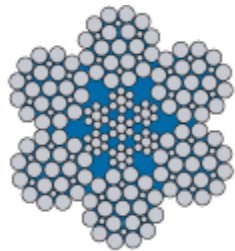


Wire Ropes



Wire Ropes : Crane Rope - Hi Flex 6 X 19



HI FLEX 6X19

- High quality flexible 6x19 class crane rope- including 6x19 Seale, 6x19 Filler, 6x26
- A sample of rope from each production batch is tested to destruction in order to confirm compliance with specified breaking force values.
- Consistent performance.
- Independent wire rope core.
- Good resistance to abrasion.
- Fully lubricated in manufacture.

Breaking Load Chart						
Nominal rope diameter		Approx. Mass. kg/100m	Minimum Breaking Force			
			Galvanized & Ungalvanized			
Rope Grade						
			1770N/mm ²		1960N/mm ²	
mm	inch		kN	tonnes	kN	tonnes
6		14.3	22.7	2.31	25.1	2.56
7		19.5	30.9	3.15	34.2	3.49
8	5/16	25.5	40.3	4.11	44.7	4.56
9		32.2	51	5.2	56.5	5.76
10		39.8	63	6.42	69.8	7.12
11	7/16	48.2	76.2	7.77	84.4	8.61
12		57.3	90.7	9.25	101	10.3
13		67.3	107	10.9	118	12
14		78	124	12.6	137	14

Typical Applications



LATTICE BOOM
Boom Hoist



DOCKSIDE
Boom Hoist

● Boom Hoist

16	5/8	102	161	16.4	179	18.3
18		129	204	20.8	226	23
20		159	252	25.7	279	28.4
22	7/8	193	305	31.1	338	34.5
24	15/16	229	363	37	402	41
26	1	269	426	43.4	472	48.1
28		312	494	50.4	547	55.8
32	1 1/4	408	645	65.8	715	72.9
36		516	817	83.3	904	92.2
40		637	1010	103	1120	114
44		771	1220	124	1350	138
48	1 7/8	917	1450	148	1610	164
52		1076	1700	173	1890	193

For Other constructions of the 6x19 Class and Fiber Core ropes, the breaking force details can be provided on request. Apart from above 1770,1960N/mm² rope grade, the IPS, EIPS, EEIPS, 2070N/mm² rope grade also can be made/available.



Wire Ropes : Crane Rope - Hi Flex 6 X 29Fi

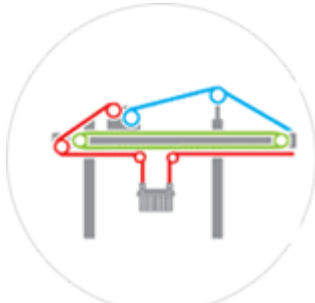


HI FLEX 6X29Fi

- High quality flexible crane rope.
- A sample of rope from each production batch is tested to destruction in order to confirm compliance with specified force values.
- Consistent performance.
- Independent wire rope core.
- Fully lubricated in manufacture.

Breaking Load Chart			
Norminal rope diameter mm	Approx. Mass. kg/100m	Minimum Breaking Force	
		Galvanized & Ungalvanized	
		1770 N/mm ²	1960 N/mm ²
		kN	kN
10	44	67.7	75.9
11.2	55	84.9	95.1
12.5	69	106	119
14	86	133	149
16	113	173	194
18	143	219	246
20	176	271	303
22.4	221	340	381
25	275	423	474

Typical Applications



CONTAINER
Main Hoist, Boom Hoist,
Trolley

- Main Hoist
- Boom Hoist
- Trolley

28	345	531	595
30	396	609	683
31.5	437	672	753
33.5	494	760	851
35.5	555	853	956
37.5	619	952	1067
40	704	1080	1214
42.5	795	1220	1370
45	891	1370	1536

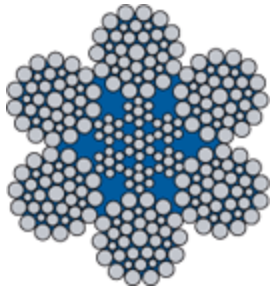
Above figures are for steel Core ropes.

For Fiber Core ropes, the breaking force can be provided on request.

Apart from above 1770,1960N/mm² rope grade, the IPS, EIPS, EEIPS, 2070N/mm² rope grade also can be made/available.



Wire Ropes : Crane Ropes - Class 6 X 36

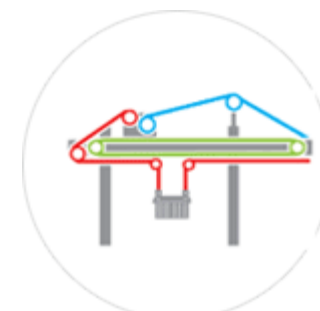


Class 6X36

- High quality flexible 6x36 class crane rope.
- A sample of rope from each production batch is tested to destruction in order to confirm compliance with specified breaking force values.
- Consistent performance.
- Independent wire rope core.
- Fully lubricated in manufacture.
- Supplied in high strength 1770N/mm², 1960N/mm² tensile steel as standard.

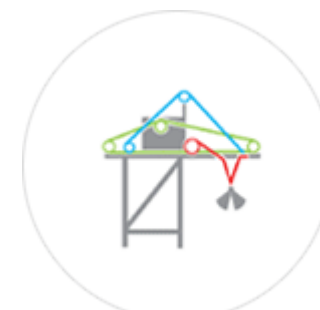
Nominal rope		Approximate nominal length mass		Minimum breaking force(F _{mm})					
mm	Inch	kg/100 m	(lb.ft)	Grade 1770 kN	Grade 1960 kN	Grade 2160 kN	Grade IPS kN	Grade EIP kN	Grade EEIP kN
(9.5)	(3/8)		(0.26)				58.4	67.2	73.8
10		40.9		63.0	69.8	76.9			
11		49.5		76.2	84.4	93.0			
(11.1)	(7/16)		(0.35)				79.1	90.7	99.6
12		58.9		90.7	100.0	111.0			
(12.7)	(1/2)		(0.46)				102.0	118.0	130.0
13		69.1		106.0	118.0	130.0			
14		80.2		124.0	137.0	151.0			
(14.3)	(9/16)		(0.58)				129.0	149.0	165.0
(15.9)	(5/8)		(0.72)				157.0	183.0	202.0

Typical Applications



CONTAINER

Main Hoist, Boom Hoist, Trolley



UNLOADER

Main Hoist, Boom Hoist, Racking

16		105.0	161.0	179.0	197.0			
18		133.0	204.0	226.0	249.0			
19		148.0	227.0	252.0	278.0			
(19.1)	(3/4)		(1.04)			228.0	262.0	288.0
20		164.0	252.0	279.0	308.0			
22		198.0	305.0	338.0	372.0			
(22.2)	(7/8)		(1.41)			308.0	354.0	390.0
24		236	363.0	402.0	443.0			
(25.4)	(1)		(1.85)			399.0	460.0	506.0
26		276.0	426.0	472.0	530.0			
28		321.0	494.0	547.0	603.0			
(28.6)	(1 1/8)		(2.34)			503.0	578.0	636.0
(31.8)	(1 1/4)		(2.89)			617.0	711.0	782.0
32		419.0	645.0	715.0	787.0			



LATTICE BOOM
Main Hoist



STEELWORK LADLE
Main Hoist

- Main Hoist
- Boom Hoist
- Trolley/Racking

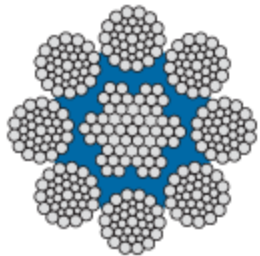
(34.9)	(1 3/8)	(3.49)		743.0	854.0	943.0
35		501.0	772.0	855.0	942.0	
36		530.0	817.0	904.0	997.0	
38		591.0	910.0	1010.0	1110.0	
(38.1)	(1 1/2)	(4.16)		880.0	1010.0	1110.0
40		654.0	1010.0	1120.0	1230.0	
(41.3)	(1 5/8)	(4.88)		1020.0	1170.0	1300.0
44		792.0	1220.0	1350.0	1490.0	
(44.5)	(1 3/4)	(5.66)		1180.0	1360.0	1500.0
45		828.0	1280.0	1410.0	1560.0	
(47.6)	(1 7/8)	(6.49)		1350.0	1550.0	1710.0
48		942.0	1450.0	1610.0	1770.0	
(50.8)	(2)	(7.39)		1530.0	1760.0	1930.0
51		1060.0	1640.0	1810.0	2000.0	

52		1110.0		1700.0	1890.0	2080.0			
(54.0)	(2 1/8)		(8.34)				1710.0	1970.0	2160.0
56		1280.0		1980.0	2190.0	2410.0			
(57.2)	(2 1/4)		(9.35)				1910.0	2200.0	2420.0
60		1470.0		2270.0	2510.0	2770.0			
62		1572.0	(1056)	2422.0	2682.0	2956.0	2244.0	2584.0	2843.0
(63.5)	(2 1/2)	1730.0	(1160)	2540.0	2814.0	3100.0	2354.0	2711.0	2950.0
64		1757.0	(1181)	2580.0	2858.0	3150.0	2390.0	2754.0	2997.0

Rope size and breaking force not show in the standard table also available on request and prior confirmation



Wire Ropes : Hi Flex 8 X 36 WS

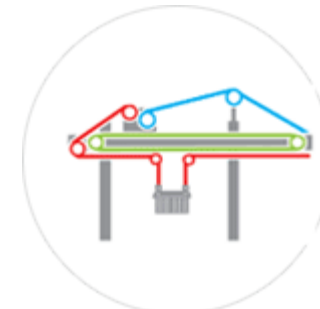


HI FLEX 8X36WS

- Hyflex 8x36 is a flexible high strength eight strand rope with steel core.
- A sample of rope from each production batch is tested to destruction in order to confirm compliance with specified breaking force values.
- Greater surface contact area resulting from the eight strand construction.
- Good bending fatigue life.
- Fully lubricated in manufacture.

Breaking Load Chart									
Nominal rope diameter		Approx. Mass. kg/100m	Minimum breaking force						
			Galvanized & Ungalvanized						
Rope Grade									
			1770N/mm ²		1960N/mm ²		2070N/mm ²		
mm	inch		kN	tonnes	kN	tonnes	kN	tonnes	
12		63.1	93.0	9.5	103.0	10.5	109	11.1	
13	1/2	73.6	109	11.1	121	12.3	128	13.0	
14		84.4	127	12.9	140	14.3	148	15.1	
15		97.8	145	14.8	161	16.4	170	17.3	
16	5/8	111	165	16.9	183	18.7	193	19.7	
17		127	187	19.0	207	21.1	218	22.3	
18		143	209	21.4	232	23.6	245	25.0	
19	3/4	161	233	23.8	258	26.3	273	27.8	
20		177	258	26.4	286	29.2	302	30.8	

Typical Applications



CONTAINER

Main Hoist, Boom Hoist, Trolley



SWIMGRAB

Main Hoist, Boom Hoist

- Main Hoist
- Boom Hoist
- Trolley/Racking

22	7/8	214	313	31.9	346	35.3	366	37.3
24	15/16	255	372	38.0	412	42.0	435	44.4
25		276	404	41.2	447	45.6	472	48.2
26	1	301	437	44.5	484	49.3	511	52.1
28		345	507	51.7	561	57.2	592	60.4
30		394	581	59.3	644	65.7	680	69.4
32	1 1/4	449	662	67.5	733	74.7	774	78.9
34		507	747	76.2	827	84.4	873	89.1
36		562	837	85.4	927	94.6	979	99.9

The above figures are for steel Core ropes.

For Fiber Core ropes, the breaking force can be provided on request.

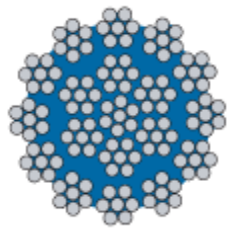
8 stranded ropes are also available as Hyflex 8x25, Hyflex 8x19S, with Steel and Fiber cores

Breaking load details can be provided on request.

Apart from above 1770,1960, 2070N/mm² rope grade, the IPS, EIPS, EEIPS rope grade also can be made/available.



Wire Ropes : Hi Flex 18



HI FLEX 18x7

- Hyflex 18 is a high strength flexible hoist rope, with antispin properties.
- Good resistance to rotation- Also known as Non Rotating ropes used extensively for tall cranes and Tower crane duties.
- Consistent Performance.
- Fully lubricated in manufacture.
- Also available in fibre core construction.
- A sample of rope for each production batch is tested to destruction in order to confirm compliance with specified breaking force values.

Breaking Load Chart										
Nominal rope diameter		Approx. Mass. kg/100m	Minimum Breaking Force							
			Galvanized & Ungalvanized							
Rope Grade										
			1770N/mm ²		1960N/mm ²		2070N/mm ²			
mm	inch		kN	tonnes	kN	tonnes	kN	tonnes		
10		40.4	62.5	6.4	69.2	7.1	73.1	7.4		
11	7/16	48.7	75.6	7.7	83.7	8.5	88.4	9.0		
12		60.3	90.0	9.2	99.6	10.2	105	10.7		
13	1/2	70	106	10.8	117	11.9	124	12.6		
14		81.7	123	12.5	136	13.8	143	14.6		
15		92.9	141	14.3	156	15.9	164	16.8		
16	5/8	105	160	16.3	177	18.1	187	19.1		
17		117	181	18.4	190	20.4	211	21.5		

Typical Applications



MOBILE
Main Hoist



TOWER
Main Hoist

● Main Hoist

18		133	202	20.6	224	22.9	237	24.1
19	3/4	147	226	23.0	250	25.5	264	26.9
20		161	250	25.5	277	28.2	292	29.8
22	7/8	196	302	30.8	335	34.2	354	36.1

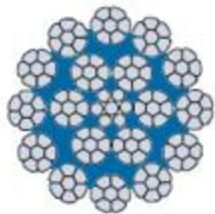
The above figures are for steel Cored ropes.

For Fiber Cored ropes, the breaking force can be provided on request.

Apart from above 1770,1960, 2070N/mm² rope grade, the IPS, EIPS, EEIPS rope grade also can be made/available.



Wire Ropes : Powerform 18



POWERFORM 18

- Powerform[®] 18 is a high strength rotation resistant hoist rope.
- Suitable for use on single part and multi-part hoist reeving systems.
- High fatigue life resulting from the unique compaction process.
- Increased resistance to crushing. Recommended for multi-layer spooling operations.
- Increased abrasion resistance resulting from the unique compaction process.
- Fully lubricated in manufacturing.



Nominal rope diameter		Approx mass kg/100m	Minimum breaking force(kN) 1960N/mm ²
mm	inch		
9	1/2	39.3	64.6
10		48.5	80.8
11	5/8	58.7	101
12		69.8	116
	1/2	78.2	135
13		82.0	141
14		95.1	160
15		109	182
16	5/8	124	209
17		140	237
18		157	266

Typical Applications



MOBILE
Main Hoist



OFFSHORE PEDESTAL
Main Hoist, Whip Hoist

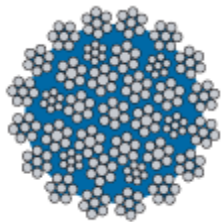
- Main Hoist
- Whip Hoist

	3/4	175	219
20		194	320
22		235	379
	7/8	240	387
24		279	462
	1	313	517
26		328	542

Note : For higher lifting heights consideration should be given to using a 35x7 construction with improved rotational characteristics.



Wire Ropes : Hi Flex 35



HI FLEX 35x7

- Hyflex 35 is a high strength flexible hoist rope, with antispin properties for higher lifts.
- Very High resistance to rotation in applications. Used for Taller Tower cranes.
- Suitable for use on single part and multi-part hoist reeving systems.
- Langs Lay construction offers maximum resistance to wear.
- A sample of rope for each production batch is tested to destruction in order to confirm compliance with specified breaking force values.

Breaking Load Chart									
Nominal rope diameter		Approx. Mass. kg/100m	Minimum Breaking Force						
			Galvanized & Ungalvanized						
Rope Grade									
			1770N/mm ²		1960N/mm ²		2070N/mm ²		
mm	inch		kN	tonnes	kN	tonnes	kN	tonnes	
12		63.8	100	10.2	111	11.3	117	11.9	
13	1/2	75.6	117	11.9	130	13.2	137	14	
14		87.4	136	13.8	151	15.4	159	16.2	
15		100	156	15.9	173	17.6	183	18.6	
16	5/8	114	178	18.1	197	20.1	208	21.2	
17		128	201	20.4	222	22.6	235	23.9	

Typical Applications



MOBILE
Main Hoist



TOWER
Main Hoist

18		144	225	22.9	249	25.4	263	26.8
19	3/4	161	250	25.5	277	28.3	293	29.9
20		179	278	28.3	307	31.3	325	33.1
21	13/16	196	306	31.2	339	34.6	358	36.5
22	7/8	220	336	34.2	372	37.9	393	40
23		236	367	37.4	406	41.4	429	43.7
24	15/16	257	400	40.7	443	45.1	467	47.6
25		278	434	44.2	480	49	507	51.7
26	1	302	469	47.8	519	53	549	56



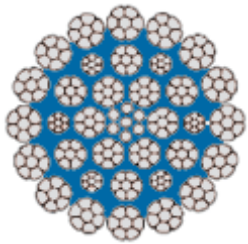
OFFSHORE PEDESTAL
Main Hoist, Whip Hoist

- Main Hoist
- Whip Hoist

The above figures are for Steel Core ropes.
Apart from above 1770,1960, 2070N/mm² rope grade, the IPS, EIPS, EEIPS rope grade also can be made/available.



Wire Ropes : Powerform 35



POWERFORM 35

- Powerform[®] 35/35P has the highest strength of all low rotation hoist ropes.
- Maximum resistance to rotation.
- Suitable for use on single part and multi-part hoist reeving systems.
- High fatigue life resulting from the unique compaction process.
- Increased resistance to crushing. Recommended for multi-layer spooling operations.
- Increased abrasion resistance resulting from the unique compaction process.
- Fully lubricated in manufacturing.

Nominal rope diameter		Approx mass kg/100m	Minimum breaking force(kN) 1960N/mm ²
mm	inch		
	1/2	81.1	148
14		98.6	180
16	5/8	129	233
18		163	300
19	3/4	182	331
20		201	372
22		243	444
	7/8	249	453
24		290	531
	1	325	591
26		340	621

Typical Applications



MOBILE
Main Hoist



OFFSHORE PEDESTAL
Main Hoist, Whip Hoist

- Main Hoist
- Whip Hoist



Wire Ropes : Fishing Ropes

Usha ropes are widely used for fishing purposes all over the world. From uses in general fishing to highly mechanised trawlers, our fishing ropes are favoured because of the high quality of rope drawn, superior coating, improved fatigue property and longer rope life. Lubricants specially developed for fishing purposes ensure proper adhesive, retention and pliable qualities. Even in extreme cold waters it provides protection against internal and external wear and corrosion.

6 Strand Ropes with Fibre Core Galvanised

6x7



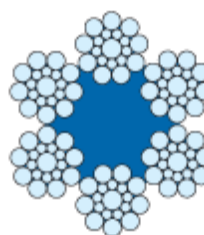
TYPICAL APPLICATIONS :

6x19



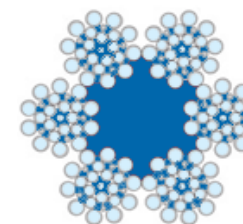
TYPICAL APPLICATIONS :

6x19S



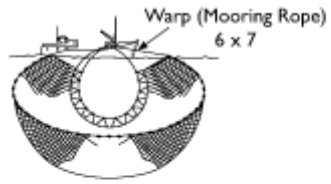
TYPICAL APPLICATIONS

6x26WS

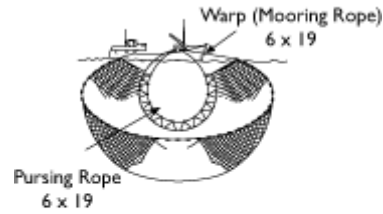


TYPICAL APPLICATIONS :

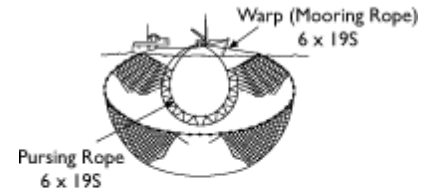
SURFACE TRAWL



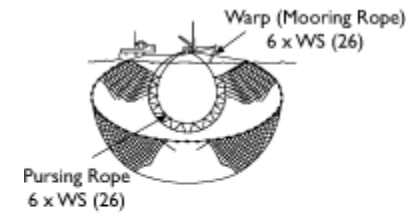
SURFACE TRAWL



SURFACE TRAWL



SURFACE TRAWL



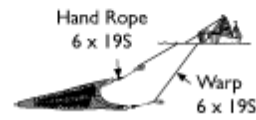
BOTTOM TRAWL



BOTTOM TRAWL



BOTTOM TRAWL



BOTTOM TRAWL



6x7 (6/1) Construction "Sealion Brand" right hand ordinary lay :				
Nominal Diameter (mm)	Approximate Weight Kg/100 M		Minimum Breaking Load At 1470 N/mm² (kN)	
	Fibre Core	Steel Core	Fibre Core	Steel Core
10	35.6	40.2	52.8	58.3
12	51.3	58	76.0	84.0
13	60.3	68.1	88.0	99.0
14	70	79.1	103.0	113.0
16	91.3	103.2	135.0	149.0
18	115.5	130.5	171.0	188.0
20	142.5	161	211.0	232.0
22	172.5	195	256.0	282.0
24	205.3	232	304.0	334.4

**6x12 (9/3) Construction with fibre main core-right hand ordinary lay :
6x19 (12/6/1) Construction with fibre main core-right hand ordinary lay :**

Nominal Diameter (mm)	Approximate Weight Kg/100 M	Minimum Breaking Load At 1470 N/mm ² (kN)
8	20.5	32.1
9	28	40.7
10	31.5	50.2
11	39.5	60.7
12	48.5	72.3
13	56	84.4
14	65	98.4
16	85	128.0
18	107.5	163.0
20	133	201.0

6x19S & 6x26WS Trawline fishing rope :-					
Diameter		Approximate Mass	Minimum Breaking Force		
mm	INCH	Kg/100 M	1570 N/mm ² (kN)	1770 N/mm ² (kN)	
13	1/2	63	88	99	
14	9/16	73	102	115	
16	5/8	95.4	133	150	
18	23/32	121	168	190	
19	3/4	135	188	211	
20	25/32	149	208	234	
22	7/8	180	251	283	
24	15/16	215	299	337	
26	1	252	351	396	
28	1 1/8	292	407	459	
32	1 1/4	382	532	600	

Note: Ropes can also be designed and manufactured to customers' special needs.



Wire Ropes : Elevator Ropes

GOVERNOR ROPES



6 x 25F

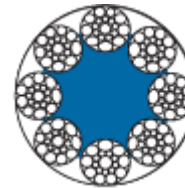
HOIST & COMPENSATING ROPES



**6 x 19 Classification
+ Fibre core (CFN)**

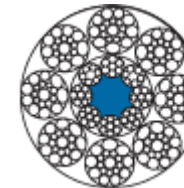


HOIST & COMPENSATING ROPES



**8 x 19 S+ Fibre core
(CFN)**

HOIST & COMPENSATING ROPES



**8 x 19 S+ IWRC
(8x7+CF)**

Elevator ropes require the highest degree of quality due to their Critical Nature. Human life is involved directly in use of these ropes. Several International customers using our ropes are testimony to the quality of our ropes. Elevator ropes are manufactured using the best steel rods and good quality cores and pass through stringent qualifying tests before being put to use. We manufacture both Hoist ropes as well as Governor ropes for the elevator industry.

These are offered as per JIS G 3525, EN 12385-5

GOVERNOR ROPES - 6x25F					
Size Rope 8-12 mm					
Nominal Rope Diameter		Approx. Weight / mass		Min. Breaking force /load 1770 N/mm2 grade	
inches	mm	lbs/100ft	kg/100m	1000lbs	kN
5/16	8	15.4	23	8.4	37.4
	10	24.1	35.9	13.1	58.4
15/32	12	34.7	51.9	18.9	84.1

GOVERNOR ROPES - 8x25F					
Size Rope 8-13 mm					
Nominal Rope Diameter		Approx. Weight / mass		Min. Breaking force /load 1770 N/mm2 grade	
inches	mm	lbs/100ft	kg/100m	1000lbs	kN
5/16	8	14.6	21.8	6.6	29.4
3/8	9.5	20.6	30.9	9.3	41.5
7/16	11	27.6	41.1	12.5	55.7
1/2	12.7	36.8	54.8	16.7	74.2

HOIST AND COMPENSATING ROPES - 6X19F					
Nominal Rope Diameter		Approx. Weight / mass		Min. Breaking force /load 1770 N/mm2	
inches	mm	lbs/100ft	kg/100m	1000lbs	kN
5/16	8	15.4	23	8.4	37.4
	9	19.6	29.2	10.6	47.3
	10	24.1	35.9	13.1	58.4
	11	29.2	43.4	15.9	70.7
	12	34.9	51.7	18.9	84.1
1/2	12.7	38.9	57.9	22.2	98.7
5/8	16	61.8	91.9	33.6	149.5

HOIST AND COMPENSATING ROPES - 8X19S					
Size Rope 8-16 mm					
Nominal Rope Diameter	Approx. Weight / mass	Min. Breaking force kN			
		Dual Tensile			Single Tensile
mm	lbs/100ft	kg/100m	1180/1770 grade	1370/1770 grade	1570
8	14.6	21.8	25.7	28.1	29.4
9	18.5	27.5	32.5	35.6	37.3
10	22.8	34	40.1	44	46
11	27.6	41.1	48.6	53.2	55.7
12	32.9	49	57.8	63.3	66.2
13	38.6	57.5	67.8	74.3	77.7
16	58.5	87	103	113	118

HOIST AND COMPENSATING ROPES - 8X19S(IWRC)					
Size Rope 8-16 mm					
Nominal Rope Diameter	Approx. Weight / mass		Min. Breaking force kN		
			Dual Tensile		Single Tensile
mm	lbs/100ft	kg/100m	1180/1770 grade	1370/1770 grade	1570
8	17.5	26	35.8	38	35.8
9	22.2	33	45.3	48.2	45.3
10	27.3	40.7	55.9	59.5	55.9
11	33.1	49.2	67.6	71.9	67.6
12	39.4	58.6	80.5	85.6	80.5
13	46.2	68.7	94.5	100	94.5
16	69.9	104	143	152	143

HOIST AND COMPENSATING ROPES - 8X19S(Fiber Core) as per RR-W-410-F Type II Class 2 Traction Grade					
Nominal Rope Diameter		Approx. Weight / mass		Min. Breaking force	
inches	mm	lbs/100ft	kg/100m	1000lbs	kN
3/8	9.5	0.23	0.2	8.2	36.5
1/2	12.7	0.4	0.36	14.5	64.5
5/8	16	0.63	0.57	23	102.3

Breaking load of 8x19S, 8x19W, 8x25F as per JIS G 3525				
Nominal Rope Diameter	Breaking load kN			(Informative) Approximate unit mass kg/m
	Bright or plated		Bright	
Mm	Grade E (1320 N/mm ²)	Grade A (1620 N/mm ²)	Grade B (1770 N/mm ²)	
8	26	30.8	32.8	0.220
10	40.6	48.1	51.3	0.343
11.2	51	60.3	64.3	0.430
12	58.5	69.2	73.8	0.494
12.5	63.5	75.1	80.1	0.536
14	79.6	94.3	100	0.672
16	104	123	131	0.878
18	132	156	166	1.11
20	162	192	205	1.37
22.4	204	241	257	1.72
25	254	301	320	2.14



Sand Line 6x7 ropes



Sand Line

- Large outer wires for resistance to wear.
- Exceptional spooling characteristics.
- Resistance to kinking.
- Easy to splice.

Nominal rope diameter(inch)	Approx mass kg/100m	Minimum breaking force(kN)	
		IPS	EIPS
3/8	31.2	52.1	141
7/16	43	70.5	77.6
1/2	57	91.6	101
9/16	71	116	127
5/8	88	141	155

Typical Applications

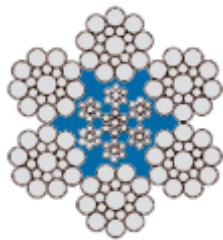


Sand line

• Reference standards : API 9A, ASTM A1023(drawn-galvanize/bright)



Drilling Lines



DRILL LINE

Deteriorating Forces	<ul style="list-style-type: none"> • Abrasion • Drum/Sheaves wear fatigue • Crushing forces from multi-layer winding on drum • Shock load
Properties required	<ul style="list-style-type: none"> • Flexibility • Abrasion resistance • Stable construction to absorb crushing forces
Types of ropes suggested	<ul style="list-style-type: none"> • 6x19S IWRC • 6x26WS for larger dia ropes

NOMINAL ROPE DIA		APPROX. MASS	MINIMUM BREAKING FORCE	
Inch.	mm		EIPS	EEIPS
		Kg./100m	kN	kN
3/4	19	155	262	288
7/8	22	211	354	389
1.0	26	275	460	506
1 - 1/8	29	348	568	636
1 - 1/4	32	430	711	782
1 - 3/8	35	521	854	943
1 - 1/2	38	619	1010	1112
1 - 5/8	42	726	1170	1300
1 - 3/4	45	844	1360	1500
1 - 7/8	48	967	1550	1710
2.0	52	1100	1760	1930

Typical Applications



Drill line

Gondola Ropes



GONDOLA ROPE

The construction of high-rise building, Chimneys, Towers, Bridges & Industrial structures has created a demand for **"UNLIMITED HEIGHT, MOBILE CONTINUOUS ACCESS PLATFORMS"**. These are required for construction & maintenance of building, cleaning, painting, repairs and glass facade maintenance. These mobile continuous access platforms are commonly known as **GONDOLAS**. These platforms are raised & lowered "using hoisting motors that run on steel wire ropes that pass through the hoisting mechanism using pressure pulleys. The steel wire ropes used in it are called **GONDOLA ROPES**.

These steel wire ropes are made using a special steel with tightly controlled specification having special zinc coating applied before wire drawing with improved adherence of coating, closer tolerances, improved fatigue property to provide longer rope life & consistent quality.



LUBRICANT

Unless otherwise specified, the Gondola ropes are dry with a view to avoid the adherence of dust particles & slippage in rollers when in use in open-air atmosphere.

MAINTENANCE

Sheave and grooved rollers must be checked periodically for wear in the grooves, which may cause pinching, and abrasion of the rope. If the groove bears the imprint of the rope it should be machined clean or replaced with a sheave of harder material.

STORAGE

In order to avoid corrosion and damage, wire rope should be stored in a dry place, with adequate ventilation to avoid a build-up of moisture around rope. The stored rope must be covered with dust protecting covering. Avoid the rope contact with alkalis and acidic materials, otherwise the rope will get corroded at the point of contact.

RECOMMENDATION

Proper maintenance & care of rope ensures safety, longer life and lower costs, therefore:

- Never over load the wire rope.
- Never exceed the work load limit/safe working load.
- Use correct design factor for the application.
- Never use damaged, or corroded rope.
- Never use broken, corroded, grooved sheaves.
- Never fail in performing the periodical check for the maintenance of rope.
- Do not use twisted, looped or kinked wire rope.
- Avoid crushing or hammering, severe or reverse bending.
- Avoid shock-too fast start or stop, as this may lead to bird caging of the rope.

GONDOLA ROPES SPECIFICATION																
Construction	Main core	5/16" (8.00 mm)			8.20 mm.			8.30 mm.			9.00 mm.			3/8" (9.53 mm.)		
		Weight (kg/km)	Min. B/L (kN)		Weight (kg/km)	Min. B/L (kN)		Weight (kg/km)	Min. B/L (kN)		Weight (kg/km)	Min. B/L (kN)		Weight (kg/km)	Min. B/L (kN)	
			1770 N/mm ²	1960 N/mm ²		1770 N/mm ²	1960 N/mm ²		1770 N/mm ²	1960 N/mm ²		1770 N/mm ²	1960 N/mm ²		1770 N/mm ²	1960 N/mm ²
4x19S (9/9/1) 4x26WS (10/5+5/5/1) 4x36WS(14/7+7/7/1)	FMC	229	42	46.6	241	44.1	49	247	45.2	50.1	290	53.2	58.9	325	59.2	65.7
5x19S (9/9/1) 5x26WS(10/5+5/5/1)	FMC	223	40.8	45.2	234	42.8	47.4	240	43.9	48.6	282	51.6	57.2	331	57.8	64
6x17S (8/8/1)	WSC IWRC	246	40.3	44.7	258	42.3	47	264	43.3	48.2	311	51	56.6	348	62.9	69.9
6x19S (9/9/1)	WSC IWRC	253	40.3	44.7	265	42.3	47	272	43.3	48.2	320	51	56.6	358	62.9	69.9
6x19 (12/6/1)	WSC IWRC	243	40.3	44.7	255	42.3	47	262	43.3	48.2	308	51	56.6	344	62.9	69.9

PVC Coated Ropes



Products PVC Coated Ropes

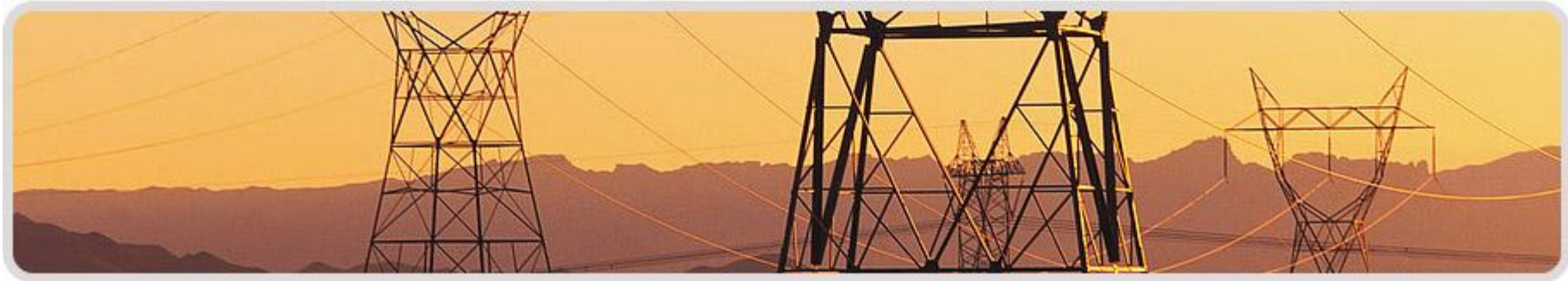
Galvanized Steel Wire Ropes Coated with PVC, PP, PE in various colors.

	Size in millimeter		Size in inch		Construction		Rope grade(N/mm ²)	Colour of outer cover	
	Inner size	Outer size	Inner size	Outer size					
	2	3,3.5,4,5	1/16"	3/32", 1/8" & 3/16"	6x7,7x7	-	1570,1770,1960	Various colours	
	2.5	3.5,4,5,5.5	3/32"	1/8", 5/32" & 3/16"		-			
	3	4,5,6	1/8"	3/16", 7/32" & 1/4"		6x19,7x19			
	4	5,6,7	3/16"	1/4", 5/16"					
	5	6,7,8	1/8"	3/16", 7/32" & 1/4"					
	6	7,8,9	5/32"	7/32"					
	7	8,9,10	3/16"	1/4", 5/16"					

8	9,10,11	1/4"	5/16" & 3/8"				
9	10,11,12	5/16"	7/16"				
10	11,12	3/8"	7/16"				

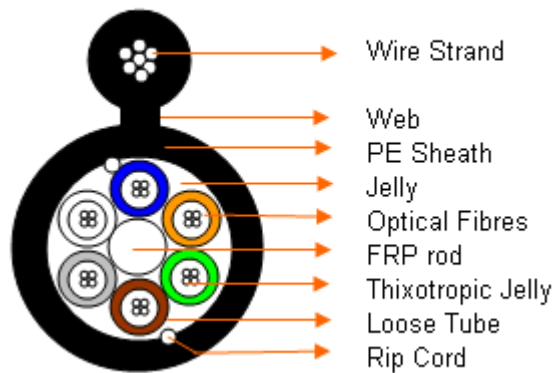
- Intermediate size are available on demand.

Industrial Strands



Industrial Strands

Cross-section of 24 Fibers Cable for Aerial





Telephone Messenger Strand (Dry/ with asphalt)	
SIZE & CONSTRUCTION	
1/4" (7/2.03mm.), 3/16" (7/1.57mm.), 7/1.80mm., 7/1.60mm., 7/1.32mm.	
Approx. Wt. Kg/Km	
7/2.03 mm.-180 kgs., 7/1.80 mm.-142 kgs., 7/1.60 mm.-112 kgs., 7/1.57mm-109 kgs., 7/1.32 mm.-76 kgs	
SPECIFICATION	
ASTM A 640 / Customer's specification, ASTM A475, BS 183	
APPLICATION	
- Telephone Messenger support strand for figure 8 telecom Aerial Cables/ Aerial Optic Fibre Cables	



LT. Overhead ground wire strand	
SIZE & CONSTRUCTION	
1/4" (7/2.03mm.), 5/16" (7/2.64mm.), 3/8" (7/3.05mm.)	
Approx. Wt. Kg/Km	
1/4"-180 kgs., 5/16" -305 kgs., 3/8"-406 kgs.	
SPECIFICATION	
Grade -EHS, HS, UTILITY : ASTM A 475	
APPLICATION	
- For supporting telecom & optical fibre cables poles and telecom towers.	



Galvanised Guy Strand

SIZE & CONSTRUCTION

25 mm² (7/2.10 mm.), 35 mm²(7/2.50 mm.), 50 mm²(7/3.00 mm.) , 70 mm² (19/2.10 mm.), 95 mm²(19/2.50 mm.),120 mm² (19/2.80 mm.)

Approx.Wt. Kg/Km

25 mm²-192 kgs., 35 mm²-272 kgs., 50 mm²-392 kgs., 70 mm²-522kgs.,95 mm²-740 kgs.,120 mm² -933kgs.

SPECIFICATION

TIS-404(Grade-I),as per customer

APPLICATION

- For earthing & support of electric poles.



HT. -Over head ground wire strand

SIZE & CONSTRUCTION

5/16"(7/2.64 mm.), 3/8"(7/3.05 mm.), 7/16"(7/3.68 mm.)

APPROX Wt. KGS./KM.

5/16"-305 kgs., 3/8"-406 kgs., 7/16"-595 kgs.

SPECIFICATION

ASTM A363 (Grade-EHS, HS)

APPLICATION

- For earthing in HT power lines.

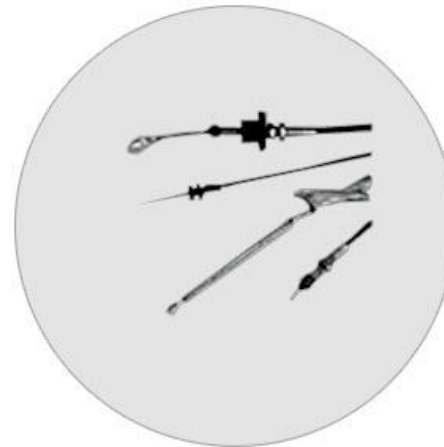
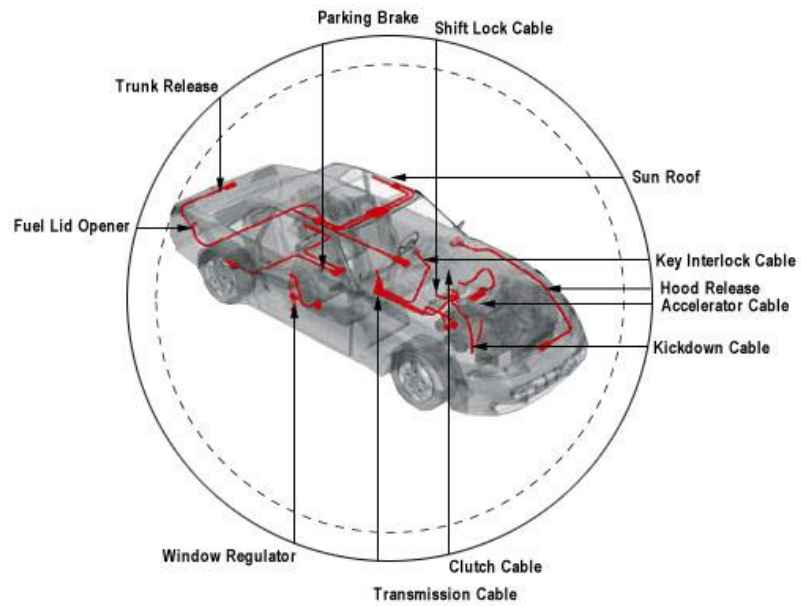


ACSR strand	
SIZE & CONSTRUCTION	
	7/1.57 mm To 7/2.67 mm
Approx.Wt. Kg/Km	
	As per specifications
SPECIFICATION	
	ASTM B498/B500-class A, BS-215
APPLICATION	
	Zinc coated stranded, steel core for aluminium, conductors, steel reinforced

GAC / Control Cables



Products **GAC / Control Cables**



Fine Cords, GAC & Auto Control Cables.

Size range		Construction	Core	Rope grade(N/mm \diamond)	Coating
mm	inch				
1.0 - 4.2		1x7(6/1)	-	1770,1960	Galvanize
1.2 - 3.5		1x12(9/3)	-		
2.0 - 3.5		1x15(14/1)	-		
1.2 - 3.5		1x19(12/6/1)	-		
3.0 - 3.5		1x37(18/12/6/1)	-		
1.5 - 10.0	1/16" - 3/8"	7x7(6/1)	WSC		Galvanize
3.0 - 12.0	1/8" - 7/16"	7x19(12/6/1)			
2.0 - 7.0	5/64" - 9/32"	6x7(6/1)	FMC		
3.0 - 12.0	1/8" - 7/16"	6x19(12/6/1)			
4.0 - 5.0	5/32" - 3/16"	4x7(6/1)			
2.0		3x19(12/6/1)	FMC	2250	Galvanize
2.5 - 10.0		4x19(12/6/1)		2070,2250	
6.0 - 10.0		6x19S(9/9/1)	FMC, WSC	1770,1960	Galvanize

(BS EN 12385-4, JASO F 903, RR-W-410F, AS 3569 and customer's specification)