

索 引

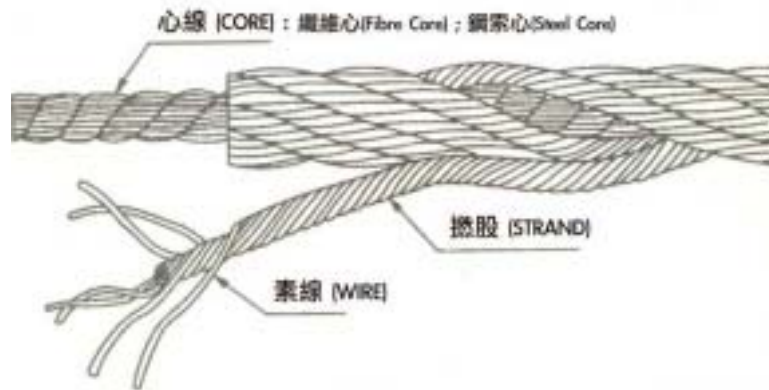
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本目錄內數值僅供參考！請以本公司實際產品尺寸為準！

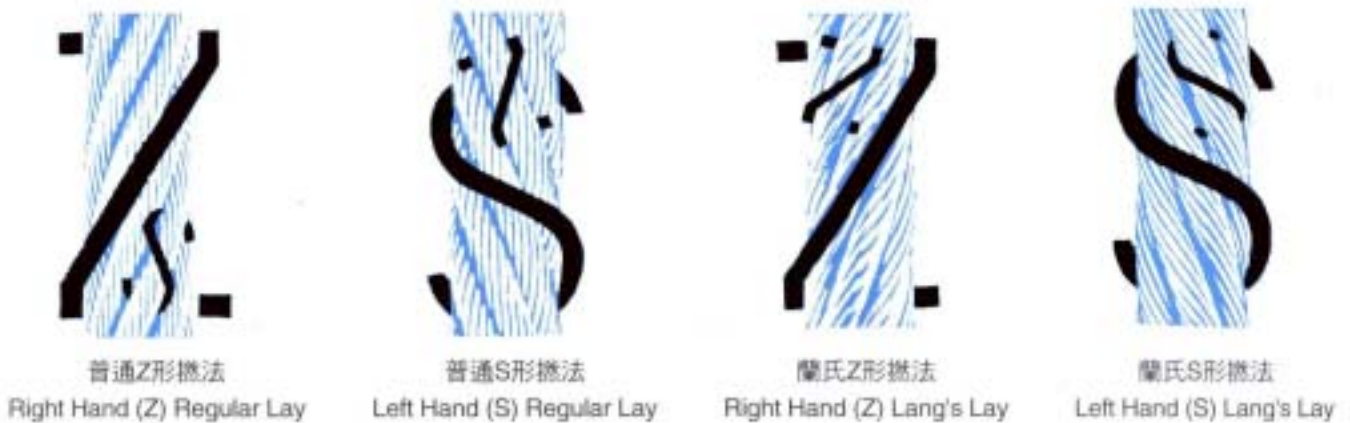
鋼纜使用須知

Directions for Wire Rope's Usage

一．鋼纜之構成 (Construction of Wire Rope)



二．鋼纜之撚法 (Lay of Wire Rope)



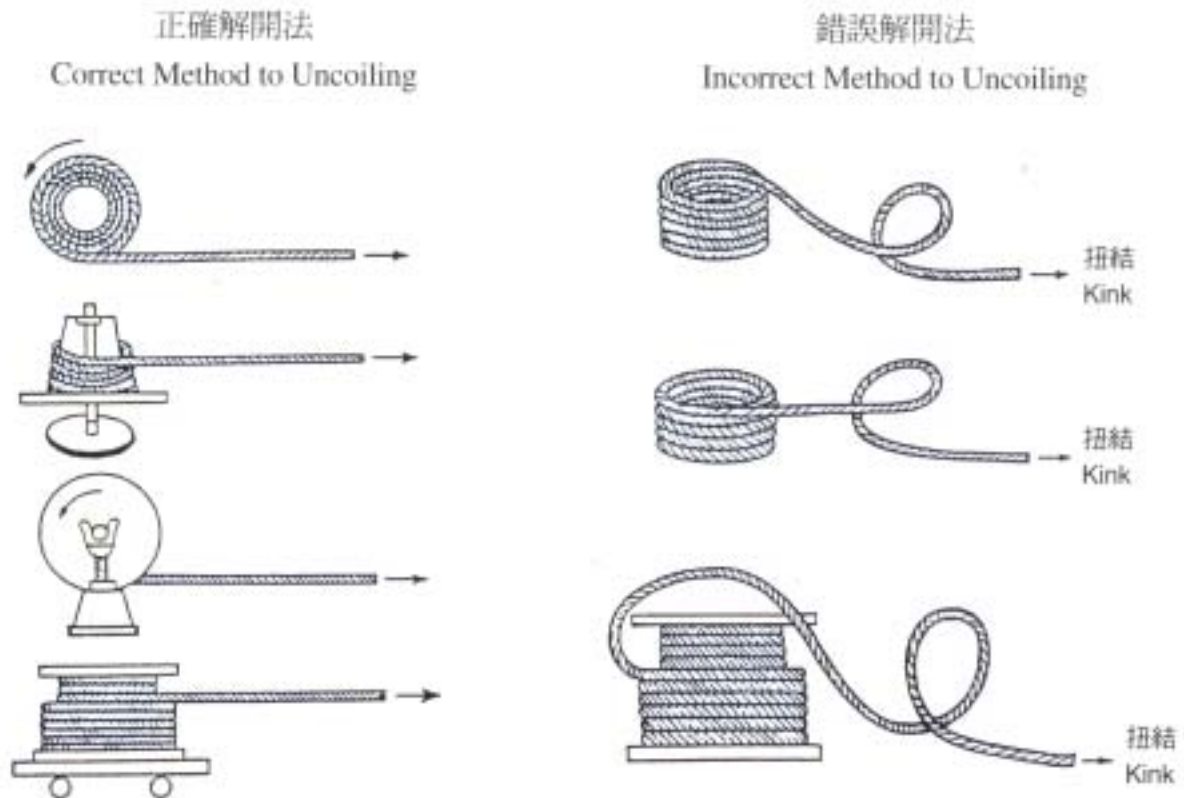
三．破斷荷重之區分 (Classification of Minimum Breaking Strength)

規格	級別	備註
JIS G 3525	E 級 (1320 N/mm ² [135 kgf/mm ²])	裸線及經熱鍍(含熱鍍後施於冷間加工)
	G 級 (1470 N/mm ² [150 kgf/mm ²])	熱鍍(含熱鍍後施於冷間加工)
	A 級 (1620 N/mm ² [165 kgf/mm ²])	裸線及經熱鍍(熱鍍後施於冷間加工)
	B 級 (1770 N/mm ² [180 kgf/mm ²])	裸線及經熱鍍(熱鍍後施於冷間加工)
TSK	特級 (1910 N/mm ² [195 kgf/mm ²])	裸線

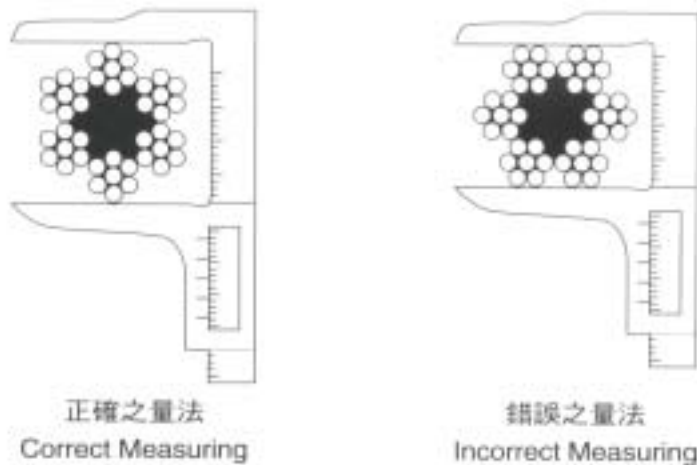
鋼纜使用須知

Directions for Wire Rope's Usage

四．鋼纜解取法 (How to Uncoil the Rope)



五．直徑測定法 (How to Measure the Diameter of Wire Rope)



鋼纜橫截面圖

Typical Cross Section of Wire Rope & Strand



U4 x SeS(39)



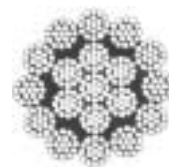
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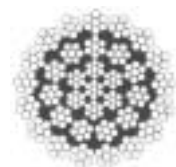
18 x 7



19 x 7



19 x 19



35 x 7



7 x 7



7 x 19



7 x 37



8 x S(19)



8 x W(19)



8 x Fi(25)



6 x 7



6 x 12



6 x 15



6 x 61



6 x (6 x 7)



1 x 7



6 x 19



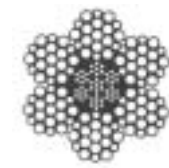
6 x S(19)



6 x S(19) IWRC



6 x W(19)



6 x W(19) IWRC



6 x Fi(21) IWRC



6 x 24



6 x Fi(25)



6 x Fi(25) IWRC



6 x SeS(25) IWRC



6 x WS(26)



6 x WS(26) IWRC



6 x 30



6 x Fi(29)



6 x Fi(29) IWRC



6 x WS(31) IWRC



6 x WS(36)



6 x WS(36) IWRC



6 x 37



6 x SeS(37)



6 x SeS(37) IWRC



6 x SFi(41) IWRC



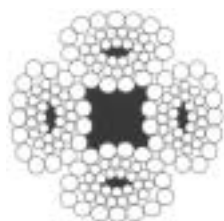
6 x WS(41)



6 x WS(41) IWRC

非旋轉 4 股鋼纜

Non Rotating 4 Strand Wire Rope



U 4 x SeS (39)

結構：4 X 39 (F + 9 + 15 + 15) FC

用途：吊升起重

特性：1. 不旋轉性優 2. 極少變形 3. 耐磨性特強
4. 破斷載荷大 5. 柔軟性佳 6. 耐疲勞性高

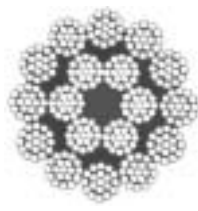
直徑 Diameter				破斷荷重 (噸)			概算單位重量
鋼索 Rope		上層素線徑 Outer Wire Dia	斷面積 Metallic Area	Minimum Breaking Strength in Metric Tons			Approximate Weight
mm	inch	mm	mm ²	A級	B級	特級	Kg/M
8	5/16	0.56	28.7	3.83	4.18	4.53	0.261
9	3/8	0.63	36.4	4.83	5.28	5.72	0.330
10	13/32	0.71	44.9	5.98	6.52	7.06	0.408
11.2	7/16	0.80	56.3	7.50	8.19	8.87	0.512
12	15/32	0.85	64.7	8.32	9.08	9.84	0.588
12.5	1/2	0.90	70.2	9.35	10.2	11.1	0.638
14	9/16	1.00	88.0	11.7	12.8	13.9	0.800
16	5/8	1.12	115	15.3	16.7	18.1	1.04
18	23/32	1.25	145	19.4	21.2	23.0	1.32
20	25/32	1.40	180	23.9	26.1	28.3	1.63
22	7/8	1.57	217	28.9	31.6	34.2	1.97
22.4	7/8	1.60	225	30.0	32.8	35.5	2.05
24	15/16	1.70	259	33.2	36.3	39.3	2.35
25	1	1.80	281	37.3	40.7	44.1	2.55
26	1 1/32	1.85	303	40.3	44.0	47.6	2.76
28	1 3/32	2.00	352	46.9	51.2	55.4	3.20
30	1 3/16	2.12	405	53.8	58.7	63.6	3.73
31.5	1 1/4	2.24	445	59.3	64.7	70.1	4.10
32	1 1/4	2.27	460	61.2	66.8	72.3	4.23
33.5	1 5/16	2.36	506	67.1	73.2	79.3	4.64
34	1 11/32	2.40	519	69.1	75.4	81.7	4.78
35.5	1 13/32	2.50	568	75.4	82.2	89.0	5.21
36	1 13/32	2.55	582	77.5	84.5	91.5	5.36
37.5	1 15/32	2.65	634	84.1	91.7	99.3	5.81
38	1 1/2	2.70	648	86.4	94.2	102	5.97
40	1 9/16	2.80	718	93.8	102	110	6.61
42	1 21/32	2.95	792	103	113	122	7.29
42.5	1 11/16	3.00	811	106	115	125	7.46
44	1 3/4	3.10	869	113	124	134	8.02
45	1 25/32	3.15	909	119	129	140	8.37

非自轉性多股鋼纜

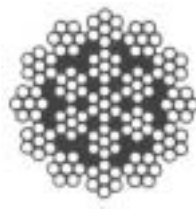
Hercules Rope



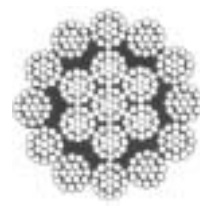
18 x 7



18 x 19



19 x 7



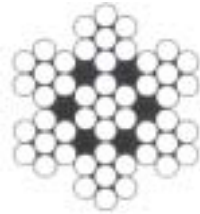
19 x 19

用途：索道、起重機、機械捲揚機

規格	直徑 Diameter			破斷荷重（噸）			概算單位重量 Approx.Weight
	鋼纜 mm	上層素線徑		鍍鋅 G級	裸 . 鍍鋅		
		7絲 (mm)	19絲 (mm)		A級	B級	Kg/M
18 x 7 & 18 x 19	10	0.67	0.40	5.68	6.22	6.53	0.390
	11.2	0.75	0.45	7.12	7.80	8.20	0.490
	12	0.80	0.48	8.18	8.95	9.40	0.562
	12.5	0.84	0.50	8.86	9.70	10.2	0.608
	14	0.93	0.56	11.1	12.2	12.8	0.765
	16	1.06	0.64	14.5	15.9	16.7	0.997
	18	1.20	0.72	18.4	20.2	21.1	1.26
	20	1.33	0.80	22.7	24.9	26.1	1.56
	22	1.46	0.88	27.5	30.1	31.6	1.89
	22.4	1.50	0.89	28.5	31.2	32.8	1.96
	24	1.60	0.96	32.7	35.8	37.6	2.25
	25	1.67	1.00	35.5	38.9	40.8	2.44
	26	1.73	1.04	38.4	42.1	44.1	2.64
	28	1.86	1.12	44.5	48.7	51.1	3.06
	30	1.99	1.20	51.1	56.0	58.8	3.51
19 x 7 & 19 x 19	10	0.67	0.40	5.99	6.59	6.95	0.410
	11.2	0.75	0.45	7.51	8.26	8.71	0.514
	12	0.80	0.48	8.63	9.49	10.0	0.591
	12.5	0.84	0.50	9.34	10.2	10.8	0.640
	14	0.93	0.56	11.7	12.9	13.6	0.864
	16	1.06	0.64	15.3	16.9	17.8	1.05
	18	1.20	0.72	19.4	21.3	22.5	1.33
	20	1.33	0.80	24.0	26.3	27.8	1.64
	22	1.46	0.88	29.0	31.9	33.6	1.98
	22.4	1.50	0.89	30.0	33.0	34.9	2.06
	24	1.60	0.96	34.5	37.9	40.0	2.36
	25	1.67	1.00	37.4	41.1	43.4	2.56
	26	1.73	1.04	40.5	44.5	47.0	2.77
	28	1.86	1.12	47.0	51.7	54.4	3.21
	30	1.99	1.20	53.9	59.3	62.5	3.69

不銹鋼鋼纜

Stainless Steel Wire Rope



7 x 7



7 x 19

用途：航空及控制內線用

規格	直徑 Diameter			破斷荷重（噸） Minimum Breaking Strength in Metric Tons		概算單位重量 Approximate Weight
	鋼索 Rope		鋼絲 Wire			
	mm	inch	mm	SUS304	SUS305,316	Kg/M
7 x 7	1.5	1/16	0.16	0.162	0.143	0.010
	2	5/64	0.22	0.276	0.247	0.016
	2.5	3/32	0.27	0.437	0.380	0.027
	3	1/8	0.35	0.665	0.589	0.041
	4	5/32	0.44	1.08	0.988	0.068
	5	3/16	0.55	1.70	1.54	0.105
	6.3	1/4	0.70	2.59	2.34	0.160
	8	5/16	0.88	4.27	3.52	0.269
	9	3/8	1.00	5.34	4.22	0.341
	10	13/32	1.10	6.58	5.20	0.421
	11.2	7/16	1.24	7.41	5.86	0.474
	12	15/32	1.33	9.22	7.49	0.585
	12.5	1/2	1.39	9.63	7.83	0.611
	14	9/16	1.54	10.7	10.16	0.825
	16	5/8	1.78	16.0	13.1	1.08
	18	23/32	2.00	20.6	16.8	1.36
	20	25/32	2.20	24.7	20.0	1.68
	22	7/8	2.44	29.9	24.2	2.03
	22.4	7/8	2.48	30.7	25.0	2.10
	24	15/16	2.66	35.5	28.7	2.40
	25	1	2.76	38.8	31.5	2.65
7 x 19	4	5/32	0.26	1.06	0.892	0.066
	5	3/16	0.33	1.66	1.39	0.103
	6	1/4	0.40	2.35	2.04	0.151
	6.3	1/4	0.42	2.58	2.21	0.164
	8	5/16	0.53	3.97	3.42	0.261
	9	3/8	0.60	5.17	4.35	0.334
	10	13/32	0.66	6.12	5.17	0.412
	11.2	7/16	0.74	7.35	6.14	0.517
	12	15/32	0.80	8.47	7.06	0.594
	12.5	1/2	0.83	9.30	7.77	0.655
	14	9/16	0.93	11.3	9.40	0.819
	16	5/8	1.06	14.1	11.6	1.06
	18	23/32	1.19	17.7	14.7	1.34
	20	25/32	1.32	21.2	18.2	1.65
	22	7/8	1.45	25.7	22.0	2.00
	22.4	7/8	1.47	26.4	22.8	2.07
	24	15/16	1.58	30.6	26.2	2.37
	25	1	1.65	33.5	28.7	2.60
	26	1 1/32	1.70	35.5	30.3	2.74
	28	1 3/32	1.86	42.2	36.2	3.28
	30	1 3/16	1.97	47.1	40.7	3.71
32	1 1/4	2.11	52.8	44.9	4.22	

鋼纜

Wire Rope



8 x S (19)



8 x W (19)



8 x Fi (25)

用途：電梯、升降設備

直徑 Diameter		破斷荷重 (噸)			概算單位重量
鋼索 Rope		Minimum Breaking Strength in Metric Tons			Approximate Weight
mm	inch	G級	A級	B級	Kg/M
8	5/16	2.85	3.14	3.35	0.220
10	13/32	4.45	4.90	5.23	0.343
11.2	7/16	5.58	6.15	6.56	0.430
12	15/32	6.41	7.06	7.53	0.494
12.5	1/2	6.95	7.66	8.17	0.536
14	9/16	8.72	9.61	10.2	0.672
16	5/8	11.4	12.6	13.4	0.878
18	23/32	14.4	15.9	16.9	1.110
20	25/32	17.8	19.6	20.9	1.370
22.4	7/8	22.3	24.6	26.2	1.720
25	1	27.8	30.6	32.7	2.140

鋼纜

Wire Rope



6 x 7

結構：6撚 7線 1麻心

用途：船舶、礦山、林場、架空纜道

直徑 Diameter			破斷荷重（噸） Minimum Breaking Strength in Metric Tons			概算單位重量 Approximate Weight
鋼索 Rope		鋼絲 Wire				
mm	inch	mm	A級	B級	特級	Kg/M
3	1/8	0.35	0.53	0.60	0.66	0.037
4	5/32	0.44	0.85	0.97	1.06	0.059
5	3/16	0.55	1.34	1.52	1.65	0.093
6.3	1/4	0.70	2.12	2.41	2.62	0.147
8	5/16	0.88	3.42	3.88	4.23	0.237
9	3/8	1.00	4.33	4.91	5.35	0.300
10	13/32	1.10	5.34	6.06	6.61	0.371
11.2	7/16	1.24	6.70	7.60	8.29	0.465
12	15/32	1.33	7.69	8.73	9.52	0.534
12.5	1/2	1.39	8.34	9.47	10.3	0.579
14	9/16	1.54	10.5	11.9	13.0	0.727
16	5/8	1.78	13.7	15.5	16.9	0.950
18	23/32	2.00	17.3	19.6	21.4	1.20
20	25/32	2.22	21.4	24.2	26.4	1.48
22	7/8	2.44	25.8	29.3	32.0	1.79
22.4	7/8	2.48	26.8	30.4	33.2	1.86
24	15/16	2.66	30.8	34.9	38.1	2.14
25	1	2.76	33.4	37.9	41.3	2.32
26	1 1/32	2.86	36.1	41.0	44.7	2.51
28	1 3/32	3.12	41.9	47.5	51.8	2.91
30	1 3/16	3.30	48.1	54.5	59.5	3.34
31.5	1 1/4	3.50	53.0	60.1	65.6	3.68
32	1 1/4	3.55	54.5	62.1	67.7	3.80
33.5	1 5/16	3.70	59.9	68.0	74.2	4.16
34	1 11/32	3.75	61.7	70.1	76.4	4.29
35.5	1 13/32	3.93	67.3	76.4	83.3	4.67
36	1 13/32	4.00	69.2	78.5	85.7	4.81
37.5	1 15/32	4.16	75.1	85.2	93.0	5.21
38	1 1/2	4.22	77.1	87.5	95.5	5.35
40	1 9/16	4.40	85.5	97.0	106	5.93

鋼纜

Wire Rope



6 x 19

結構：6撚 19線 1麻心

用途：船舶、礦山、林場、漁業、起重機
纜道、一般機械

直徑 Diameter			破斷荷重 (噸)			概算單位重量
鋼索 Rope		鋼絲 Wire	Minimum Breaking Strength in Metric Tons			Approximate Weight
mm	inch	mm	G級	A級	B級	Kg/M
4	5/32	0.27	0.81	0.88	0.94	0.058
5	3/16	0.33	1.27	1.38	1.46	0.091
6.3	1/4	0.42	2.01	2.18	2.33	0.144
8	5/16	0.53	3.24	3.52	3.75	0.233
9	3/8	0.60	4.11	4.46	4.74	0.295
10	13/32	0.67	5.07	5.50	5.86	0.364
11.2	7/16	0.75	6.36	6.90	7.35	0.457
12	15/32	0.81	7.30	7.92	8.43	0.524
12.5	1/2	0.84	7.92	8.59	9.15	0.569
14	9/16	0.93	9.93	10.8	11.5	0.713
16	5/8	1.07	13.0	14.1	15.0	0.932
18	23/32	1.20	16.4	17.8	19.0	1.18
20	25/32	1.33	20.3	22.0	23.4	1.46
22	7/8	1.47	24.5	26.6	28.4	1.76
22.4	7/8	1.50	25.4	27.6	29.4	1.83
24	15/16	1.60	29.2	31.7	33.7	2.10
25	1	1.68	31.7	34.4	36.6	2.28
26	1 1/32	1.73	34.3	37.2	39.6	2.46
28	1 3/32	1.88	39.7	43.1	45.9	2.85
30	1 3/16	2.00	45.6	49.5	52.7	3.28
31.5	1 1/4	2.11	50.3	53.6	58.1	3.61
32	1 1/4	2.14	51.9	56.3	60.0	3.73
33.5	1 5/16	2.24	56.9	61.7	65.7	4.08
34	1 11/32	2.27	58.6	63.6	67.7	4.21
35.5	1 13/32	2.37	63.9	69.3	73.8	4.59
36	1 13/32	2.40	65.7	71.3	75.9	4.72
37.5	1 15/32	2.51	71.3	77.3	82.4	5.12
38	1 1/2	2.55	73.2	79.4	84.6	5.26
40	1 9/16	2.66	81.1	88.0	93.7	5.82
42	1 21/32	2.78	89.4	97.0	103	6.42
42.5	1 11/16	2.86	91.5	99.3	106	6.57
44	1 3/4	2.95	98.1	106	113	7.05
45	1 25/32	3.03	103	111	119	7.37
46	1 13/16	3.07	107	116	124	7.70
47.5	1 7/8	3.16	114	124	132	8.21
48	1 7/8	3.20	117	127	135	8.39
50	2	3.35	127	138	146	9.10

鋼纜

Wire Rope



6 x 24

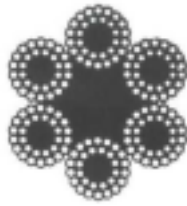
結構：6撚 24線 7麻心

用途：船舶、漁業、起重機、營建重機械

直徑 Diameter			破斷荷重 (噸)		概算單位重量
鋼索 Rope		鋼絲 Wire	Minimum Breaking Strength in Metric Tons		Approximate Weight
mm	inch	mm	G級	A級	Kg/M
8	5/16	0.45	2.97	3.21	0.212
9	3/8	0.51	3.75	4.06	0.269
10	13/32	0.56	4.64	5.02	0.332
11.2	7/16	0.63	5.82	6.29	0.416
12	15/32	0.68	6.68	7.22	0.478
12.5	1/2	0.71	7.25	7.84	0.519
14	9/16	0.78	9.09	9.83	0.651
16	5/8	0.90	11.9	12.8	0.850
18	23/32	1.01	15.0	16.2	1.08
20	25/32	1.12	18.5	20.1	1.33
22	7/8	1.24	22.5	24.3	1.61
22.4	7/8	1.26	23.3	25.2	1.67
24	15/16	1.35	26.7	28.9	1.91
25	1	1.41	29.0	31.3	2.08
26	1 1/32	1.45	31.4	33.9	2.24
28	1 3/32	1.58	36.4	39.3	2.60
30	1 3/16	1.68	41.8	45.1	2.99
31.5	1 1/4	1.78	46.0	49.8	3.29
32	1 1/4	1.80	47.5	51.4	3.40
33.5	1 5/16	1.88	52.1	56.7	3.73
34	1 11/32	1.91	53.6	58.0	3.84
35.5	1 13/32	2.00	58.5	63.2	4.18
36	1 13/32	2.03	60.1	65.0	4.30
37.5	1 15/32	2.11	65.2	70.5	4.67
38	1 1/2	2.14	67.0	72.4	4.79
40	1 9/16	2.24	74.2	80.2	5.31
42	1 21/32	2.34	81.8	88.5	5.86
42.5	1 11/16	2.40	83.8	90.6	6.00
44	1 3/4	2.44	89.8	97.1	6.43
45	1 25/32	2.55	94.0	102	6.72
46	1 13/16	2.58	98.2	106	7.03
47.5	1 7/8	2.66	105	113	7.49
48	1 7/8	2.70	107	116	7.65
50	2	2.82	117	125	8.30
52	2 1/16	2.90	125	136	8.98
53	2 3/32	3.00	130	141	9.33
54	2 1/8	3.03	135	146	9.68

鋼纜

Wire Rope



6 x 30

結構：6撚 30線 1麻心

用途：船舶、起重機、一般機械

直徑 Diameter			破斷荷重（噸） Minimum Breaking Strength in Metric Tons	概算單位重量 Approximate Weight
鋼索 Rope		鋼絲 Wire		
mm	inch	mm	G級	Kg/M
8	5/16	0.38	2.68	0.198
9	3/8	0.43	3.39	0.251
10	13/32	0.48	4.19	0.310
11.2	7/16	0.53	5.26	0.388
12	15/32	0.57	6.03	0.446
12.5	1/2	0.60	6.55	0.484
14	9/16	0.67	8.21	0.607
16	5/8	0.76	10.7	0.793
18	23/32	0.86	13.6	1.00
20	25/32	0.95	16.7	1.24
22	7/8	1.05	20.3	1.50
22.4	7/8	1.06	21.0	1.55
24	15/16	1.14	24.1	1.78
25	1	1.19	26.2	1.94
26	1 1/32	1.22	28.3	2.09
28	1 3/32	1.33	32.8	2.43
30	1 3/16	1.41	37.6	2.79
31.5	1 1/4	1.50	41.6	3.07
32	1 1/4	1.52	42.9	3.17
33.5	1 5/16	1.58	47.0	3.47
34	1 11/32	1.60	48.4	3.58
35.5	1 13/32	1.68	52.8	3.90
36	1 13/32	1.70	54.3	4.01
37.5	1 15/32	1.78	58.9	4.35
38	1 1/2	1.80	60.5	4.47
40	1 9/16	1.88	67.0	4.95
42	1 21/32	2.00	75.7	5.59
44	1 3/4	2.08	81.1	5.99
45	1 25/32	2.14	84.8	6.27
46	1 13/16	2.17	88.7	6.55
47.5	1 7/8	2.24	94.5	6.99
48	1 7/8	2.27	96.5	7.13
50	2	2.37	104	7.74
52	2 1/16	2.48	113	8.37
53	2 3/32	2.51	118	8.70
54	2 1/8	2.55	122	9.03
56	2 7/32	2.66	131	9.71

鋼纜

Wire Rope



6 x 37

結構：6撚 37線 1麻心

用途：起重機、吊車、一般機械

直徑 Diameter			破斷荷重 (噸)			概算單位重量
鋼索 Rope		鋼絲 Wire	Minimum Breaking Strength in Metric Tons			Approximate Weight
mm	inch	mm	G級	A級	B級	Kg/M
6.3	1/4	0.3	1.98	2.15	2.29	0.143
8	5/16	0.38	3.19	3.46	3.69	0.230
9	3/8	0.43	4.04	4.38	4.67	0.291
10	13/32	0.47	4.99	5.41	5.76	0.359
11.2	7/16	0.53	6.26	6.79	7.23	0.451
12	15/32	0.57	7.19	7.79	8.29	0.517
12.5	1/2	0.60	7.80	8.45	9.00	0.561
14	9/16	0.66	9.81	10.6	11.3	0.704
16	5/8	0.76	12.7	13.8	14.7	0.920
18	23/32	0.85	16.2	17.5	18.7	1.16
20	25/32	0.94	19.9	21.6	23.0	1.44
22	7/8	1.04	24.2	26.2	27.9	1.74
22.4	7/8	1.06	25.0	27.1	28.9	1.80
24	15/16	1.14	28.7	31.2	33.2	2.07
25	1	1.19	31.2	33.8	36.0	2.25
26	1 1/32	1.22	33.7	36.6	38.9	2.43
28	1 3/32	1.33	39.0	42.4	45.2	2.82
30	1 3/16	1.41	44.8	48.7	51.8	3.23
31.5	1 1/4	1.50	49.5	53.7	57.2	3.57
32	1 1/4	1.52	51.1	55.4	59.0	3.68
33.5	1 5/16	1.58	56.0	60.7	64.6	4.03
34	1 11/32	1.63	57.0	62.5	66.6	4.15
35.5	1 13/32	1.68	62.9	68.2	72.6	4.53
36	1 13/32	1.70	64.7	70.1	74.6	4.66
37.5	1 15/32	1.78	70.2	76.1	81.0	5.05
38	1 1/2	1.80	72.1	78.1	83.2	5.19
40	1 9/16	1.88	79.7	86.6	92.2	5.75
42	1 21/32	2.00	88.0	95.4	102	6.34
42.5	1 11/16	2.03	90.1	97.7	104	6.49
44	1 3/4	2.11	96.6	105	112	6.96
45	1 25/32	2.14	101	110	117	7.28
46	1 13/16	2.20	106	114	122	7.60
47.5	1 7/8	2.24	113	122	130	8.11
48	1 7/8	2.30	115	125	133	8.28
50	2	2.37	125	135	144	8.98
52	2 1/16	2.48	135	146	156	9.72
53	2 3/32	2.51	140	152	162	10.1
54	2 1/8	2.58	146	158	168	10.5

鋼纜

Wire Rope



6 x S (19)



6 x W (19)



6 x Fi (25)

用途：礦山、營建重機械、起重機、鑿井

直徑 Diameter					破斷荷重 (噸)			概算單位重量
鋼索 Rope		鋼絲 Wire			Minimum Breaking Strength in Metric Tons			Approximate Weight
mm	inch	S(19)	W(19)	Fi(25)	G級	A級	B級	Kg/M
4	5/32	-	0.30	-	0.79	0.88	0.94	0.062
5	3/16	0.40	0.38	-	1.25	1.39	1.48	0.097
6.3	1/4	0.51	0.47	-	1.98	2.20	2.34	0.153
8	5/16	0.64	0.60	0.52	3.19	3.55	3.78	0.247
9	3/8	0.73	0.67	0.58	4.04	4.50	4.78	0.312
10	13/32	0.81	0.75	0.65	4.99	5.55	5.91	0.386
11.2	7/16	0.90	0.84	0.73	6.26	6.96	7.41	0.484
12	15/32	0.97	0.90	0.78	7.18	7.99	8.51	0.555
12.5	1/2	1.01	0.94	0.82	7.79	8.67	9.23	0.603
14	9/16	1.12	1.04	0.90	9.78	10.9	11.6	0.756
16	5/8	1.30	1.20	1.04	12.8	14.2	15.1	0.988
18	23/32	1.45	1.35	1.17	16.2	18.0	19.1	1.25
20	25/32	1.60	1.50	1.30	20.0	22.2	23.6	1.54
22	7/8	1.78	1.65	1.43	24.1	26.9	28.6	1.87
22.4	7/8	1.80	1.68	1.45	25.0	27.8	29.6	1.94
24	15/16	1.94	1.80	1.56	28.7	32.0	34.0	2.22
25	1	2.03	1.88	1.63	31.2	34.7	36.9	2.41
26	1 1/32	2.11	1.94	1.68	33.8	37.5	39.9	2.61
28	1 3/32	2.27	2.11	1.83	39.1	43.5	46.3	3.02
30	1 3/16	2.40	2.24	1.94	44.9	50.0	53.2	3.47
31.5	1 1/4	2.55	2.37	2.06	49.5	55.1	58.6	3.83
32	1 1/4	2.58	2.40	2.08	51.1	56.8	60.5	3.95
33.5	1 5/16	2.70	2.51	2.17	56.0	62.3	66.3	4.33
34	1 11/32	2.74	2.55	2.20	57.7	64.2	68.3	4.46
35.5	1 13/32	2.86	2.66	2.30	62.9	69.9	74.4	4.86
36	1 13/32	2.90	2.70	2.34	64.6	71.9	76.6	5.00
37.5	1 15/32	3.03	2.82	2.44	70.2	78.0	83.1	5.42
38	1 1/2	3.07	2.86	2.48	72.0	80.1	85.3	5.57
40	1 9/16	3.20	3.00	2.58	79.8	88.8	94.5	6.17
42	1 21/32	3.40	3.16	2.74	88.0	97.9	104	6.80
42.5	1 11/16	3.45	3.20	2.78	90.1	100	107	6.97
44	1 3/4	3.55	3.30	2.86	96.6	107	114	7.47
45	1 25/32	3.65	3.40	2.95	101	112	120	7.81
46	1 13/16	3.70	3.45	3.00	106	117	125	8.16
47.5	1 7/8	3.80	3.55	3.07	113	125	133	8.70
48	1 7/8	3.87	3.60	3.12	115	128	136	8.89
50	2	4.05	3.75	3.25	125	139	148	9.64

鋼心鋼纜

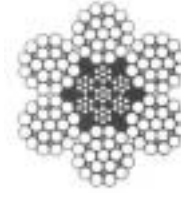
Wire Rope (IWRC)



6 x S (19) IWRC



6 x W (19) IWRC



6 x Fi (25) IWRC

用途：礦山、營建重機械、起重機、鑿井

直徑 Diameter					破斷荷重 (噸)		概算單位重量
鋼索 Rope		鋼絲 Wire			Minimum Breaking Strength in Metric Tons		Approximate Weight
mm	inch	S(19)	W(19)	Fi(25)	A級	B級	Kg/M
8	5/16	0.64	0.60	0.52	4.05	4.30	0.275
9	3/8	0.73	0.67	0.58	5.12	5.44	0.348
10	13/32	0.81	0.75	0.65	6.33	6.72	0.430
11.2	7/16	0.90	0.84	0.74	7.94	8.44	0.539
12	15/32	0.97	0.90	0.78	9.11	9.68	0.619
12.5	1/2	1.01	0.94	0.82	9.89	10.5	0.672
14	9/16	1.12	1.04	0.90	12.4	13.2	0.843
16	5/8	1.30	1.20	1.04	16.2	17.2	1.10
18	23/32	1.45	1.35	1.17	20.5	21.8	1.39
20	25/32	1.60	1.50	1.30	25.3	26.9	1.72
22	7/8	1.78	1.65	1.43	30.6	32.5	2.08
22.4	7/8	1.80	1.68	1.45	31.7	33.7	2.16
24	15/16	1.94	1.80	1.56	36.4	38.7	2.48
25	1	2.03	1.88	1.63	39.5	42.0	2.69
26	1 1/32	2.11	1.94	1.68	42.8	45.5	2.91
28	1 3/32	2.27	2.11	1.83	49.6	52.7	3.37
30	1 3/16	2.40	2.24	1.94	56.9	60.5	3.87
31.5	1 1/4	2.55	2.37	2.06	62.8	66.7	4.27
32	1 1/4	2.58	2.40	2.08	64.8	68.9	4.40
33.5	1 5/16	2.70	2.51	2.17	71.0	75.5	4.83
34	1 11/32	2.74	2.55	2.20	73.1	77.7	4.97
35.5	1 13/32	2.86	2.66	2.30	79.7	84.8	5.42
36	1 13/32	2.90	2.70	2.34	82.0	87.2	5.57
37.5	1 15/32	3.03	2.82	2.44	89.0	94.6	6.05
38	1 1/2	3.07	2.86	2.48	91.4	97.1	6.21
40	1 9/16	3.20	3.00	2.58	101	108	6.88
42	1 21/32	3.40	3.16	2.74	112	119	7.59
42.5	1 11/16	3.45	3.20	2.78	114	121	7.77
44	1 3/4	3.55	3.30	2.86	122	130	8.32
45	1 25/32	3.65	3.40	2.95	128	136	8.71
46	1 13/16	3.70	3.45	3.00	134	142	9.10
47.5	1 7/8	3.80	3.55	3.07	143	152	9.70
48	1 7/8	3.87	3.60	3.12	146	155	9.91
50	2	4.05	3.75	3.25	158	168	10.8
52	2 1/16	4.16	3.87	3.40	171	182	11.6
54	2 1/8	4.34	4.05	3.50	184	196	12.5

鋼纜

Wire Rope



6 x Fi (29)



6 x WS (36)



6 x SeS (37)

用途：礦山、營建重機械、鑿井

直徑 Diameter					破斷荷重 (噸)			概算單位重量
鋼索 Rope		鋼絲 Wire			Minimum Breaking Strength in Metric Tons			Approximate Weight
mm	inch	Fi(29)	WS(36)	SeS(37)	G級	A級	B級	Kg/M
8	5/16	0.46	-	-	3.30	3.63	3.86	0.253
9	3/8	0.52	-	-	4.17	4.59	4.88	0.321
10	13/32	0.58	-	0.55	5.15	5.67	6.03	0.396
11.2	7/16	0.65	-	0.61	6.46	7.11	7.56	0.496
12	15/32	0.69	-	0.66	7.42	8.16	8.68	0.570
12.5	1/2	0.73	-	0.68	8.05	8.85	9.42	0.618
14	9/16	0.81	-	0.76	10.1	11.1	11.8	0.776
16	5/8	0.93	0.93	0.87	13.2	14.5	15.4	1.01
18	23/32	1.04	1.04	0.99	16.7	18.4	19.5	1.28
20	25/32	1.15	1.15	1.09	20.6	22.7	24.1	1.58
22	7/8	1.28	1.28	1.20	24.9	27.4	29.2	1.92
22.4	7/8	1.30	1.30	1.22	25.9	28.4	30.2	1.99
24	15/16	1.39	1.39	1.31	29.7	32.6	34.7	2.28
25	1	1.45	1.45	1.37	32.2	35.4	37.7	2.48
26	1 1/32	1.50	1.50	1.43	24.8	38.3	40.7	2.68
28	1 3/32	1.63	1.63	1.54	40.4	44.4	47.3	3.10
30	1 3/16	1.73	1.73	1.63	46.4	51.0	54.2	3.56
31.5	1 1/4	1.83	1.83	1.73	51.1	56.2	59.8	3.93
32	1 1/4	1.86	1.86	1.75	52.8	58.0	61.7	4.05
33.5	1 5/16	1.94	1.94	1.83	57.8	63.6	67.6	4.44
34	1 11/32	1.97	1.97	1.86	59.6	65.5	69.7	4.58
35.5	1 13/32	2.06	2.06	1.94	64.9	71.4	76.0	4.99
36	1 13/32	2.08	2.08	1.97	66.8	73.4	78.1	5.13
37.5	1 15/32	2.17	2.17	2.06	72.4	79.7	84.8	5.57
38	1 1/2	2.20	2.20	2.08	74.4	81.6	87.0	5.72
40	1 9/16	2.30	2.30	2.17	82.4	90.7	96.4	6.33
42	1 21/32	2.44	2.44	2.30	90.9	100	106	6.98
42.5	1 11/16	2.48	2.48	2.34	93.1	102	109	7.15
44	1 3/4	2.55	2.55	2.40	99.7	110	117	7.66
45	1 25/32	2.62	2.62	2.48	104	115	122	8.01
46	1 13/16	2.66	2.66	2.51	109	120	128	8.38
47.5	1 7/8	2.74	2.74	2.58	116	128	136	8.93
48	1 7/8	2.78	2.78	2.62	119	131	139	9.12
50	2	2.90	2.90	2.74	129	142	151	9.90
52	2 1/16	3.00	3.00	2.86	139	153	163	10.7
53	2 3/32	3.07	3.07	2.90	145	159	169	11.1
54	2 1/8	3.12	3.12	2.95	150	165	176	11.5

鋼心鋼纜

Wire Rope (IWRC)



6 x Fi (29) IWRC



6 x WS (36) IWRC



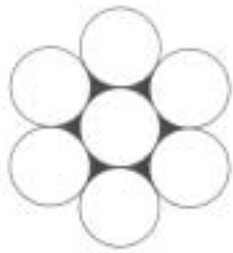
6 x SeS (37) IWRC

用途：礦山、營建重機械、鑿井

直徑 Diameter					破斷荷重 (噸)			概算單位重量
鋼索 Rope		鋼絲 Wire			Minimum Breaking Strength in Metric Tons			Approximate Weight
mm	inch	Fi(29)	WS(36)	SeS(37)	G級	A級	B級	Kg/M
10	13/32	0.58	-	0.55	5.89	6.48	6.89	0.440
11.2	7/16	0.65	-	0.61	7.39	8.13	8.64	0.552
12	15/32	0.69	-	0.66	8.49	9.33	9.92	0.634
12.5	1/2	0.73	-	0.68	9.21	10.1	10.8	0.688
14	9/16	0.81	-	0.76	11.5	12.7	13.5	0.852
16	5/8	0.93	0.93	0.87	15.1	16.6	17.6	1.13
18	23/32	1.04	1.04	0.99	19.1	21.0	22.3	1.43
20	25/32	1.15	1.15	1.09	23.6	25.9	27.6	1.76
22	7/8	1.28	1.28	1.20	28.5	31.4	33.3	2.13
22.4	7/8	1.30	1.30	1.22	29.6	32.5	34.6	2.21
24	15/16	1.39	1.39	1.31	33.9	37.3	39.7	2.53
25	1	1.45	1.45	1.37	36.8	40.5	43.1	2.75
26	1 1/32	1.50	1.50	1.43	39.8	43.8	46.6	2.97
28	1 3/32	1.63	1.63	1.54	46.2	50.8	54.0	3.45
30	1 3/16	1.73	1.73	1.63	53.0	58.3	62.0	3.96
31.5	1 1/4	1.83	1.83	1.73	58.5	64.3	68.4	4.37
32	1 1/4	1.86	1.86	1.75	60.3	66.4	70.5	4.51
33.5	1 5/16	1.94	1.94	1.83	66.1	72.8	77.3	4.94
34	1 11/32	1.97	1.97	1.86	68.1	74.9	79.6	5.09
35.5	1 13/32	2.06	2.06	1.94	74.3	81.7	86.8	5.55
36	1 13/32	2.08	2.08	1.97	76.4	84.0	89.3	5.70
37.5	1 15/32	2.17	2.17	2.06	82.9	91.2	96.9	6.19
38	1 1/2	2.20	2.20	2.08	85.1	93.6	99.5	6.35
40	1 9/16	2.30	2.30	2.17	94.3	104	110	7.04
42	1 21/32	2.44	2.44	2.30	104	114	121	7.76
42.5	1 11/16	2.48	2.48	2.34	106	117	124	7.95
44	1 3/4	2.55	2.55	2.40	114	125	133	8.52
45	1 25/32	2.62	2.62	2.48	119	131	140	8.91
46	1 13/16	2.66	2.66	2.51	125	137	146	9.31
47.5	1 7/8	2.74	2.74	2.58	133	146	155	9.93
48	1 7/8	2.78	2.78	2.62	136	149	159	10.1
50	2	2.90	2.90	2.74	147	162	172	11.0
52	2 1/16	3.00	3.00	2.86	159	175	186	11.9
53	2 3/32	3.07	3.07	2.90	166	182	194	12.4
54	2 1/8	3.12	3.12	2.95	172	189	201	12.8
56	2 7/32	3.25	3.25	3.07	185	203	216	13.8
58	2 9/32	3.35	3.35	3.16	198	213	232	14.8

鍍鋅鋼絞線

Galvanized Steel Wire Strand



1 x 7



用途：架空地線、埋設地線、支線、電桿拉線等

通用抗拉強度等級為 70、90 及 125 kgf/mm²

股線 Strand		單線 Wire	破斷荷重 (噸) Minimum Breaking Strength in Metric Tons											單位重量 Approx. Weight
mm	inch	mm	35 kg/mm ²	40 kg/mm ²	50 kg/mm ²	60 kg/mm ²	70 kg/mm ²	80 kg/mm ²	90 kg/mm ²	100 kg/mm ²	110 kg/mm ²	120 kg/mm ²	125 kg/mm ²	Kg/100M
3.0	1/8	1.0	0.174	0.200	0.250	0.300	0.349	0.399	0.449	0.499	0.552	0.602	0.621	4.43
3.6	9/64	1.2	0.249	0.286	0.356	0.427	0.499	0.570	0.641	0.712	0.796	0.860	0.888	6.32
4.2	5/32	1.4	0.340	0.390	0.485	0.582	0.680	0.776	0.873	0.970	1.07	1.17	1.20	8.63
4.8	3/16	1.6	0.443	0.509	0.633	0.760	0.885	1.02	1.14	1.26	1.40	1.52	1.57	11.25
5.4	7/32	1.8	0.558	0.645	0.800	0.960	1.12	1.28	1.44	1.60	1.77	1.93	1.99	14.22
6.0	1/4	2.0	0.693	0.794	0.989	1.18	1.39	1.58	1.78	1.98	2.18	2.37	2.47	17.52
6.9	9/32	2.3	0.915	1.05	1.31	1.57	1.83	2.09	2.36	2.61	2.87	3.14	3.27	23.17
7.8	5/16	2.6	1.17	1.34	1.67	2.01	2.34	2.68	3.01	3.35	3.69	4.01	4.18	29.16
8.7	11/32	2.9	1.46	1.66	2.08	2.49	2.91	3.33	3.74	4.16	4.58	5.00	5.20	36.84
9.6	3/8	3.2	1.77	2.03	2.53	3.04	3.55	4.05	4.56	5.07	5.58	6.07	6.30	44.85
10.5	13/32	3.5	2.12	2.43	3.03	3.64	4.24	4.85	5.58	6.05	6.66	7.28	7.56	53.66
12.0	15/32	4.0	2.77	3.17	3.96	4.75	5.54	6.33	7.12	7.92	8.71	9.51	9.89	70.08
13.5	17/32	4.5	3.50	4.00	5.00	6.01	6.99	8.01	9.00	10.00	11.02	12.02	12.50	88.70
15.0	19/32	5.0	4.33	4.95	6.19	7.42	8.63	9.89	11.10	12.37	13.61	14.84	15.40	109.5

披覆鋼纜

Cable with Coating



規格	直徑 Diameter				概算單位重量 Approximate Weight		
	內徑 Inner Cable		外徑 Outer Cover		內鋼纜	披覆 Jacket	總重量
	inch	mm	inch	mm	Kg/100M	Kg/100M	Kg/100M
7 x 7	1/16	1.5	3/32	2.5	1.12	0.33	1.45
			1/8	3	1.12	0.82	1.94
			3/16	5	1.12	1.79	2.91
	3/32	2.5	1/8	3	2.38	0.45	2.83
			5/32	4	2.38	1.12	3.50
			3/16	5	2.38	1.79	4.17
	1/8	3	3/16	5	4.17	1.37	5.54
			1/4	6	4.17	3.35	7.52
	3/16	5	5/16	8	9.23	4.32	13.50
7 x 19	1/8	3	3/16	5	4.32	1.28	5.60
			7/32	5.5	4.32	2.14	6.46
			1/4	6	4.32	2.90	7.22
	5/32	4	7/32	5.5	6.70	1.53	8.23
	3/16	5	1/4	6	9.67	2.23	11.90
			5/16	8	9.67	4.32	14.00
	1/4	6	5/16	8	16.40	2.38	18.80
			3/8	9	16.40	6.40	22.80
	5/16	8	13/32	10	25.70	4.46	30.20
			7/16	11.2	25.70	6.55	32.30
	3/8	9	7/16	11.2	36.20	3.13	39.30
			15/32	12	36.20	5.21	41.40

(可根據客戶需求加工制作不同外徑、不同披覆材料之產品)

電纜拉網

Cable Grips



TYPE SE (Single Eye)
單眼式



TYPE DE (Double Eye)
雙眼式



TYPE OE (Open Ended)
開口式

Overall length 全長						Lattice Length 拉網長度				適用直徑 Cable Dia.		安全荷重 Proof Load
SE		DE		OE		SE / DE		OE				
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	Kg
305	12	305	12	380	15	230	9	380	15	6-13	1/4 - 1/2	500
430	17	430	17	610	24	355	14	610	24	13-19	1/2 - 3/4	1000
510	20	485	19	710	28	405	16	710	28	19-25	3/4 - 1	1000
610	24	585	23	815	32	455	18	815	32	25-38	1 - 1 1/2	2500
735	29	710	28	915	36	535	21	915	36	38-50	1 1/2 - 2	2500
865	34	840	33	1065	42	610	24	1065	42	50-63	2 - 2 1/2	3000
990	39	915	36	1220	48	685	27	1220	48	63-89	2 1/2 - 3 1/2	3000
990	39	915	36	1370	54	685	27	1370	54	89-115	3 1/2 - 4 1/2	3500

鋼索頭加工方式

Typical Example of Rope End Preparation



Soft Eye Splice (Mechanical Splice)



Soft Eye Splice (Hand-Splice)



Rope End Pressed Thimble



Becket Eye (made of 2-strands)



Rope End with Open Socket



Rope End with Closed Socket



Rope End Pressed Solid Thimble

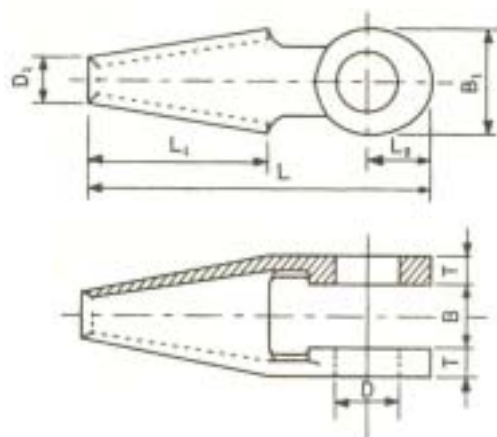


Rope End with Clips

鋼纜套環

Wire Rope Spelter Sockets

OPEN TYPE

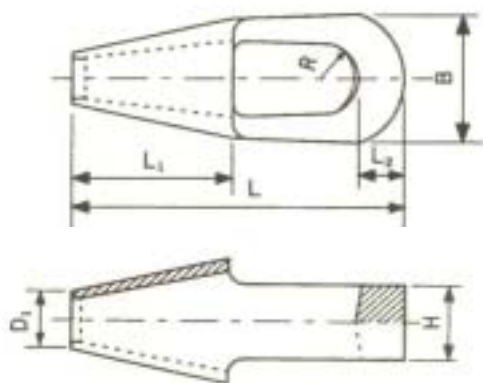


Rope	Dimensions (mm)								Weight
mm	L	L ₁	L ₂	D ₁	B ₁	B	T	D	Kg
20	190	92	38	34以上	66	34	16	38	1.5
22	204	102	40	36以上	72	36	18	41	1.9
24	224	112	44	40以上	78	40	19	45	2.4
26	244	122	48	42以上	84	42	21	48	3.2
28	266	132	52	44以上	90	46	22	52	3.8
30	278	140	54	48以上	96	48	24	55	4.6
32	300	152	58	50以上	104	52	26	59	5.8
34	316	158	62	54以上	110	56	27	63	6.9
36	336	168	66	56以上	114	58	28	66	7.7
38	356	176	70	60以上	122	62	30	70	9.4
40	370	188	72	62以上	128	64	32	73	11.0
42	390	198	76	64以上	134	68	33	77	12.0
44	405	206	78	68以上	140	70	35	80	14.0
46	430	216	84	70以上	146	74	36	84	16.0
48	445	228	86	72以上	152	76	38	87	18.0
50	465	236	90	76以上	158	80	39	90	20.0
52	485	244	94	80以上	166	84	41	94	24.0
54	495	252	96	84以上	172	86	43	97	26.0
56	520	264	100	86以上	178	90	44	101	29.0
58	535	274	102	88以上	184	92	46	105	32.0

鋼纜套環

Wire Rope Spelter Sockets

CLOSED TYPE



Rope	Dimensions (mm)							Weight
mm	L	L ₁	L ₂	D ₁	B	H	R	Kg
20	200	92	28	34以上	72	30	22	1.7
22	220	102	33	36以上	82	32	23	2.4
24	240	112	34	40以上	86	36	26	3.0
26	260	122	37	42以上	94	38	27	3.9
28	280	132	39	44以上	100	42	29	4.6
30	298	140	43	48以上	108	44	31	5.9
32	320	152	45	50以上	116	48	33	7.2
34	336	158	46	54以上	120	52	36	8.1
36	358	168	51	56以上	128	54	37	9.8
38	376	176	52	60以上	134	58	40	10.0
40	395	188	57	62以上	144	58	41	14.0
42	415	198	58	64以上	148	62	44	15.0
44	435	206	63	68以上	158	64	45	18.0
46	455	216	65	70以上	162	68	48	20.0
48	475	228	67	72以上	170	70	49	23.0
50	495	236	69	76以上	178	74	51	26.0
52	515	244	71	80以上	184	79	53	29.0
54	530	252	75	84以上	192	80	55	33.0
56	555	264	76	86以上	196	84	58	36.0
58	570	274	80	88以上	206	86	60	40.0

毛眼

Wire Rope Thimbles

STANDARD THIMBLE



For Rope Diam.		Dimensions (mm)						Weight
mm	inch	Overall length	Overall Width	Inside Length	Inside Width	Inside Width of Score	Max Pin Dia.	Kg
3	1/8	45.8	24.0	30.2	14.5	4.0	14	0.015
5	3/16	47.5	25.5	31.8	16.0	5.6	15	0.016
6	1/4	49.2	27.0	33.3	17.5	7.1	16	0.017
8	5/16	54.0	31.8	38.1	20.6	9.5	19	0.018
9	3/8	60.3	37.3	41.3	23.8	11.1	22	0.034
13	1/2	69.9	44.5	47.6	28.6	14.3	26	0.085
16	5/8	88.9	60.3	57.2	34.9	17.5	32	0.163
19	3/4	95.3	68.3	63.5	41.3	20.6	38	0.272
22	7/8	127.0	81.0	88.9	47.6	23.8	44	0.408
25	1	144.5	95.3	108.0	63.5	27.0	60	0.476
28	1 1/8 - 1 1/4	158.8	109.5	114.3	69.9	33.3	66	0.753
38	1 1/2	190.5	136.5	127.0	82.6	39.7	79	1.474
44	1 3/4	273.1	184.2	184.2	108.0	47.6	105	2.646
50	2	273.1	184.2	184.2	108.0	54.0	105	2.658

EXTRA HEAVY THIMBLE



For Rope Diam.		Dimensions (mm)						Weight
mm	inch	Overall length	Overall Width	Inside Length	Inside Width	Overall Thickness	Max Pin Dia.	Kg
6	1/4	55.6	38.1	41.3	22.2	10.3	20	0.034
8	5/16	63.5	46.0	47.6	27.0	12.7	23	0.064
9	3/8	73.0	54.0	54.0	28.6	17.2	26	0.113
11.2	7/16	82.6	60.3	60.3	31.8	19.1	30	0.163
13	1/2	92.1	69.9	69.9	38.1	20.9	36	0.231
14	9/16	92.1	71.4	70.0	38.2	23.6	36	0.233
16	5/8	108.0	79.4	82.6	44.5	25.4	41	0.340
19	3/4	127.0	96.8	95.3	50.8	31.8	47	0.667
22	7/8	139.7	108.0	108.0	57.2	34.9	53	0.839
25	1	155.6	125.4	114.3	63.5	39.7	60	1.323
28	1 1/8 - 1 1/4	177.8	149.2	130.2	73.0	47.6	69	1.739
32	1 1/4 - 1 3/8	228.6	173.0	158.8	82.6	57.2	82	3.704
38	1 3/8 - 1 1/2	230.2	181.0	165.1	88.9	66.7	85	5.292
40	1 5/8	285.6	206.4	203.2	101.6	70.0	98	7.371
44	1 3/4	309.6	215.9	228.6	114.3	73.0	111	8.335
50	1 7/8 - 2	384.2	263.5	304.8	152.4	79.4	149	11.680
56	2 1/4	435.0	301.6	355.6	177.8	92.1	174	17.463

SOLID THIMBLE

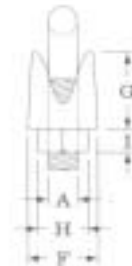
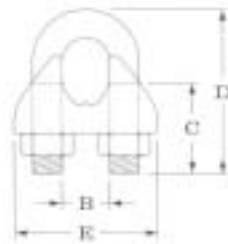


For Rope Diam.		Dimensions (mm)				Weight
mm	inch	Overall length	Overall Width	Thickness	Max Pin Dia.	Kg
13	1/2	71.4	54.0	22.2	25	0.454
16	5/8	119.1	85.7	28.6	30	1.134
19	3/4	119.1	85.7	34.9	34	1.497
22	7/8	154.0	114.3	41.3	41	2.268
25	1	154.0	114.3	46.0	50	2.948
28	1 1/8	184.2	136.5	52.4	57	3.856
32	1 1/4 - 1 3/8	184.2	136.5	58.7	63	4.536

鋼索挾

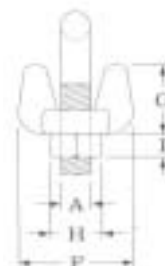
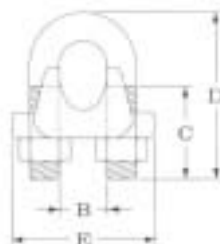
Wire Rope Clips

JIS
TYPE
(日式)



Size		Dimensions (mm+-10%)									Weight
mm	inch	A	B	C	D	E	F	G	H	I	Kg
2	1/16	4	6	9	20	19	11	9	7	3	0.009
3	1/8	5	7	9	25	23	12	10	8	4	0.014
5	3/16	6.3	8	16	30	26	13	13	10	5	0.024
6	1/4	8	9	18	37	34	17	14	12	6	0.044
8	5/16	8	9	18	37	34	19	17	12	6	0.048
9.5	3/8	9.5	11	25	48	40	21	19	14	7	0.083
11	7/16	9.5	12	25	48	41	23	20	14	7	0.090
13	1/2	9.5	13	25	48	45	23	24	14	7	0.101
14	9/16	11.2	15	28	60	46	25	25	14	8	0.140
16	5/8	12.5	17	30	65	55	27	25	19	9	0.202
19	3/4	12.5	20	36	70	60	28	27	19	9	0.230
22	7/8	16	23	45	86	66	32	31	23	12	0.383
25	1	16	27	50	96	73	36	40	23	12	0.500
28	1 1/8	19	31	56	114	86	43	54	26	15	0.922
32	1 1/4	22	35	60	135	98	49	68	32	18	1.60
38	1 1/2	22	43	90	148	118	57	80	32	18	2.08

U.S.
TYPE
(美式)



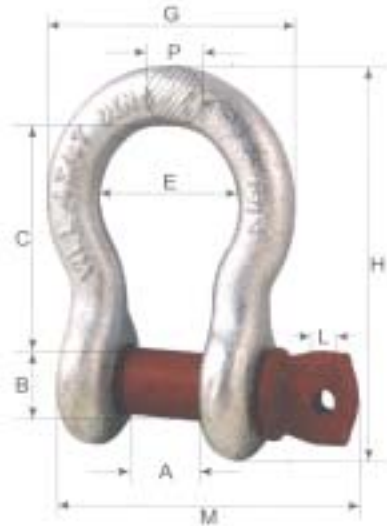
Size		Dimensions (mm+-10%)									Weight
mm	inch	A	B	C	D	E	F	G	H	I	Kg
3	1/8	6	7	16	30	27	23	13	10	5	0.033
5	3/16	6.3	8	16	30	30	24	14	10	5	0.041
6	1/4	8	9	19	37	36	30	17	12	6	0.063
8	5/16	8	9	19	37	36	30	19	12	6	0.069
9.5	3/8	9.5	11	25	48	43	36	20	14	7	0.115
13	1/2	9.5	14	25	48	44	37	24.2	14	7	0.120
16	5/8	12.5	17	35	71	58	49	29	19	9	0.300
19	3/4	16	20	45	88	73	57	36	23	12	0.601
22	7/8	19	24	50	100	82	62	42	26	15	0.902
25	1	19	27	55	104	85	72	49	26	15	1.04
32	1 1/4	22	36	79	149	108	82	64	32	18	2.00
38	1 1/2	22	44	91	154	110	86	69	32	18	2.10
62	2 1/2	32	72	102	247	163	114	99	50	31	6.50

卸克

Forged Anchor Shackles

SCREW PIN

G-209 S-209



BOLT TYPE

G-2130 S-2130



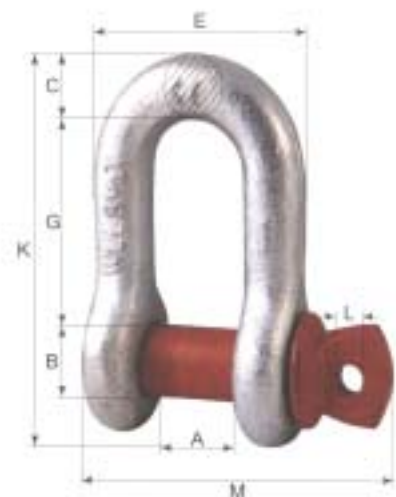
Size		Dimensions (mm+/-10%)											S.W.L	Weight
mm	inch	A	B	C	D	E	F	G	H	L	M	P	Ton	Kg
5	3/16	9.7	6.4	22.4	4.8	15.2	14.2	24.9	37.3	4.1	28.4	4.8	1/3	0.05
6.5	1/4	11.9	7.9	28.7	6.4	19.8	15.5	32.5	46.7	4.8	35.1	6.4	1/2	0.12
8	5/16	13.5	9.7	31.0	7.9	21.3	19.1	37.3	53.1	5.6	42.2	7.9	3/4	0.19
9.5	3/8	16.8	11.2	36.6	9.7	26.2	23.1	45.2	63.2	6.4	51.6	9.7	1	0.31
11	7/16	19.1	12.7	42.9	11.2	29.5	26.9	51.6	73.9	7.9	60.5	11.2	1 1/2	0.38
13	1/2	20.6	16.0	47.8	12.7	33.3	30.2	58.7	83.3	9.7	68.3	12.7	2	0.63
16	5/8	26.9	19.1	60.5	16.0	42.9	38.1	74.7	106.4	11.2	84.8	17.5	3 1/4	1.38
19	3/4	31.8	22.4	71.4	19.1	50.8	46.0	88.9	126.2	12.7	100.8	20.6	4 3/4	2.25
22	7/8	36.6	25.4	84.1	22.4	57.9	53.1	102.4	148.1	12.7	114.3	24.6	6 1/2	3.38
25	1	42.9	28.7	95.3	25.4	68.1	60.5	119.1	166.6	14.2	128.8	26.9	8 1/2	5.32
28	1 1/8	46.0	31.8	108.0	29.5	73.9	68.3	131.1	189.7	16.0	142.0	31.8	9 1/2	6.81
32	1 1/4	51.6	35.1	119.1	32.8	82.6	76.2	146.1	209.6	17.5	156.5	35.1	12	9.5
34	1 3/8	57.2	38.1	133.4	36.1	92.2	84.1	162.1	232.7	19.1	173.7	38.1	13 1/2	13.25
38	1 1/2	60.5	41.4	146.1	39.1	98.6	92.2	174.8	254.0	20.6	186.7	41.1	17	17.20
44	1 3/4	73.2	50.8	177.8	46.7	127.0	106.4	225.0	313.4	25.4	230.6	57.2	25	30.38
50	2	82.6	57.2	196.9	52.8	146.1	122.2	253.2	347.5	31.0	262.6	61.0	35	45.00
62	2 1/2	104.9	69.9	266.7	68.8	184.2	144.5	326.9	453.1	35.1	330.2	79.5	55	85.75

卸克

Forged Chain Shackles

SCREW PIN

G-210 S-210



BOLT TYPE

G-2150 S-2150



Size		Dimensions (mm+/-10%)										S.W.L	Weight
mm	inch	A	B	C	D	E	F	G	K	L	M	Ton	Kg
6.5	1/4	11.9	7.9	6.4	6.4	24.6	15.5	22.4	40.4	4.8	35.1	1/2	0.11
8	5/16	13.5	9.7	7.9	7.9	29.5	19.1	26.2	48.5	5.6	42.2	3/4	0.17
9.5	3/8	16.8	11.2	9.7	9.7	35.8	23.1	31.8	58.4	6.4	51.6	1	0.24
11	7/16	19.1	12.7	11.2	11.2	41.4	26.9	36.6	67.6	7.9	60.5	1 1/2	0.40
13	1/2	20.6	16.0	12.7	12.7	46.0	30.2	41.4	77.0	9.7	68.3	2	0.59
16	5/8	26.9	19.1	15.7	16.0	58.7	38.1	50.8	95.3	11.2	84.8	3 1/4	1.21
19	3/4	31.8	22.4	20.6	19.1	69.9	46.0	60.5	115.1	12.7	100.8	4 3/4	2.25
22	7/8	36.6	25.4	25.4	22.4	81.0	53.1	71.4	135.4	12.7	114.3	6 1/2	3.16
25	1	42.9	28.7	28.7	25.4	93.7	60.5	81.0	150.9	14.2	128.8	8 1/2	4.75
28	1 1/8	46.0	31.8	31.8	28.7	103.1	68.3	90.9	172.2	16.0	142.0	9 1/2	6.75
32	1 1/4	51.6	35.1	35.1	31.8	115.1	76.2	100.1	190.5	17.5	156.5	12	9.06
34	1 3/8	57.2	38.1	38.1	35.1	127.0	84.1	111.3	210.3	19.1	173.7	13 1/2	11.63
38	1 1/2	60.5	41.1	41.1	40.4	136.7	91.9	122.2	230.1	20.6	186.7	17	15.95
44	1 3/4	73.2	53.8	53.8	44.5	162.1	106.4	146.1	278.6	25.4	230.6	25	26.75
50	2	82.6	50.8	50.8	50.8	184.2	122.2	171.5	311.9	31.0	262.6	35	42.31
62	2 1/2	104.9	66.5	66.5	66.5	238.3	144.5	203.2	376.9	35.1	330.2	55	71.75

轉環吊鉤

Swivels



S-1 JAW & HOOK

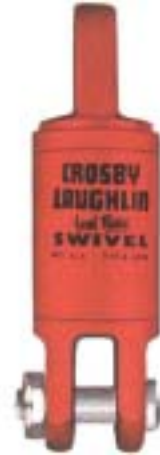


S-2 JAW & JAW



S-3 JAW & EYE

Type	Working Load Limit (Ton)	Wire Rope Size (inch)	Weight (Kg)
S-1	3	12.5	4.309
S-2	3	12.5	4.196
S-3	3	12.5	4.082
S-4	3	12.5	4.082
S-5	3	12.5	3.856
S-6	3	12.5	4.082
S-1	5	16	7.484
S-2	5	16	6.464
S-3	5	16	6.123
S-4	5	16	6.237
S-5	5	16	5.556
S-6	5	16	6.917
S-1	8 1/2	19	15.195
S-2	8 1/2	19	13.268
S-3	8 1/2	19	13.268
S-4	8 1/2	19	13.154
S-5	8 1/2	19	13.268
S-6	8 1/2	19	14.515
S-1	10	22	21.205
S-2	10	22	20.752
S-3	10	22	19.731
S-4	10	22	19.958
S-5	10	22	19.051
S-6	10	22	20.638
S-1	15	25	33.452
S-2	15	25	28.463
S-3	15	25	27.669
S-4	15	25	27.669
S-5	15	25	27.669
S-6	15	25	33.566
S-1	25	-	63.503
S-2	25	-	63.503
S-3	25	-	61.235
S-4	25	-	61.235
S-5	25	-	58.967
S-6	25	-	61.235
S-1	35	-	99.790
S-2	35	-	70.306
S-3	35	-	68.039
S-4	35	-	68.039
S-5	35	-	65.771
S-6	35	-	97.522
S-1	45	-	113.398
S-2	45	-	106.594
S-3	45	-	102.058
S-4	45	-	102.058
S-5	45	-	97.522
S-6	45	-	122.469



S-4 EYE & JAW



S-5 EYE & EYE



S-6 EYE & HOOK

吊貨鉤

Hoist Hooks

EYE HOOKS



Dimensions (mm)				S.W.L (Ton)	
Overall length	Overall Width	Throat Opening	Eye Width	Carbon 320	Alloy 320
110.0	73.2	22.4	19.1	3/4	1
125.5	81.0	24.6	23.1	1	1 1/2
141.0	91.9	25.4	28.7	1 1/2	2
162.3	103.9	28.4	31.8	2	3
200.4	125.5	34.5	39.6	3	4 1/2
256.3	165.1	38.1	50.8	5	7
316.0	192.0	44.5	62.0	7 1/2	11
354.1	220.7	48.5	72.1	10	15

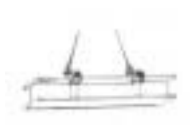
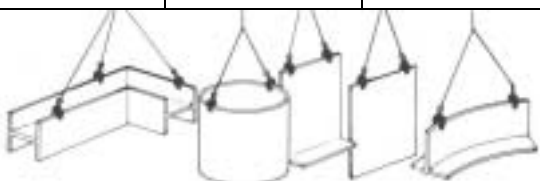
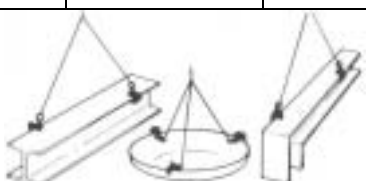
SWIVEL HOOKS



Dimensions (mm)				S.W.L (Ton)	
Overall length	Overall Width	Throat Opening	Swivel Width	Carbon 322	Alloy 322
141.2	73.2	22.4	31.8	3/4	1
168.1	81.0	24.6	38.1	1	1 1/2
193.5	91.9	25.4	44.5	1 1/2	2
206.2	103.9	28.4	44.5	2	3
243.6	125.5	26.9	50.8	3	4 1/2
315.2	165.1	38.1	63.5	5	7
368.3	192.0	44.5	69.9	7 1/2	11
403.4	220.7	48.5	79.2	10	15

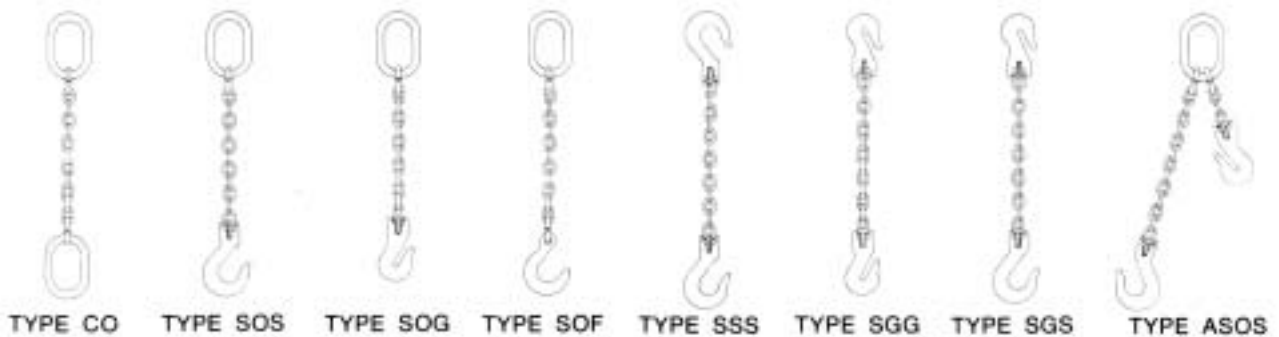
鋼板吊具

Clamps

	Vertical Lifting Clamps			Lateral Lifting Clamps		
Model						
Lifting Cap.	1~12 Ton	0.5~10 Ton		0.5~5 Ton	1~5 Ton	1~2 Ton
Jaw Opening	0 - 25~60 mm	0 - 20~50 mm	0 - 20~40 mm	0 - 20~40 mm	0 - 30~40 mm	0 - 25~30 mm
Clamping manner						
Applications						
	Scar-Free Clamps		Hook	Screw Clamps		
				For all-direction lifting	pulling	
Model						
Lifting Cap.	0.5~5 Ton	1~3 Ton	1~3 Ton	1~5 Ton	1 Ton	5 Ton
Jaw Opening	0 - 20~40 mm	5 - 25~35 mm	0 - 40~55 mm	0 - 25~40 mm	0 ~ 40 mm	0 ~ 80 mm
Clamping manner						
Applications						

鋼鏈吊鉤

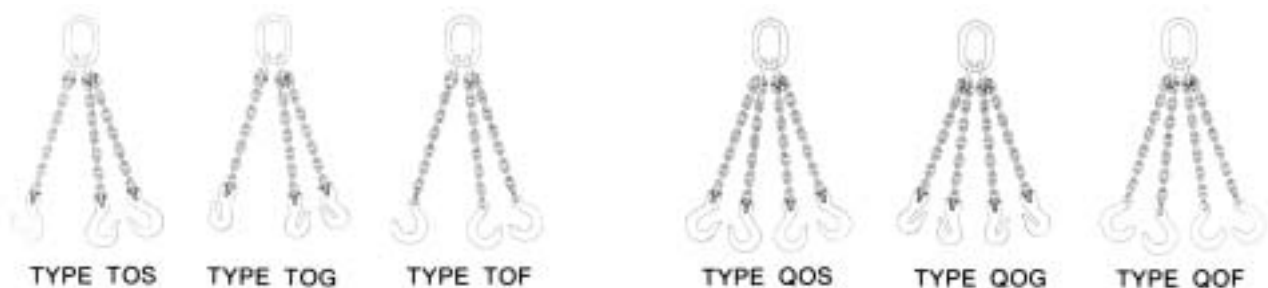
Chain Sling Configurations



Type	Description	Type	Description
CO	Single Chain Sling with Master Link each end	SSS	Single Chain Sling with Sling Hook each end
SOS	Single Chain Sling with Master Link and Sling Hook	SGG	Single Chain Sling with Grab Hook each end
SOG	Single Chain Sling with Master Link and Grab Hook	SGS	Single Chain Sling with Sling Hook and Grab Hook
SOF	Single Chain Sling with Master Link and Foundry Hook	ASOS	Adjustable Single Chain Sling with Master Link and Sling Hook



Type	Description
DOS	Double Chain Sling with Master Link and Sling Hook
DOG	Double Chain Sling with Master Link and Grab Hook
DOF	Double Chain Sling with Master Link and Foundry Hook
ADOS	Adjustable Double Chain Sling with Master Link and Sling Hook



Type	Description	Type	Description
TOS	Triple Chain Sling with Master Link and Sling Hook	QOS	Quadruple Chain Sling with Master Link and Sling Hook
TOG	Triple Chain Sling with Master Link and Grab Hook	QOG	Quadruple Chain Sling with Master Link and Grab Hook
TOF	Triple Chain Sling with Master Link and Foundry Hook	QOF	Quadruple Chain Sling with Master Link and Foundry Hook

吊鏈配件

Chain Sling Components



合金鋼鏈 (Alloy Chain)

規格(mm)	內長(mm)	外寬(mm)	重量(Kg/M)	荷重(Ton)
6	18.0	22.0	0.80	1.20
7	21.0	25.9	1.10	1.60
8	24.0	29.6	1.43	2.00
10	30.0	37.0	2.23	3.20
13	39.0	48.1	3.77	5.40
16	48.0	59.2	5.71	8.20
20	60.0	72.0	8.92	12.80
22	66.0	81.4	10.80	15.50
26	78.0	96.2	15.10	21.70



鋼圈 (Master Link)

規格(in.)	內長(mm)	外寬(mm)	重量(Kg)	荷重(Ton)
1/2	127.0	88.9	0.37	2.23
5/8	152.4	108.0	0.69	2.99
3/4	139.7	108.0	0.94	4.68
1	177.8	139.7	2.20	11.05
1 1/4	222.3	174.8	4.34	15.95
1 1/2	266.7	209.6	7.36	21.72
1 3/4	304.8	241.3	11.44	28.36
2	355.6	279.4	16.80	44.31



活動鏈接 (Lock-A-Loy Link)

規格(in.)	內長(mm)	外寬(mm)	重量(Kg)	荷重(Ton)
1/4	47.8	44.5	0.13	1.59
5/16	54.1	50.0	0.15	2.45
3/8	63.5	63.5	0.33	3.22
1/2	87.4	81.8	0.76	5.44
5/8	104.9	96.0	1.30	8.21
3/4	125.5	118.4	2.27	12.84
7/8	139.7	143.0	3.40	15.51
1	152.4	157.2	5.00	21.64

吊鏈配件

Chain Sling Components



眼型牛角卡鉤 (Eye Grab Hook)

規格(in.)	外長(mm)	外寬(mm)	重量(Kg)	荷重(Ton)
1/4	97.5	54.9	0.27	1.59
3/8	124.7	76.2	0.54	3.22
1/2	165.1	101.6	1.36	5.44
3/4	230.6	138.9	3.74	12.84
7/8	265.2	160.3	5.40	15.51



U型牛角卡鉤 (Clevis Grab Hook)

規格(in.)	外長(mm)	外寬(mm)	重量(Kg)	荷重(Ton)
1/4	106.4	54.9	0.28	1.59
3/8	135.6	76.2	0.57	3.22
1/2	180.8	101.6	1.56	5.44
5.8	212.9	117.9	2.56	8.21
3/4	253.2	138.9	4.72	12.84
7/8	293.6	160.3	6.18	15.51



眼型吊鉤 (Eye Sling Hook)

規格(in.)	外長(mm)	外寬(mm)	重量(Kg)	荷重(Ton)
1/4	127.0	88.1	0.37	1.59
3/8	165.9	115.6	0.95	3.22
1/2	200.2	139.7	1.68	5.44
5.8	235.7	165.1	2.90	8.21
3/4	273.1	186.9	4.45	12.84
7/8	309.1	215.4	6.99	15.51



U型吊鉤 (Clevis Sling Hook)

規格(in.)	外長(mm)	外寬(mm)	重量(Kg)	荷重(Ton)
1/4	134.9	88.1	0.43	1.59
3/8	177.0	115.6	0.98	3.22
1/2	215.1	139.7	1.97	5.44
5.8	252.5	165.1	3.38	8.21
3/4	293.6	186.9	5.19	12.84
7/8	333.2	215.4	8.01	15.51

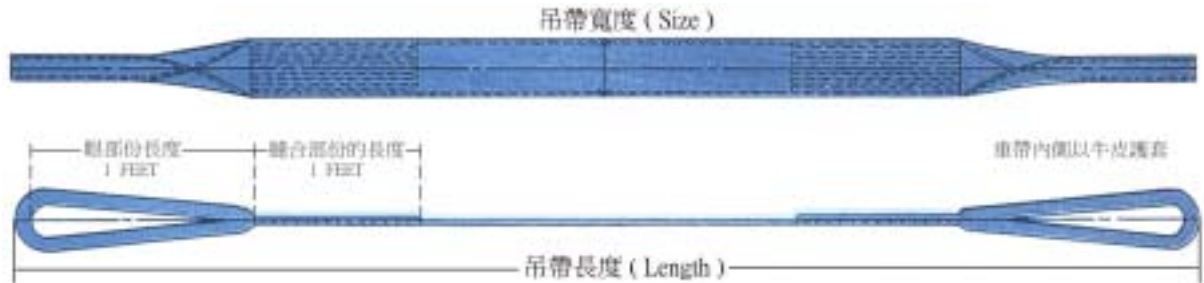


眼型寬尾鉤 (Eye Foundry Hook)

規格(in.)	外長(mm)	外寬(mm)	重量(Kg)	荷重(Ton)
1/4	163.8	120.7	1.09	1.59
3/8	200.2	146.1	2.04	3.22
1/2	238.0	171.5	3.22	5.44
5.8	278.6	198.4	5.53	8.21
3/4	325.4	231.9	8.75	12.84
7/8	360.7	255.5	11.93	15.51

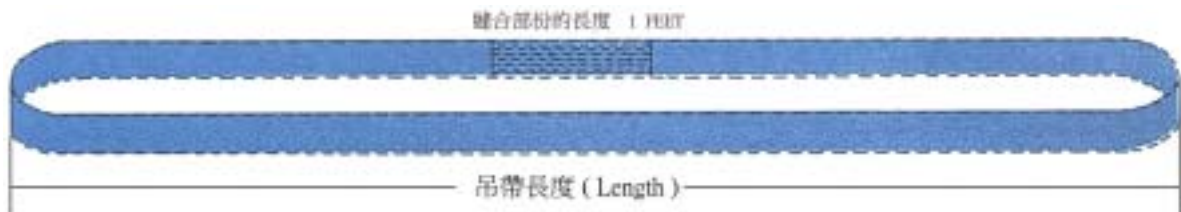
吊帶

Belt Slings



雙眼型吊帶 (Webbing Sling / Belt Type)

Size (mm)	Breaking Load	S.W.L.(Ton)	Length	Remark
25	5	1	1-10M	By every 0.5M
50	10	2	1-10M	By every 0.5M
75	15	3	1-10M	By every 0.5M
100	20	4	2-20M	By every 1M
150	30	6	2-20M	By every 1M
200	40	8	2-20M	By every 1M



銜接型吊帶 (Round Sling / Endless Type)

Size (mm)	Breaking Load	S.W.L.(Ton)	Length	Remark
25	10	2	1-10M	By every 0.5M
50	20	4	1-10M	By every 0.5M
75	30	6	1-10M	By every 0.5M
100	40	8	2-20M	By every 1M
150	60	12	2-20M	By every 1M
200	80	16	2-20M	By every 1M

請避免使用下列三種方式吊運，因其強度僅正常使用方式之 50 %



伸縮螺絲

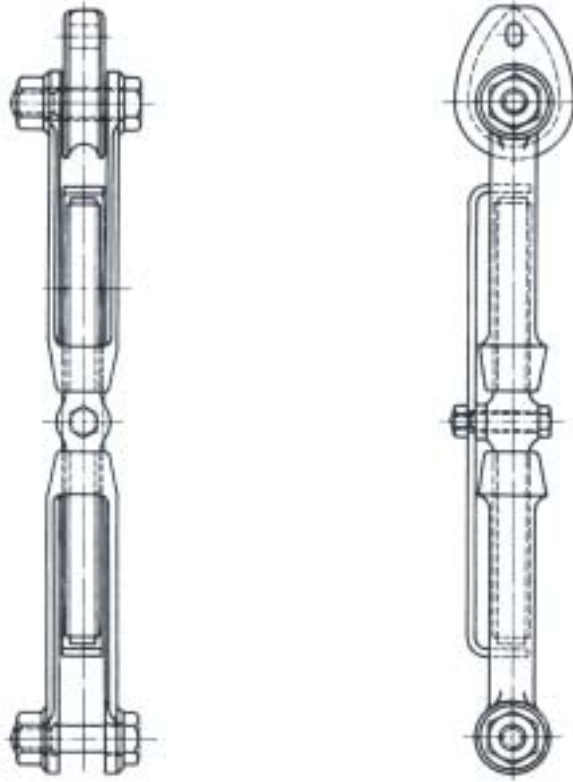
Turnbuckles



規格 (inch)			重量Weight (Kg)					安全荷重 (Ton)	
A	B	C	Hook&Hook	Hook&Eye	Eye&Eye	Jaw&Eye	Jaw&Jaw	Hook&Hook Hook & Eye	Eye & Eye Jaw & Eye Jaw & Jaw
1/4	4	8 1/4	0.136	0.136	0.136	0.136	0.181	0.4	0.5
5/16	4 1/2	9 9/16	0.227	0.227	0.227	0.159	0.263	0.7	0.8
3/8	6	11 7/8	0.340	0.340	0.340	0.372	0.422	1.0	1.2
1/2	6	13 5/16	0.680	0.680	0.680	0.735	0.762	1.5	2.2
1/2	9	16 5/16	0.794	0.794	0.794	0.826	0.839	1.5	2.2
1/2	12	19 5/16	0.989	0.989	0.989	0.993	0.998	1.5	2.2
5/8	6	15 1/2	1.19	1.19	1.19	1.24	1.28	2.25	3.5
5/8	9	18 1/2	1.36	1.36	1.36	1.37	1.47	2.25	3.5
5/8	12	21 1/2	1.47	1.47	1.47	1.59	1.70	2.25	3.5
3/4	6	17	1.71	1.71	1.71	1.93	2.12	3.0	5.2
3/4	9	20	2.04	2.04	2.04	2.27	2.44	3.0	5.2
3/4	12	23	2.61	2.61	2.61	2.69	2.78	3.0	5.2
3/4	18	29	3.18	3.18	3.18	3.29	3.40	3.0	5.2
7/8	12	24 5/8	3.80	3.80	3.80	4.03	4.25	4.0	7.2
7/8	18	30 5/8	4.65	4.65	4.65	4.81	5.19	4.0	7.2
1	12	26 5/8	5.10	5.10	5.10	5.44	5.84	5.0	10.0
1	18	32 5/8	6.35	6.35	6.35	6.69	7.30	5.0	10.0
1	24	38 5/8	7.71	7.71	7.71	8.05	8.44	5.0	10.0
1 1/4	12	29 7/8	8.62	8.62	8.62	9.62	10.70		15.2
1 1/4	18	35 7/8	10.93	10.93	10.93	11.79	12.07		15.2
1 1/4	24	41 7/8	11.34	11.34	11.34	13.02	14.15	-	15.2
1 1/2	12	32 3/8	12.25	12.25	12.25	14.11	16.10	-	21.4
1 1/2	18	38 3/8	14.15	14.15	14.15	16.51	18.46	-	21.4
1 1/2	24	44 3/8	17.33	17.33	17.33	20.05	21.59	-	21.4
1 3/4	18	41 3/4	20.41	20.41	20.41	22.14	23.77	-	28.0
1 3/4	24	47 3/4	26.31	26.31	26.31	27.22	29.03		28.0
2	24	51 3/4	40.82	40.82	40.82	46.27	52.16		37.0
2 1/2	24	58 1/2	81.65	81.65	81.65	81.65	90.72	-	60.0
2 3/4	24	61 1/2	83.01	83.01	83.01	97.07	112.49	-	75.0

艀裝鬆緊螺絲

Rigging Screws



Size (mm)	Dia.of Wire Rope (mm)	Wire Socket (Ton)	S.W.L (Ton)	Approx. Weight (Kg)
14	14	14	2.1	5.97
16	16	16	2.6	8.58
18	18	18	3.3	11.6
22	20 ~ 22.4	20 ~ 22	5.1	14.8
24	24	24	5.9	19.4
26	25	26	6.9	23.9
30	28 ~ 30	28 ~ 30	9.2	30.2
32	32	32	10.5	36.2
34	34	34	11.5	43.2
36	36	36	13.0	51.1
38	38	38	14.5	59.9
40	40	40	16.5	70.7
42	42.5	42	18.5	93.5
45	45	45	21.0	105
48	47.5	48	23.0	117
50	50	50	25.5	124

艙蓋配件

Hatch Cover Parts



艙蓋螺絲 Quick Acting Cleat Assembly	
Rod Dia.	Rod Length
22 mm	180 mm
	315 mm
	405 mm
33mm	285 mm
	380 mm
	440 mm



 Rod	 Head	 Convex Washer	 Snug
	 Hinge Pin	 Rubber Washer	 Crutch
	 Nyloc Nut	 Steel Washer	 Strap



橫接楔栓
Cross Joint Wedge Assembly

 Saddle	 Wedge	 Leaf Spring	 Taper Pin
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船用配件

Ship & Deck Fitting

固定環 Eye Plates



Type <D>



Type <E>



Type <F>

捆綁配件 Lashing Assembly



D-Ring



Lashing Single Eye



Lashing Link

平衡轉子 Hatch Balancing Roller



Roller



Single Link Plate



Double Link Plate

各式插梢 Various Types of Pins



船用配件

Ship & Deck Fitting



轉環吊貨鉤
Cargo Hook with Swivel Eye



導纜接圈
Mandal Fairlead Shackle



桅桿 D 型卸克
Cargo Topping Bracket for Ship Derrick



浮筒卸克
Buoy Shackle



導引繩輪
Fairlead Roller



纜繩孔樁
Panama Bow

船用滑車

Ship's Steel Plate Cargo Blocks

Single Sheave



Type	Dia.of Rope (mm)	S.W.L (Ton)	Proof Load (Ton)	Shackle
JIS-340-1AR	20	3.5	14	SB34 / BB34
JIS-340-1BR			21	SB42 / BB42
JIS-430-1AR	25	5.5	22	
JIS-430-1BR			33	SB55 / BB55
JIS-480-1AR	28	7	28	SB48 / BB48
JIS-480-1BR			42	SB60 / BB60
HD-410-1AR	24	5	20	SB40 / BB40
HD-410-1BR			30	SB50 / BB50
HD-460-1AR	26	6.5	26	SB46 / BB46
HD-460-1BR			39	SB60 / BB60

Double Sheave



Type	Dia.of Rope (mm)	S.W.L (Ton)	Proof Load (Ton)	Shackle
JIS-340-2AR	20	13	26	SB46 / BB46
JIS-340-2BR		16	32	SB55 / BB55
JIS-430-2AR	25	21	41	SB60 / BB60
JIS-430-2BR		25	45	SB65 / BB65
JIS-480-2AR	28	28	48	SB70 / BB70
JIS-480-2BR		34	54	SB75 / BB75
HD-410-2AR	24	19	38	SB55 / BB55
HD-410-2BR		23	43	SB60 / BB60
HD-460-2AR	26	24	44	SB65 / BB65
HD-460-2BR		29	49	SB70 / BB70

Triple Sheave



Type	Dia.of Rope (mm)	S.W.L (Ton)	Proof Load (Ton)	Shackle
JIS-410-3AR	24	29	49	SB70 / BB70
JIS-410-3BR		33	53	SB75 / BB75
JIS-430-3AR	25	32	52	
JIS-430-3BR		36	56	SB80 / BB80
JIS-460-3AR	26	34	54	SB75 / BB75
JIS-460-3BR		38	58	SB80 / BB80
HD-480-3AR	28	39	59	
HD-480-3BR		45	67.5	SB85 / BB85

船用滑車

Ship's Cast Steel Cargo Blocks

Single Sheave



Type	Dia.of Rope (mm)	S.W.L (Ton)	Proof Load (Ton)	Shackle
JIS-340-1RA	20	3.5	14	SB34 / BB34
JIS-340-1RB			21	SB42 / BB42
JIS-410-1RA	24	5	20	SB40 / BB40
JIS-410-1RB			30	SB50 / BB50
JIS-430-1RA	25	5.5	22	SB42 / BB42
JIS-430-1RB			33	SB55 / BB55
HD-460-1RA	26	6.5	26	SB46 / BB46
HD-460-1RB			39	SB60 / BB60
HD-480-1RA	28	7	28	SB48 / BB48
HD-480-1RB			42	SB65 / BB65

Double Sheave



Type	Dia.of Rope (mm)	S.W.L (Ton)	Proof Load (Ton)	Shackle
JIS-340-2RA	20	13	26	SB46 / BB46
JIS-340-2RB		16	32	SB55 / BB55
JIS-410-2RA	24	19	38	
JIS-410-2RB		23	43	SB60 / BB60
JIS-430-2RA	25	21	41	
JIS-430-2RB		25	45	SB65 / BB65
HD-460-2RA	26	24	44	SB70 / BB70
HD-460-2RB		29	49	SB75 / BB75
HD-480-2RA	28	28	48	
HD-480-2RB		34	54	

開口滑車

Snatch Blocks



單輪 S型開口滑車 (Single Sheave Steel Snatch Block)

規格 (inch)	鋼索直徑 (mm)	總長 (mm)		總寬 (mm)	安全荷重 (Ton)
		鉤型	眼型		
2"	6	210	185	57	0.25
3"	8	265	263	87	0.5
4"	10	330	310	112	1
5"	13	400	376	140	1.5
6"	16	458	402	168	2
7"	19	490	450	190	3
8"	22	540	500	205	4
10"	25	690	650	270	5



雙輪 S型開口滑車 (Double Sheave Steel Snatch Block)

規格 (inch)	鋼索直徑 (mm)	總長 (mm)		總寬 (mm)	安全荷重 (Ton)
		鉤型	眼型		
2"	6	210	185	57	0.25
3"	8	265	263	87	0.5
4"	10	330	310	112	1
5"	13	400	376	140	1.5
6"	16	458	402	168	2
7"	19	530	490	190	3
8"	22	615	575	205	4
10"	25	770	730	270	5



烏魚滑車 (Lashing Snatch Block)

規格 (inch)	鋼索直徑 (mm)	總長 (mm)	總寬 (mm)	安全荷重 (Ton)
5"	12, 14, 16	360	135	3
6"	18, 20, 22	410	160	5

鏈條起重機

Chain Hoist



手拉吊車 (Chain Hoist)

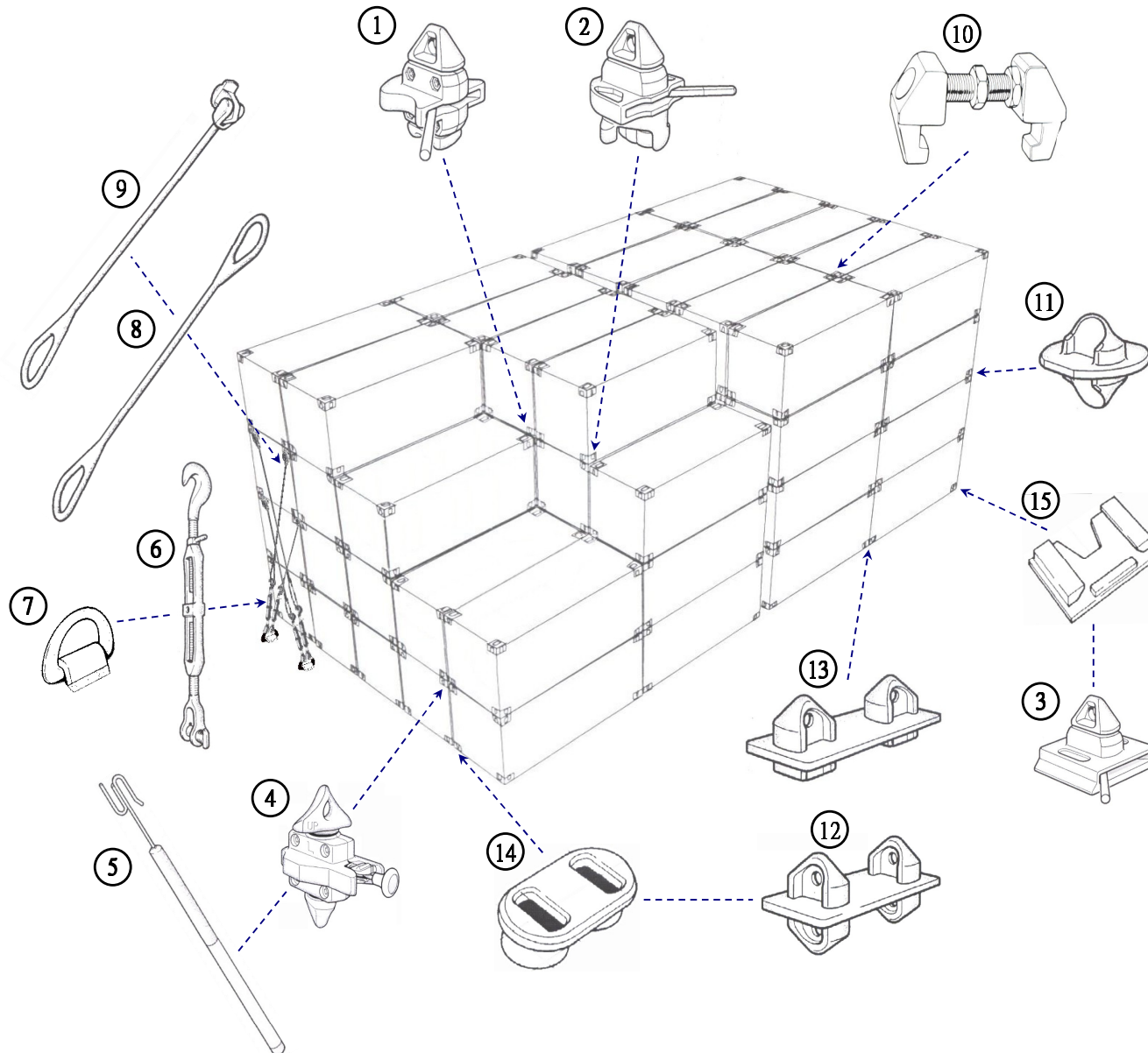
規格 (Ton)	揚程 (Meter)	鏈條直徑 (mm)	吊鏈 串數
1/2	2.5M, 5M, 7M	6.3	1
1	2.5M, 5M, 7M	6.3	1
1 1/2	2.5M, 5M, 7M	7.1	1
2	3M, 5M, 7M	8.0	1
3	3M, 5M, 7M	7.1	2
5	3M, 5M, 7M	9.0	2
10	3.5M, 5M, 7M	9.0	4

手搖吊車 (Chain Hand-Lever Hoist)

規格 (Ton)	揚程 (Meter)	鏈條直徑 (mm)	吊鏈 串數
3/4	1.5M, 3M	6.3	1
1	1.5M, 3M	6.3	1
1 1/2	1.5M, 3M	7.1	1
3	1.5M, 3M	9.0	2
6	1.5M, 3M	9.0	2

LASHING SYSTEM

貨櫃配件



- ① Twistlock - Intermediate Type
- ② Twistlock - Combined Fixed Base
- ③ Twistlock - Bottom Type
- ④ Twistlock - Dual Function
- ⑤ Actuator Pole
- ⑥ Turnbuckle with Jaw and Hook
- ⑦ D-Ring
- ⑧ Lashing Rod - Single Rod
- ⑨ Lashing Rod - Hinge Rod
- ⑩ Bridge Fitting
- ⑪ Single Stacker
- ⑫ Double Stacker (Transversal)
- ⑬ Double Stacker (Longitudinal) - Bottom
- ⑭ Flush ISO Socket
- ⑮ U-frame Socket

扭鎖

Twistlocks

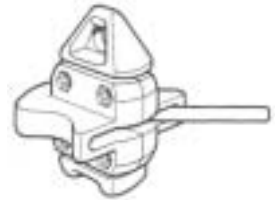


TL-01-RL

Twistlocks - Intermediate Type

Item	Breaking Load (Ton)		Weight (Kg)
	Tension	Shear	
TL-01-RL	50	40	5.8
TL-01-LL	50	40	5.8

RL : Right Hand Locking LL : Light Hand Locking



TL-01-LL



TL-02-RL

Combined Fixed Base Twistlocks

Item	Breaking Load (Ton)		Weight (Kg)
	Tension	Shear	
TL-02-RL	50	40	5.8
TL-02-LL	50	40	5.8

RL : Right Hand Locking LL : Light Hand Locking



TL-02-LL



TL-03-RL

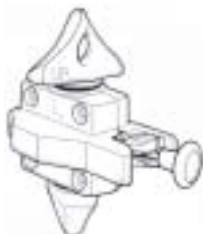
Bottom Twistlocks

Item	Breaking Load (Ton)		Weight (Kg)
	Tension	Shear	
TL-03-RL	50	40	5.8
TL-03-LL	50	40	5.8

RL : Right Hand Locking LL : Light Hand Locking



TL-03-LL



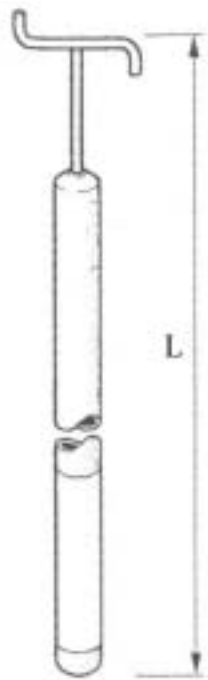
TL-04-DF

Dual Function Twistlocks

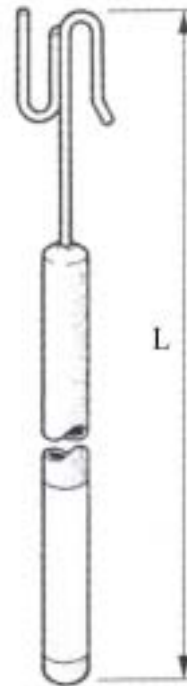
Item	Breaking Load (Ton)		S.W.L (Ton)	Weight (Kg)
	Tension	Shear	Compression	
TL-04-DF	50	40	100	6.8

作動桿

Actuator Poles



AP-01



AP-02

Actuator Pole for Twistlock TL-01 & 02

Item	Length (M)	Weight (Kg)
AP-01-1.8	1.8	1.4
AP-01-5.1	5.1	2.9
AP-01-7.7	7.7	4.3
AP-01-10.3	10.3	5.6

Material : Pole head (Stainless Steel)
 Pipe (Age-hardened Aluminium)
 Finish : Painted with antislip-primer

Actuator Pole for Twistlock TL-04

Item	Length (M)	Weight (Kg)
AP-02-1.8	1.8	1.4
AP-02-5.1	5.1	2.9
AP-02-7.7	7.7	4.3
AP-02-10.3	10.3	5.6

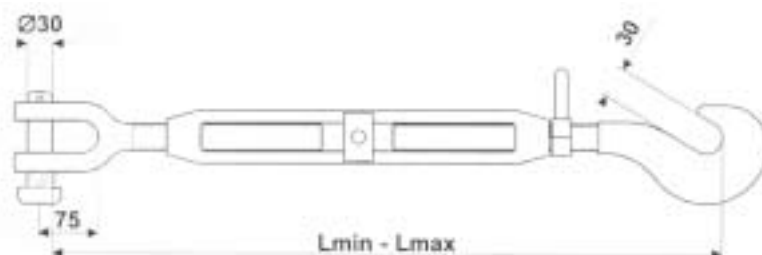
Material : Pole head (Stainless Steel)
 Pipe (Age-hardened Aluminium)
 Finish : Hot dip galvanized

鬆緊螺絲

Turnbuckles



TB-01



Turnbuckle with jaw and hook

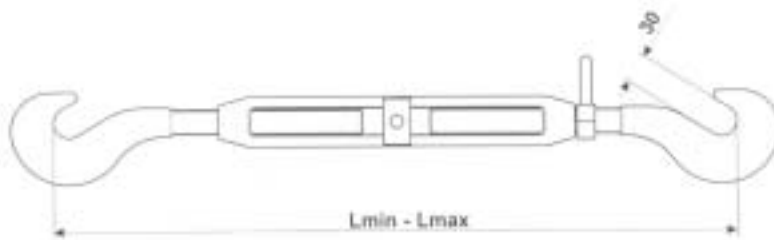
Item No.	Breaking Load Ton	Weight Kg	L min ~ L max mm
TB-01-A	36	11.9	845 ~ 1155
TB-01-B	36	13.5	940 ~ 1410
TB-01-C	50	14.0	940 ~ 1410
TB-01-D	50	16.1	1050 ~ 1660

Material : High tensile steel - drop forged

Finish : Hot dip galvanized



TB-02



Turnbuckle with hook both ends

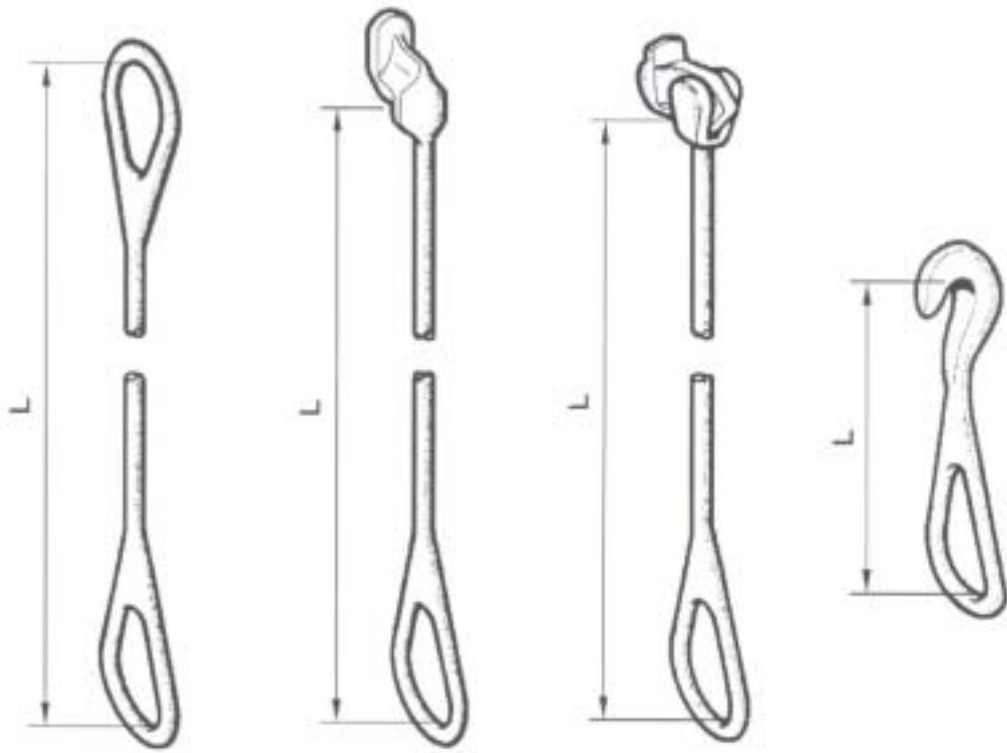
Item No.	Breaking Load Ton	Weight Kg	L min ~ L max mm
TB-02-A	36	11.9	875 ~ 1185
TB-02-B	36	13.2	970 ~ 1440
TB-02-C	50	14.0	970 ~ 1440
TB-02-D	50	16.3	1080 ~ 1690

Material : High tensile steel - drop forged

Finish : Hot dip galvanized

捆綁桿

Lashing Rods



LR-01
Single Rod

LR-02
Cross Rod

LR-03
Hinge Rod

ER-01
Extension Rod

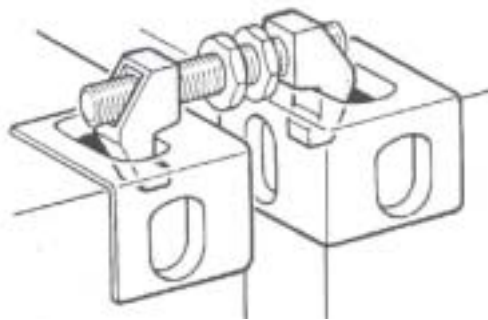
Item No.	Rod Dia. mm	Breaking Load Ton	Weight (Kg)	
			L = 2400 mm	L = 4700 mm
LR-01-A	22	36	8.1	15.0
LR-01-B	25	50	10.5	19.6
LR-02-A	22	36	8.9	15.8
LR-02-B	25	50	11.0	20.1
LR-03-A	22	36	10.3	17.1
LR-03-B	25	50	12.1	21.3
ER-01	25	50	4.0 (L = 310 mm)	

Material : High tensile steel - drop forged

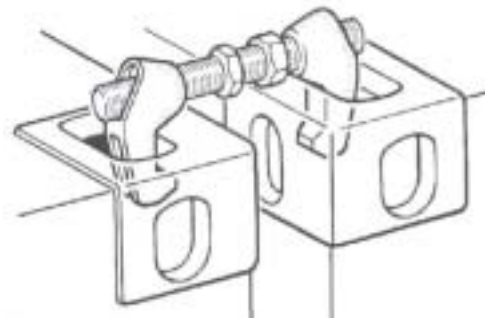
Finish : Hot dip galvanized

橋架

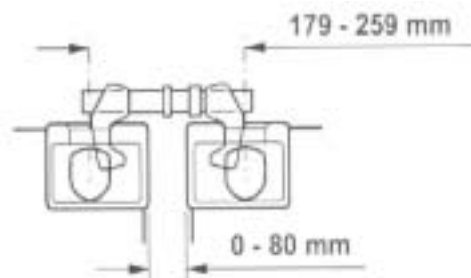
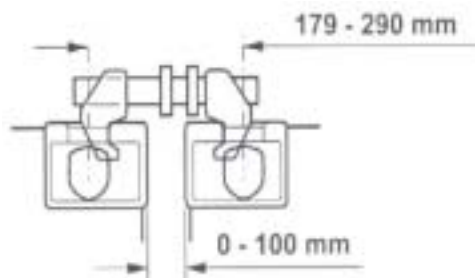
Bridge Fittings



BF-01



BF-02



Item	Adjustable Range	Container Distance	Breaking Load	Weight
No.	mm	mm	Ton	Kg
BF-01	179 ~ 290	0 ~ 80	10.0	4.6
BF-02	179 ~ 259	0 ~ 100	7.0	3.5

Material : Hooks drop forged

Finish : Hot dip galvanized

堆積足

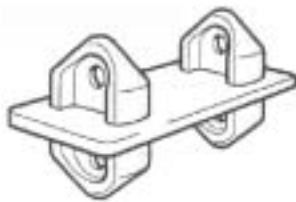
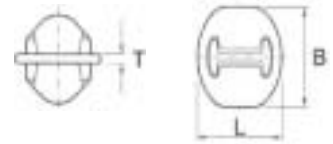
Stackers



SS-01-A
Single



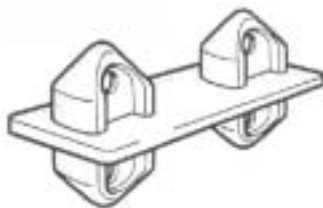
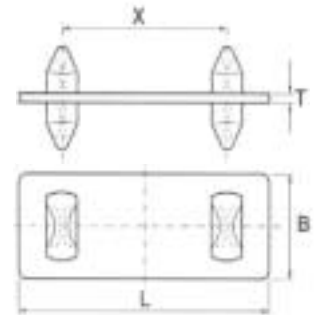
SS-01-B
Bottom



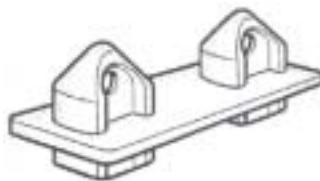
DS-01-A
Double Stacker
(Transversal)



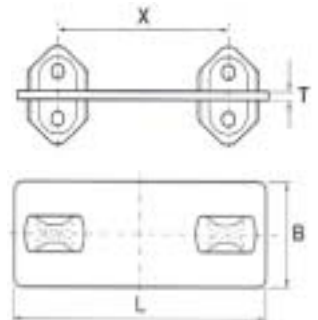
DS-01-B
Bottom Type
(Transversal)



DS-01-A
Double Stacker
(Longitudinal)



DS-01-B
Bottom Type
(Longitudinal)

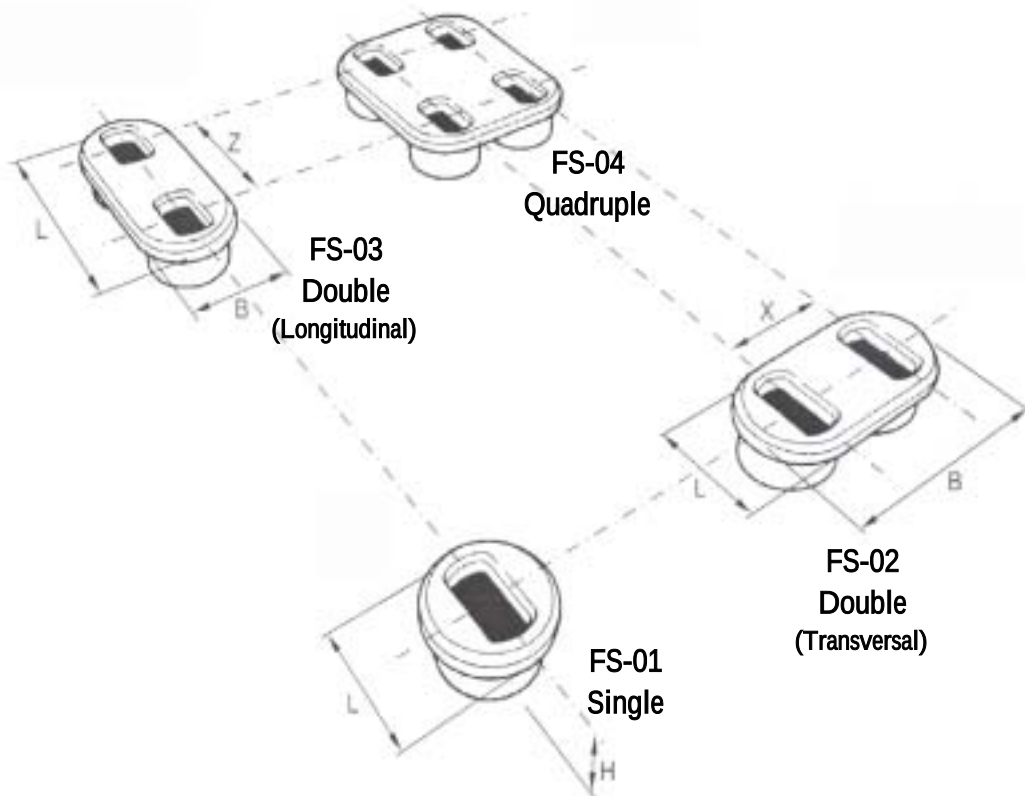


Item	Dimensions (mm)				Breaking Load (Ton)		Weight
No.	X	L	B	T	Tension	Shear	Kg
SS-01-A	--	130	130	12	--	42	2.8
SS-01-B	--	130	130	12	--	42	2.6
DS-01-A1	203	333	130	12	36	42	7.6
DS-01-A2	258	338	130	12	36	42	8.3
DS-01-B1	203	333	130	12	36	42	6.6
DS-01-B2	258	338	130	12	36	42	7.3
DS-02-A	279	409	130	12	36	42	8.5
DS-02-B	279	409	130	12	36	42	7.6

基座

Sockets

Flush ISO Sockets

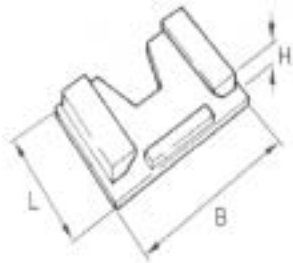


Item	Dimensions (mm)					Breaking Load (Ton)		Weight
No.	X	Z	L	B	H	Tension	Shear	Kg
FS-01	--	--	190		95	50	42	9.1
FS-02-A	203	--	190	393	95	50	42	20.2
FS-02-B	258	--	190	448	95	50	42	22.7
FS-03	--	279	469	190	95	50	42	23.6
FS-04-A	203	279	469	393	95	50	42	51.2
FS-04-B	258	279	469	448	95	50	42	57.1

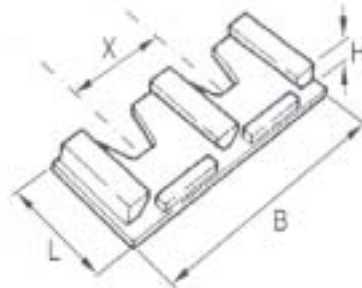
基座

Sockets

U-frame Sockets



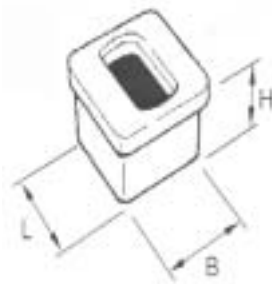
US-01
Single



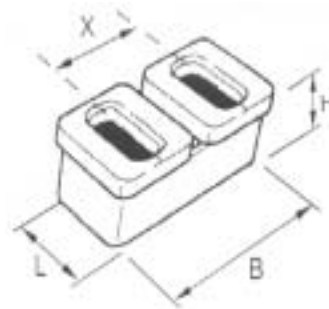
US-02
Double

Item	Dimensions (mm)				Breaking Load (Ton)		Weight
No.	X	L	B	H	Tension	Shear	Kg
US-01	--	170	260	40	40	42	6.2
US-02-A	203	170	463	40	40	42	10.2
US-02-B	258	170	518	40	40	42	13.1

Raised ISO Sockets



RS-01
Single



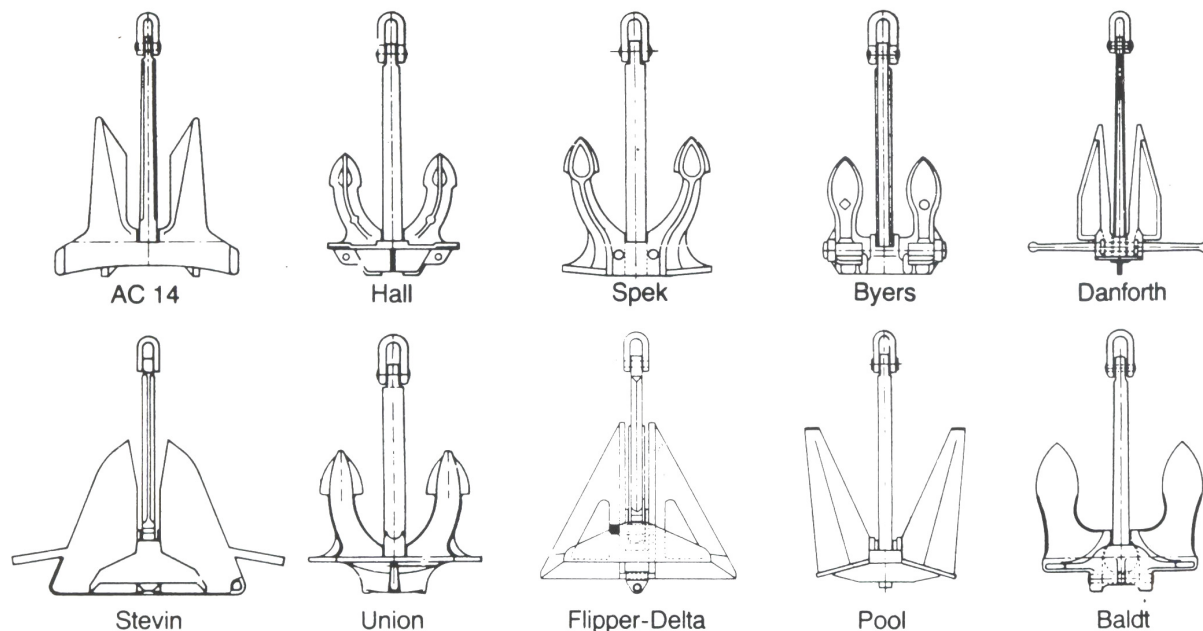
RS-02
Double

Item	Dimensions (mm)				Breaking Load (Ton)		Weight
No.	X	L	B	H	Tension	Shear	Kg
RS-01	--	160	160	110	50	42	8.2
RS-02-A	203	160	363	110	50	42	15.9
RS-02-B	258	160	418	110	50	42	16.7

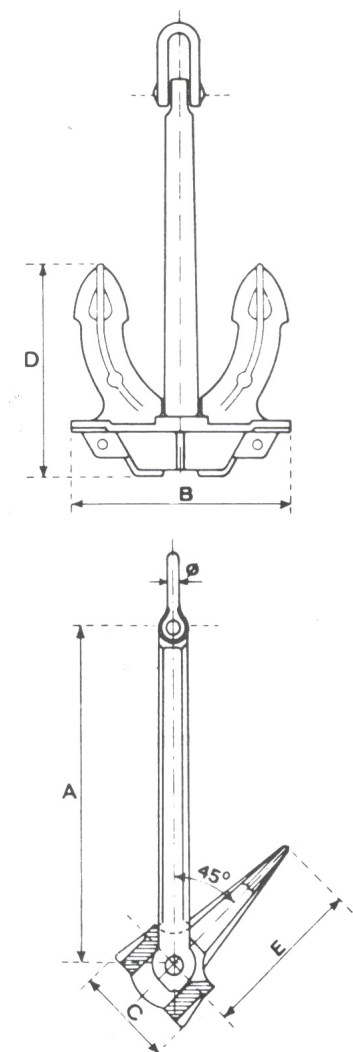
船錨設備

Equipment for Mooring and Anchoring

Various Types Anchors



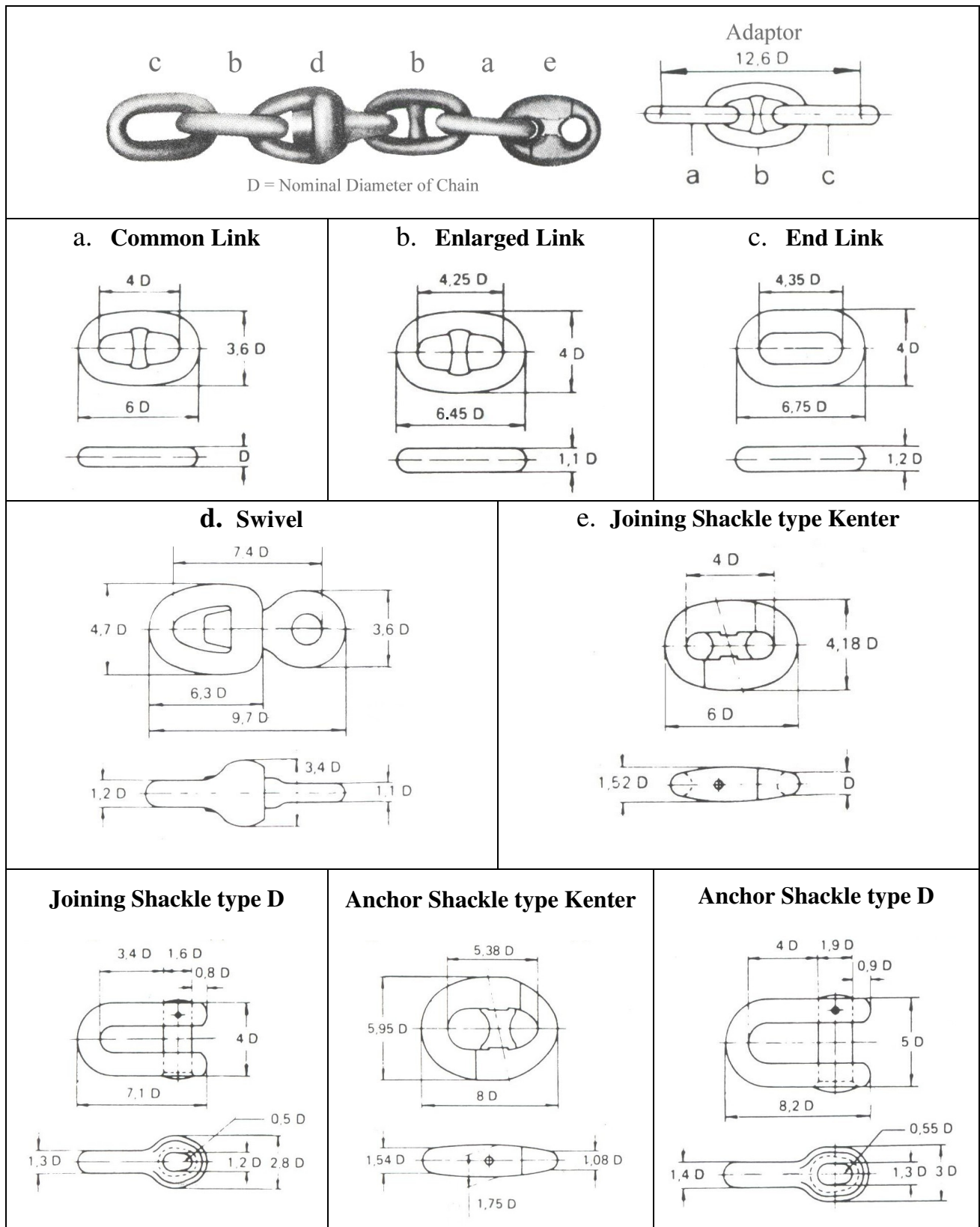
HALL ANCHOR



Ø	Dimension in mm					Weight
	A	B	C	D	E	Kg
20	723	510	230	474	375	100
25	915	645	290	594	470	200
30	1050	738	330	685	543	300
35	1200	845	373	784	620	450
40	1280	904	400	837	660	570
45	1390	980	430	907	715	700
50	1480	1050	460	968	765	850
55	1545	1090	496	1005	800	1020
60	1670	1180	535	1089	865	1290
65	1800	1245	555	1147	895	1440
70	1930	1362	616	1262	999	1920
75	2120	1483	667	1367	1076	2460
80	2261	1596	720	1480	1172	3060
90	2466	1740	712	1613	1278	4050
100	2923	2011	804	1746	1413	4890
110	3270	2033	829	1878	1525	6000
120	3072	2150	950	1982	1536	7350
130	3253	2270	1005	2097	1626	8700
140	3330	2360	1045	2175	1686	9900
150	3565	2495	1105	2295	1780	11700

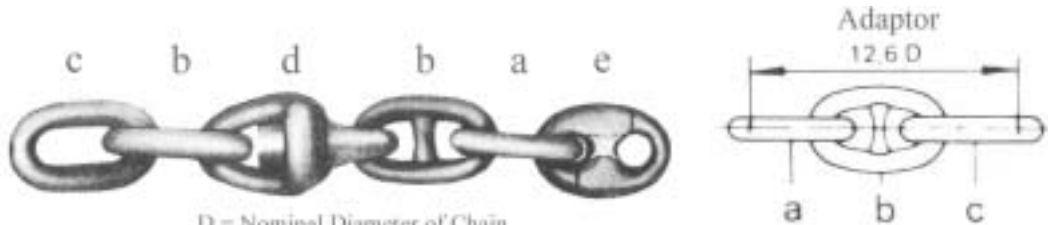
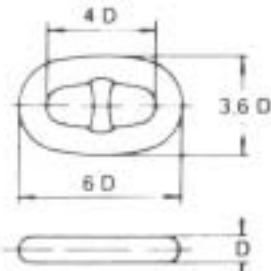
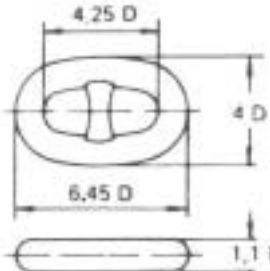
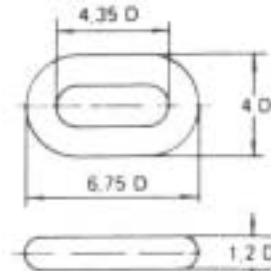
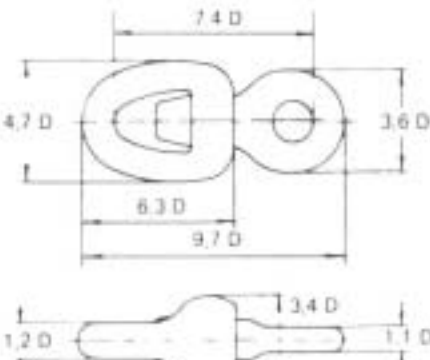
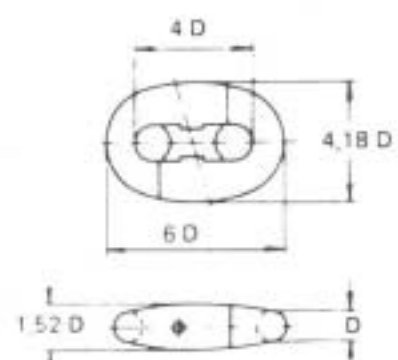
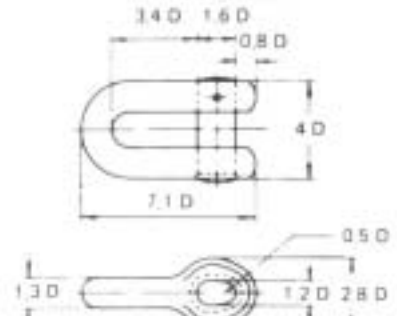
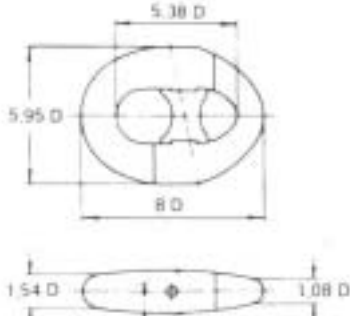
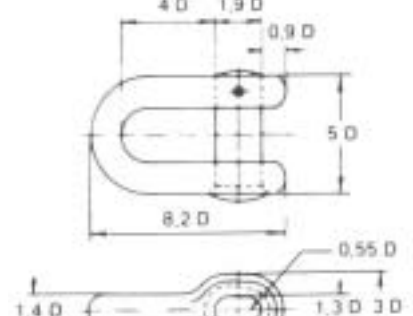
船錨轉環配件

Details of Studlink Anchor Chain



船錨轉環配件

Details of Studlink Anchor Chain

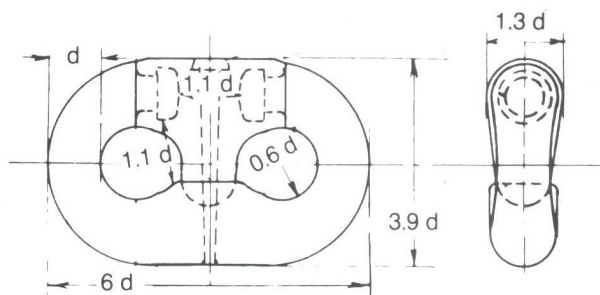
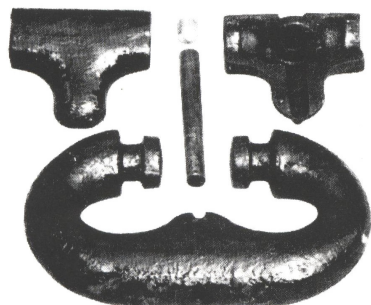
 D = Nominal Diameter of Chain		
a. Common Link 	b. Enlarged Link 	c. End Link 
d. Swivel 		e. Joining Shackle type Kenter 
Joining Shackle type D 	Anchor Shackle type Kenter 	Anchor Shackle type D 

船錨設備

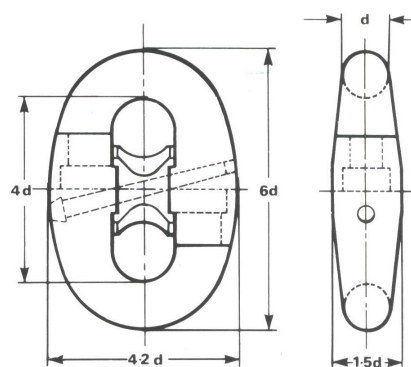
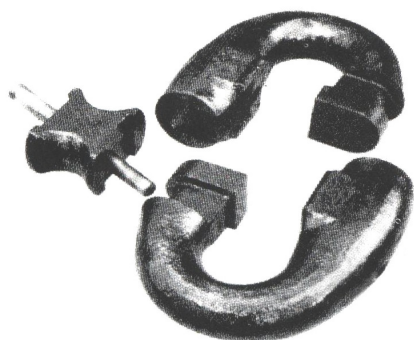
Equipment for Mooring and Anchoring

LUGLESS JOINING SHACKLES

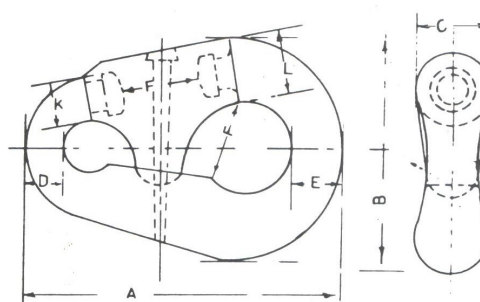
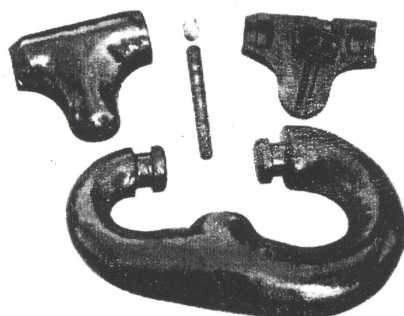
BALDT SHACKLE



KENTER SHACKLE



PEAR END SHACKLE



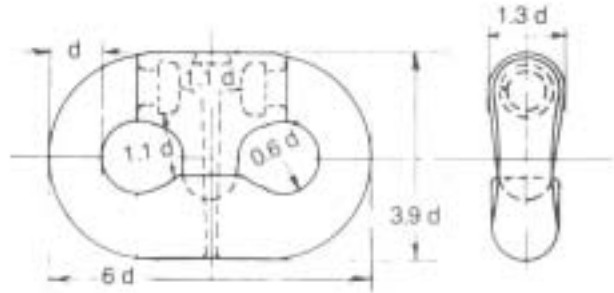
No.	For Dia. of Chain	A	B	C	D	E	F	K	L
2	19-24	194	132	40	24	32	52	24	35
3	26-30	238	167	46	30	38	65	32	46
4	32-40	298	206	59	40	48	79	39 x 44	57
5	50-52	381	251	76	51	64	100	52 x 64	76
6	52-60	454	313	92	60	76	121	62 x 73	89
7	62-76	559	376	117	76	95	143	79	111
8	78-92	651	406	140	92	124	152	111 x 122	130
9	90-95	692	435	146	98	130	159	124 x 137	141
10	97-102	889	527	190	120	165	190	121 x 148	181
11	103-111	940	610	203	127	172	203	147 x 155	194
12	108-114	990	648	216	133	184	216	165 x 172	203

船錨設備

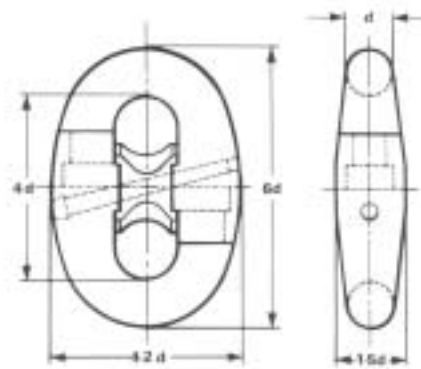
Equipment for Mooring and Anchoring

LUGLESS JOINING SHACKLES

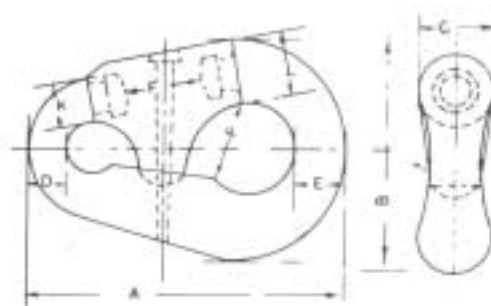
BALDT SHACKLE



KENTER SHACKLE



PEAR END SHACKLE



No.	Per Dia. of Chain	A	B	C	D	E	F	K	L
2	19-24	194	132	40	24	32	52	24	35
3	26-30	238	167	46	30	38	65	32	46
4	32-40	298	206	59	40	48	79	39 x 44	57
5	50-52	381	251	76	51	64	100	52 x 64	76
6	52-60	454	313	92	60	76	121	62 x 73	89
7	62-76	559	376	117	76	95	143	79	111
8	78-92	651	406	140	92	124	152	111 x 122	130
9	90-95	692	435	146	98	130	159	124 x 137	141
10	97-102	889	527	190	120	165	190	121 x 148	181
11	103-111	940	610	203	127	172	203	147 x 155	194
12	108-114	990	648	216	133	184	216	165 x 172	203

錨鏈

Anchor Chain



鏈徑 Chain Dia.	拉力 Proof Load (Ton)				破斷荷重 Breaking Load (Ton)				單位重量
	M1級	M2級	M3級	石油 平合鏈	M1級	M2級	M3級	石油 平合鏈	Approximate Weight
mm	Grade M1	Grade M2	Grade M3	Oil Platform	Grade M1	Grade M2	Grade M3	Oil Platform	Kg/M
19	10.7	15.3	21.5		15.3	21.5	30.7		8.25
20.5	12.5	17.8	24.9		17.8	24.9	35.6		9.60
22	14.3	20.4	28.6		20.4	28.6	40.9		11.07
24	17.0	24.2	33.9		24.2	33.9	48.5		13.1
26	19.8	28.3	39.7		28.3	39.7	56.7		15.4
28	22.9	32.7	45.8		32.7	45.8	65.5		17.9
30	26.2	37.5	52.4		37.5	52.4	74.9		20.6
32	29.7	42.5	59.4		42.5	59.4	84.9		23.4
34	33.4	47.7	66.8		47.7	66.8	95.5		26.4
36	37.3	53.3	74.6		53.3	74.6	107		29.6
38	41.4	59.2	82.8		59.2	82.8	118		33.0
40	45.7	65.3	91.4		65.3	91.4	131		36.6
42		71.7	100			100	143		40.3
44		78.4	110			110	157		44.3
46		85.3	119			119	171		48.4
48		92.6	130			130	185		52.7
50		100	140	143		140	200	215	57.2
52		108	151	154		151	215	232	61.8
54		116	162	165		162	231	249	66.7
56		124	174	177		174	248	267	71.7
58		132	185	189		185	265	285	77.0
60		141	198	201		198	282	304	82.3
62		150	210	214		210	300	323	88.0
64		159	223	227		223	319	343	93.7
66		169	236	241		236	337	363	99.6
68		178	250	255		250	357	383	105.7
70		188	263	269		263	376	405	112.0
73		203	285	290		285	407	438	121.9
76		219	307	313		307	438	471	132.0
78		230	322	328		322	459	494	139.0
81		246	345	352		345	492	529	150.0

纜繩

Mooring Rope



纜繩

Mooring Rope

尼龍繩 (Nylon)、P.P 繩 (Polypropylene)

Size		NYLON		POLYPROPYLENE MONOFILAMENT				POLYPROPYLENE MULTIFILAMENT	
				REGULAR-TYPE		DANLINE-TYPE			
		Weight	Breaking	Weight	Breaking	Weight	Breaking	Weight	Breaking
mm	inch	Kg/200M	Ton	Kg/200M	Ton	Kg/200M	Ton	Kg/200M	Ton
3	1/8	1.10	0.19	0.90	0.10	0.90	0.14	0.90	0.10
4	5/32	1.97	0.33	1.58	0.18	1.50	0.22	1.58	0.21
5	3/16	3.08	0.50	2.48	0.27	2.36	0.35	2.48	0.31
6	1/4	4.43	0.71	3.56	0.38	3.40	0.50	3.56	0.44
7	9/32	6.03	0.94	4.85	0.51	4.65	0.65	4.85	0.58
8	5/16	7.86	1.21	6.34	0.65	6.10	0.85	6.34	0.75
9	3/8	9.94	1.51	8.02	0.81	7.80	1.06	8.02	0.93
10	13/32	12.3	1.85	9.90	0.99	9.60	1.29	9.90	1.13
12	15/32	17.7	2.80	14.3	1.44	13.8	1.80	14.4	1.66
13	1/2	20.8	3.29	16.51	1.69	16.5	2.10	17.0	1.95
14	9/16	24.0	3.73	19.0	1.92	18.4	2.40	19.4	2.21
16	5/8	31.3	4.78	25.0	2.47	24.0	3.00	25.1	2.83
18	23/32	39.7	5.94	31.5	3.07	30.5	3.80	32.0	3.52
19	3/4	44.2	6.62	35.1	3.42	34.0	4.10	35.65	3.92
20	13/16	48.9	7.23	39.0	3.73	37.6	4.50	39.5	4.29
22	7/8	59.2	8.63	47.5	4.46	45.6	5.60	48.0	5.12
24	15/16	70.4	10.2	56.5	5.24	54.0	6.50	56.7	6.02
25	1	76.4	11.1	61.3	5.69	59.0	7.00	61.5	6.53
26	1 1/32	82.6	11.8	66.0	6.08	64.0	7.50	67.2	6.98
28	1 1/8	95.8	13.5	77.0	6.98	74.0	8.50	77.3	8.02
30	1 3/16	109	15.4	87.5	7.94	85.0	9.90	88.5	9.11
32	1 1/4	125	17.3	100	8.95	96.0	11.0	101	10.3
34	1 11/32	141	19.4	113	10.0	109	12.4	114	11.5
36	1 7/16	158	21.6	126	11.1	122	13.7	128	12.8
38	1 1/2	176	23.9	141	12.3	136	15.1	143	14.1
40	1 19/32	195	26.3	156	13.6	150	16.7	158	15.6
42	1 21/32	215	28.7	171	14.8	166	18.5	175	17.0
44	1 3/4	236	31.5	188	16.2	182	20.0	192	18.7
45	1 25/32	246	32.7	196	16.9	190	20.7	200	19.4
50	2	304	39.8	243	20.5	235	25.5	248	23.6
55	2 5/32	368	47.5	293	24.5	284	30.0	299	28.1
60	2 3/8	438	55.8	349	28.8	338	35.5	356	33.1
65	2 9/16	513	64.8	410	33.4	397	41.0	418	38.4
70	2 3/4	596	74.3	476	38.4	460	47.0	485	44.1
75	2 31/32	683	84.5	546	43.6	526	53.5	557	50.1
80	3 5/32	777	95.3	621	49.2	596	60.5	634	56.5
85	3 5/8	874	107	701	55.1	670	68.0	715	63.2
90	3 9/16	980	119	786	61.3	750	75.0	802	70.3
95	3 3/4	1092	131	875	67.7	835	83.0	893	77.8
100	3 15/16	1210	144	970	74.5	930	91.5	990	85.5

纜繩

Mooring Rope

馬尼拉繩 (Manila)、各類化纖纜繩 (Polyethylene、Polyester、Kuralon)

Size		MANILA		POLYETHYLENE		POLYESTER		KURALON	
		Weight	Breaking	Weight	Breaking	Weight	Breaking	Weight	Breaking
mm	inch	Kg/200M	Ton	Kg/200M	Ton	Kg/200M	Ton	Kg/200M	Ton
3	1/8	1.32	0.07	0.91	0.10	1.39	0.17	1.13	0.08
4	5/32	2.35	0.13	1.66	0.18	2.46	0.29	2.01	0.15
5	3/16	3.50	0.20	2.60	0.27	3.85	0.45	3.13	0.23
6	1/4	5.28	0.28	3.71	0.38	5.50	0.62	4.50	0.33
7	9/32	7.19	0.38	5.03	0.51	7.50	0.82	6.18	0.43
8	5/16	9.40	0.47	6.60	0.65	9.80	1.05	7.96	0.56
9	3/8	11.89	0.59	8.34	0.81	12.5	1.31	10.0	0.70
10	13/32	14.68	0.72	10.3	0.99	15.4	1.59	12.4	0.95
12	15/32	21.14	1.01	14.8	1.42	22.2	2.24	17.8	1.37
13	1/2	24.81	1.19	17.6	1.67	26.1	2.61	20.9	1.61
14	9/16	28.77	1.34	20.1	1.90	30.2	2.98	24.2	1.83
16	5/8	37.58	1.72	26.3	2.43	39.4	3.82	31.5	2.34
18	23/32	47.56	2.14	33.3	3.03	49.9	4.76	39.8	2.92
19	3/4	52.99	2.38	37.1	3.38	55.6	5.20	44.3	3.25
20	13/16	58.72	2.61	41.1	3.68	61.6	5.79	49.0	3.55
22	7/8	71.05	3.11	49.8	4.40	74.5	6.91	59.2	4.24
24	15/16	84.56	3.66	59.2	5.17	88.7	8.12	70.4	4.98
25	1	91.75	3.97	62.3	5.61	96.2	8.70	76.4	5.40
26	1 1/32	99.24	4.24	69.5	6.00	104	9.42	82.5	5.78
28	1 1/8	115	4.87	80.6	6.88	121	10.8	95.6	6.64
30	1 3/16	132	5.54	92.5	7.83	139	12.3	109	7.55
32	1 1/4	144	6.24	105	8.82	158	13.9	124	8.51
34	1 11/32	163	6.99	119	9.88	178	15.5	140	9.53
36	1 7/16	183	7.78	133	11.0	200	17.3	157	10.6
38	1 1/2	204	8.59	148	12.1	222	19.1	175	11.7
40	1 19/32	226	9.73	164	13.4	247	21.0	194	12.9
42	1 21/32	249	10.65	181	14.6	272	23.0	213	14.1
44	1 3/4	273	11.69	199	16.0	299	25.0	234	15.5
45	1 25/32	285	12.12	208	16.6	312	26.1	245	16.0
50	2	352	14.73	257	20.2	385	31.8	302	19.5
55	2 5/32	426	17.60	310	24.2	466	38.0	355	23.3
60	2 3/8	507	20.69	370	28.4	555	44.7	433	27.4
65	2 9/16	595	24.01	434	33.0	651	51.8	508	31.8
70	2 3/4	691	27.56	501	37.8	755	59.5	589	36.5
75	2 31/32	793	31.33	577	43.0	867	67.6	675	41.5
80	3 5/32	902	35.33	657	48.5	985	76.2	767	46.8
85	3 5/8	1018	39.54	744	54.3	1110	85.3	866	52.4
90	3 9/16	1142	43.98	834	60.4	1250	94.9	973	58.2
95	3 3/4	1272	48.63	930	66.8	1390	105	1081	64.4
100	3 15/16	1409	53.50	1030	73.5	1540	116	1200	70.8