PRODUCT

CATALOGUE

- Rigging Division
- Height Safety
- Lashing Systems
- Site Inspection
- Testing Services

LB International

Pty Limited

L B I n t e r n a t i o n a l

E n g i n e e r e d r i g g i n g s o l u t i o n s

LB International is an engineering-based marketing and manufacturing company that has serviced the rigging industry for almost four decades.

Established in 1962 when Frank Hansen and Jack Smith purchased the business from an innovative French Canadian, James Le Blanc (who had patented the 'Le Blanc' wire rope hand splice), the company initially traded as Le Blanc Wire Ropes then later as LB Wire Ropes.

In 1976 all rights and tooling for the 'Expanda' cable stocking range were purchased, and to this day LB International continues to supply cable and restraint stockings for the mining and construction industries that meet increasingly demanding workplace site safety requirements. The year 1976 witnessed partner Jack Smith retire from the company, followed in 1993 by Frank and Lois Hansen who passed management to current proprietors, Paul and Vivien Hansen.

Vivien Hansen joined the company in 1981 after spending seven years teaching commerce and economics in secondary schools, and co-authoring a dozen commerce and business textbooks. Paul Hansen joined the company in 1984 after working for 10 years in civil engineering and geo-technical consultancy. At the time they took over management, LB Wire Ropes' operations were oriented around a traditional base of rigging manufacture, with introduction to Australia of a revolutionary new product, the Brifen Wire Rope Safety Fence (WRSF), very much in its embryonic stage.

Without any loss of emphasis on the rigging business, diversification of the company's operations continued as the Brifen WRSF became established in all Australian states and subsequently in India. A trading division was established to take advantage of import / export opportunities, and a site inspection and testing division to give clients maximum attention to their needs.

With more diversified business operations it was felt that continuing to use 'wire rope' in the trading name did not reflect the many other products – rigging, height safety and road safety – that the company designs, manufactures and markets. As LB International, the tradition of service, quality products and competent consultancy continues – only the name has changed to reflect the broadening business activities.

Today a strong customer focus remains alongside the realisation that tomorrow's customer is more discriminating and looking for maximum value in every purchase. Maintaining communication with customers is also a key factor and in 1998 LB International established two comprehensive web sites that are constantly updated with new products and information. In the year 2000 e-commerce is the priority, as it gives the customer maximum richness in terms of information and provides maximum reach for LB International. Use of the world wide web has further spread export sales in Asia-Pacific.

Wire rope sales are still a major part of LB International's operations, in addition to products we design and manufacture from wire rope including slings, nets, ladders, cable stockings, and many special assemblies for industry and the defence forces.

This brochure focuses on the traditional core of LB International's business. It is not designed to be exhaustive in detail, but to reflect the range of products available. It is not designed to solve rigging problems, but there is enough data to assist you in 'day to day' problems; please call our experienced engineers or riggers for technical assistance.

At LB International we take pride in constantly meeting the challenge to engineer rigging solutions for a wide variety of specialist needs. We offer our customers the peace of mind that comes from products engineered to meet stringent quality requirements and international safety standards.

Currently in excess of 40 companies in Sydney alone rely on our on-site inspection and testing services for all their rigging and height safety equipment, with monthly, quarterly and annual inspections to satisfy all Australian government Occupational Health and Safety requirements.

The company's engineered solutions are designed to meet international statutory, structural and Australian OHS needs. Whether a one-off item or batch produced, you can be sure LB International's rigging solutions will not only work but will comply. With almost 40 years of experience we believe our company's actions do the talking when it comes to rigging solutions.

Paul Hansen

Managing Director

GENERAL PURPO

The general purpose wire ropes shown are suitable for a wide variety of applications including slings, winch and hoist ropes, and guy wires. Wire ropes are available in diameters from 2mm to 32mm in a wide range of constructions, grades of steel, core type and finish.

Factors Affecting Wire Rope Life

Operational Conditions

- Size, arrangement and type of equipment
- Type of rope service and abrasive wear
- Rope speeds, acceleration, braking
- Vibration and whipping of rope
- Type of loading (steady or impact)
- Regularity of inspection and maintenance
- Crushing and cross-over on drums
- Cropping, end for ending and re-tension
- Hot, wet, gritty or dirty conditions
- Lubrication in the field

The wire ropes shown below are representative of those used for applications such as:

- Slings
- Catenary Systems
- Cranes
- Guying
- Rigging

500 tonne press for swaging fittings on wire rope

Always be specific when ordering wire ropes, shown is a sample of 16mm wire rope types available.

No.	Construction	Core	Grade	Finish	MBL	Application Comments
1	#40 Superflex	–	2070 MPa	Galv	110 kN	Slings
2	6x36	IWRC	1770 MPa	Black	161 kN	Cranes
3	6x24	FC	1570 MPa	Galv	113 kN	General Purpose
4	6x25	IWRC	1700 MPa	Black	161 kN	Winch/Crane
5	7x7	WSC	1570 MPa	Galv	144 kN	Guying Wires
6	6x25	IWRC	2070 MPa	Galv	184 kN	Tirfor Winch
7	6x9/91	IWRC	1770 MPa	Black	133 kN	Logging
8	6x36	FC	1770 MPa	Black	149 kN	Cranes
9	6x26 Dyform	IWRC	1770 MPa	Black	198 kN	Cranes
10	35x7 Compak	IWRC	2070 MPa	Black	214 kN	Non-rotating
11	18x19	IWRC	1960 MPa	Black	223 kN	Non-rotating
12	34x7	FC	2070 MPa	Black	164 kN	Non-rotating

FC = Fibre Core, WRC = Independent Wire Rope Core, MBL = Minimum Breaking Load

오 성 산 업

SE WIRE ROPE

Design Data

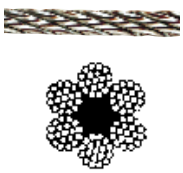
- Rope size and breaking load
- Rope construction
- Lay - right or left hand: Ordinary or Lang's
- Wire grade and quality: Lay - lengths, strand and rope
- Wire arrangement and sizes: Core - type, size and quality
- Equipment and manufacturing quality: Rope - shop lubrication
- Fabrication: Preformed or Non-preformed
- Rope loading conditions
- Type and amount of loading
- Rope bending stresses
- Rates of acceleration and deceleration
- Speed of rope operation
- Angularity of load application
- Statutory and operational factors of safety and regulations

Equipment Limits, Handling & Fitting

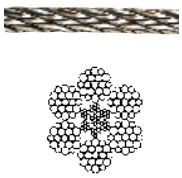
- Drum and sheave conditions
- Tread and groove diameters of drums and sheaves
- Drum and sheave materials
- Unit bearing pressures of sheave material
- Arc of contact of rope on sheave
- Arrangement of drums and sheaves
- Fleet angles between drum and sheave
- Handling, fitting and installation
- Method of transport and storage
- Unreeling and uncoiling methods
- Seizing, cutting and preparation
- Type of end attachment and fitting
- Lubrication and care in storage
- Drum anchorage and breaking in

Discard Inspection Factors

- Broken wires due to abrasion, fatigue or tension
- Plastic deformation due to heavy bearing pressure, skidding under load over heavy or wet sheaves, or peening on track rollers, etc.
- Physical damage such as cut marks or bruises
- Heat or electrical arcing
- Corrosion - check both inner and outer wires
- Wear - check both inner and outer wires
- Stretch
- Reduced rope diameter
- Decreased elasticity
- Deformation - flattening, bends, kinks, scrubbing, bird caging



6 x 19 (12/6/1)

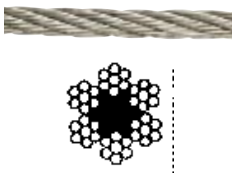


6 x 19W (6 & 6/6/1)

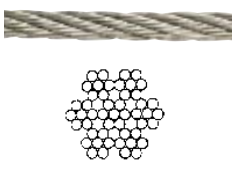
Nom. Dia. mm	Min. Breaking Force at 1570 MPa	
	Fibre Core	Wire Rope Core
	kN	kN
3.5	5.6	6.4
4	7.7	8.5
5	12.0	13.2
6	17.6	19.3
7	23.4	25.8
8	30.9	33.3
9	39.1	42.2
10	48.2	52.1
11	58.4	63.1
12	69.5	75.0

6 x 24 (15/9/F)

Nom. Dia. mm	Min. Breaking Force at 1570 MPa
	kN
6	15.8
7	21.5
8	28.2
9	35.6
10	44.0
11	53.2
12	63.3
13	74.3
14	86.2
16	113
18	143
20	176
22	213
24	253



6 x 7 (6/1)



7 x 7 (6/1)

Nom. Dia. mm	Min. Breaking Force at 1770 MPa	
	Fibre Core	Wire Rope Core
	kN	kN
8	37.2	40.2
9	47.3	51.1
10	58.4	63.1
11	70.7	76.3
12	84.1	90.8
13	98.7	107
14	114	124
16	149	161
18	189	204
20	234	252
22	283	305
24	336	363
26	395	426
28	458	494
32	598	646

When ordering specify:

· Diameter · Construction · Core Type · Finish (eg. galv or black) · Length · Use if known

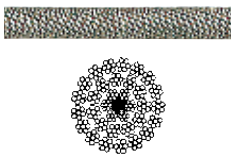
If for use on a crane please advise capacity of crane and number of falls.

Please contact our technical sales staff for assistance in selecting the correct wire rope for your application.

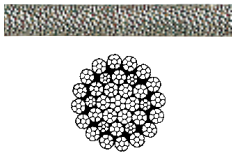
NON-ROTATING
WIRE ROPE

Constructed by winding the inner and outer strands in opposite directions to markedly reduce the rotation of the rope, only a selection of the many types of non-rotating wire ropes available are shown here. Recommended where spinning of the load while lifting is not recommended or allowed.

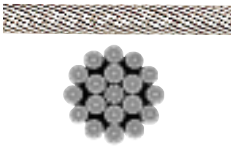
34 x 7 (6/1) NR



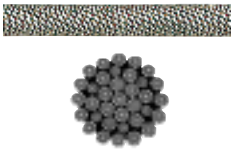
Compak 35 x 7



Dyform® 18



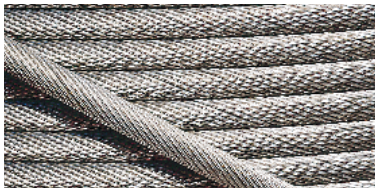
Dyform® 34LR



Nom. Dia. mm	34 x 7 (6/1) NR MBF (kN)		Compak 35 x 7 MBF (kN)	Dyform 18 MBF (kN)		Dyform 34LR MBF (kN)	
	Rope Grade 2070 (MPa)	Rope Grade 1770 (MPa)	Rope Grade 2070 (MPa)	Rope Grade 1960 (MPa)	Rope Grade 2160 (MPa)	Rope Grade 1960 (MPa)	Rope Grade 2160 (MPa)
10						90.0	97.9
11						108	118
12	93	79.6	105			128	139
13	107	93.4	143			148	161
14	124	108.0	165	166	183	170	185
15						199	217
16	162	141.0	214	224	246	227	247
17						245	266
18	206	179.0	273	277	305	278	302
19			306	312	344	311	339
20	258	221.0	336	349	384	345	376
21						390	424
22	306	267.0	407	421	464	421	458
23						457	497
24	365	318.0	486			502	546
25				544	599	546	594
26	430	374.0	570			596	649
27						624	679
28	498	433.0	661	688	759	685	745
30				786	866	744	810
31						780	848
32	650	566.0	864	893	985	885	963
36			1095				

Sydney Casino Site

Non rotating rope



When ordering specify:

- Diameter
- Construction
- Length
- Finish (eg. galv or black)
- Intended application
- SWL required

If for use on a crane please advise capacity of crane and number of falls.

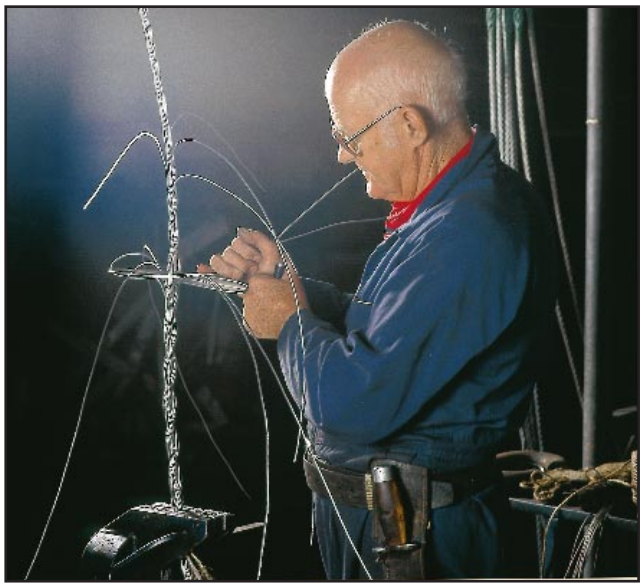
오 성 산 업

SUPERFLEX
WIRE ROPE

Superflex wire ropes are specially designed for applications where high breaking strains, exceptional rotation resistant characteristics or extreme flexibility are required. The special plaited construction results in superior performance that you can depend on.

Applications include:

- Slings for lifting loads with sharp edges
- Pulling electrical and optical fibre cabling through conduit



Superflex Cable

Cable Size	Overall Diameter	Minimum Breaking Force	Mass	Working Load Limit*
mm	mm	kN	kg/100m	kN
Two-0	8.0	30	20	5.0
Two-5	10.0	47	31	9.4
Three-0	12.0	70	47	14.0
Three-5	14.0	93	60	19.0
Four-0	16.0	125	79	25.0
Four-5	18.0	157	103	31.0
Five-0	20.0	210	125	42.0
Six-5	26.0	335	212	67.0
Eight-0	34.0	500	337	100.0
Ten-0	44.0	750	499	154.0

Superflex Plaited Pulling-in Rope

Overall Diameter	No. & Dia. of Strands	Mass	Standard Max. Length	Minimum Breaking Force
mm		kg/100m	m	kN
10	8x2.1 4x2.4	31	3500	53.6
13	8x2.7 4x3.0	51	2500	88.6
16	8x3.3 4x3.8	78	1500	136.0
18	8x3.7 4x4.2	97	1200	169.0
20	8x4.1 4x4.7	120	1000	209.0
24	8x4.9 4x5.4	167	800	290.0

Andromeda Recovery Strops

Strop Capacity M.B.L. (Tonnes)	Superflex Cable	No. of Plies	Level #1 Incapacity (Slippery Surface)	Level #2 Incapacity (Medium Bogged)	Level #3 Incapacity (Severely Bogged)
68	Six–5	2	GVM=140T	GVM=70T	GVM=45T
100	Eight–0	2	GVM=200T	GVM=100T	GVM=70T
150	Ten–0	2	GVM=300T	GVM=150T	GVM=100T
200	Eight–0	4	GVM=400T	GVM=200T	GVM=140T
300	Ten–0	4	GVM=600T	GVM=300T	GVM=200T

Notes:

Level #1 Incapacity – Slippery surface: vehicle unable to move but not sinking into the ground.

Level #2 Incapacity – Medium bogged: vehicle drive wheels have slipped into the ground up to one third wheel diameter.

Level #3 Incapacity – Severely bogged: vehicle drive wheels have lost all capacity and axle assembly resting on ground.

When ordering specify:

- Diameter
- Construction
- Length
- Intended application
- SWL required

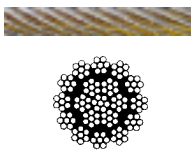
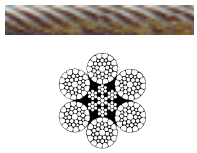
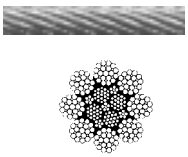
오 성 산 업

HIGH PERFORMANCE
WIRE ROPE

Endurance and Dyform wire ropes offer superior strength for applications such as overhead and mobile cranes. Manufactured from the highest quality steel, these wire ropes also provide exceptional resistance to wear for highly repetitive applications.

Applications include:

- High performance overhead cranes • Mobile cranes • Highly repetitive applications

Diameter	Endurance 18 MBF (kN)		Dyform 6 MBF (kN)		Endurance DSC8 MBF (kN)	
	Rope Grade 1960 MPa	Rope Grade 2160 MPa	Rope Grade 1960 MPa	Rope Grade 2160 MPa	Rope Grade 1960 MPa	Rope Grade 2160 MPa
6 mm	25.3	27.9			30.8	34.0
7 mm	34.6	38.1			40.5	44.6
8 mm	44.1	48.6			52.3	57.6
9 mm	57.0	62.8			66.7	73.6
10 mm	69.1	76.2	85.9	94.7	83.1	91.6
12 mm	103	114	119	131	122	135
13 mm	119	131	147	162	143	157
14 mm	139	153	172	190	171	189
16 mm	180	198	214	236	221	243
18 mm	227	250	279	308	278	307
20 mm	276	277	333	367	344	379
22 mm	334	368	397	437	428	472
24 mm	400	441	486	536	509	561
26 mm	470	518	572	631	594	655
28 mm	545	601	657	724	691	762
30 mm			757	834	792	873
32 mm			858	945	914	1010
34 mm			932	1030	1030	1140
36 mm			1080	1190	1150	1270
38 mm			1180	1300	1290	1420

Application	Endurance 18	Dyform 6	Endurance DSC8
Container crane		Yes	
Crane Boom Hoist	Yes	Yes	Yes
Crane Jib Hoist	Yes	Yes	Yes
Crane Pendants		Yes	Yes
Crane Trolley	Yes	Yes	Yes
Excavators		Yes	Yes
Gantry Cranes	Yes	Yes	Yes
Hoist rope	Yes	Yes	Yes
Mobile cranes	Yes		Yes
Overhead cranes	Yes		Yes
Ship ramps			Yes
Shovels		Yes	
Skip Hoist		Yes	Yes
Tower Cranes	Yes	Yes	Yes
Truck Cranes		Yes	Yes
Note	*Used in rotation resistant applications. Sheave alignment and sheave condition greatly influences performance of rope.*	*Tough general purpose ropes with low wear characteristic.*	*Not to be used in any application where either end is free to rotate*

When ordering specify:

A detailed description of the intended application is required at the time of ordering so our technical sales staff can recommend the correct wire rope for your application.

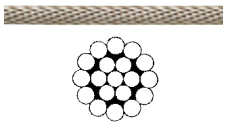
오 성 산 업

STAINLESS STEEL

WIRE ROPE G304 & G316

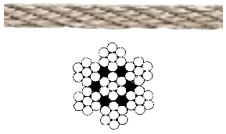
Stainless steel wire ropes are ideal for flexible cabling solutions in corrosive environments such as balustrades, handrails, decorative supports, shopfitting, shadecloth and marine rigging. Available in sizes from 1.2mm to 16mm diameter with special sizes on request.

1 x 19
Grade 304 & Grade 316



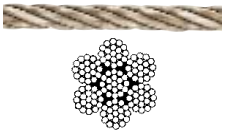
Diameter	Min. Breaking Force (kg)	
mm	G304	G316
1.2	170	151
1.6	227	202
2.0	363	323
2.4	545	484
3.2	953	848
4.0	1497	1332
4.8	2132	1897
5.6	2858	2543
6.4	3720	3310
8.0	5670	5046
9.6	7938	7056
12.7	145.15	129.18

7 x 7
Grade 304 & Grade 316



Diameter	Min. Breaking Force (kg)	
mm	G304	G316
1.2	122	109
1.6	217	193
2.0	295	263
2.4	417	371
3.2	798	710
4.0	1089	969
4.8	1678	1494
5.6	2268	2018
6.4	2903	2584
7.2	3528	3149
8.0	4082	3033
9.6	5443	4844
11.1	7076	6580
12.7	9661	9204
14.3	12928	11506
16.0	15876	14130

7 x 19
Grade 304 & Grade 316



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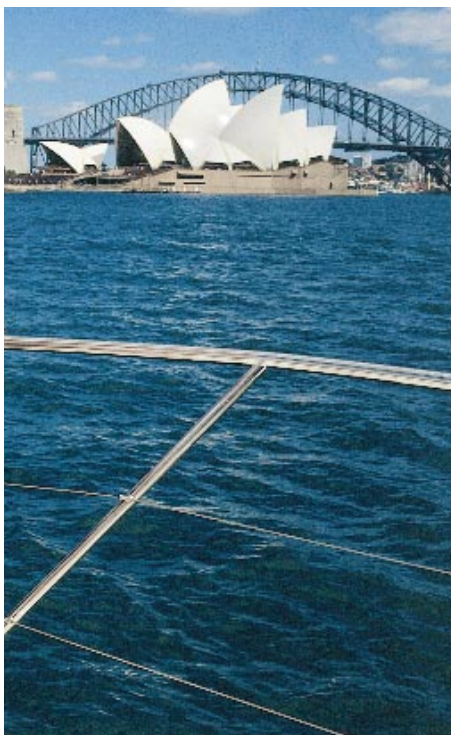
5.6	2268	2018
6.4	2903	2584
7.2	3538	3149
8.0	4082	3633
9.6	5443	4844
11.1	7393	6580
12.7	10342	9204
14.3	12923	11505



Stainless steel wire rope is available in both Grade 304 and Grade 316. Grade 304 is more common as it is a general rope that will not work harden as quickly as Grade 316. Grade 316 is mainly used for architectural applications as it does not tarnish (rust) as quickly as Grade 304.

오 성 산 업

WIRE ROPE SLINGS

Hand and machine spliced wire rope slings are available in black, galvanised or stainless steel. Suitable for a range of applications including lifting, tie-down, towing, crane ropes and winching, sizes range from 2mm to 32mm with special sizes available on request.

Machine Spliced Slings – Safe Working Load in Tonnes





		Direct Load	Choke Round Load	Choke Square Load	Direct Load			Basket Hitch Square		
					60°	90°	120°	60°	90°	120°
G1570 FC					**Machine Spliced Slings Fibre Core**					
Included angle					60°	90°	120°	60°	90°	120°
Load factor		1	0.75	0.5	1.73	1.41	1	0.87	0.71	0.5
Splice factor		0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Factor of Safety		5	5	5	5	5	5	5	5	5
Diameter (mm)	Min. Breaking Force (kN)									
8	28.2	0.55	0.27	0.41	0.94	0.77	0.55	0.48	0.39	0.27
9	35.6	0.69	0.34	0.52	1.19	0.97	0.69	0.60	0.49	0.34
10	44.0	0.85	0.43	0.64	1.47	1.20	0.85	0.74	0.61	0.43
11	53.2	1.03	0.52	0.77	1.78	1.45	1.03	0.90	0.73	0.52
12	63.3	1.23	0.61	0.92	2.12	1.73	1.23	1.07	0.87	0.61
13	74.3	1.44	0.72	1.08	2.49	2.03	1.44	1.25	1.02	0.72
14	86.2	1.67	0.83	1.25	2.89	2.35	1.67	1.45	1.19	0.83
16	113	2.19	1.09	1.64	3.79	3.09	2.19	1.90	1.55	1.09
18	143	2.77	1.38	2.08	4.79	3.91	2.77	2.41	1.97	1.38
20	176	3.41	1.70	2.56	5.90	4.81	3.41	2.97	2.42	1.70
22	213	4.13	2.06	3.09	7.14	5.82	4.13	3.59	2.93	2.06
24	253	4.90	2.45	3.68	8.48	6.91	4.90	4.26	3.48	2.45
26	297	5.75	2.88	4.31	9.95	8.11	5.75	5.00	4.08	2.88
28	345	6.68	3.34	5.01	11.56	9.42	6.68	5.81	4.74	3.34
32	450	8.72	4.36	6.54	15.08	12.29	8.72	7.58	6.19	4.36

B1770 WRC					**Machine Spliced Slings Steel Core**					
Included angle					60°	90°	120°	60°	90°	120°
Load factor		1	0.75	0.5	1.73	1.41	1	0.87	0.71	0.5
Splice factor		0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Factor of Safety		5	5	5	5	5	5	5	5	5
Diameter (mm)	Min. Breaking Force (kN)									
8	40.2	0.78	0.39	0.58	1.35	1.10	0.78	0.68	0.55	0.39
9	51.1	0.99	0.49	0.74	1.71	1.40	0.99	0.86	0.70	0.49
10	63.1	1.22	0.61	0.92	2.11	1.72	1.22	1.06	0.87	0.61
11	76.3	1.48	0.74	1.11	2.56	2.08	1.48	1.29	1.05	0.74
12	90.8	1.76	0.88	1.32	3.04	2.48	1.76	1.53	1.25	0.88
13	107.0	2.07	1.04	1.55	3.59	2.92	2.07	1.80	1.47	1.04
14	124.0	2.40	1.20	1.80	4.15	3.39	2.40	2.09	1.71	1.20
16	161	3.12	1.56	2.34	5.39	4.40	3.12	2.71	2.21	1.56
18	204	3.95	1.98	2.96	6.84	5.57	3.95	3.44	2.81	1.98
20	252	4.88	2.44	3.66	8.44	6.88	4.88	4.25	3.47	2.44
22	305	5.91	2.95	4.43	10.22	8.33	5.91	5.14	4.19	2.95
24	363	7.03	3.52	5.27	12.16	9.91	7.03	6.12	4.99	3.52
26	426	8.25	4.13	6.19	14.27	11.63	8.25	7.18	5.86	4.13
28	494	9.57	4.78	7.18	16.55	13.49	9.57	8.32	6.79	4.78
32	646	12.51	6.26	9.38	21.65	17.64	12.51	10.89	8.88	6.26
36	817	15.82	7.91	11.87	27.37	22.31	15.82	13.77	11.23	7.91
40	1010	19.56	9.78	14.67	33.84	27.58	19.56	17.02	13.89	9.78
44	1220	23.63	11.81	17.72	40.88	33.32	23.63	20.56	16.78	11.81
48	1450	28.08	14.04	21.06	48.58	39.60	28.08	24.43	19.94	14.04
52	1710	33.12	16.56	24.84	57.30	46.70	33.12	28.81	23.51	16.56
56	1980	38.35	19.17	28.76	66.34	54.07	38.35	33.36	27.23	19.17
60	2270	43.97	21.98	32.97	76.06	61.99	43.97	38.25	31.22	21.98

Hand Spliced Slings – Safe Working Load in Tonnes

		Direct Load	Choke Round Load	Choke Square Load	Direct Load			Basket Hitch Square		
					60°	90°	120°	60°	90°	120°
G1570 FC		Hand Spliced Slings Fibre Core								
Included angle					60°	90°	120°	60°	90°	120°
Load factor		1	0.5	0.75	1.73	1.41	1	0.87	0.71	0.5
Splice factor <20mm dia. rope		0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Splice factor ≥20mm dia. rope		0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Factor of Safety		5	5	5	5	5	5	5	5	5
Diameter (mm)	Min. Breaking Force (kN)									
8	28.2	0.52	0.26	0.39	0.901	0.73	0.521	0.45	0.37	0.26
9	35.6	0.65	0.33	0.49	1.13	0.92	0.65	0.57	0.46	0.33
10	44.0	0.81	0.40	0.61	1.40	1.14	0.81	0.70	0.57	0.40
11	53.2	0.98	0.49	0.73	1.69	1.38	0.98	0.85	0.69	0.49
12	63.3	1.16	0.58	0.87	2.01	1.64	1.16	1.01	0.82	0.58
13	74.3	1.36	0.68	1.02	2.36	1.92	1.36	1.19	0.97	0.68
14	86.2	1.58	0.79	1.19	2.74	2.23	1.58	1.38	1.12	0.79
16	113	2.07	1.04	1.56	3.59	2.92	2.07	1.80	1.47	1.04
18	143	2.62	1.31	1.97	4.54	3.70	2.62	2.28	1.86	1.31
20	176	2.87	1.44	2.15	4.97	4.05	2.87	2.50	2.04	1.44
22	213	3.47	1.74	2.61	6.01	4.90	3.47	3.02	2.47	1.74
24	253	4.13	2.06	3.09	7.14	5.82	4.13	3.59	2.93	2.06
26	297	4.84	2.42	3.63	8.38	6.83	4.84	4.21	3.44	2.42
28	345	5.63	2.81	4.22	9.73	7.93	5.63	4.90	4.001	2.81
32	450	7.34	3.67	5.50	12.70	10.35	7.34	6.39	5.21	3.67

G1770 FC		Hand Spliced Slings Fibre Core								
Included angle					60°	90°	120°	60°	90°	120°
Load factor		1	0.75	0.5	1.73	1.41	1	0.87	0.71	0.5
Splice factor <20mm dia. rope		0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Splice factor ≥20mm dia. rope		0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Factor of Safety		5	5	5	5	5	5	5	5	5
Diameter (mm)	Min. Breaking Force (kN)									
8	37.2	0.68	0.34	0.51	1.18	0.96	0.68	0.59	0.48	0.34
9	47.3	0.87	0.43	0.65	1.50	1.22	0.87	0.76	0.62	0.43
10	58.4	1.07	0.54	0.80	1.85	1.51	1.07	0.93	0.76	0.54
11	70.7	1.30	0.65	0.97	2.24	1.83	1.30	1.13	0.92	0.65
12	84.1	1.54	0.77	1.16	2.67	2.18	1.54	1.34	1.10	0.77
13	98.7	1.81	0.91	1.36	3.13	2.55	1.81	1.58	1.29	0.91
14	114.0	2.09	1.05	1.57	3.62	2.95	2.09	1.82	1.49	1.05
16	149	2.73	1.37	2.05	4.73	3.85	2.73	2.38	1.94	1.37
18	189	3.47	1.73	2.60	6.00	4.89	3.47	3.02	2.46	1.73
20	234	3.82	1.91	2.86	6.60	5.38	3.82	3.32	2.71	1.91
22	283	4.62	2.31	3.46	7.99	6.51	4.62	4.02	3.28	2.31
24	336	5.48	2.74	4.11	9.48	7.73	5.48	4.77	3.89	2.74
26	395	6.44	3.22	4.83	11.15	9.08	6.44	5.60	4.57	3.22
28	458	7.47	3.73	5.60	12.92	10.53	7.47	6.50	5.30	3.73
32	598	9.75	4.88	7.31	16.87	13.75	9.75	8.49	6.92	4.88
36	757	12.35	6.17	9.26	21.36	17.41	12.35	10.74	8.77	6.17
40	934	15.23	7.62	11.43	26.35	21.48	15.23	13.25	10.82	7.62

오 성 산 업

SUPERFLEX WIRE SLINGS
& FLAT WOVEN WIRE SLINGS

The solution for bulk handling of soft materials, woven slings are ideal for handling delicate and odd-shaped objects. Multiple configurations are available with standard Superflex slings woven from 11mm to 28mm diameter wire, and flat woven slings in 64mm to 280mm diameter.

Superflex Plaited Wire Slings

Cable Size	Rope Diameter (mm)	Eye Size (mm)	Minimum Breaking Force (kN)	Safe Working Load in Tonnes						
				Sling	Hitch	Choke Round	Choke Square	60°	90°	120°
2-0	8	150	30	0.5t	1.0t	0.4t	0.3t	0.9t	0.7t	0.5t
2-5	10	180	47	0.9t	1.8t	0.7t	0.5t	1.6t	1.3t	0.9t
3-0	12	220	70	1.3t	2.6t	1.0t	0.7t	2.3t	1.8t	1.3t
3-5	14	250	93	1.8t	3.6t	1.4t	0.9t	3.1t	2.5t	1.8t
4-0	16	290	125	2.4t	4.8t	1.8t	1.2t	4.2t	3.4t	2.4t
4-5	18	320	157	3.0t	6.0t	2.3t	1.5t	5.2t	4.2t	3.0t
5-0	20	360	210	4.0t	8.0t	3.0t	2.0t	6.9t	5.6t	4.0t
6-5	26	470	335	6.4t	12.8t	4.8t	3.2t	11.1t	9.0t	6.4t
8-0	34	600	500	9.5t	19.0t	7.5t	4.8t	16.4t	13.3t	9.5t
10-0	44	800	750	14.7t	29.4t	11.0t	7.4t	30.6t	20.6t	14.7t

Superflex Plaited Wire Strops

Cable Size	Rope Diameter (mm)	Minimum Breaking Force (kN)	Safe Working Load in Tonnes			
			Single Strop	Strop as Cradle	Choke Round	Choke Square
2-0	8	30	0.8t	1.5t	0.6t	0.4t
2-5	10	47	1.4t	2.7t	1.0t	0.7t
3-0	12	70	2.0t	3.9t	1.5t	1.0t
3-5	14	93	2.7t	5.4t	2.0t	1.4t
4-0	16	125	3.6t	7.2t	2.7t	1.8t
4-5	18	157	4.5t	9.0t	3.4t	2.3t
5-0	20	210	6.0t	12.0t	4.5t	3.0t
6-5	26	335	9.6t	19.2t	7.2t	4.0t
8-0	34	500	14.3t	28.5t	10.7t	7.2t
10-0	44	750	22.0t	44.1t	16.6t	11.0t

Superflex Plaited Sling

- All safe working loads shown in tonnes
- For specialised applications or ropes please contact our technical sales department

Type 2 Flat Woven Sling

Flat Woven Wire Slings

Type 1 – Cradle Lift

24 Ply Sling – 2070 Mpa Wire				S.W.L. in tonnes (included angle at hook)		
Sling Width mm	Sling Thickness mm	Basic Cord Size mm	Mass kg/m	0°	60°	120°
50	5	2.0	0.4	1.9	1.7	0.9
64	7	3.0	0.6	3.0	2.6	1.5
76	8	3.0	1.0	4.5	3.9	2.3
88	10	4.0	1.3	6.0	5.2	3.0
100	11	4.0	1.6	8.0	7.0	4.0
112	12	5.0	2.1	10.0	8.7	5.0
125	14	5.0	2.7	13.0	12.0	6.5
160	17	7.0	4.3	21.0	18.0	10.0
200	20	8.0	6.9	32.0	28.0	16.0
250	25	10.0	10.3	48.0	42.0	24.0

Type 2 – Choker Lift

24 Ply Sling – 2070 Mpa Wire				S.W.L. in tonnes	
Sling Width mm	Sling Thickness mm	Basic Cord Size mm	Mass kg/m	Choked Round Load	Choked Square Load
50	5	2.0	0.5	0.75	0.5
64	7	3.0	0.6	1.1	0.7
76	8	3.0	1.0	1.6	1.1
88	10	4.0	1.3	2.1	1.4
100	11	4.0	1.6	2.9	1.9
112	12	5.0	2.1	3.6	2.4
125	14	5.0	2.7	4.8	3.2
160	17	7.0	4.3	7.7	5.0
200	20	8.0	6.9	12.0	7.5
250	25	10.0	10.3	17.0	11.0

ROUND & WEB SLINGS

Spanset slings are manufactured to meet Australian Standards using high tenacity polyester for strength, light weight and abrasion resistance. Stronger than chain and lighter than rope, all Spanset slings are colour coded with woven-in indication of lift capacity.

Round Slings

Spanset round slings feature a unique monofilament web and smooth sleeving for improved gliding characteristics when choke lifting cylindrical objects. Ideal for lifting smooth objects without damage.

- Spanset 'Supra Plus' protector sleeve 40% thicker
- Wears evenly for greater working life
- Wide choice of lifting and towing modes
- High strength to weight ratio
- Secutex® anti-cutting and abrasion protection available
- Safety factor of 7:1
- Conforms to AS 4497, B.S. 6668 Part 2 & A.S. 1353

Safe Working Load in (kg)

Type \ Mode SWL		Vert 1.0	Choke 0.8	Basket 2.0	90° 1.4 120° 1.0
E 1000		1000	800	2000	1400	1000
E 2000		2000	1600	4000	2800	2000
E 3000		3000	2400	6000	4200	3000
E 4000		4000	3200	8000	5600	4000
E 5000		5000	4000	10000	7000	5000
E 6000		6000	4800	12000	8400	6000
E 8000		8000	6400	16000	11200	8000
E 10000		10000	8000	20000	14000	10000

Flat Webbing Sling – Single Ply (W1)

These slings feature a wide, flat, load bearing surface and can be ordered with reinforced becket eye, flat eye, D1 & D2 steel or C-Hook end fittings to cover all load applications.

- Stronger than chain
- Lighter than rope
- More durable than wire

Safe Working Load in (kg)

Type	SWL Kg	Colour	Size mm
A1000	1000	Violet	75
A2000	2000	Green	140
A3000	3000	Yellow	180

Flat Webbing Slings – Double Ply (W2)

Colour coded to A.S. 1353 and B.S. 6668

Featuring the same features as single ply webbing slings, double ply slings provide the added security of protective sleeves for use when lifting steel, concrete, glass, timber etc. P.V.C and Web sleeves provide medium protection, Secutex super protection.

Sleeve Types

- P.V.C. – Low to Medium Protection
- Webbing (Kooper) – Low to Medium Protection
- Webbing (Hi-Tech) – Medium Protection
- Secutex – Very High Protection

Safe Working Load in (kg)

Type	SWL Kg	Colour	Size mm
B1000	1000	Violet	50
B2000	2000	Green	75
B3000	3000	Yellow	100
B4000	4000	Orange	140
B5000	5000	Red	150
B6000	6000	Brown	180
B8000	8000	Blue	240
B10000	10000	Olive	300

NOTE: Widths are approximate, and may vary slightly.

오 성 산 업

KUPLEX ALLOY CHAIN

GRADE 8 AND GRADE 10

Suitable for lifting, lashing, towing and recovery operations, Kuplex Grade 8 and Grade 10 alloy chains are the highest rated alloy chains available. Both are available in sizes ranging from 7mm to 32mm. Kuplex Grade 10 chain is dimensionally accurate, however it must only be used with Kuplex '8+10' chain fittings.

Kuplex Grade 8

Grade 8 Chain Dia. (mm)	Direct Load (Tonnes)	Adjustable Sling (Tonnes)	Choked Hitch (Tonnes)	Direct Load (Tonnes)			Reeved Sling (Tonnes)			Endless Sling (Tonnes)			Reeved Sling (Double) (Tonnes)
				60°	90°	120°	60°	90°	120°	60°	90°	120°	
6	1.1	1.1	0.8	1.9	1.6	1.1	1.4	1.2	0.8	1.4	1.2	0.8	1.7
7	1.5	1.5	1.1	2.6	2.1	1.5	1.9	1.6	1.1	1.9	1.6	1.1	2.3
8	2	2.0	1.5	3.5	2.8	2.0	2.6	2.1	1.5	2.6	2.1	1.5	3.0
10	3.2	3.2	2.4	5.5	4.5	3.2	4.2	3.4	2.4	4.2	3.4	2.4	4.8
13	5.3	5.3	4.0	9.2	7.5	5.3	6.9	5.6	4.0	6.9	5.6	4.0	8.0
16	8	8.0	6.0	13.9	11.3	8.0	10.4	8.5	6.0	10.4	8.5	6.0	12.0
19	11.2	11.2	8.4	19.4	15.8	11.2	14.5	11.9	8.4	14.5	11.9	8.4	16.8
23	16	16.0	12.0	27.7	22.6	16.0	20.8	17.0	12.0	20.8	17.0	12.0	24.0
26	21.2	21.2	15.9	36.7	30.0	21.2	27.5	22.5	15.9	27.5	22.5	15.9	31.8
32	32	32.0	24.0	55.4	45.3	32.0	41.6	33.9	24.0	41.6	33.9	24.0	48.0

Kuplex Grade 10

Grade 10 Chain Dia (mm)	Direct Load (Tonnes)	Adjustable Sling (Tonnes)	Choked Hitch (Tonnes)	Direct Load (Tonnes)			Reeved Sling (Tonnes)			Endless Sling (Tonnes)			Reeved Sling (Double) (Tonnes)
				60°	90°	120°	60°	90°	120°	60°	90°	120°	
7	2	2.0	1.5	3.5	2.8	2.0	2.6	2.1	1.5	2.6	2.1	1.5	3.0
10	4	4.0	3.0	6.9	5.7	4.0	5.2	4.2	3.0	5.2	4.2	3.0	6.0
13	6.7	6.7	5.0	11.6	9.5	6.7	8.7	7.1	5.0	8.7	7.1	5.0	10.1
16	10	10.0	7.5	17.3	14.1	10.0	13.0	10.6	7.5	13.0	10.6	7.5	15.0
19	14	14.0	10.5	24.2	19.8	14.0	18.2	14.8	10.5	18.2	14.8	10.5	21.0
23	21	21.0	15.8	36.4	29.7	21.0	27.3	22.3	15.8	27.3	22.3	15.8	31.5
26	27	27.0	20.3	46.8	38.2	27.0	35.1	28.6	20.3	35.1	28.6	20.3	40.5
32	40	40.0	30.0	69.3	56.6	40.0	52.0	42.4	30.0	52.0	42.4	30.0	60.0

오 성 산 업

KUPLEX CHAIN FITTINGS

Kuplex chain fittings branded '8+10' can be used with both Grade 8 and Grade 10 chain. Featuring exceptional strength and ductility to combat shock and other forms of abusive stressing, new section profiles result in components that are light, with high fatigue strength and resistance to wear.

Master Link KMLL

A cost effective alternative to the KM/KAL assembly for three-leg and four-leg slings. Designed for use only under the uniform load method of working load rating.

Shortening Clutch KSC

This unique component for leg length adjustment is a major feature of the Kuplex system, allowing safe leg length adjustment of any number of legs with the load remaining fully in-line. Requires separate suspension on the master or auxiliary link, using a Kupler and three links of chain.

Foundry Hook KF

Originally designed with wide throat to accommodate moulding box trunnions, but ideal for other bulky attachment points.

Reevable Egg Link KSS

The ideal link for collar slings – fully reevable and compact.

Pipe Hook KPH

Designed for lifting pipes, Pipe Hooks must be used in pairs.

Shackle KDL

Has a wide jaw and attaches directly to the chain. Complete with pin, hexagon nut and cotter pin.

Auxiliary Link KAL

Mechanically assembled link for three-leg and four-leg slings.

Kupler K

This component is used for joining chain to the top links.

Safety Hook KHX C

This safety hook is designed so that the safety latch cannot open when the hook is loaded, and requires pressure on the trigger to release the hook from the load. Features a clevis top fitting.

Bale Hook KB

Designed for handling soft bales such as wood pulp and scrap paper, Bale Hooks must be used in pairs.

Sling Hook KHN

The most popular type of Sling Hook, with optional safety catch.

오 성 산 업

GUNNEBO ALLOY CHAIN

GRADE 8 AND GRADE 8+

Gunnebo alloy chain is suitable for lifting, lashing, towing and recovery operations. Grade 8 alloy chain is available in sizes ranging from 6mm to 32mm. Grade 8+ alloy chain provides 25% greater strength and is available in sizes from 8mm to 16mm, however it can only be fitted with Gunnebo GrabiQ Grade 8+ chain fittings.

Gunnebo Grade 8

Grade 8 Chain Dia. (mm)	Direct Load (Tonnes)	Adjustable Sling (Tonnes)	Choked Hitch (Tonnes)	Direct Load (Tonnes)			Reeved Sling (Tonnes)			Endless Sling (Tonnes)			Reeved Sling (Double) (Tonnes)
				60°	90°	120°	60°	90°	120°	60°	90°	120°	
6	1.1	1.1	0.8	1.9	1.6	1.1	1.4	1.2	0.8	1.4	1.2	0.8	1.7
7	1.5	1.5	1.1	2.6	2.1	1.5	1.9	1.6	1.1	1.9	1.6	1.1	2.3
8	2	2.0	1.5	3.5	2.8	2.0	2.6	2.1	1.5	2.6	2.1	1.5	3.0
10	3.2	3.2	2.4	5.5	4.5	3.2	4.2	3.4	2.4	4.2	3.4	2.4	4.8
13	5.4	5.4	4.1	9.4	7.6	5.4	7.0	5.7	4.1	7.0	5.7	4.1	8.1
16	8	8.0	6.0	13.9	11.3	8.0	10.4	8.5	6.0	10.4	8.5	6.0	12.0
19	11.5	11.5	8.6	19.9	16.3	11.5	14.9	12.2	8.6	14.9	12.2	8.6	17.3
22	15.5	15.5	11.6	26.8	21.9	15.5	20.1	16.4	11.6	20.1	16.4	11.6	23.3
26	21.6	21.6	16.2	37.4	30.5	21.6	28.1	22.9	16.2	28.1	22.9	16.2	32.4
32	32.8	24.3	24.6	56.8	46.4	32.8	42.8	38.8	24.6	42.6	34.8	24.6	49.2

Gunnebo Grade 8+

Grade 8+ Chain Dia. (mm)	Direct Load (Tonnes)	Adjustable Sling (Tonnes)	Choked Hitch (Tonnes)	Direct Load (Tonnes)			Reeved Sling (Tonnes)			Endless Sling (Tonnes)			Reeved Sling (Double) (Tonnes)
				60°	90°	120°	60°	90°	120°	60°	90°	120°	
8	2.5	2.5	1.9	4.3	3.5	2.5	3.2	2.7	1.9	3.2	2.7	1.9	3.8
10	4	4.0	3.0	6.9	5.7	4.0	5.2	4.2	3.0	5.2	4.2	3.0	6.0
13	6.5	6.5	4.9	11.3	9.2	6.5	8.4	6.9	4.9	8.4	6.9	4.9	9.8
16	10	10.0	7.5	17.3	14.1	10.0	13.0	10.6	7.5	13.0	10.6	7.5	15.0

Note Gunnebo manufacture Grade 8+ in 8mm, 10mm, 13mm and 16mm only.

Grade 8+ is dimensionally nominal in size (ie actual chain sizes are dimensionally larger in some sizes to achieve rated strength).

Must use manufacturers own fittings on Grade 8+ chain.

오 성 산 업

GUNNEBO GRADE 8

CHAIN FITTINGS

Gunnebo's reputation for quality results from 200 years' experience in the manufacture of lifting components. Gunnebo fittings are made from quenched and tempered alloy steel, guaranteeing very high strength, low weight, high resistance to wear and long service life.

Master Link Type OT

For 3 and 4 leg chain slings.

Master Link Type O

For single and double leg chain fittings.

Coupling Link Type G

Coupler for connecting chain to master links.

Grab Hook Type GG

Clevis type grab hook used to shorten a chain or for back hooking onto a chain.

Grab Hook Type OG

Eye type grab hook used to shorten a chain or for back hooking onto a chain.

Shortening Hook Type OKF

Used to shorten a chain at the master link.

Safety Hook with grip latch Type OBK

Eye type safety hook.

Swivel Safety Hook Type BKL

Swivel type safety hook.

Sling Hook Type OKN

Eye type sling hook with safety catch.

Sling Hook Type GK

Clevis type sling hook.

Foundry Hook Type OKE

Eye type foundry hook.

Master Link (closed) Type SKG

SK System master link.

Container Hook Type CH-3

SK System master link.

Ball Bearing Swivel Type SKL

SK System swivel.

Universal Weld-on Hook Type UKN

Weld on hauling hook.

Stainproof Hammerlock

Also available:

Stainproof Safety Hook Type GBK

GUNNEBO GRADE 8+

CHAIN FITTINGS

Gunnebo Grade 8+ lifting chain fittings provide 25% additional strength over conventional Grade 8 components. Top assemblies consist of a maximum of three components with the shortening function of chain legs built-in. Due to their unique dimensions these chain fittings can only be used with Gunnebo Grade 8+ chain.

Mastergrab Duo Type MGD

- All in one compact top link
- Dual grab for 2-leg and 4-leg
- Use with Masterlink Type MF

C-grab Type CG

- Compact design single grab
- Use with Masterlink Type MF

2 x C-grab Type CG shown

C-grab Duo Type CGD

- Compact design dual grab
- Use with Masterlink Type MF

2 x C-grab Duo Type CGD shown

Mastergrab Type MG

- All in one compact top link
- Single grab and reevable
- Use with Masterlink Type MF

C-lok Type CL

- Compact single chain design
- Use with Masterlink Type MF and choke

2 x C-lok Type CL shown

Masterlink Type MF

- Master link for 1, 2, 3, and 4-leg slings
- Use with C-grab Type CG and CGD
- Use with C-lok Type CL and CLD

Also available:

Hook Type BKG

- Self-locking hook

Also available:

Hook Type EGKN

- Sling hook

SPANSET
LIFTING COMPONENTS

Spanset provides a comprehensive range of components to solve virtually any lifting or materials handling challenge. A wide range of standard solutions such as lifting slings, ratchet tie-downs and hooks are available, while Spanset can also provide custom made products to solve applications that require a unique solution.

Spanset Drum Lifter

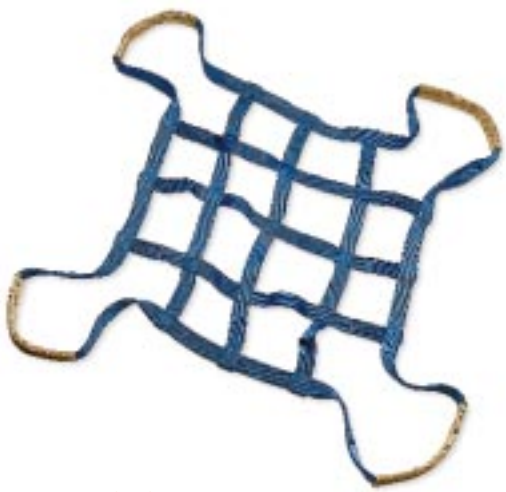
- Simple webbing design is light and easy to handle
- Won't damage drums as other lifting systems can
- Drums can be stacked with webbing still fitted
- Can be left fitted for easy retrieval from storage

Spanset Secutex® Webbing Protectors

- Available in a wide range of sizes and designs
- Helps protect webbing from sharp edges
- Reduces abrasion to promote longer webbing life
- Manufactured from patented, super tough Secutex

Joker® Hook

- The innovative new hook for webbing slings
- Models available in 1, 2, 3, 5 & 8 tonne capacity
- Use with webbing slings eliminates heavy chains
- Easier to handle than conventional chain slings
- Can also be used to link webbing slings together



Spanset Lifting Net

- Available in custom made sizes
- Optional extended lifting eyes
- Capacity from 1 to 50 tonnes

SHEAVE BLOCKS

Sheave blocks allow quick and easy load redirection or multiplication of the maximum load capacity. Single, double and triple sheave models enable a wide range of combinations, and all are suitable for use with manual or power operation using either fibre or wire ropes.

Snatch Block

- Manual or power operated
- For fibre or wire rope
- Available up to 450mm diameter
- Allows attachment to the rope via removable side plate

Single Sheave Block

- Manual or power operated
- For fibre or wire rope
- Cast iron sheave
- Hook and safety catch or eye fitting
- Available up to 450mm diameter

Double Sheave Block

- Manual or power operated
- For fibre or wire rope
- Bearings can be fitted to sheaves
- Available as a double snatch block

Triple Sheave Block

- Manual or power operated
- For fibre or wire rope
- Maximum load multiplication
- Available up to 450mm diameter

Gunnebo-Johnson Blocks for Mining & Construction

Manufactured to the highest structural tolerances, the comprehensive range of 235 Gunnebo-Johnson Snatch Blocks feature forged, heat treated carbon steel construction and innovative side opening – making it easy to thread the block without removing end fittings from ropes. Ideal for mining and construction applications ranging from 2 to 30 tonnes.

PLATE CLAMPS

Camlok plate clamps are manufactured in the UK to comply with international and technical quality assurance standards. An extensive range of Camlok plate clamps is kept in stock for immediate delivery, with clamps for specialised applications also available.

Universal Clamps Type CZ92

Designed to enable single plates to be turned over or lifted from the horizontal to the true vertical position efficiently and safely. Available with standard hook ring or with integral short chain sling. Suitable for all structural steel up to 300 Brinell surface hardness.

Hinged Universal Clamps Type CX

Designed to enable single plates or fabrications to be lifted at any angle for safe handling of awkward lifts previously considered hazardous. The eye can be fitted with a swivel for increased versatility which can also be insulated to allow welding to be carried out while suspended.

Heavy Duty Horizontal Plate Clamp Type CH

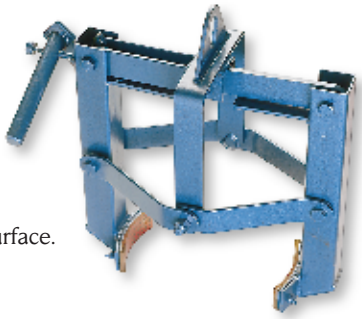
These clamps feature smooth jaws and are used in pairs, usually suspended from a lifting beam by a two-legged sling, for lifting single plates in a horizontal position. Maximum sling angle 90°.

Pile Pitching Clamp Type CP

Designed specifically for pitching sheet steel piling, with the advantage of a 15 metre rope for easy release of the clamp from ground level. This presents a faster and safer method than the laborious procedure of release when using a standard shackle. Not designed for extraction of driven piles.

Oxygen Bottle Grab Type OBG

Grab designed specifically for the safe lifting and handling of gas bottles. Large rubber lined jaws are fitted to protect the bottle surface.



Plastic Clamp Type PC

This clamp is manufactured from Nylon with a polycarbonate moving jaw and rubber lined fixed pad. Designed for handling plastics, thin sheet plate, and composite materials.

Screwlok Clamps Type SC92 Shackle Suspension

Screwlok clamps are designed to fit the flanges of RSJ's and Universal beams as a semi-permanent lifting point suitable for use with powered hoists, chain blocks, Tirfors etc. The SC92 range has a shackle incorporated for load suspension.

Camlok Horizontal Girder Clamp Type TTGC

This new clamp is based on the Camlok TTG clamp, however it incorporates several additional features to make it easier to use:

- A chain type lock in place of the usual locking lever which makes the clamp easier to open and close
- A handle on the back of the clamp to aid in positioning onto the girder.

CONCRETE LIFTING

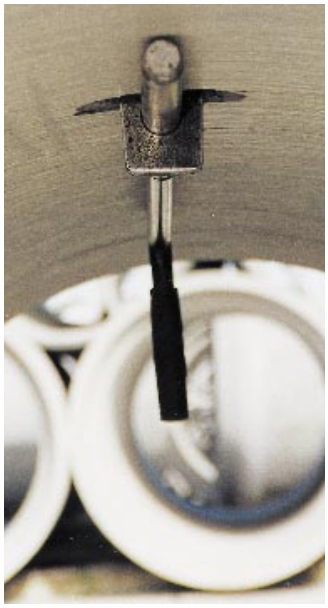
Manufactured in Australia to suit local conditions, both the Pipelifter and Swiftlift have been specially designed to maximise fast, safe and dependable lifting of concrete forms. Manufactured from the highest quality materials, both products are individually tested and certified.

Pipelifter 2000

- Australian designed and manufactured with full spare parts back-up
- Super robust and will not bend like other pipe lifting equipment
- Proof load tested and certified

Part Number	SWL	Proof Load
Pipelifter 2025	2.5t	5,000kg
Pipelifter 2054	5.4t	10,800kg

Top of pipe



Inside pipe

Swiftlift

The simple, safe and rapid method of lifting and handling all shapes and sizes of pre-cast concrete elements.

Available in 1.3, 2.5, 5, 10 and 20 tonne capacity

Typical applications for the Swiftlift include:

- Box culverts
- Jersey barriers
- Bridge beams
- Manhole risers
- Pre-cast columns & beams
- Planter boxes
- Septic tanks
- Pipes
- Tilt-up panels
- Flat slabs
- Concrete poles
- Pit lids
- Water tanks

Swiftlift 1.3 tonne engaged

Swiftlift before coupling

RIGGING HARDWARE

LB International carries a comprehensive range of general hardware fittings in stock to suit a wide variety of applications where wire ropes are used. We can help whether you need hardware to manufacture a custom solution, or replacement parts for maintenance and repair.

Thimbles

Standard Thimble

- Used to reinforce the eye of wire or fibre rope
- Manufactured in steel (electroplate or galvanised finish), stainless steel or Nylon
- Available in commercial grade for general purpose or manufactured in accordance with statutory documents for lifting purposes
- Solid heart thimble available on request

Metalling socket on pennant rope.

Wire Rope Grips

Standard Rope Grips

- Used to form an eye in wire rope
- Easily applied on site
- Available electro-plated and galvanised as well as stainless steel
- NOT SUITABLE FOR USE WITH FIBRE ROPE
- NOT TO BE USED FOR LIFTING
- Available in commercial grade for general purpose work or manufactured in accordance with statutory documents for heavy duty purposes
- Double base rope grips for safety line systems available on request

Metalling Sockets

Open Metalling Socket

- Eye type (closed) or Open type (clevis and pin) available
- Permanent, heavy duty wire rope termination
- Can be fixed with white metal or resin
- Approved for lifting

Wedge Sockets

Open Wedge Socket

- Available as Open type (clevis) or Closed type (eye)
- Permits simple but safe adjustment of wire rope length
- Able to be fitted on site
- Can be used for lifting, pulling, tensioning and staying applications

Grips

Tension Grip

- Used to tension wire rope, strand, guy wires and cables
- Clamps to suit 4mm to 32mm cable
- Each clamp fits a range of sizes
- NOT TO BE USED FOR LIFTING

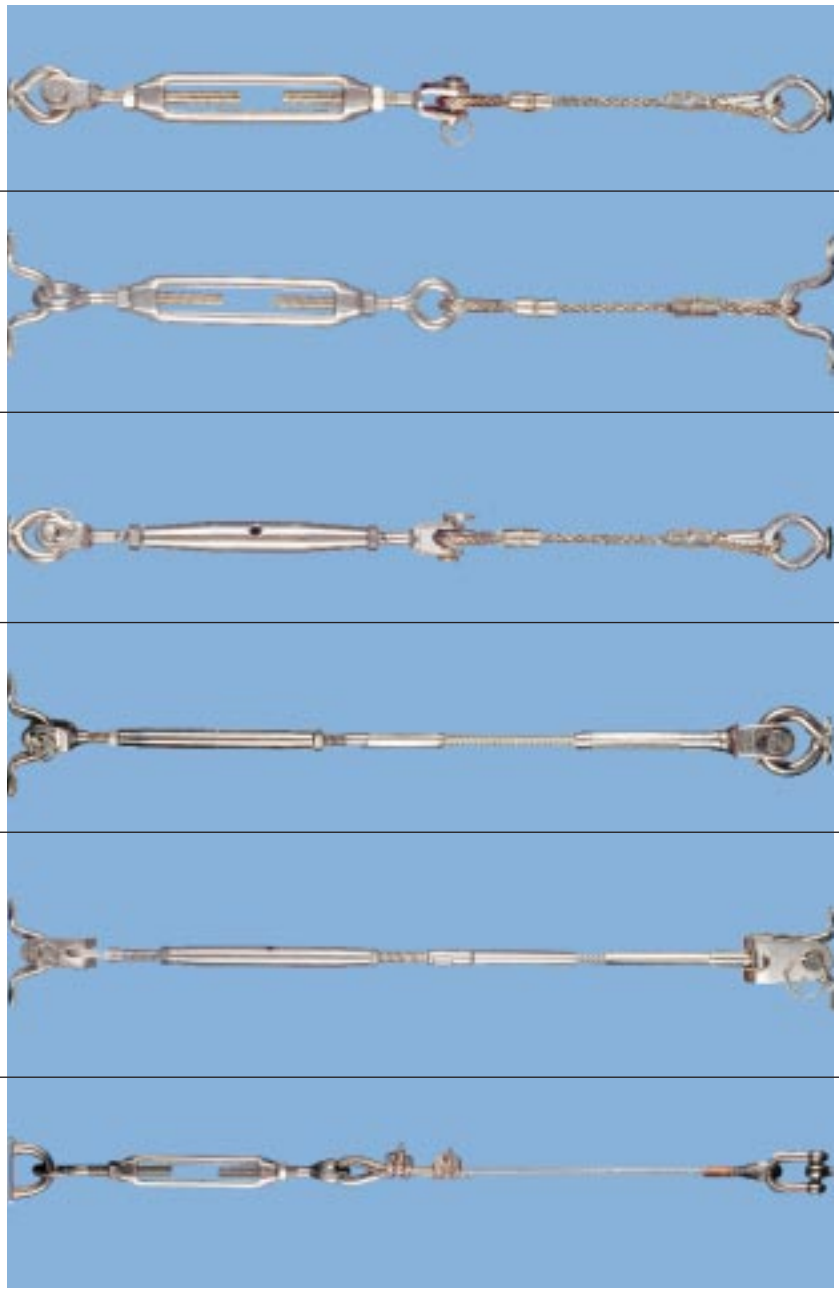
STAINLESS STEEL

Increasingly popular in commercial architectural applications, stainless steel balustrading provides the potential for a wide range of creative executions and construction possibilities. LB International stocks a wide range of leading stainless steel rigging brands and components.

Bridco Stainless Steel Fittings

A comprehensive range of Bridco stainless steel rigging products is available in Economy and Premium ranges. The Economy range is extremely well priced and recommended for use in commercial fishing, general marine and industrial applications.

The Premium range of Bridco fittings are of higher quality than the Economy range and are recommended when proven strength and reliability are more important than price.



1. Turnbuckle Jaw & Jaw with Eye Bolt

1a. Swaged Eye with Thimble & Eye Bolt

2. Turnbuckle Eye & Eye with Saddle

2a. Swaged Eye with Thimble & Saddle

3. Bottlescrew Jaw & Jaw with Eye Bolt

3a. Swaged Eye with Thimble & Eye Bolt

4. Bottlescrew Jaw & Swage Stud with Saddle

4a. Fork Terminal & Eye Bolt

5. Bottlescrew Toggle & Swage Stud with Saddle

5a. Toggle Terminal & Saddle

6. Hook & Eye Turnbuckle

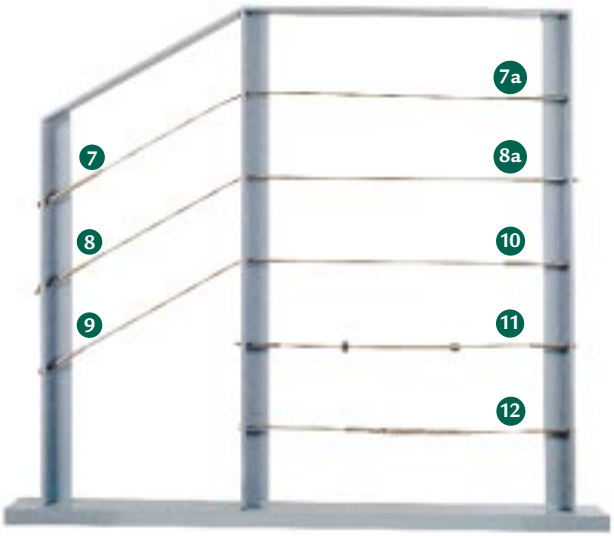
6a. Swaged Eye with Thimble

BALUSTRADING

7. Architectural Ball used with Internal Thread Terminal and Button Head Screw.

8. Architectural Ball used with Swage Stud Threaded Terminal.

9. Threaded Ball End used with Swage Stud Threaded Terminal.



7a. Internal Thread Terminal used with Button Head Socket Screw.

8a. Swage Stud Threaded Terminal used with Stainless Steel Dome Nut.

10. Tensioner used with Swage Stud Threaded Terminal.

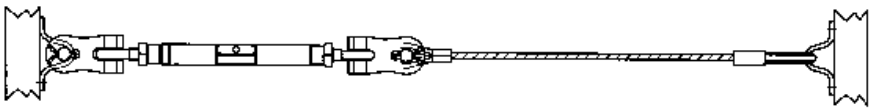
11. Swage Stud Threaded Terminal used with Stainless Steel Nut.

12. Dome Terminal.

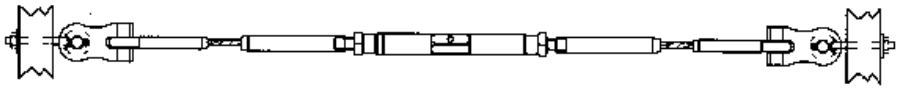
Ronstan Stainless Steel Fittings

The Ronstan cable systems for balustrading are simple to specify, easy to install and virtually maintenance free.

1. Sealoc toggle/swage turnbuckle and swage toggle with welded lug connections.

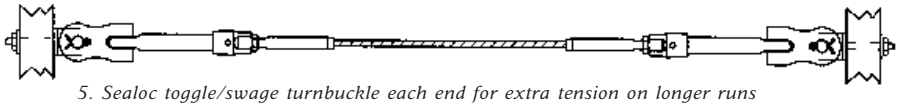


2. Seafast toggle/toggle turnbuckle and thimble/ferrule eyes with saddle connections.



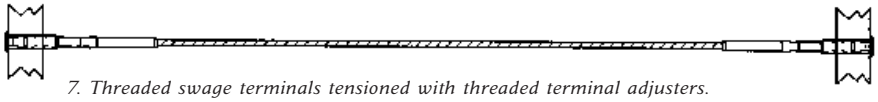
3. In line Seafast swage/swage turnbuckle and swage toggles with eyebolt connections.

4. Seafast fork/fork turnbuckle and thimble/ferrule eyes with pad eye connections.



5. Sealoc toggle/swage turnbuckle each end for extra tension on longer runs with anchor bolt connections.

6. Threaded swage terminals tensioned by external nuts.



7. Threaded swage terminals tensioned with threaded terminal adjusters.

STAINLESS STEEL FITTINGS

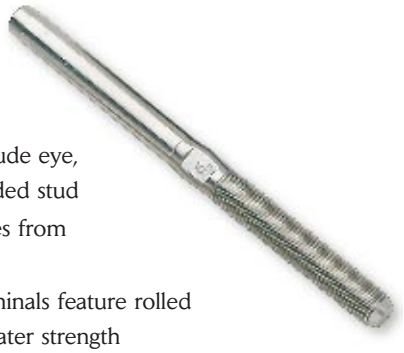
A comprehensive range of stainless steel fittings are available from LB International to suit a wide range of applications including yacht rigging, balustrading, medical and therapeutic supports, theatre and staging, shopfitting and corrosive environments.

Ronstan Sealoc Turnbuckles

'Sealoc' turnbuckles feature a unique, patented adjustment design, the threaded end of the turnbuckle being connected to the barrel with a coupling nut. The coupling nut is free to swivel on the barrel, adjusting considerably more tension on the stay than is possible with conventional turnbuckle design, while a cone lock nut positively locks adjustment.

- Unique adjustment mechanism
- Higher strength and lighter weight than conventional designs
- Wide assortment of end fittings available including toggle, eye and swage

Swage Terminals

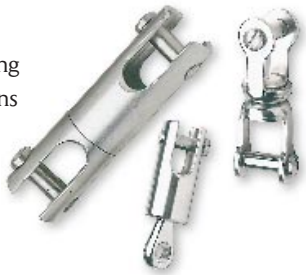


- Available designs include eye, jaw, toggle and threaded stud
- Available for wire sizes from 2.4mm to 16mm
- Threaded Swage Terminals feature rolled U.N.F. threads for greater strength
- Manufactured from 316 grade stainless steel – except for toggles which are manufactured from 304 grade stainless steel

Carbine Hooks

- Available with screw type locking mechanism, spring and snap types
- Ideal for use as general purpose fixing, ie. winch hooks, halyards etc.

Swivels



- Swivels with integral bearing are available for applications requiring rotation under load
- End fittings include eye, fork, ring and shackle

Pad Eyes

- Available in various sizes ranging from 6mm to 11mm
- Supplied with Nylon mounting pad
- Can be fitted to various materials including steel, timber, fibre glass and concrete
- Manufactured from 304 grade stainless steel

Stainless Steel Wire Rope Grips

- Easily applied on site
- Used to form an eye in stainless steel wire rope
- Available for wire sizes from 1.5mm to 9.5mm
- NOT TO BE USED FOR LIFTING
- NOT SUITABLE FOR USE WITH FIBRE ROPE

"S" Hooks

- "S" Hooks feature closed eye and long return leg to ensure positive attachment
- Manufactured from 304 grade stainless steel

Shackles

- A large range of shackles available manufactured from 304 grade stainless steel

SHACKLES

Shackles are suitable for a wide variety of applications such as the joining of chains, slings, and wire ropes. Dee and Bow styles are available in both load rated and commercial grade specifications ranging from 5mm to 38mm, with special sizes up to 1000 tonne.

Shackle Dee or Bow Grade 'S' to AS2741

Dia. Body d mm	Dia. Pin D mm	Throat T mm	Int. Length L mm	Work Load Limit W.LL tonnes
6	8	10	22	0.50
8	10	12	28	0.75
10	11	13	31	1.0
11	13	16	36	1.5
13	16	18	43	2.0
16	19	22	51	3.2
19	22	26	64	4.7
22	25	31	76	6.5
25	29	36	83	8.5
29	32	43	85	9.5
32	35	47	108	12
35	38	51	115	13
38	41	57	133	17
44	51	60	146	25
51	57	74	178	35
57	63	83	197	45
63	70	105	254	55
70	76	-	-	70
76	83	-	-	85
89	95	-	-	120
102	108	-	-	150

Shackle Dee or Bow Grade 'M' to AS2741

d mm	D mm	T mm	L mm	W.LL T.
6	10	13	25	0.25
10	13	19	37	0.50
13	16	28	54	0.75
16	19	32	63	1.5
19	22	37	74	2.0
22	25	44	82	3.0
25	29	52	95	3.8
29	32	54	104	5.0
32	35	60	114	6.0
35	38	66	125	7.0
38	44	78	136	9.5
41	48	75	146	11.0
44	51	82	155	13.0
48	54	92	175	14.0
51	57	98	187	16.0
57	63	108	210	20.0

Shackle Dee or Bow Grade 'L' to AS2741

d mm	D mm	T mm	L mm	W.LL T.
10	13	19	37	0.40
13	16	54	51	0.60
16	19	32	63	1.1
19	22	37	74	1.6
22	25	44	82	2.3
25	29	52	95	3.0
29	32	54	104	3.8
32	35	60	114	4.5
35	38	66	125	5.5
38	41	70	136	6.5
44	48	82	155	8.5
51	57	98	187	12.0
57	63	108	210	15.0

Commercial Dee

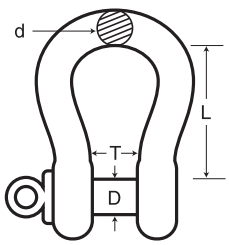
- NOT TO BE USED FOR LIFTING
- Available electro-plated or galvanised
- Available Bow or Dee (shown)
- Many sizes available from 5mm to 38mm

Alloy Grade S

Bow Shackle

Dee Shackle

- Suitable for all lifting and load rated applications
- Available with screw pin or safety pin
- Pin colour coded to permit quick and easy identification
- Stamped with ID number and SWL
- Bow shape allows more versatility
- Available in sizes ranging from 6mm (0.5T) to 102mm (150T).
- Larger sizes available to order (up to 1000T)



d = diameter of body
D = diameter of pin
T = throat
L = internal length

TURNBUCKLES
& RIGGING SCREWS

Turnbuckles and rigging screws are available in several different configurations to suit a wide variety of applications. These components are designed for tensioning guy, catenary, and container tie-down wire ropes and are not suitable for use in lifting applications.

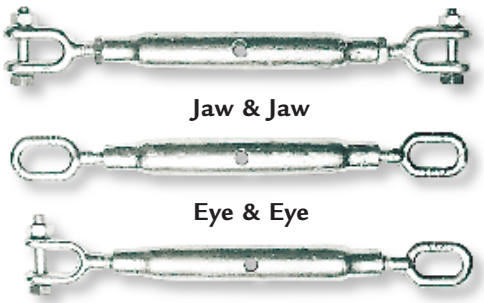
Commercial Grade Turnbuckles

- Light weight forged turnbuckles are ideal for lashing and tiedown as well as general tensioning applications
- Eye and eye, and hook and eye turnbuckles are galvanised, stub and stub is self colour
- Not suitable for lifting or where specific load bearing capacity is required

Applications include:

- Tensioning guy wires for sail cloth and shade cloth fixing
- Tensioning catenary wires
- Tensioning tie down wires in shipping containers
- NOT TO BE USED FOR LIFTING

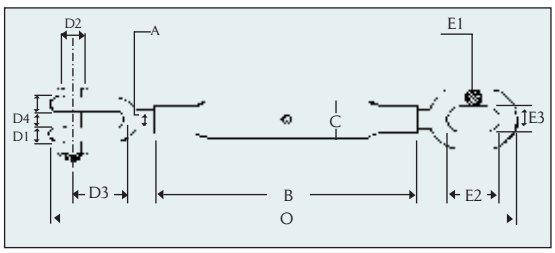
Grade L Turnbuckles & Rigging Screws



Jaw & Jaw

Eye & Eye

Eye & Jaw



- Ideal for load bearing applications
- Galvanized finish available
- NOT TO BE USED FOR LIFTING

SWL	A	B	C	N (Closed)	O (Closed)	D				E			WEIGHT
						Jaw				Oval Eye			
	Dia. Screw	Length of Body	Dia. of Body	Overall Length in Closed Position	Overall Length in Open Position	Dia.	Dia. Pin	Inside Length	Inside Width	Dia. Length	Inside Width		Per Piece
						D1	D2	D3	D4	E1	E2	E3	
m.tons	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kgs.
0.25	10	152	21	235	349	8	8	19	11	8	25	11	0.3
0.50	12	229	27	243	524	9	9	35	1	11	36	14	0.8
0.75	16	229	27	281	550	9	13	51	22	14	41	16	1.4
1.10	20	229	34	387	550	11	16	48	2	16	51	22	1.93
1.60	22	305	42	476	702	13	19	63	25	16	51	22	3.5
2.10	24	356	42	556	822	14	22	63	32	19	57	25	4.1
2.75	27	356	48	559	816	14	22	70	32	19	57	28	4.5
3.75	33	381	40	604	872	16	25	76	38	22	65	35	6.4
4.30	36	381	60	610	870	19	28	85	38	22	65	38	8.2
5.10	39	407	60	674	949	19	32	98	47	25	75	38	10.9
7.10	45	407	76	705	959	25	35	111	51	32	88	41	16.4
9.25	48	407	76	743	977	25	41	121	51	38	102	44	21.8
11.50	56	407	95	813	1025	32	47	139	60	41	134	67	31.8

EYEBOLTS & EYENUTS

If you're searching for a source of eyebolts and eyenuts that comply with Australian Standards LB International carries a large inventory. We stock forged mild steel eyebolts for general applications, and Rud alloy eyebolts and eyenuts for jobs where ultimate safety is critical.

Eyebolt & Eyenut Selection

To select the correct eyebolt or eyenut for Safe Working Load (SWL) first establish weight of load to be lifted. Ascertain if eyebolts or eyenuts are to be used individually or in pairs. If in pairs, it will be necessary to establish whether spreader bars will be used, in which case the SWL of the eyebolt or eyenut will be as per axial loading. If spreader bars are not used, then the included angle of the sling must be determined and the SWL established using pairs of eyebolts or eyenuts at included angles of 30˚, 60˚ and 90˚.

Reduction Factor for Single Eyebolt

Nominal size of eyebolt	Single eyebolt (Lift)		Pair of eyebolt (Lift)			
	Axial (WLL)	Trunnion-type mounting	Perpendicular	Included angle 30˚	Included angle 60˚	Included angle 90˚
	1	0.25	0.25	0.63	0.40	0.25

Example M22 Eyebolt

M22	2000kg	500kg	1000kg	2500kg	1600kg	1000kg

NOTE: The included angle, between the legs of every two-leg sling connected to a load by a pair of eyebolts, should not exceed 90˚.

Forged Eyenut

Alloy Eyebolt

Forged Eyebolt

Alloy Eyenut

Eyebolts and Eyenuts

- Use as a lifting or lashing equipment attachment point
- Available self colour or galvanised, as well as stainless steel
- When used for lifting, approved methods must be observed

Collar & Face Seating

To achieve loadings shown it is essential that the underside of the collar and the contacting surface is flat and smooth, and that the surface is at right angles to the tapped hole.

Correct Fitting of Eyebolts in Pairs

It is essential that pairs of eyebolts be aligned correctly. Eyebolts must not be forced into alignment, as this will cause overstressing at the neck of the collar.

Tightening of Eyebolts

Excessive tightening of eyebolts must be avoided due to the stresses placed upon the neck of the eyebolt; however, it must not be possible to enter a feeler gauge of more than 0.04mm at any point around the circumference of the collar.

Eyebolt Axial Working Load Limits - Imperial

Nominal Size of eyebolt	Grade L FDT Axial (WLL) kg	Grade S RUD Axial (WLL) kg
3/8″	250	1000
1/2″	400	1600
5/8″	800	4000
3/4″	1600	4800
7/8″	2000	-
1″	2500	8000
1 1/8″	4000	-
1 1/4″	5000	12000
1 1/2″	7000	16000
1 3/4″	8000	24000
2″	1000	32000
2 1/2″	20000	-
3″	30000	-

Eyebolt Axial Working Load Limits - Metric

Nominal Size of eyebolt	Grade L FDT Axial (WLL) kg	Grade S RUD Axial (WLL) kg
M6	-	400
M8	-	800
M10	250	1000
M12	400	1600
M14	-	3000
M16	800	7000
M20	1600	6000
M22	2000	-
M24	2500	8000
M30	4000	12000
M33	5000	-
M36	6300	16000
M39	7000	-
M42	8000	24000
M48	10000	32000
M56	15000	-
M64	20000	-
M72	25000	-
M76	30000	-

Ordering Information

1. Nominal size or size of existing hole
2. Thread form required
3. Surface finish unless self coloured
4. Lifting capacity as:
   (i) Working Load Limit (WLL)
   (ii) Safe Working Load (SWL) and AS 1418 classification of load application
   (iii) Whether testing is required

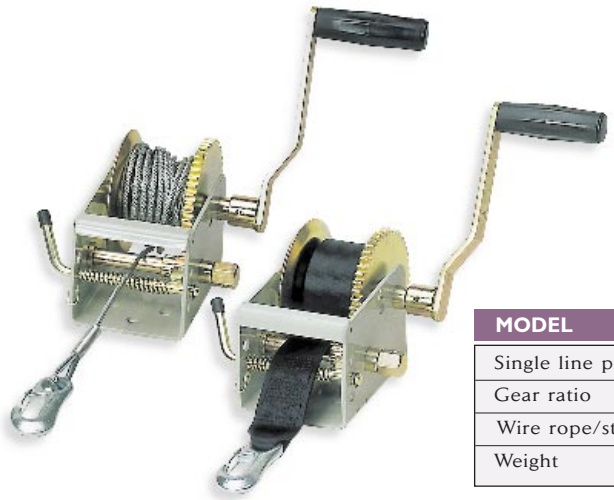
HAND WINCHES

LB International carries a comprehensive range of brake, and non-brake hand winches for applications ranging from boat trailers to rescue work. Heavy duty pull-lift winches, typically used for pulling and tensioning in the mining and construction industry, are also available.

Pacific Brake Hand Winches

- Positive action brake can hold the load in any position
- Compact, light weight and rugged construction
- Mechanical components enclosed for protection
- Baked enamel finish for corrosion protection
- High precision construction minimises gear noise
- Can be used to pull or lift loads

Model	BHW-800	BHW-1200	BHW-1800	BHW-2600	SF-2200
Capacity (kg) Pull - Lift	370-180	545-270	820-410	1200-600	1100
Hand force required (kg)	14.5	15	22	19	16
Gear ratio	4.1:1	4.1:1	5:1	10:1	22.2:1

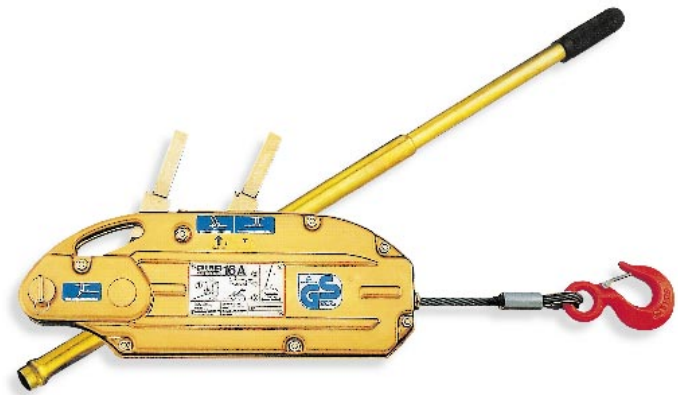


Pacific Non-brake Hand Winches

A versatile general purpose product for recreational and trailer applications.

- Fitted with single-acting ratchet mechanism to hold load whilst pulling
- Choose from galvanised wire rope or strap

MODEL HW	200R	500R	700R	700R2	700R3	200S	500S	700S	700S2	700S3
Single line pull kg	200	500	700	700	800	200	500	700	700	800
Gear ratio	1:1	3:1	5:1	5:1/1:1	10:1/5:1/1:1	1:1	3:1	5:1	5:1/1:1	10:1/5:1/1:1
Wire rope/strap	6m x 5mm rope					6m x strap				
Weight kg	3.8	4.2	4.5	4.8	6.0	4.0	4.5	5.0	5.2	6.5

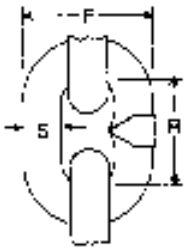


Alba Pull Lift Winches

- Stamped steel casing with reinforced shaping
- Double galvanised protection for tough environments
- Activating levers in line with rope ensure stability
- Protection against advance overload by safety screw
- Grip jaws open by means of patented claw couplers
- Conforms to AS1418-2

TRANSPORT CHAIN
& CHAIN FITTINGS

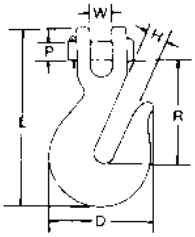
Characterised by a gold coloured finish, this uniquely designed tie-down chain provides the combined benefits of cleanliness, light weight and strength, with Test Certificates available on request. Note that these chains and components are not to be used for lifting.



HiLite – Bulk

Chain Size mm	MWL tonnes	S mm	R mm	F mm	Links/ metre	Part No.	Metres/ 100kg	Link Marking
7.3	2.0	7.3	23.8	25.9	42.0	40556	86.3	HILITE
8	2.5	8.0	23.8	27.0	42.0	41026	68.9	HILITE
10	4.0	10.0	29.6	34.3	33.8	41027	45.5	HILITE

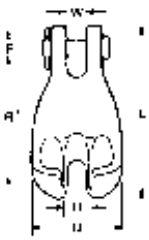
NOT TO BE USED FOR LIFTING



Clevis Grab Hook

Nominal Chain Size mm	Approx. M.W.L. tonne	D mm	H mm	L mm	P mm	R mm	W mm	Weight kg
6	1.0	49	9.5	86	7.9	51	7.9	0.18
7.1-8	2.0	57	11.1	100	9.5	61	9.5	0.30
10	3.0	69	12.7	114	11.1	69	11.1	0.45
13	5.0	84	16.7	143	14.3	86	15.1	1.95

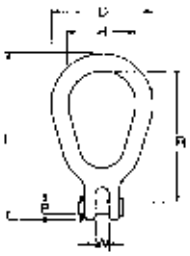
NOT TO BE USED FOR LIFTING



Clevis Claw Hook

Nominal Chain Size mm	Approx. M.W.L. tonne	D mm	H mm	L mm	P mm	R mm	W mm	Weight kg
6-8	2.0	42	9	81	9.4	60	9.5	0.3
10	3.0	52	11	101	10.3	75	11.1	0.5

NOT TO BE USED FOR LIFTING



Clevis Lug Link

Nominal Chain Size mm	Approx. M.W.L. tonne	D mm	H mm	L mm	P mm	R mm	W mm	Weight kg
7.1-8	2.5	83	54	140	9.5	108	9.5	0.4
10	4.0	87	54	142	12	107	12	0.5
13	6.4	100	60	200	16	158	14.5	1.5

NOT TO BE USED FOR LIFTING

HiLite – Bulk

Clevis Grab Hook

Clevis Claw Hook

Clevis Lug Link

CHAIN LOAD BINDERS

LB International carries a comprehensive range of load chain tensioning solutions including new designs that will meet evolving safety standards due for introduction in the near future. One of these, the Spanset Web Dog combines the safety of web/ratchet tensioning with a conventional load chain.

Safety Load Binder

- Independent body and handle construction incorporates unique cam action
- When chain tension is released, cam action stops binder handle flying back
- Eliminates need to open the Safety Load Binder with a cheater bar or snipe.
- Manufactured from drop-forged steel for top quality and maximum durability

Spanset Web Dog

- Unique Spanset ERGO ABS 'pull down' ratchet action
- Achieves almost double the tension of a chain dog
- Maintains constant tension under dynamic loading
- Safer to use due to incremental tensioning and release
- Highest rated load restraint device available

Standard Load Binder

- The most common load chain binder design
- Low cost solution for tensioning load chains

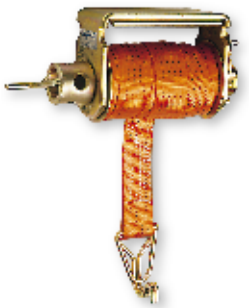
Ratchet Load Binder

- Ratchet design enables incremental tensioning
- Safer load chain tensioning and release function

Many chain tensioning solutions now available – the safest being the web dog and ratchet type load binders.

SPANSET LASHING SYSTEMS

The Spanset range incorporates a comprehensive choice of winches, tie-down straps and ratchet tie-downs ideal for safely securing loads of all kinds. Manufactured from high quality materials, Spanset products meet Australian and International Standards.



Winches

- Pretension capacity: 300 kg
- Will spool a total of 9 metres of 50mm, 75mm or 100mm wide webbing

Replacement Straps

- 20002-9 – 50 x 9 metre/5T Heavy Duty (1835 & 20002) fitted with hook & keeper

DI Tradesman

- 36mm Ratchet Tiedown
- Ideal for securing heavy loads

Spanset 50mm Ratchet

The Spanset 50mm Ratchet is ideal for heavy duty tie-down applications on vehicles of all sizes. The 9 metre length of high tenacity webbing is fitted with a hook and keeper allowing attachment to a wide range of truck bodys, rails etc.

Type	Webbing Width	Load Rating	Overall Length	Conforms to
20002	50mm	2.5 tonne	9 metres	International Standards

D1 Tradesman

The Spanset 36mm Ratchet Tie-down is ideal for securing any load items such as ladders, tools and boxes. Features high tenacity webbing fitted to PVC coated heavy duty 'S' hooks and 1804 blue epoxy coated ratchet. Manufactured to the highest safety standard. Protective sleeves are available for sharp edged loads.

Type	Webbing Width	Load Rating	Overall Length	Conforms to
D1	30mm	500kg	6 metres	International Standards

B1 Weekender

The Spanset 25mm Ratchet is the most versatile and handy top quality tie-down for light loads on utilities and box trailers. They are manufactured with high tenacity webbing, PVC coated 'S' hooks and blue epoxy coated ratchets.

Type	Webbing Width	Load Rating	Overall Length	Conforms to
B1	25mm	175kg	4 metres	International Standards

Photographs courtesy of Spanset Australia.

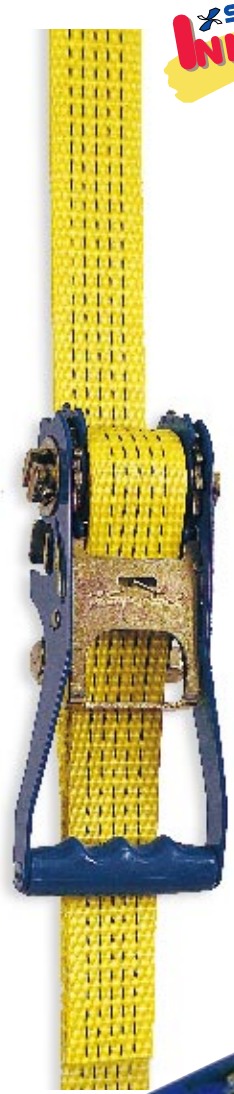
SPANSET RATCHETS

When it comes to ratchets and tie-down systems, look no further than the Spanset range. The worldwide innovator in ratchet webbing systems, Spanset products feature unbeatable quality and are engineered to deliver maximum durability. When it comes to binding loads never compromise on safety!

Spanset 20035 Ratchet

- **Unique, patented Spanset ERGO 'pull down' ratchet action**
- 50mm wide webbing for 2,500kg capacity
- ABS dual pawl ratchet for safe, slow release
- Significantly lighter than chain load binders
- Easier to handle than conventional chain binders
- Safer to use than conventional chain binders

ERGO ABS



Spanset 20020 Ratchet

- 50mm wide webbing for 2,500kg capacity
- ABS dual pawl ratchet for safe, slow release
- Significantly lighter than chain load binders
- Easier to handle than conventional chain binders
- Safer to use than conventional chain binders

Spanset 20040 Ratchet

- 75mm wide webbing delivers 5,000kg capacity
- ABS dual pawl ratchet for safe, slow release
- Significantly lighter than chain load binders
- Easier to handle than conventional chain binders
- Safer to use than conventional chain binders

FIBRE ROPE

Fibre ropes are suitable for lashing, lifting, rigging, towing, mooring, rescue, climbing and abseiling applications. LB International carries a large inventory in natural and synthetic fibres. Three strand, braided and plaited designs are available ranging in diameter from 2mm to 80mm.

3 Strand Fibre Rope

- Available in Sisal or Manilla natural fibres, as well as synthetic fibres including Nylon, Polypropylene, Polyethylene and Polyester
- Ideal for rigging, lashing and lifting
- Available in many sizes
- Splicing service available

General formula to calculate safe working load (of new rope only).
SWL in kg = (diameter in mm)^2 x factor.

Material	Factor	Material	Factor
Nylon	2.25	Polypropylene	1.6
Polyvinyl	1.25	Polyester	2
Polyethylene	1.45	Silver	1.16
Manilla	1.0	Sisal	1.0

Example: 12mm Nylon SWL in kg = (12)2 x 2.25 = 324kg

Braided Fibre Rope

- Available in Nylon, Polyester and cotton fibres
- High strength rope, ideal for yachting, abseiling and climbing, rescue work and other industrial applications
- Can be machine or hand spliced

8 Strand Fibre Rope

- Used for mooring lines, tow lines etc.
- Available in Polypropylene or Nylon fibres
- High strength/weight ratio
- Splicing service available

ELECTRONIC
LOAD INDICATORS

Electronic load indicators allow operators to remain at a safe working distance while monitoring loads. They're the ideal safety device for use on mobile and tower cranes, in construction and shipping operations, tension measurement, check weighing and testing.

BRIDON Telemetry Load Indicators

Bridon radio safe telemetry load indicators provide all the advantages of quick load and tension measurement without the problem of cable connected remote read-outs, and at a fraction of the cost of traditional radio telemetry equipment.

- Light weight aluminium body
- Extreme weather capability
- Minimum 30 metre range under normal operating conditions
- Shock resistant electronic and protective hand set casing
- Returns to passive mode between load measuring operations

RON 2000

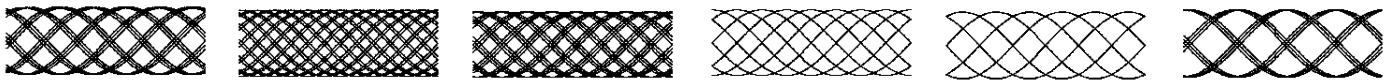
The lightest and smallest tension load meter available, the RON 2000 Electronic Dynamometer is a low headroom, accurate force and load measuring system consisting of a Load Cell and hand held electronic Indicator.

- Manufactured from high strength alloy steel
- Epoxy or electro-plated finish
- Load Cell connects to remote, hand held Indicator
- Indicator features liquid crystal display for clear read-outs
- Load Cell and Indicator powered by rechargeable battery housed in the Indicator
- System comes complete with solid, compact fitted case and battery charging unit
- Standard model load range from 1 to 120 tons, other ranges upon request

Proof Load Test using Bridon telemetry load indicator.

'EXPANDA' CAB

Designed to securely grip and hold cables to enable pulling operations, cable stockings are available to suit cable diameters from 5mm to 180mm with special sizes on request. Cable stockings will not damage cables and are available in a wide variety of designs.



Part No.	Range (mm)	Wire	Ferrule	Overall Length	Eye (mm)	Weave	Wire/Grade (mm)	Number of Strands	Aggregate BS (kN)	Approx. Stocking BS (T)
0.5 SS NTF	5 - 8	St/Steel	Copper	300	50	3 x 2	1.2 G304	6	7.32	0.62
0.5SS HD NTF	5 - 8	St/Steel	Copper	300	50	4 x 2	1.2 G304	8	9.75	0.83
01 NTF	8 - 12	Galv	Alloy	400	57	4 x 2	1.6 G1570	8	12.96	1.10
01 HD NTF	8 - 12	Galv	Alloy	400	57	3 x 3	1.6 G1570	9	14.58	1.24
01 SS NTF	8 - 12	St/Steel	Copper	400	57	4 x 2	1.6 G304	8	17.36	1.48
01 SS HD NTF	8 - 12	St/Steel	Copper	400	57	3 x 3	1.6 G304	9	19.53	1.66
02 NTF	12 - 22	Galv	Alloy	580	57	4 x 2	1.6 G1570	8	12.96	1.10
02 HD NTF	12 - 22	Galv	Alloy	580	57	4 x 3	1.6 G1570	12	19.44	1.65
02 SS NTF	12 - 22	St/Steel	Copper	580	57	4 x 2	1.6 G304	8	17.36	1.48
02 SS HD NTF	12 - 22	St/Steel	Copper	580	57	4 x 3	1.6 G304	12	26.04	2.21
03 NTF	22 - 32	Galv	Alloy	690	57	6 x 2	1.6 G1570	12	19.44	1.65
03 HD NTF	22 - 32	Galv	Alloy	690	57	6 x 3	1.6 G1570	18	29.16	2.48
03 SS NTF	22 - 32	St/Steel	Copper	690	57	6 x 2	1.6 G304	12	26.04	2.21
03 SS HD NTF	22 - 32	St/Steel	Copper	690	57	6 x 3	1.6 G304	18	39.06	3.32
04 NTF	34 - 44	Galv	Alloy	910	62	6 x 2	2.0 G1570	12	25.20	2.14
04 HD NTF	34 - 44	Galv	Alloy	910	62	6 x 3	2.0 G1570	18	37.80	3.21
04 SS NTF	34 - 44	St/Steel	Copper	910	62	6 x 2	2.0 G304	12	35.40	3.01
04 SS HD NTF	34 - 44	St/Steel	Copper	910	62	6 x 3	2.0 G304	18	53.10	4.51
05 NTF	45 - 55	Galv	Alloy	1120	62	6 x 2	2.0 G1570	12	25.20	2.14
05 HD NTF	45 - 55	Galv	Alloy	1120	62	6 x 3	2.0 G1570	18	37.80	3.21
05 SS NTF	45 - 55	St/Steel	Copper	1120	62	6 x 2	2.0 G304	12	35.40	3.01
05 SS HD NTF	45 - 55	St/Steel	Copper	1120	62	6 x 3	2.0 G304	18	53.10	4.51
06 NTF	56 - 66	Galv	Alloy	1300	75	6 x 2	2.5 G1570	12	38.40	3.26
06 HD NTF	56 - 66	Galv	Alloy	1300	75	6 x 3	2.5 G1570	18	57.60	4.90
06 SS NTF	56 - 66	St/Steel	Copper	1300	75	6 x 2	2.5 G304	12	50.04	4.25
06 SS HD NTF	56 - 66	St/Steel	Copper	1300	75	6 x 3	2.5 G304	18	75.06	6.38
07 NTF	70 - 82	Galv	Alloy	1560	95	6 x 2	2.5 G1570	12	38.40	3.26
07 HD NTF	70 - 82	Galv	Alloy	1560	95	6 x 3	2.5 G1570	18	57.60	4.90
07 SS NTF	70 - 82	St/Steel	Copper	1560	95	6 x 2	2.5 G304	12	50.04	4.25
07 SS HD NTF	70 - 82	St/Steel	Copper	1560	95	6 x 3	2.5 G304	18	75.06	6.38
08 NTF	85 - 100	Galv	Alloy	2250	100	6 x 2	3.0 G1570	12	56.40	4.79
08 HD NTF	85 - 100	Galv	Alloy	2250	100	6 x 3	3.0 G1570	18	84.60	7.19
08 SS NTF	85 - 100	St/Steel	Copper	2250	100	6 x 2	3.0 G304	12	85.20	7.24
08 SS HD NTF	85 - 100	St/Steel	Copper	2250	100	6 x 3	3.0 G304	18	127.80	10.86
09 NTF	104 - 130	Galv	Alloy	2250	130	6 x 2	4.0 G1570	12	92.40	7.85
09 HD NTF	104 - 130	Galv	Alloy	2250	130	6 x 3	4.0 G1570	18	138.60	11.78
09 SS NTF	104 - 130	St/Steel	Copper	2250	130	6 x 2	4.0 G304	12	130.68	11.11
09 SS HD NTF	104 - 130	St/Steel	Copper	2250	130	6 x 3	4.0 G304	18	196.02	16.66
10 NTF	130 - 180	Galv	Alloy	3000	175	6 x 2	5.0 G1570	12	144.00	12.24
10 HD NTF	130 - 180	Galv	Alloy	3000	175	6 x 3	5.0 G1570	18	216.00	18.36
10 SS NTF	130 - 180	St/Steel	Copper	3000	175	6 x 2	5.0 G304	12	201.36	17.12
10 SS HD NTF	130 - 180	St/Steel	Copper	3000	175	6 x 3	5.0 G304	18	302.04	25.67

Notes: *1. Stockings can be made to any length required.*

2. Lengths quoted are nominal and refer to minimum diameters. If length is critical please advise when placing the order.

3. Breaking strains are quoted in new condition.

4. Stainless Steel ferrule available in most sizes upon request.

LE STOCKINGS

Hauling Cable with Type C stocking

Type A: One end open, one end closed with a single eye. Designed to pull the cable by the end of the cable only. Suitable for electrical and hydraulic work, crane work, construction site handling work and pulling reinforcement strand. In some applications Type A should be used with a swivel. When working with rough or corrugated conduit shoulder protection may be required.

Type NA: As above made in Nylon strand for protection of adjacent wire. See picture below.

Type B: Both ends open with a double eye one end. This 'open' design allows the cable to pass through the stocking hence the cable can be pulled either at the end or at any point along the cable.

Type C: Flat (lace-up) stocking with double eye. The stocking is 'split' so that it can be wrapped around the cable and then laced.

Type D: Open both ends without eyes. Designed to join two ropes for installation purposes. Allows reasonably smooth join to pass over sheaves.

Type R: Open both ends with one eye. Made without any ferrules apart from formation of eye. Suitable for small duct work in electrical and hydraulic applications.

Also available with looped eye.

Manufacturing Nylon cable stocking

Manufacturing wire cable stocking