ICPR 1200 LIMITED

**UK / EUROPE REPRESENTATIVE** 

# CEFW PRODUCT CATALOG Made in Japan, High Quality & Reasonable Price ALLOY PLATED WIRE ROPE

Founded in 1970 C.F.WIREROPE.LTD

# Introduction

# The Best Wire Rope

We have been manufacturing quality wire rope since establishing in 1970.

Our philosophy is simply to manufacture the wire rope our customers need.

As a wire rope specialist, we also seek to innovate, and through such process we have reduced the cost to our clients, whilst maintaining safety and quality.



# **Company Profile**

Name : C.F.WIREROPE, LTD President : Hiroyoshi Nakano Line of business : Manufacturing, sales and processing wire rope Subsidiary : NAKANO, LTD (overseas export of wire rope) Address : 5-13-24, Shimokawaraya, Izumisano-city, Osaka, Japan 〒 598-0062

E-mail : director@icpr1200.com Representative: Paul Buckingham Established : April, 1970



#### OUR ALLOY PLATING WIRE ROPE PARTNER – J-WITEX CORPORATION

We manufacture zinc-aluminum alloy plating (product name: KAL-G) wire rope using inhouse developed wire plating equipment.

The plating system consists of a gas wiping system and a special cooling device, enabling an unprecedented thickness of plating.

It is generally accepted that zinc-aluminum alloy plating is 2-3 times more resistant to corrosion than zinc plating, and by applying a greater thickness of plating than normal galvanized products, it has become possible to manufacture the wire ropes with the tested 3 times higher level of corrosion resistance.

#### ALLOY PLATING WIRE ROPE (10% AI-Zn) – TEST DATA

Key Features:

- Galvanized wire rope is usually zinc (Zn) plated, but our alloy plated wire rope is 10% Al-Zn plating for high corrosion resistance.
- This plating technology, producing the 10% AI-Zn plating, is only available via our Japanese wire rope manufacturer network.
- Overseas manufacturers are not privy to this technology and coating weight.
- Alloy plated wire rope has 3 times more corrosion resistance than general galvanized rope.

#### **Reference Material 1 : Salt Spray Test**



Alloy plating(10% Al-Zn)

# W J-WITEX CORPORATION

#### ALLOY PLATING WIRE ROPE - TEST DATA



Reference Material 2 : Reduction of coating weight due to corrosion (Salt spray time: 500 hours)

#### SERVICE LIFE OF AI-Zn ALLOY PLATING vs. GALVANIZED - ENVIRONMENT BASED

Service life value is calculated based on the annual amount of corrosion in the atmosphere from the results of salt spray tests. Values may change according to conditions.



#### Industrialised Area

#### SERVICE LIFE OF AI-Zn ALLOY PLATING vs. GALVANIZED - ENVIRONMENT BASED

**AI-Zn Notes:** The service life is a calculated value until 90% of the plating film is consumed through annual corrosion due to atmospheric condition estimates from salt spray test results. The values may change depending on conditions. Historical testing of AI-Zn alloy plating is limited, so 'in service' longeivty test results are ongoing.

**Galvanized Notes:** The values presented are calculated on the basis of 90% of the plating film being consumed based on the atmospheric condition rates of JIS H 8641 (1999).



#### **Countryside Area**



# **Coastal Zone**

# W J-WITEX CORPORATION



#### ALLOY PLATING WIRE ROPE - TEST DATA

#### **Reference Material 3 : Salt Spray Test Result Photo Evidence**

#### Galvanized (Zn plating)

A) Before Salt Spray Test



#### B) After 200 Hours



#### C) After 500 Hours



#### D) After 1,000 Hours



#### E) After 1,500 Hours



Alloy Plating (Al-Zn)











J I S G 3525 – 2013

Sector:

**6 x 7** FC (Jute · PP)

- Fisheries • Aquafarming
- Drag Net Rope



· · · · · · · · · · · · · · · · · · ·	Outor	Break Force kN			Plating Weight (minimum value)				
Diameter	Laver	Standa	ard	Unit	g/m				
mm	Layer	Plating (	KALG)	Mass	KALG	KALG	JIS	JIS	
11.011	mm	G Type	АТуре	kg/m	GType	АТуре	GType	AType	
6	0.66	10.0	01.4	0.124	110	110	70	50	
0	0.00	19.0	21.4	0.134	120	120	70	70	
8	0.88	33.8	38.1	0.237	150	150	00	70	
9	1.00	42.8	48.2	0.300	150	150	80	70	
10	1.10	52.8	59.5	0.371	150	150	95	80	
12	1 32	76.0	85.6	0.534	165	165	110	90	
14	1.54	103	117	0.727	190	180	135	100	
14	1.04	105	150	0.727	190	180	165	110	
10	1.70	130	102	0.950	160	160	105	110	
18	1.98	1/1	193	1.20	205	205	100	110	
20	2 20	211	238	1.48	205	205	190	110	
20	2.20	256	288	1.40	205	205	220	110	
24	2.42	204	242	2.14	230	200	220	125	
24	2.04	257	402	2.14	230	230	230	125	
20	2.80	307	402	2.51	230	230	230	120	
28	3.08	414	466	2.91	230	230	230	125	
30	3.30	475	535	3.34	250	250	250	135	
32	3.52	541	609	3.80	250	250	250	135	
02	0.02	041	000	0.00	200	200	200	100	

J I S G 3525 – 2013

Sector:

Fisheries

- **6 x 19** FC (Jute · PP)
- Landing Winches
- Trawl Nets



Diameter	Outer Layer	Break Force kN Standard Plating (KALG)		Unit Mass	Plating Weight (minimum value)				
Diamotor					KALG	KALG	JIS	JIS	
mm	mm	G Type	AType	kg/m	GType	AType	GType	AType	
9	0.60	40.7	43.8	0 295	110	110	60	40	
10	0.67	50.2	54.0	0.364	110	110	70	50	
12	0.80	72.3	77.8	0.524	130	130	70	50	
14	0.94	98.4	106	0.713	130	130	85	70	
16	1.07	128	138	0.932	150	150	95	80	
18	1.21	163	175	1.18	165	165	95	80	
20	1.34	201	216	1.46	165	165	110	90	
22	1.47	243	261	1.76	165	165	135	100	
24	1.61	289	311	2.10	180	180	165	110	
28	1.88	393	424	2.85	180	180	165	110	

(Jute · PP)

Sector:

J I S G 3525 – 2013

6 x 24 FC

Fisheries

- Landing Winches
  - Trawl Nets
  - Shipbuilding ships work boats
  - Anchor Rope
  - Fall Rope



	Outer	Break Force	kN	· · · · · · · · · · · · · · · · · · ·	Plating	y Weight (mi	nimum valu	e)	
Diameter		Standa	ard	Unit	g/m²				
	Layer	Plating (KALG)		Mass	KALG	KALG	JIS	JIS	
mm	mm	G Type	АТуре	kg/m	GType	АТуре	GType	д Туре	
1.0.2.50	1.5.5			tal and at			125		
9	0.5	37.1	33.9	0.269	90	90	40	30	
10	0.56	45.8	49.3	0.332	90	90	60	40	
12	0.67	65.9	71.0	0.478	110	110	70	50	
14	0.78	89.7	96.6	0.651	120	120	70	50	
16	0.90	117	126	0.850	130	130	85	70	
18	1.01	148	160	1.08	150	150	95	80	
20	1.12	183	197	1.33	150	150	95	80	
22	1.23	222	239	1.61	165	165	95	80	
24	1.34	264	284	1.91	165	165	110	90	
26	1 46	309	333	2.24	165	165	135	100	
28	1.57	359	387	2 60	180	180	135	100	
30	1.68	412	444	2.99	180	180	165	110	
32	1.79	469	505	3.40	180	180	165	110	
34	1.90	520	570	3.94	205	205	165	110	
26	2.02	502	620	4 20	205	205	190	110	
30	2.02	661	712	4.30	205	205	100	110	
30	2.13	722	790	4.79	205	205	100	110	
40	2.24	132	/89	5.31	205	205	190	110	

Sector:

J I S G 3525 – 2013

Fisheries

- Shipbuilding ships work boats
- Hull winch
- Anchor Rope
- Gate Rope



1+6/12/18

	Outor	Break Force kN			Plating Weight (minimum value)				
Diameter	Laver	Standa	ard	Unit	g/m²				
mm	Layer	Plating (	KALG)	Mass	KALG	KALG	JIS	JIS	
	mm	GType	AType	kg/m	GType	AType	GType	A Type	
( C. 2 - )					1		-		
12	0.56	71.1	76.5	0.517	90	90	60	40	
14	0.66	96.7	104	0.704	110	110	70	50	
16	0.75	126	136	0.920	120	120	70	50	
18	0.85	160	172	1.16	130	130	85	70	
20	0.04	107	212	1.44	120	120	95	70	
20	1.02	197	212	1.44	150	150	05	70	
22	1.03	239	207	1.74	150	150	90	80	
24	1.13	284	306	2.07	150	150	95	80	
26	1.22	334	359	2.43	165	165	95	80	
28	1.32	387	416	2 82	165	165	110	90	
30	1.41	444	478	3.23	165	165	135	100	
32	1.50	505	544	3.68	180	180	135	100	
34	1.60	571	614	4.15	180	180	135	100	
04	1.00	571	014	4.15	100	100	100	100	
36	1.69	640	688	4.66	180	180	165	110	
38	1.79	713	767	5.19	180	180	165	110	
40	1.88	790	850	5.75	180	180	165	110	
42	1.97	871	937	6.34	205	205	165	110	
							100	110	
44	2.07	956	1030	6.96	205	205	190	110	
46	2.16	1040	1120	7.60	205	205	190	110	
48	2.26	1140	1220	8.28	205	205	220	110	
50	2.35	1230	1330	8.98	205	205	220	110	
52	2 11	1330	1440	0.72	205	205	220	110	
52	2.44	1550	1670	11.0	200	200	220	105	
60	2.03	1700	1010	10.0	230	230	230	120	
00	2.82	1780	1910	12.9	230	230	230	125	

6 x 37 FC (Jute · PP)

J I S G 3525 – 2013

Sector:

FC (Sisal · PP) 6 x S (19) : Fisheries

- Ring wire for trawl nets, etc.
- Bottom Trawl (Warps)
- Fall Rope



I	Outer	Break Force KN Standard		Unit	Plating Weight (minimum value)			ue)
Diameter	Laver	Stand		Mass	KALC 1	KALC I	LLC T	110
mm	Layer	Plating (	(KALG)	ka (m	C Type	ATUDO	CTVDO	A Type
-	THE	Giype	AType	Kg/m	Giype	AType	Grype	Атуре
8	0.66	34.9	37.2	0 247	110	110	50	50
a l	0.74	44.1	47.0	0.312	120	120	50	50
10	0.02	545	501	0.306	120	120	70	70
11.2	0.02	04.0	70.0	0.300	100	100	70	70
11.2	0.92	08.3	12.8	0.484	130	130	70	70
12	0.98	78.4	83.6	0.556	130	130	70	70
12.5	1.03	85.1	90.7	0.603	150	150	80	80
14	1.15	107	114	0.756	150	150	80	80
16	1.21	120	140	0.000	165	165	00	00
10	1.31	159	143	0.900	105	105	50	30
18	1.48	176	188	1.25	165	165	100	100
20	1.64	218	232	1.54	180	180	110	110
22	1.80	264	281	1.87	180	180	110	110
22.4	184	273	291	1.94	180	180	110	110
					120	1921		
24	1.97	314	334	2.22	205	205	110	110
25	2.05	340	363	2.41	205	205	110	110
26	2.13	368	392	2.61	205	205	110	110
28	2.30	427	455	3.02	205	205	110	110
20	0.40	400	500	0.47	205	205	110	110
30	2.40	490	023	3.47	205	205	125	105
31.5	2.38	540	576	3.83	230	230	125	120
32	2.62	558	595	3.95	230	230	120	120
33.5	2.75	011	652	4.33	230	230	125	125
34	2.79	630	671	4.46	230	230	125	125
35.5	2.91	686	732	4.86	230	230	125	125
36	2.95	706	752	5.00	230	230	125	125
37.5	3.08	766	816	5 43	230	230	125	125
07.0	0.00	100	010	0.10	1.00	2.00	120	120
38	3.12	786	838	5.57	230	230	125	125
40	3.28	871	929	6.17	250	250	135	135
							( ) ( )	
		-	_	_		-		

FC (Sisal · PP) FM6 x S (19) 6 x P • S (19)

Sector:

Fisheries

• Ring wire for trawl nets, etc.



	Outor	Break ForcekN	Linit	Plating Weigh	t (minimum value)
Diameter	Laver	Standard	Mass	EKALO	g/m IIS round wiro
mm	mm	A Type	kg/m	A Type	A Type
8	0.66	40.7	0.275	110	50
9	0.74	51.5	0.348	120	50
10	0.82	63.6	0.430	130	70
11.2	0.92	79.8	0.539	130	70
12	0.98	91.6	0.619	130	70
12.5	1.03	99.4	0.672	150	80
14	1.15	125	0.843	150	80
16	1.31	163	1.10	165	90
18	1.48	206	1.39	165	100
19	1.56	230	1.55	180	100
20	1.64	254	1.72	180	110
22	1.80	308	2.08	180	110
22.4	1.84	319	2.16	180	110
24	1.97	366	2.48	205	110
25	2.05	398	2.69	205	110
26	2.13	430	2.91	205	110
28	2.3	499	3.37	205	110
30	2.46	572	3.87	205	110
31.5	2.58	631	4.27	230	125
32	2.62	651	4.40	230	125
33.5 34 35.5 36	2.75 2.79 2.91 2.95	714 735 802 824	4.83 4.97 5.42 5.57	230 230 230 230	125 125 125 125 125
37.5	3.08	895	6.05	230	125
38	3.12	919	6.21	230	125
40	3.28	1020	6.88	250	135
42.5	3.49	1150	7.77	250	135

The outer layer wire diameter is the same as that of the round wire of the same configuration and diameter. The adhesion amount is the same as that of the round wire with the same diameter and diameter.

JISG3525-2013 IWRC 6xS (19) Sector:

Fisheries • Fall Rope



	Outer	Break Force	e kN	Linit	Platir	ng Weight (n	ninimum va	lue)	
Diameter	Laver	Stand	ard	Mass	g/m²				
mm	Layor	Plati	ng		KALG	KALG	JIS	JIS	
11011	mm	д Туре	ВТуре	kg/m	дТуре	В Туре	дТуре	ВТуре	
			10.1				50	50	
8	0.66	39.8	42.4	0.275	110	110	50	50	
9	0.74	50.4	53.6	0.348	120	120	50	50	
10	0.82	62.2	66.2	0.430	130	130	70	70	
11.2	0.92	78.0	83.0	0.539	130	130	70	70	
10	0.00	00.5	05.0	0.010	100	100	70	70	
10.5	1.02	89.5	95.3	0.619	130	130	70	70	
12.5	1.03	97.1	103	0.672	150	150	80	80	
14	1.10	122	130	0.843	150	150	00	00	
10	1.31	109	169	1.10	105	100	90	90	
18	1.48	201	214	1.39	165	165	100	100	
20	1.64	249	265	1.72	180	180	110	100	
22	1.80	301	320	2.08	180	180	110	110	
22.4	1.84	312	332	2.16	180	180	110	110	
25	2.05	389	414	2.69	205	205	110	110	
28	2.30	487	519	3.37	205	205	110	110	
30	2.46	560	596	3.87	205	205	110	110	
31.5	2.58	617	657	4.27	230	230	125	125	
00.5							105	105	
33.5	2.75	698	743	4.83	230	230	125	125	
35.5	2.91	783	834	5.42	230	230	125	125	
37.5	3.08	8/4	931	6.05	230	230	125	125	
40	3.28	995	1060	6.88	250	250	135	135	
					-				

Outside of JIS Range

6 x S (24) FC (Sisal · PP) Sector:

Fisheries

- Ring wire for trawl nets, etc.
- Bottom Trawl (Warps)



a+12+12

	Outer	Break Force KN	Linit	Plating Weigh	Plating Weight (min value)		
Diameter		Standard	Mass	g/	m		
mm	Layer	Plating	le ce / per	ATURA	015 A Turc		
5 - 19 - 19 - 19 - 19 - 19 - 19 - 19 - 1	mm	Arype	kg/m	A Type	A Type		
10	0.67	40.2	0 3 3 2	110	50		
11.2	0.07	45.2	0.332	120	50		
12	0.75	70.0	0.417	120	50		
10.5	0.80	70.8	0.478	130	50		
12.5	0.84	/0.8	0.519	130	70		
14	0.94	96.3	0.651	130	70		
16	107	126	0.850	150	80		
18	1.07	159	1.08	165	80		
20	1.34	197	1.33	165	90		
22	1.47	238	1.61	165	100		
22.4	1.50	247	1.67	180	100		
24	1.61	283	1.91	180	110		
25	1.68	307	2.08	180	110		
26	1.74	222	2.24	180	110		
20	1.74	332	2.24	180	110		
20	2.01	442	2.00	205	110		
30	2.01	442	2.99	205	110		

6 x WS (26) FC (Sisal · PP) Sector:

Fisheries

- Ring wire for trawl nets, etc.
- Bottom Trawl (Warps)



1+5+(5+5)+10

Lovor	Standard		Unit	Plating Weight (min value)		
	Plat	ting	Mass	KALG B/ II	1115	
mm	AType	170Type	kg/m	170Type	AType	
0.60	34.9	36.0	0 247	110	40	
0.68	44 1	45.0	0.312	110	50	
0.75	54.5	56.0	0.386	120	50	
0.84	68.3	70.0	0.484	130	70	
0.90	78.4	88.0	0.556	130	70	
0.94	85.1	143	0.603	130	70	
1.05	107	110	0.756	150	80	
1.20	139	143	0.988	165	80	
1.35	176	181	1.25	165	90	
1.50	218	224	1.54	180	100	
1.65	264	271	1.87	180	110	
1.68	273	281	1.94	180	110	
1.80	314	323	2.22	180	110	
1.88	340	350	2.41	180	110	
1.95	368	379	2.61	205	110	
2.10	427	439	3.02	205	110	
2.25	490	504	3.47	205	110	
2.36	540	556	3.83	205	110	
2.40	558	574	3.95	205	110	
2.51	611	629	4.33	230	125	
2.55	630	647	4.46	230	125	
2.66	686	706	4.86	230	125	
2.70	706	726	5.00	230	125	
2.81	766	788	5.43	230	125	
2.85	786	809	5.57	230	125	
3.00	871	896	6.17	230	125	
	0.60   0.68   0.75   0.84   0.90   0.94   1.05   1.20   1.35   1.50   1.65   1.68   1.80   1.88   1.95   2.10   2.25   2.36   2.40   2.51   2.55   2.66   2.70   2.81   2.85   3.00	0.60 $34.9$ $0.68$ $44.1$ $0.75$ $54.5$ $0.84$ $68.3$ $0.90$ $78.4$ $0.94$ $85.1$ $1.05$ $107$ $1.20$ $139$ $1.35$ $176$ $1.50$ $218$ $1.65$ $264$ $1.68$ $273$ $1.80$ $314$ $1.88$ $340$ $1.95$ $368$ $2.10$ $427$ $2.25$ $490$ $2.36$ $540$ $2.40$ $558$ $2.51$ $611$ $2.55$ $630$ $2.66$ $686$ $2.70$ $706$ $2.81$ $766$ $2.85$ $786$ $3.00$ $871$	0.60 $34.9$ $36.0$ $0.68$ $44.1$ $45.0$ $0.75$ $54.5$ $56.0$ $0.84$ $68.3$ $70.0$ $0.90$ $78.4$ $88.0$ $0.94$ $85.1$ $143$ $1.05$ $107$ $110$ $1.20$ $139$ $143$ $1.55$ $264$ $271$ $1.65$ $264$ $271$ $1.68$ $273$ $281$ $1.80$ $314$ $323$ $1.88$ $340$ $350$ $1.95$ $368$ $379$ $2.10$ $427$ $439$ $2.25$ $490$ $504$ $2.51$ $611$ $629$ $2.55$ $630$ $647$ $2.66$ $686$ $706$ $2.70$ $706$ $726$ $2.81$ $786$ $809$ $3.00$ $871$ $896$	1.311 $1.1312$ $1.13142$ $1.13142$ $0.60$ $34.9$ $36.0$ $0.247$ $0.68$ $44.1$ $45.0$ $0.312$ $0.75$ $54.5$ $56.0$ $0.386$ $0.84$ $68.3$ $70.0$ $0.484$ $0.90$ $78.4$ $88.0$ $0.556$ $0.94$ $85.1$ $143$ $0.603$ $1.05$ $107$ $110$ $0.756$ $1.20$ $139$ $143$ $0.988$ $1.35$ $176$ $181$ $1.25$ $1.50$ $218$ $224$ $1.54$ $1.65$ $264$ $271$ $1.87$ $1.68$ $314$ $323$ $2.22$ $1.88$ $340$ $350$ $2.41$ $1.95$ $368$ $379$ $2.61$ $2.10$ $427$ $439$ $3.02$ $2.25$ $490$ $504$ $3.47$ $2.36$ $540$ $556$ $3.83$ $2.40$ $558$ $574$ $3.95$ $2.51$ $611$ $629$ $4.33$ $2.55$ $630$ $647$ $4.46$ $2.70$ $706$ $726$ $5.00$ $2.81$ $786$ $809$ $5.57$ $3.00$ $871$ $896$ $6.17$	0.60 $0.68$ $34.9$ $44.1$ $36.0$ $45.0$ $0.247$ $0.312$ $110$ $110$ $0.75$ $0.84$ $54.5$ $68.3$ $56.0$ $70.0$ $0.386$ $0.484$ $120$ $120$ $0.90$ $0.94$ $1.05$ $78.4$ $107$ $88.0$ $143$ $0.556$ $0.603$ $130$ $130$ $0.90$ $1.20$ $78.4$ $1.20$ $88.0$ $107$ $0.556$ $107$ $130$ $0.756$ $1.35$ $1.20$ $176$ $139$ $181$ $224$ $271$ $1.25$ $1.87$ $165$ $180$ $1.35$ $1.68$ $273$ $273$ $281$ $1.25$ $1.94$ $165$ $1.80$ $1.68$ $314$ $273$ $323$ $281$ $2.22$ $2.61$ $2.05$ $2.25$ $2.10$ $490$ $427$ $504$ $439$ $3.02$ $2.25$ $2.51$ $490$ $611$ $504$ $629$ $3.47$ $4.33$ $205$ $230$ $2.55$ $2.66$ $636$ $230$ $647$ $726$ $738$ $4.46$ $5.57$ $230$ $230$ $2.85$ $3.00$ $786$ $871$ $809$ $896$ $5.57$ $6.17$ $230$	

Unit mass is based on JIS value. (Class 170 may be different from JIS.)

FC (Sisal · PP) FM6 x WS (26) 6 x P • WS (26) Sector:

Fisheries

- Ring wire for trawl nets, etc.
- Bottom Trawl (Warps)



	Outer	Break Force KN Standard		- Unit - Mass	Plating Weight (minimum value)				
Diameter	Laver				g/m²				
mm	Layer	Plating	(KALG)	101033	KALG	KALG	JIS round wire A Type		
TOIL	mm	170	190	kg/m	170	190Type			
1.25					a second.				
10	0.85	61.5	70.6	0.433	130	150	70		
12.5	0.94	96.2	110	0.678	130	150	70		
14	1.05	121	138	0.848	150	150	80		
16	1.20	158	181	1.11	165	165	80		
18	1.35	199	229	1.40	165	165	90		
20	1.50	246	282	1 73	180	180	100		
20	1.65	240	202	2.00	180	180	110		
22.4	1.68	309	354	2.03	180	180	110		
	-								
24	1.80	354	407	2.49	180	180	110		
25	1.88	385	441	2.70	180	180	110		
26	1.94	416	477	2.93	205	205	110		
28	2.10	482	553	3.39	205	205	110		

The outer layer wire diameter is the same as that of the round wire of the same configuration and diameter. The adhesion amount is the same as that of the round wire with the same diameter and diameter.

FC (Sisal · PP) **6 x Fi** (29)

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Sector:

Fisheries

- Ring wire for trawl nets, etc.
- Hull Winch
- Work Boat Hoist
- Heavy Machinery
- Cranes



1+7+7Fi+14

Sector:
Break Force kN

	0.1	Break Ford	e kN	11.11	Plating Weight (minimum value)				
Diameter	Outer	Stan	dard	Unit		g/	m .		
mm	Layer	Plati	ng	Mass	KALG	KALG	JIS	JIS	
	mm	A lype	Blype	kg/m	Alype	Blype	A Type	Blype	
10	0.57	55.0	50.0	0.000			10	10	
10	0.57	55.6	59.2	0.396	90	90	40	40	
11.2	0.64	69.7	/4.3	0.496	110	110	50	50	
12	0.68	80.1	85.3	0.570	110	110	50	50	
12.5	0.71	86.9	92.5	0.618	120	120	50	50	
14	0.80	109	116	0.776	130	130	50	70	
16	0.91	142	152	1.010	130	130	70	70	
18	1.03	180	102	1.010	150	150	80	80	
20	1.00	222	237	1.20	150	150	80	80	
20	1,14		237	1.00	150	150	00	00	
22	1.25	269	287	1.92	165	165	80	90	
22.4	1.28	279	297	1.99	165	165	90	90	
24	1.37	320	341	2.28	165	165	90	90	
25	1.43	348	370	2.47	165	165	100	100	
26	1.48	376	400	2.68	165	180	100	100	
28	1.60	436	464	3.10	180	180	100	110	
30	1.71	500	533	3.56	180	180	110	110	
31.5	1.80	552	588	3.93	180	180	110	110	
				1.1.1.1.1					
32	1.82	569	607	4.05	180	180	110	110	
33.5	1.94	624	665	4.44	205	205	110	110	
34	1.94	643	685	4.58	205	205	110	110	
35.5	2.02	701	746	4.99	205	205	110	110	
26	2.05	721	769	5.12	205	205	110	110	
27.5	2.00	700	022	5.13	205	205	110	110	
37.5	2.14	202	055	5.72	205	205	110	110	
40	2.17	800	049	6.22	205	205	110	110	
40	2.20	890	940	0.33	205	203	110	110	
42.5	2.42	1000	1070	7.15	205	205	110	110	
45	2.57	1130	1200	8.01	230	230	125	125	
47.5	2.71	1250	1340	8.93	230	230	125	125	
50	2.85	1390	1480	9.90	230	230	125	125	
			1000	-				1.03.11	
53	3.02	1560	1660	11.1	230	230	125	125	
56	3.19	1740	1860	12.4	230	250	135	135	
60	3.42	2000	2130	14.2	250	250	135	135	
								2 S	

J I S G 3525 – 2013 IWRC 6 x Fi (29) Sector:

Heavy MachineryWork Boat Hoist

Cranes



1+7+7Fi+14

	Break Force kN Plating Weight		ing Weight (r	(minimum value)				
Diameter	Outer	Stand	dard	Unit		g/	m²	
mm	Layer	Pla	ting	Mass	KALG	KALG	JIS	JIS
11011	mm	AType	ВТуре	kg/m	A Type	ВТуре	A Type	В Туре
10	0.57	00.0		0.110			10	10
11.0	0.57	63.6	67.7	0.440	90	90	40	40
11.2	0.64	79.8	84.9	0.552	110	110	50	50
12	0.68	91.6	97.5	0.634	110	110	50	50
12.5	0.71	99.4	106	0.688	120	120	50	50
14	0.80	125	122	0.963	120	120	50	70
16	0.00	162	170	1.12	120	120	70	70
10	0.91	103	173	1.13	130	130	70	70
18	1.03	206	219	1.43	150	150	80	80
20	1.14	254	2/1	1.76	150	150	80	80
22	1.25	308	328	2 13	165	165	80	90
221	1 28	319	340	2.10	165	165	90	90
24	1.20	366	390	2.53	165	165	90	90
25	1.42	202	422	2.55	165	165	100	100
20	1.45	090	423	2.75	105	105	100	100
26	1.48	430	458	2.98	165	180	100	100
28	1 60	499	531	3 45	180	180	100	110
30	1 71	573	609	3.96	180	180	110	110
31.5	1.80	631	672	4.37	180	180	110	110
01.0	1.00	001	072	4.07	100	100	110	110
32	1.82	651	693	4.51	180	180	110	110
33.5	1.94	714	760	4.94	205	205	110	110
34	1.94	735	783	5.09	205	205	110	110
35.5	2.02	802	853	5.55	205	205	110	110
		-		1.00				
36	2.05	825	877	5.70	205	205	110	110
37.5	2.14	895	952	6.19	205	205	110	110
38	2.17	919	978	6.36	205	205	110	110
40	2.28	1020	1080	7.04	205	205	110	110
125	2.42	1150	1220	7.05	205	205	110	110
42.0	2.42	1200	1220	7.95	205	205	105	105
40	2.37	1290	1520	0.91	230	230	125	125
47.5	2./1	1440	1530	9.93	230	230	125	125
50	2.85	1590	1690	11.0	230	230	125	125
53	3.02	1790	1900	12.4	230	230	125	125
56	319	2000	2120	13.8	230	250	135	135
60	3.42	2200	2440	15.8	250	250	135	135
00	0.42	2230	2440	10.0	200	200	100	100
								(*

J I S G 3525 – 2013 FC (Sisal · PP)

**6 x WS** (31)

Sector:

Fisheries

- Ring wire for trawl nets, etc.
- Bottom Trawl (Warps)



1+6+(6+6)+12

	Outer	Break Ford	e kN	Unit Plating Weight (minimum v		minimum valu	alue)	
Diameter	Laver	Stan	dard	Mass		g/	m	
mm	Layer	Pla	ting	Made	KALG	KALG	JIS	JIS
	mm	AType	втуре	kg/m	Alype	Biype	Alype	втуре
10	0.05	FFO	50.0	0.000	110	110	50	50
10	0.65	55.6	59.2	0.396	110	110	50	50
11.2	0.73	69.7	74.3	0.496	120	120	50	50
12	0.78	80.1	85.3	0.570	120	120	50	50
12.5	0.81	86.9	92.5	0.618	130	130	70	70
14	0.91	109	116	0.776	130	130	70	70
16	1.04	142	152	1.01	150	150	80	80
18	117	180	192	1.28	150	150	80	80
20	1.30	222	237	1.58	165	165	90	90
22	1.43	269	287	1.92	165	165	100	100
22.4	1.46	279	297	1.99	165	165	100	100
24	1.56	320	341	2.28	180	180	100	100
25	1.63	348	370	2.47	180	180	110	110
26	1.60	276	400	2.60	190	190	110	110
20	1.09	370	400	2.00	100	190	110	110
20	1.02	430	404	3.10	205	205	110	110
21.5	2.05	552	500	3.00	205	205	110	110
31.0	2.05	552	000	3.93	205	205	110	110
32	2.08	569	607	4.05	205	205	110	110
33	2.15	605	645	4.31	205	205	110	110
33.5	2.18	624	665	4.44	205	205	110	110
34	2.21	643	685	4.58	205	205	110	110
05.5	0.01	704	740	1.00	005	005	110	110
35.5	2.31	701	740	4.99	205	205	110	110
30	2.34	721	/08	5.13	205	205	110	110
37.5	2.44	/82	833	5.57	205	205	110	110
38	2.47	803	800	5.72	205	205	110	110
40	2.60	890	948	6.33	230	230	125	125
42.5	2.76	1000	1070	7.15	230	230	125	125
45	2.93	1130	1200	8.01	230	230	125	125
47.5	3.09	1250	1340	8.93	230	230	125	125
50	2.25	1200	1490	0.00	250	250	125	125
50	0.20	1590	1460	5.50	250	250	125	135
56	3.45	1740	1960	12.4	250	250	135	100
60	3.04	2000	2120	14.9	250	250	135	135
00	5.90	2000	2130	14.2	200	200	130	130

FC (Sisal · PP) FM6 x WS (31) 6 x P • WS (31)



1+6+(6+6)+12

	Outer	Break Force	kN	11.34	Plating W	eight (minim	um value)		
Diameter	Outer	Standa	ard	Unit		g/m			
mm	Layer	Plating (	lating (KALG)		KALG	KALG	JIS round wire		
	mm	Alype	190 Type	kg/m	Alype	1901ype	Alype		
10 11.2 12 12.5	0.65 0.73 0.78 0.81	63.8 80.1 91.9 99.8	67.4 84.5 97.0 105	0.432 0.542 0.622 0.675	110 120 120 130	110 120 120 130	50 50 50 70		
14 16 18 20	0.91 1.04 1.17 1.30	125 163 207 255	132 172 218 269	0.847 1.11 1.40 1.73	130 150 150 165	130 150 150 165	70 80 80 90		
22 22.4 24 25	1.43 1.46 1.56 1.63	309 320 368 399	326 338 388 421	2.09 2.17 2.49 2.70	165 165 180 180	165 165 180 180	100 100 100 110		
26 28 30 31.5	1.69 1.82 1.95 2.05	432 501 575 633	455 528 606 668	2.92 3.39 3.89 4.29	180 180 205 205	180 180 205 205	110 110 110 110		
32 33 33.5 34	2.08 2.15 2.18 2.21	654 695 716 738	690 734 756 779	4.42 4.70 4.85 4.99	205 205 205 205 205	205 205 205 205 205	110 110 110 110		
35 35.5 36 37.5	2.28 2.31 2.34 2.44	782 805 827 898	825 849 873 947	5.29 5.44 5.60 6.08	205 205 205 205 205	205 205 205 205 205	110 110 110 110		
38 40 42.5	2.47 2.60 2.76	922 1020 1150	973 1080 —	6.24 6.91 7.80	205 230 230	205 230 230	110 125 125		

The outer layer wire diameter is the same as that of the round wire of the same configuration and diameter. The adhesion amount is the same as that of the round wire with the same diameter and diameter. Unit mass is the value of Class A. (Class 190 may be different from Class A)

J I S G 3525 – 2013 IWRC

Sector:

**6 x WS** (31)

Heavy Machinery

- Work Boat Hoist
- Cranes



1+6+(6+6)+12

142 - 11	Outer	Break Forc	e kN		Plating Weight (minimum value)			
Diameter	Laver	Standa	rd	Unit		g/	m	
mm	Layer	Platir	ng	Mass	KALG	KALG	JIS	JIS
ituit	mm	AType	BType	kg/m	AType	B Type	AType	BType
10	0.05			0.110			50	50
10	0.65	63.6	67.7	0.440	110	110	50	50
11.2	0.73	/9.8	84.9	0.552	120	120	50	50
12	0.78	91.6	97.5	0.634	120	120	50	50
12.5	0.82	99.4	106	0.688	130	130	70	70
14	0.90	125	133	0.863	130	130	70	70
16	1.04	163	173	1.13	150	150	80	80
18	1.17	206	219	1.43	150	150	80	80
20	1.30	254	271	1.76	165	165	90	90
						-		Jaa
22	1.43	308	328	2.13	165	165	100	100
22.4	1.45	319	340	2.21	165	165	100	100
24	1.56	366	390	2.53	180	180	100	100
25	1.63	398	423	2.75	180	180	110	110
26	1.68	430	458	2.98	180	180	110	110
28	1.83	499	531	3.45	180	180	110	110
30	1.00	573	609	3.96	205	205	110	110
31.5	2.06	631	672	4.37	205	205	110	110
32	2.08	651	693	4.51	205	205	110	110
33.5	2.17	714	760	4.94	205	205	110	110
34	2.20	735	783	5.09	205	205	110	110
35.5	2.30	802	853	5.55	205	205	110	110
20	0.04	0.05	077	5 70	005	005	110	110
30	2.34	825	8//	5.70	205	205	110	110
37.5	2.44	010	902	6.19	205	205	110	110
30	2.48	919	978	0.30	205	205	105	105
40	2.38	1020	1080	7.04	230	230	125	125
42.5	2.78	1150	1220	7.95	230	230	125	125
45	2.95	1290	1370	8.91	230	230	125	125
47.5	3.07	1440	1530	9.93	230	230	125	125
50	3.25	1590	1690	11.0	250	250	135	135
				0.00			0.07	
				0.00				
53	3.45	1790	1900	12.4	250	250	135	135
56	3.65	2000	2120	13.8	250	250	135	135
60	3.93	2290	2440	15.8	250	250	135	135
1.1.1				1000		and a second		

J I S G 3525 – 2013 FC (Sisal · PP)

**6 x WS** (36)

- Sector:
- Heavy Machinery

Cranes

Work Boat Hoist



1+7+(7+7)+14

<b>D</b> : (	Outer	Break Forc	e kN		Plating Weight (minimum va			alue)	
Diameter	Laver	Standa	ard	Unit		g/I	m		
mm	Layer	Platir	ng	Mass	KALG	KALG	JIS	JIS	
mun	mm	A Type	B Type	kg/m	AType	BType	AType	BType	
10	-			Contractory of			10		
10	0.57	55.6	59.2	0.396	90	90	40	40	
11.2	0.64	69.7	74.3	0.496	110	110	50	50	
12	0.68	80.1	85.3	0.570	110	110	50	50	
12.5	0.71	86.9	92.5	0.618	120	120	50	50	
14	0.00	100	110	0.776	120	100	FO	70	
14	0.00	140	150	1.01	100	130	70	70	
10	0.91	142	102	1.01	130	130	70	70	
18	1.03	180	192	1.28	150	150	80	80	
20	1.14	222	237	1.58	150	150	80	80	
22	1.25	269	287	1 92	165	165	80	90	
224	1.28	279	297	1.99	165	165	90	90	
24	1.20	320	341	2.28	165	165	90	90	
25	1.07	349	370	2.20	165	165	100	100	
20	1.45	540	570	2.77	105	100	100	100	
26	1.48	376	400	2.68	165	180	100	100	
28	1.60	436	464	3 10	180	180	100	110	
30	171	500	533	3 56	180	180	110	110	
31.5	1.80	552	588	3.93	180	180	110	110	
01.0									
32	1.82	569	607	4.05	180	180	110	110	
33.5	1.91	624	665	4.44	205	205	110	110	
34	1.94	643	685	4.58	205	205	110	110	
35.5	2.02	701	746	4.99	205	205	110	110	
54.47				61640					
36	2.05	721	768	5.13	205	205	110	110	
37.5	2.14	782	833	5.57	205	205	110	110	
38	2.17	803	855	5.72	205	205	110	110	
40	2.28	890	948	6.33	205	205	110	110	
42.5	2.42	1004	1070	7 1 5	205	205	110	110	
42.0	2.42	1120	1200	7.15	205	205	105	105	
43	2.07	1050	1200	0.01	230	230	125	125	
47.5	2./1	1250	1340	8.93	230	230	125	125	
50	2.85	1390	1480	9.90	230	230	125	125	
53	3.02	1560	1660	11.1	230	230	125	125	
56	319	1740	1860	12.4	230	250	135	135	
60	3.42	2000	2130	14.2	250	250	135	135	
00	0.72	2000	2100	17.2	200	200	100	100	

J I S G 3525 – 2013 IWRC 6 x WS (36) Sector:

Heavy Machinery

- Work Boat HoistCranes

1+7+(7+7)+14

	Outer	Break Force kN		-	Plating Weight (minimum value)			
Diameter	Laver	Standa	rd	Unit		g/1	m²	
mm	Layer	Platin	Ig	Mass	KALG	KALG	JIS	JIS
11011	mm	A Type	ВТуре	kg/m	A Type	B Type	A Type	В Туре
	-			a management			and a	
10	0.57	63.6	67.7	0.440	90	90	40	40
11.2	0.64	79.8	84.9	0.552	110	110	50	50
12	0.68	91.6	97.5	0.634	110	110	50	50
12.5	0.71	99.4	106	0.688	120	120	50	50
14	0.90	105	100	0.962	120	120	FO	50
14	0.00	120	133	0.003	130	130	30	50
10	0.91	163	1/3	1.13	130	130	70	70
18	1.03	206	219	1.43	150	150	80	80
20	1.14	254	2/1	1.76	150	150	80	80
22	1.25	308	328	2 13	165	165	80	80
224	1.28	319	340	2 21	165	165	90	90
24	1 37	366	390	2 53	165	165	90	90
25	1.43	398	423	2 75	165	165	100	100
25	1.40	000	720	2.75	105	105	100	100
26	1.48	430	458	2.98	165	180	100	100
28	1.60	499	531	3.45	180	180	100	100
30	1.71	573	609	3.96	180	180	110	110
31.5	1.80	631	672	4.37	180	180	110	110
2.2								
32	1.82	651	693	4.51	180	180	110	110
33.5	1.91	714	760	4.94	205	205	110	110
34	1.94	735	783	5.09	205	205	110	110
35.5	2.02	802	853	5.55	205	205	110	110
26	2.05	025	977	5 70	205	205	110	110
27.5	2.05	805	052	6.10	205	205	110	110
37.5	2.14	010	079	6.26	205	205	110	110
40	2.28	1020	1080	7.04	205	205	110	110
42.5	2.42	1150	1220	7.95	205	205	110	110
45	2.57	1290	1370	8.91	230	230	125	125
47.5	2.71	1440	1530	9.93	230	230	125	125
50	2.85	1590	1690	11.0	230	230	125	125
50	2.00	1700	1000	10.4	000	000	105	105
53	3.02	1790	1900	12.4	230	230	125	125
00	3.19	2000	2120	13.8	230	250	135	100
00	3.42	2290	2440	15.8	250	250	100	100

Structural Spiral RopeUse:Fixed PositionJ I S G 35491 x 19J-WITEX

1+6/12

Diameter	Outer Layer	Bre	ak Force kN		Unit	Plating Weight (min value) $q/m^2$
mm	Nominal Line mm	ST1470 ST1570 ST1670			Mass kg/m	KALG
14	2.8	161	172	180	0.960	240
16	3.2	210	224	236	1.25	260
18	3.6	265	284	298	1.59	260
20	4	328	350	368	1.96	270
22.4	4.48	411	439	462	2.46	270
25	5	512	547	576	3.06	300

1 x 37 J-WITEX



Diameter	Outer	Bre	ak Force kN		Unit	Plating Weight (min value)
mm	Nominal Line mm	Layer Nominal Line mm ST1470 ST1570 ST1670		Mass kg/m	g/ m KALG	
20	2.86	324	346	364	1.96	240
22.4	3.20	407	434	456	2.46	260
25	3.58	507	540	568	3.07	260
28	4.00	636	678	713	3.85	270
30	4.29	730	778	819	4.42	270
31.5	4.50	805	858	902	4.87	270
33.5	4.79	910	970	1020	5.51	270
35.5	5.08	1020	1090	1150	6.19	300

Use:

Structural Spiral Rope J I S G 3549 7 x 7 J-WITEX Fixed Position Fall Rope



1+6

Outer	Brea	k Force kN	Linit	Plating Weight (min value)		
Layer Nominal	1			Mass	g/m²	
Line			and the second second		KALG	
mm	ST1470	ST1570	ST1670	kg/m		
0.88	41.2	44.0	46.3	0.258	120	
0.00	52.2	55.7	58.6	0.200	120	
1.10	64.4	68.8	72 4	0.027	120	
1.10	04.4	96.2	00.9	0.403	120	
1.23	00.0	00.5	90.6	0.300	120	
1 32	92.8	00.1	104	0.581	120	
1.02	101	108	112	0.630	120	
1.50	126	135	142	0.030	120	
1.04	165	176	195	1.02	150	
1.70	105	170	105	1.00	130	
1.98	209	223	235	1.31	150	
2 20	258	275	290	1.61	180	
2.46	323	345	363	2.02	210	
2.75	403	430	452	2.52	240	
				-		
3.08	505	539	567	3.16	260	
3.30	580	619	651	3.63	260	
3.47	639	683	718	4.00	260	
3.69	723	772	812	4.52	270	
3.91	812	867	912	5.08	270	
	Outer Layer Nominal Line mm 0.88 0.99 1.10 1.23 1.32 1.32 1.32 1.38 1.54 1.76 1.98 2.20 2.46 2.75 3.08 3.30 3.47 3.69 3.91	Outer Layer Nominal Line mm   Brea     0.88   41.2     0.99   52.2     1.10   64.4     1.23   92.8     1.38   101     1.54   126     1.76   165     1.98   209     2.20   258     2.46   323     2.75   403     3.08   505     3.30   580     3.47   639     3.91   812	Outer Layer Nominal Line mm   Break Force   kN     0.88   41.2   44.0     0.99   52.2   55.7     1.10   64.4   68.8     1.23   92.8   99.1     1.38   101   108     1.54   126   135     1.76   165   176     1.98   209   223     2.20   258   275     2.46   323   345     2.75   403   430     3.08   505   539     3.30   580   619     3.47   639   683     3.69   723   772     3.91   812   867	Break Force kNBreak Force kNBreak Force kNST1470ST1570ST16700.88 0.99 1.10 1.10 1.2341.2 64.4 64.4 80.844.0 68.8 86.346.3 72.4 98.61.32 1.32 1.33 1.54 1.54 1.54 1.7692.8 1.92 1.6599.1 1.08 1.108 1.135 1.108 1.135 1.142 1.35 1.65104 1.08 1.135 1.135 1.42 1.35 1.42 1.35 1.42 1.651.98 2.20 2.46 2.46 2.75 2.46 3.30 3.08 3.08 3.69 3.47 3.69 3.91209 2.23 2.23 2.235 2.235 2.235 2.246 3.30 3.47 3.91209 2.23 2.23 2.235 2.235 2.235 2.246 3.23 3.30 3.47 3.91209 2.23 2.23 2.235 2.235 2.235 2.246 3.23 3.30 3.47 3.47 3.91308 3.08 3.08 3.412505 3.39 3.712 3.712 3.67 3.20	Outer Layer Nominal Line   Break Force   KN   Unit Mass     ST1470   ST1570   ST1670   kg/m     0.88   41.2   44.0   46.3   0.258     0.99   52.2   55.7   58.6   0.327     1.10   64.4   68.8   72.4   0.403     1.23   80.8   86.3   90.8   0.506     1.32   92.8   99.1   104   0.581     1.38   101   108   113   0.630     1.54   126   135   142   0.790     1.76   165   176   185   1.03     1.98   209   223   235   1.31     2.20   258   275   290   1.61     2.46   323   345   363   2.02     2.75   403   430   452   2.52     3.08   505   539   567   3.16     3.30   580   619   651   3.63	

ope

Structural Spiral RopeUse:J I S G 35497 x 19J-WITEX

Fixed Position Fall Prevention Rail Rope

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	Outer	Bre	ak Force kN	-		Plating Weight (min value)	
Diameter	Layer Nominal	Layer Nominal			Unit Mass	g/m²	
mm	Line				IVIDSS	KALG	
	mm	ST1470	ST1570	ST1670	kg/m		
125	0.84	97.1	104	109	0.618	120	
14	0.04	122	130	137	0.010	120	
16	1.07	159	170	179	1.01	120	
18	1.07	201	215	226	1.01	120	
10	1.2	201	215	220	1.20	120	
20	134	249	265	279	1.58	120	
224	15	312	333	350	1.00	120	
25	1.67	388	415	436	2 47	150	
28	1.87	487	520	547	3.10	150	
20	1.07	107	020	047	0.10	100	
30	2	559	597	628	3.56	150	
31.5	2.1	616	658	692	3.92	180	
33.5	2.24	697	745	783	4.44	180	
35.5	2.37	783	836	879	4.98	210	
37.5	2.51	974	022	0.9.1	5 56	210	
10	2.01	074	1060	1120	6.22	210	
40	2.07	1120	1200	120	7 14	240	
42.0	2.04	1260	1200	1410	9.01	240	
40	3.01	1200	1340	1410	8.01	200	

# We will continue to seek improvement in quality.



















