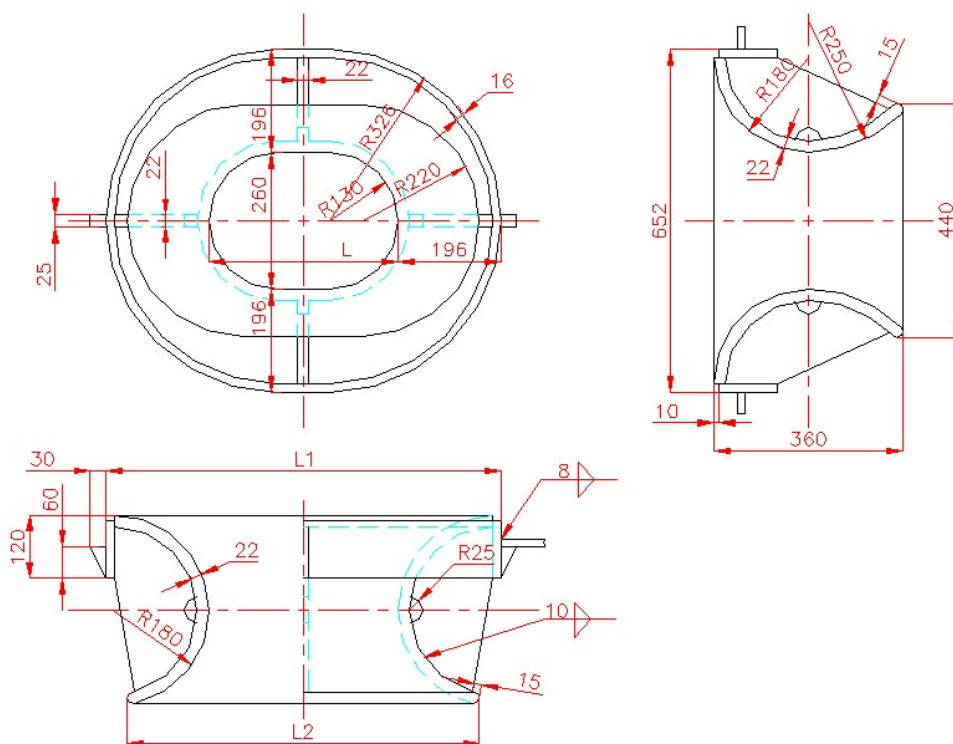




PANAMA CHOCK Type 4

Nominal Size	L	L1	L2	Weight
310	310	702	620	184
360	360	752	670	193

All Dimensions in MM All Weights in KG

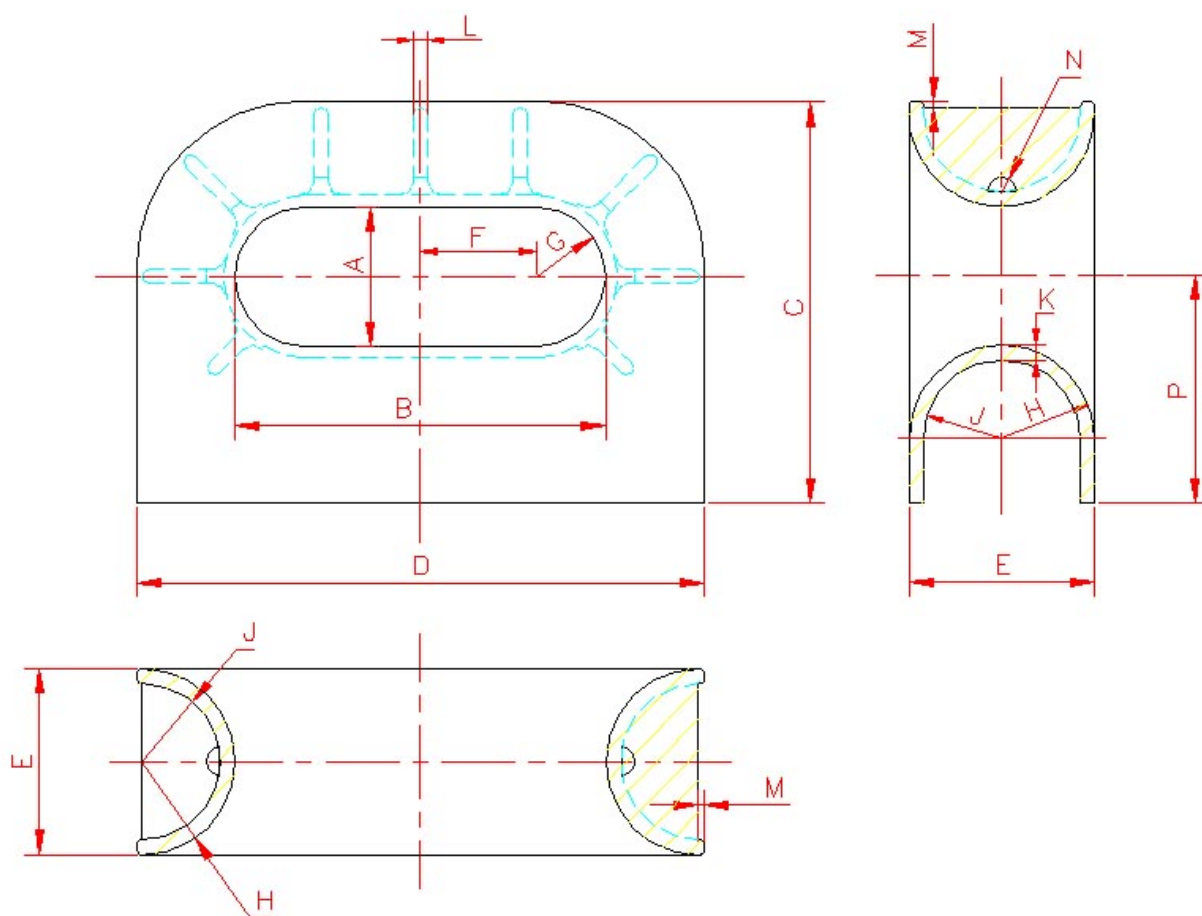




Panama Chock Type 5

Dimensions												
A x B	C	D	E	F	G	H	J	K	L	M	N	P
280 x 560	674	940	356	140	140	178	153	26	13	13	13	343
430 x 457	801	839	356	77	153	153	150	29	13	13	13	458
305 x 610	877	1804	407	153	153	204	175	29	13	13	13	508
254 x 305	648	686	356	26	127	178	153	26	13	13	13	331
457 x 610	915	1042	407	77	229	204	172	32	20	13	20	458

All Dimensions in MM All Weights in KG

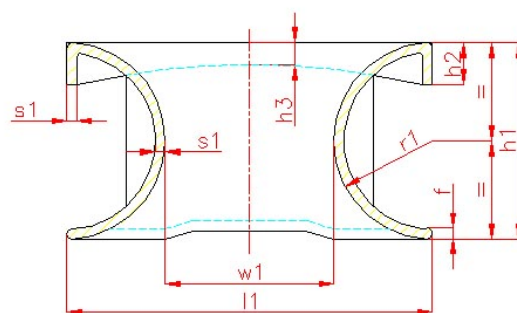
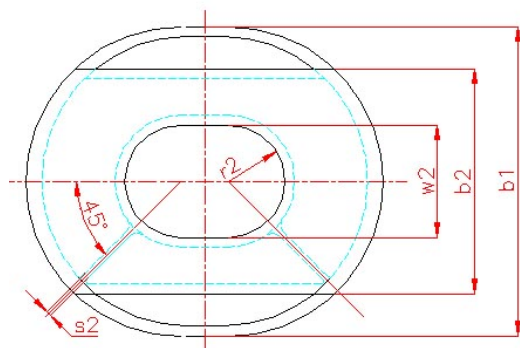




Multi Purpose Chock Type 1

Wire W.L KN.	b1	b2	f	h1	h2	h3	l1	r1	r2	s1	s2	w1	w2	Weight
20	315	225	18	200	70	25	360	100	57.5	12	6	160	115	26
30	390	275	21	250	75	32	450	125	70	14	7	200	140	42
50	480	340	24	300	80	38	550	150	90	16	8	250	180	74
80	585	415	27	360	90	45	680	180	112.5	18	9	320	225	120
125	710	500	30	440	110	55	840	220	135	20	10	400	270	185
200	840	595	33	520	130	65	1020	260	160	22	11	500	320	285
320	1100	800	-	700	150	80	1300	350	200	35	20	600	400	795

All Dimensions in MM All Weights in KG

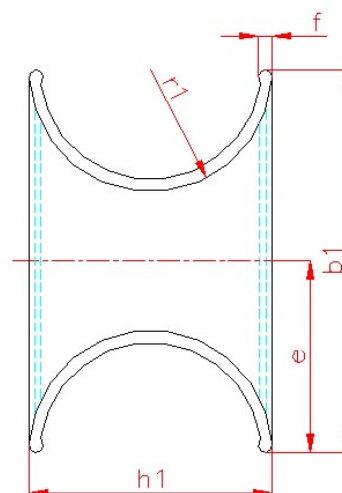
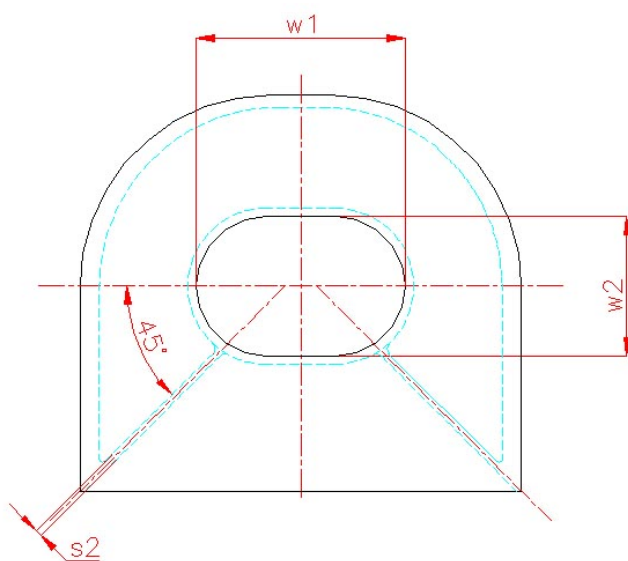




Multi Purpose Chock Type 2

Wire W.L. KN	e	b1	f	h1	l1	r1	r2	s1	s2	w1	w2	Weight
20	157.5	315	18	200	360	100	57.5	12	6	160	115	29
30	195	390	21	250	450	125	70	14	7	200	140	48
50	240	480	24	300	550	150	90	16	8	250	180	84.5
80	292.5	585	27	360	680	180	112.5	18	9	320	225	135.8
125	355	710	30	440	840	220	135	20	10	400	270	211.1
200	420	840	33	520	1020	260	160	22	11	500	320	325.2
320	550	1100	-	700	1300	350	200	35	20	600	400	840

All Dimensions in MM All Weights in KG

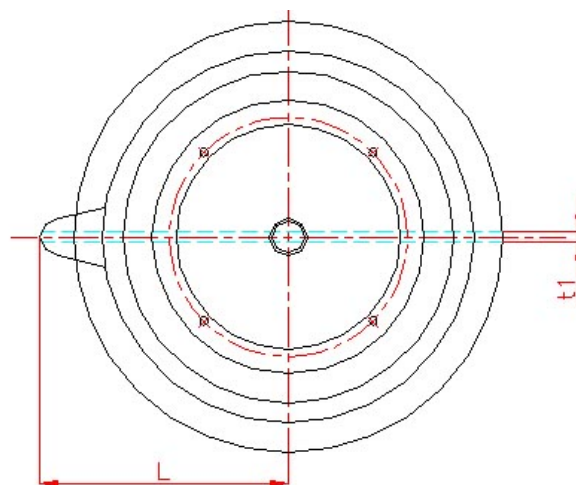
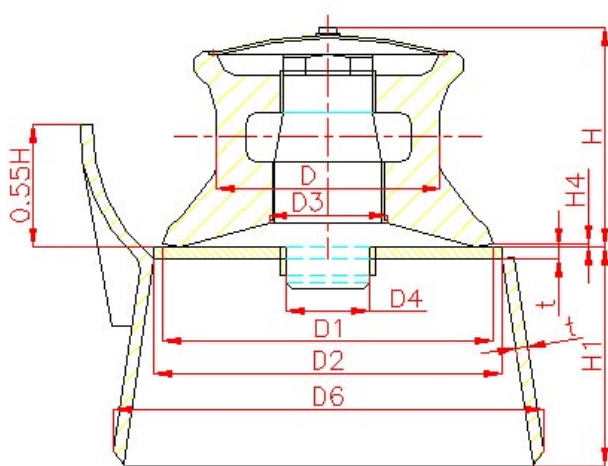




Fairlead Type 1

Roller Dia.	Max. Diameter of Suitable Cable					D1	D2	D3	D4	D5	L	H	H2	H3	H4	T	t1	Weight	
	Wire Rope			Hemp Rope Dia.	Synth Rope Dia.													Cast Iron (HT)	Cast Steel (ZG)
	6x24	6x30	6x37																
150	17	17.5	15	45	32	240	270	90	71	60	245	211	40	75	3	12	8	23.1	33.8
200	22.5	21.5	19.5	55	40	310	340	115	95	80	285	251	50	85	3	14	10	64.6	68
250	24	26	24	56	45	380	410	140	107	90	323	298	60	100	4	14	10	108	114
300	30	32.5	28	70	50	440	470	160	127	110	355	321	60	100	4	16	14	159	168
350	37.5	39	34.5	75	55	500	530	180	144	125	390	346	65	100	4	18	14	235	248
400	41	39	39	85	65	560	590	200	161	140	420	371	70	100	5	20	16	336	355

All Dimensions in MM All Weights in KG

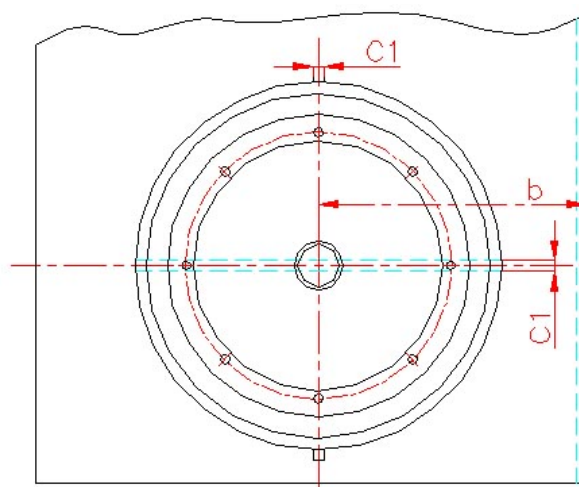
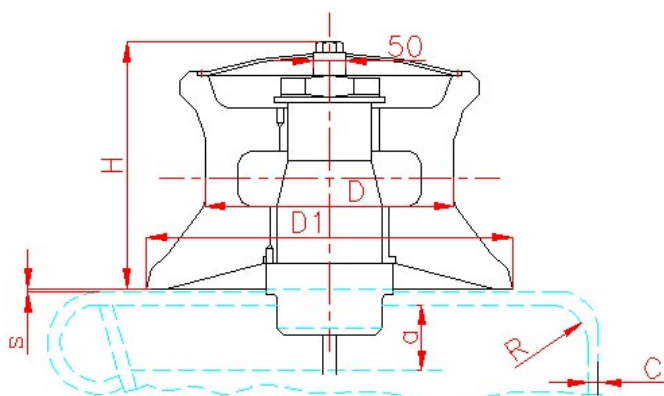




Fairlead Type 2

Wheel Dia.	Max. Diameter of Suitable Cable					Basic Size (for Reference)						External Size			Weight	
	Wire Rope			Hemp Rope Dia.	Synth Rope Dia.	a	b	c	c1	d	R	D1	H	S	Cast Iron (HT)	Cast Steel (ZG)
	6x24	6x30	6x37													
100	11	11	11	40	28	60	125	8	8	48	30	160	128	3	9.4	9.9
150	17	17.5	15	45	32	75	190	12	8	71	40	240	211	3	32.1	33.8
200	22.5	21.5	19.5	55	40	85	230	14	10	95	40	310	251	3	64.6	68
250	24	26	24	65	45	100	265	14	10	107	40	380	298	4	108	114
300	30	32.5	28	70	50	100	320	16	14	127	60	440	321	4	159	168
350	37.5	39	34.5	75	55	100	350	18	14	144	60	500	346	4	235	248
400	41	39	39	85	65	100	380	20	16	161	60	560	371	5	336	355
450	44.5	47.5	43	-	80	100	410	20	16	180	60	620	394	5	413	462

All Dimensions in MM All Weights in KG

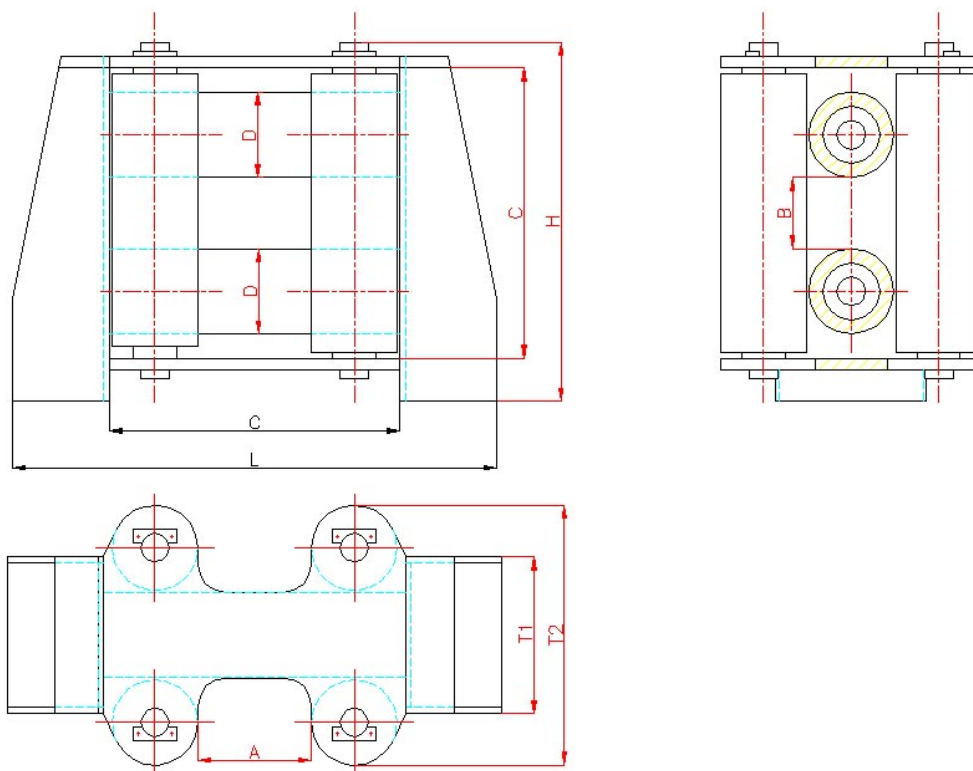




Roller Fairlead

Nom Towing Pull (kg)	Rope Ø (mm)	Dimensions							
		D	A	B	C	T1	T2	H	L
10	10	60	120	80	260	120	195	340	480
20	12	80	180	100	360	160	255	465	640
30	16	100	230	120	450	180	315	575	800
50	20	120	250	140	510	240	375	655	900
80	24	140	280	150	580	260	435	730	1000
120	32	180	300	160	680	320	555	855	1200
160	36	195	320	170	730	350	600	925	1300
200	40	245	340	180	850	450	750	1045	1350
250	44	275	370	210	940	510	840	1150	1520
320	48	300	400	250	1020	550	915	1260	1700

All Dimensions in MM All Weights in KG

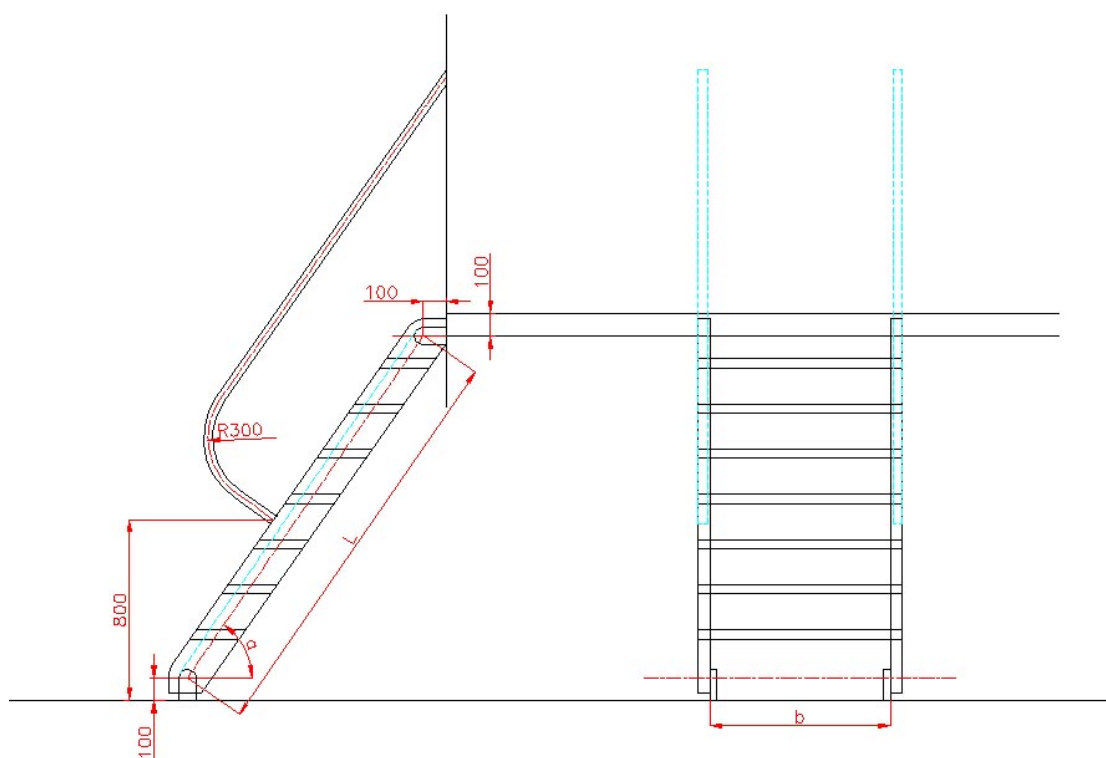




Inclined Ladder

Model	Inclination Angle a°	Breadth of Ladder b (mm)	Length of Ladder L (mm)
A Flat Bar Ladder Frame	45	700 / 00	283 - 4667
	50 / 55 / 60	500 / 600	261 - 3916
B Angle Ladder Frame		700 / 800	261 - 4961
	65 70	400 / 500 / 600	331 - 3641

All Dimensions in MM All Weights in KG

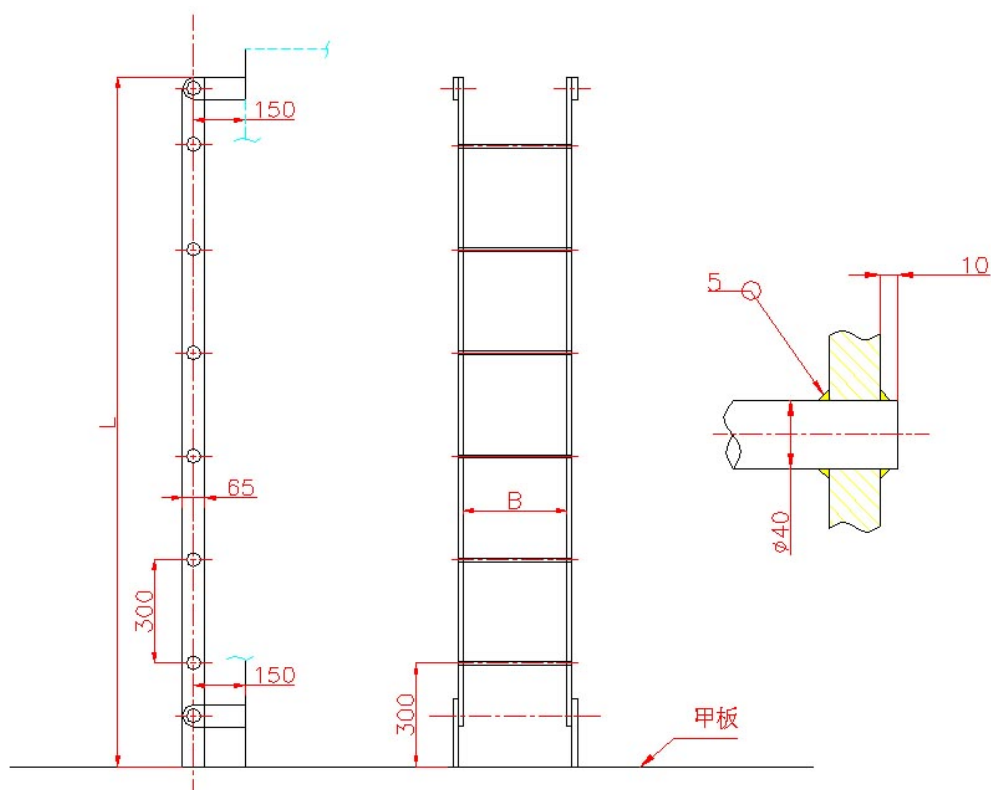




Vertical Ladder

Model	Step Dimension	Breadth of Ladder B (mm)	Length of Ladder
A Round Bar Step	Ø20	300 , 350	600~6000
	Ø22	400	
B Square Bar Step	20x20	300 , 350	
	22x22	400	
C Pipe	Ø22	300 , 400	600~3600

All Dimensions in MM All Weights in KG





Chain - Cable Stopper

Nominal Chain Dia	h	h1	h5	L	L4	L6	B	b	D	Mass
70,73	125	422	850	660	640	241	980	115	584	1096
76,78	133	450	918	700	680	254	1046	123	624	1316
81,84	143	483	983	760	720	279	1110	134	672	1608
87,90	153	515	1055	810	770	295	1190	143	720	1938
92,95	162	545	1115	850	810	317	1250	151	760	2289
97,100,102	175	584	1195	920	860	337	1320	161	816	2787
105,107	185	617	1265	981	900	364	1390	170	864	3274
111,114	195	651	1335	1026	940	376	1460	180	912	3874
117,122	208	695	1427	1100	995	408	1550	191	976	4600
127,132	225	750	1542	1190	1060	441	1660	207	1056	5750

All Dimensions in MM All Weights in KG

