SAFETY 赛福天

STOCK CODE:603028

SAFETY

CRANE WIRE ROPES

TEL
400 015 8885

ADDRESS
No. 151 Furong 3rd Road, Xishan Economic Development Zone, Xishan District, Wuxi City, Wuxi, Jiangsu, China

Email
market@safety-rope.com

WECHAT

TIKTOK

TAOBAO

SAFETY | LEADER OF POLYMER WIRE ROPES
JIANGSU SAFETY WIRE ROPE CO.,Ltd.

Aug 2021 first edition

ABOUT US

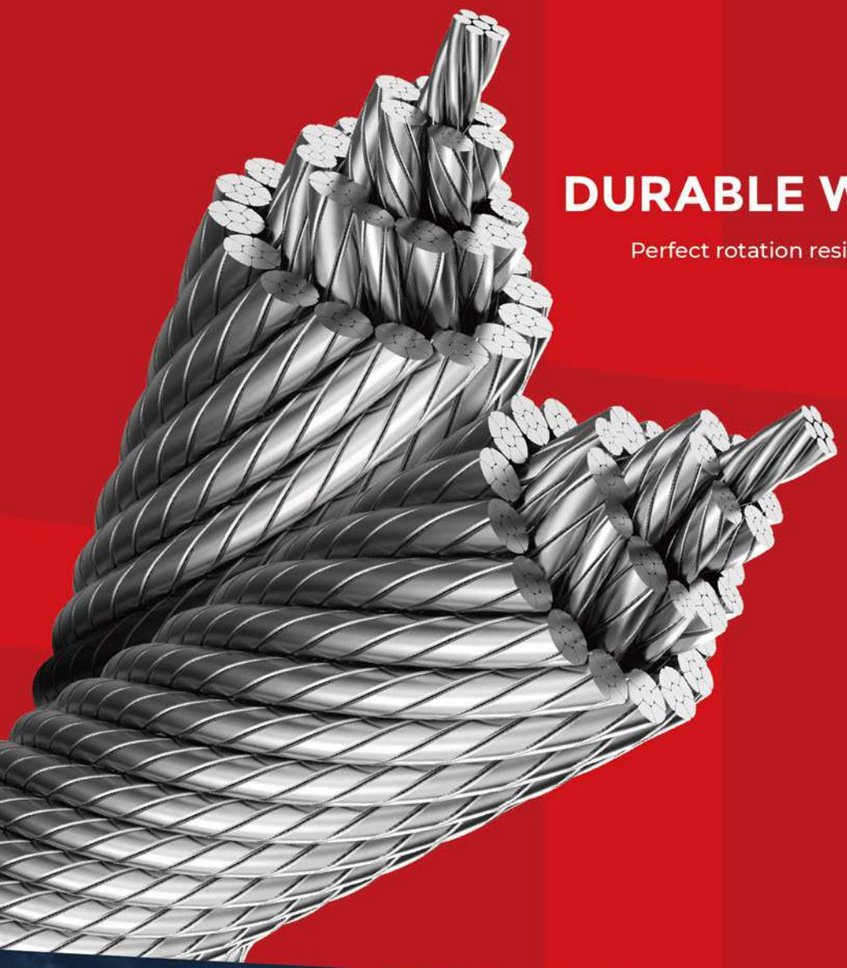
Jiangsu Safety Wire Rope Co., Ltd. was established in June 2005. Its predecessor, Wuxi Wire Rope Factory (state-owned), was founded in 1958. Safety was officially listed on the Shanghai Stock Exchange, with stock code: 603028 on March 31, 2016. We are a high-tech enterprise, a national intellectual property advantage enterprise, a service-oriented manufacturing enterprise and a private technology enterprise owning seven subsidiaries in China. Safety has more than 60 years of experience in wire rope manufacturing. We are a leading supplier of special wire ropes which focuses on the research, development, production and sales of wire ropes for elevators and cranes in China.

Our crane wire ropes can be used in equipment manufacturing, building construction, drilling rig, offshore oil exploration, port logistics, ship-building, power station construction , offshore salvage, coal mines etc.

In the field of crane wire ropes, we cooperate with the world-famous companies such as Zoomlion, XCMG, Sany and so on.

SAFETY

CONTENTS



35(W)×K7 Series

DURABLE WIRE ROPES

Perfect rotation resistance & excellent softness

STAR FIELD

High–lift operation

APPLICATION

- Drilling rig
- Tower crane
- Vehicle crane
- Multi–layer winding, high–lift operation

INVENTION PATENT

No.:ZL201010204450.4

PROFESSIONAL R&D TEAM

Inherit The Traditional Technology Of Wire Ropes, Continue To Develop And Make Breakthroughs.

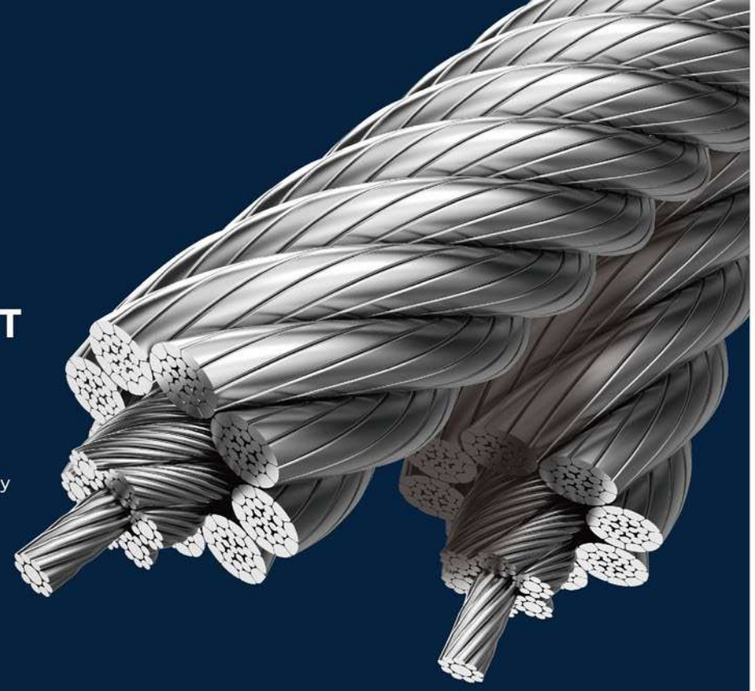
R&D CENTER

SAFETY has " Engineering Technology Research Center of Jiangsu Province ", " Enterprise Technology Center of Jiangsu Province " and "national post-doctoral research station" in China . R&D center covers an area of 2100 square meters, with 99 sets of advanced testing equipments. The average annual R & D invest-ment exceeds 15 million yuan.

8×K26 Series

ABRASION & IMPACT RESISTANT WIRE ROPES

High breaking load & good diameter uniformity



PATENTED TECHNOLOGY OF COMPACTED STRAND

Good diameter uniformity, stable structure, high breaking load

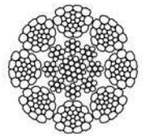
APPLICATION

Luffing
Vehicle crane
Crawler crane
Port Machinery

CUSTOMIZED

The 8 outer strands are all compacted strands, so the wire rope is more flexible than the one with 6 strands.

High breaking load, Abrasion & impact resistant are also available.



APPLICATION

Vehicle cranes of
Zoomlion, XCMG

INVENTION PATENT

No.:ZL201510817566.8

AWARDS

《 Science and Technology Award Of Jiangsu Province 》

《 Science and Technology Award Of Wuxi City 》

《 High-tech products in Jiangsu Province 》

《 Catalogue of New Products and New Technologies Promotion in Jiangsu Province 》

OUR CULTURE

WE BELIEVE WIRE ROPES HAVE SOUL

We firmly believe that the wire ropes poured with love and blood is not cold. They have soul.

ADVANCED TECHNOLOGY & HARDWORKING MEN

Advanced technology is important , but it must be implemented by responsible production managers and front-line employees to produce first-class products.

RESPONSIBILITY

It is our responsibility to ensure the quality of each wire rope.

OUR BRAND

01

SAFETY

For many years, SAFETY adheres to the philosophy of "our service, your safety", and is committed to condensing "safety" on each wire rope through excellent product quality and high-quality service. SAFETY firmly believes that it is not only the products that are introduced to the market, but also the soul and spirit.

02

DL

The sub-brand "DL" was established in 1982. Forty years of continuous in-depth brand management have given "DL" brand a strong market influence and brand reputation. It has been rated as " Famous trademark of Jiangsu Province".

CERTIFICATE

CE

ISO9001

ISO14001

ISO45001

AWARDS

5
CHINA Torch Program

6
New products and technologies promoted By Jiangsu Province

6
High-tech products

We are a high-tech enterprise, a national intellectual property advantage enterprise, a service-oriented manufacturing enterprise and a private technology enterprise owning seven subsidiaries in China.

PATENT

137
Total Amount

38
Invention Patent

99
Utility Model Patent

PARTICIPATE IN THE FORMULATUON OF CHINESE NATIONAL STANDARDS

Steel wire ropes - Requirements	ISO 2408-2017
Steel wire ropes for lifts	GB/T 8903-2018
Steel wire ropes - Determination of rotational properties	GB/T 31979-2015
Steel wire ropes - Safety - Use and maintenance	GB/T 29086-2012
Steel wire ropes for general purposes	GB/T 20118-2017
Steel wire ropes for lifts	ZYTJ 050-2010
Steel wire ropes for lift door operator	YB/T 4251-2011
Compacted wire rope	YB/T 4398-2014
Compacted strand wire rope	YB/T 5359-2020
Steel wire rope for rotary drilling rig	YB/T 4506-2016
Tower cranes - Hoisting ropes	T/CCMA 0086-2020

OUR PARTNERS & SAFETY IN GLOBAL

PARTNERS

XCMG · SANY · ZOOMLION · 抚挖重工

LiuGong 柳工 · SUNWARD · MA STEEL

CSSC · CNOOC · COSCO SHIPYARD · H&H

SALES NETWORK

The domestic marketing network has spread all over China,
And products are exported to South Korea, Australia, Sweden, Brazil and other countries all overworld.

CASES

Qingdao Port

Guangzhou Port

Daya Bay Petrochemical Project

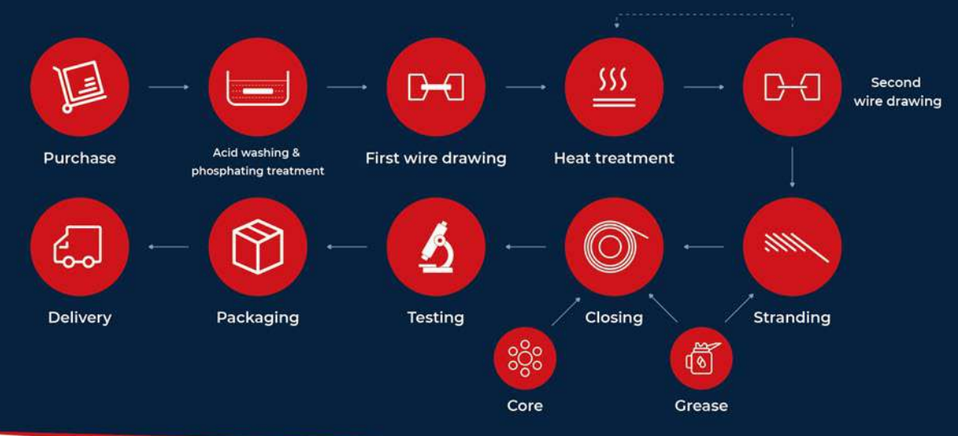
Three Gorges Hydropower Project

"Huatianlong" Floating Crane

Zoomlion Tower Crane In Construction

MANUFACTURE & INSPECTION

MANUFACTURE



TESTING CENTER

SAFETY Testing Center is an independent testing organization of our company that conducts comprehensive testing on elevator wire ropes. The testing center strictly follows the ISO quality management system and measurement management assurance system. We strictly controls the raw materials' quality entering the factory, the production process and the products leaving the factory to ensure the products 100% qualified.

Tensile test

Twisting test

Lateral pressure stability test

Bending test

Tension test

Breaking force test

Intelligent processing system for testing of steel wire and steel wire ropes

STRUCTURE OF WIRE ROPES

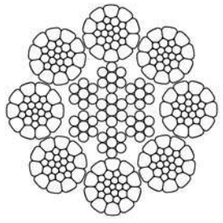
STRUCTURE

There is a brand identification band hidden in the core of steel wire ropes (see below, transparent or green)

Strands are formed by spirally twisting one or more layers of steel wires around a central steel wire, and the strands are spirally twisted around the core to form a steel wire rope.

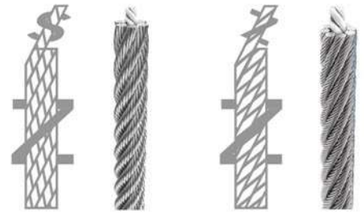
NAMING RULES AND CLASSIFICATION

Example



22 8×K26WS-IWRC 2160 U sZ

A B C D E F



sZ zZ

Definition

A Diameter mm

B Structure
Type (For example 8 x 19)
STRAND CONSTRUCTION
S Seale
W Warrington
F Filler
WS Warrington-Seale
K Compacted strand

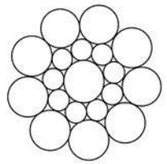
C Types of cores
Fiber core (FC)
NFC Natural fiber core
SFC Synthetic fiber core
GSF Polymer core
Steel core (WC)
WSC Wire strand core
IWRC Independent wire rope core
CSC mixed core
PWRC Parallel wire rope core
PWRC(K) Compacted strand parallel wire rope core

D Tensile strength grade

E Surface
U Bright
A Class A galvanized
B Class B galvanized

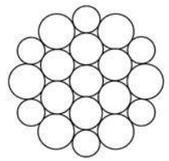
F Twist direction
sZ Right hand regular lay
zZ Right hand lang lay
zS Left hand regular lay
sS Left hand lang lay

STRAND CONSTRUCTION



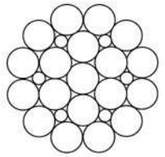
Seale

Seale: Seale strand (strand:1-n-n) is the world's most frequently used strand construction. Because of the thick outer steel wires, the Seale strand offers a high degree of resistance against external wear during use.



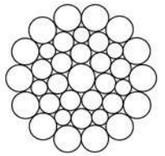
Warrington

Warrington: Ropes made of Warrington strands (Strand 1-n-n+n) offer better fatigue properties than ropes made of Seale strand. That because each strand of wire ropes with Warrington structure has far more and thinner wires than those in Seale structure. The rope is thus subject to less flexural stress.



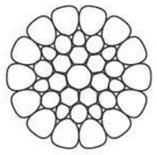
Filler

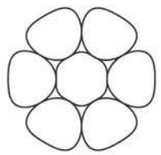
Filler: Ropes with filler strands (strand:1-n-nF-2n) offer a good balance in both abrasion & fatigue resistance. Filler strands are widely used in wire ropes with diameter of over 16mm due to their improved flexibility. the service life whose diameter is shorter than 10mm may be lower due to the geometric defect so that it's not recommended.



Warrington-Seale

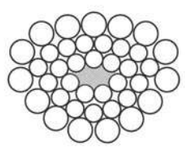
Warrington-Seale: Ropes of Warrington- Seale (strand:1-n-n+n-2n) feature a compact construction with solid support for the wires. In such case the outer wires of a Seale strand would become excessively thick which offers a good balance in both abrasion & fatigue resistance.

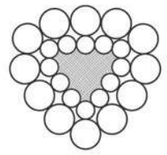




Compacted Strand

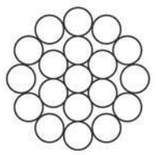
Strand which has been subject to a compacting process such as drawing, rolling, or swaging whereby the metallic cross-sectional area of the wires remains unaltered whereas the shape of the wires and dimensions of the strands are modified.





Shaped Strand

Shaped strands have greater surface area of steel. The shaped strand ropes gave about 15% greater cross-sectional metallic area, which makes the strand stronger and have longer life.

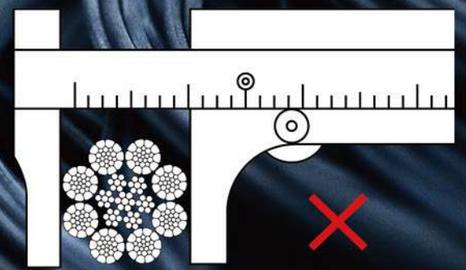


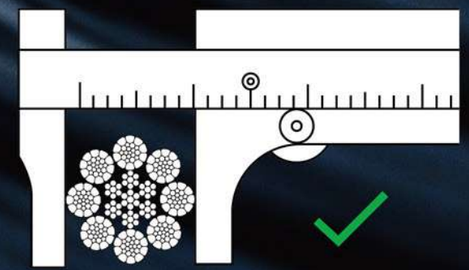
Cross Laid

Multiple operation strand construction in which the wires of superimposed wire layers cross over one another and make point contact.

TOLERANCES OF WIRE ROPE DIAMETERS

Wire rope is always measured across the largest diameter that will fit inside a true circle.
Wire rope is always manufactured larger than the nominal diameter specified.
Use the right tool, such as a vernier caliper, for measuring the diameter of wire rope.





ALLOWABLE TOLERANCE

RopeType	Nominal diameter mm	GB/T 20118				GB/T 8918		YB/T 5359		YB/T 4398	
		Rope diameter tolerance (% of nominal rope diameter)		Permissible out-of-roundness (%,not greater than)		Tolerance %	Ovality ≤ %	Tolerance %	Ovality ≤ %	Tolerance %	Ovality ≤ %
		Rope with all-metal strands	Rope with fiber core	Rope with all-metal strands	Rope with fiber core						
Ropes with round strands	0.6≤d<4	+8 0	—	7	—	+5 0	4	+5 0	4	+5 0	4
	4≤d<6	+7 0	+9 0	6	8						
	6≤d<8	+6 0	+8 0	5	7						
	d≥8	+5 0	+7 0	4	6						
Ropes with shaped strands	d≥18	+6 0	+6 0	4	4	+6 0	4	—	—	—	—

Actual Specifications may comply to customer requirements.

WIRE ROPE SELECTION & RECOMMENDATION

Usage		Rope type	Structure	Comments
Hoisting vertical shafts		Parallel laid wire rope	6×19S、6×19W、6×25F、6×29F、6×26WS、6×31WS、6×36WS	
		Rotation resistant wire rope	18×7、17×7、24(W)×7、35(W)×7	
		Compact strand wire rope	6×K19S、6×K25F、6×K29F、6×K26WS、6×K31WS、6×K36WS、18×K7、17×K7、24(W)×K7、35(W)×K7、DL1916AK、DL1212AK、DL0712AK、DL08PAK、DL1916HK、DL1315HK、DL1212HK、DL0712HK	Lang lay is ecommended
Shaft excavation (for building well)		Rotation resistant wire rope	17×7、18×7、34×7、36×7、24(W)×7、35(W)×7	
		Compact strand wire rope	17×K7、18×K7、24(W)×K7、35(W)×K7、DL1916AK、DL1212AK、DL0712AK、DL1916HK、DL1315HK、DL1212HK、DL0712HK	
		Shaped strand wire rope	4V×39SFC、4V×48SFC	
Balanced rope in vertical shafts		Rotation resistant wire rope	18×7、17×7、34(M)×7、36(M)×7、35(W)×7	Use regular lay only
		Compact strand wire rope	17×K7、18×K7、24(W)×K7、35(W)×K7、DL1916AK、DL1212AK、DL0712AK、DL1916HK、DL1315HK、DL1212HK、DL0712HK	
		Shaped strand wire rope	4V×39SFC、4V×48SFC	
Inclined shafts hoist		Parallel laid wire rope	**6×7**	Lang lay is recommended
Blast furnace hoist		Parallel laid wire rope	6×19S、6×25F、6×29F、6×26WS、6×36WS	
Vertical shaft guide and ropeway's load		Rotation resistant wire rope	**18×7、17×7**	Lang lay is recommended
		Compact strand wire rope	17×K7、18×K7、24(W)×K7、35(W)×K7	
Winch on slope		Parallel laid wire rope	**6×36WS、6×37S**	
Conveyer belt , telpher , cable railway		Parallel laid wire rope	6×19S、6×19W、6×25F、6×29F、6×26WS、6×31WS、6×36WS	Lang lay is recommended 6×19W is not recommendedfor telpher
Oil drilling	Wire rope for pumping rod & oil pipe	Parallel laid wire rope	6×25F、6×26WS、6×29F 、6×31WS、6×36WS	Fiber core of steel core
		Rotation resistant wire rope	**18×7**	
		Compact strand wire rope	6×K25F、 、6×K26WS、6×K29F、6×K31WS、6×K36WS、18×K7	
	Wire rope for bailing sand	Parallel laid wire rope	**6×7**	
	Wire rope for drilling well	Parallel laid wire rope	6×19S、6×25F、6×29F、6×26WS、6×36WS	Fiber core of steel core
		Compact strand wire rope	6×K19S、6×K25F、6×K26WS、6×K29F、6×K31WS、6×K36WS	
	Winch's wire rope for installing derrick	Parallel laid wire rope	6×26WS-IWRC、6×31WS-IWRC、6×36WS-IWRC	
	Wire rope for pumping unit	Cross laid wire rope	6×19M、6×37M	
		Rotation resistant wire rope	18×7-WSC	steel core
	Anchor rope for shallow sea	Cross laid wire rope	6×19M、6×37M	steel core

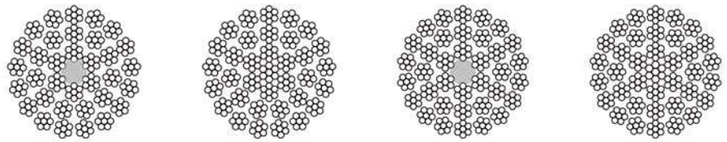
Usage		Rope type	Structure	Comments
Excavating machinery		Parallel laid wire rope	6×19S-IWRC、6×19W-IWRC、6×25F-IWRC、6×26WS-IWRC、6×29F-IWRC、6×31WS-IWRC、6×36WS-IWRC、6×41WS-IWRC	Lang lay is recommended
		Rotation resistant wire rope	35(W)×7、24(W)×7	
		Compact strand wire rope	6×K19S-IWRC、6×K25F-IWRC、6×K26WS-IWRC、6×K29F-IWRC、6×K31WS-IWRC、6×K36WS-IWRC、6×K41WS-IWRC、35(W)×K7、24(W)×K7、DL1916AK、DL1212AK、DL0712AK、DL08PAK、DL1916HK、DL1315HK、DL1212HK、DL0712HK	
Rotary drilling rig		Parallel laid wire rope	6×19S-IWRC、6×25F-IWRC、6×26WS-IWRC、6×29F-IWRC、6×31WS-IWRC、6×36WS-IWRC	
		Rotation resistant wire rope	35(W)×7、24(W)×7	
		Compact strand wire rope	6×K25F-IWRC、6×K26WS-IWRC、6×K29F-IWRC、6×K31WS-IWRC、6×K36WS-IWRC、35(W)×K7、24(W)×K7、DL1916AK、DL1212AK、DL0712AK、DL08PAK、DL1916HK、DL1315HK、DL1212HK、DL0712HK	
Crane	Metallurgy	Parallel laid wire rope	18×19S-WSC、18×19W-WSC	
		Compact strand wire rope	6×K25F-IWRC、6×K26WS-IWRC、6×K29F-IWRC、6×K31WS-IWRC、6×K36WS-IWRC	
	Dock, tower crane	Parallel laid wire rope	18×7、18×19S、18×19W、34×7、36×7、35(W)×7、24(W)×7	
		Compact strand wire rope	18×K7、35(W)×K7、24(W)×K7、DL1916AK、DL1212AK、DL0712AK、DL08PAK、DL1916HK、DL1315HK、DL1212HK、DL0712HK	
		Shaped strand wire rope	4V×39SFC、4V×48SFC	
	Other usages	Parallel laid wire rope	6×19S、6×19W、6×25F、6×26WS、6×29F、6×31WS、6×36WS、8×19S、8×19W、8×25F、8×26WS、8×29F、8×31WS、8×36WS	
		Compact strand wire rope	6×K19S、6×K25F、6×K26WS、6×K29F、6×K31WS、6×K36WS、8×K19S、8×K26WS、8×K31WS、8×K36WS	
		Shaped strand wire rope	4V×39SFC、4V×48SFC	
Fishing trawl		Cross laid wire rope	6×24M、6×19M、6×37M	Galvanized
		Parallel laid wire rope	6×24S、6×24W、6×19S、6×19W、6×26WS、6×31WS、6×36WS、6×37S	
Tie down		Cross laid wire rope	6×24M	
		Parallel laid wire rope	6×24S、6×24W	
Salvage operations		Parallel laid wire rope	6×31WS、6×36WS、6×37S、8×19S、8×19W、8×31WS、8×36WS	Galvanized
Fixing mast and hanging bridge on ships		Cross laid wire rope	6×7M-WSC、6×19M-WSC、6×37M-IWRC	Galvanized
		Parallel laid wire rope	6×19M-WSC	Galvanized
Towboat, cargo net for transporting woods		Cross laid wire rope	6×24M、6×37M	Galvanized
		Parallel laid wire rope	6×24S、6×24W、6×31WS、6×36WS、6×37S	Galvanized
Ship loading and unloading		Parallel laid wire rope	6×24S、6×24W、6×19S、6×19W、6×25F、6×29、6×31WS、6×36WS、6×37S	
		Rotation resistant wire rope	18×7、18×19S、18×19W、34×7、36×7、35(W)×7、24(W)×7	
		Compact strand wire rope	6×K19S、6×K25F、6×K29F、6×K31WS、6×K36WS、18×K7、35(W)×K7、24(W)×K7	
		Shaped strand wire rope	4V×39SFC、4V×48SFC	Galvanized
Steel works		Parallel laid wire rope	6×19S-IWRC、6×19W-IWRC、6×25F-IWRC、6×29F-IWRC、6×31WS-IWRC、6×36WS-IWRC、6×37S-IWRC	

1 Galvanized steel wire ropes should be used When corrosion is the main cause of scrap.

2 When the steel wire rope is working, the terminal cannot rotate freely or although there is backlash, but there is no working place that is entangled with each other, the same-directional twisted steel wire rope should be used.

SPECIFICATIONS OF CRANE WIRE ROPES

Class 34(M)×7 rotation resistant



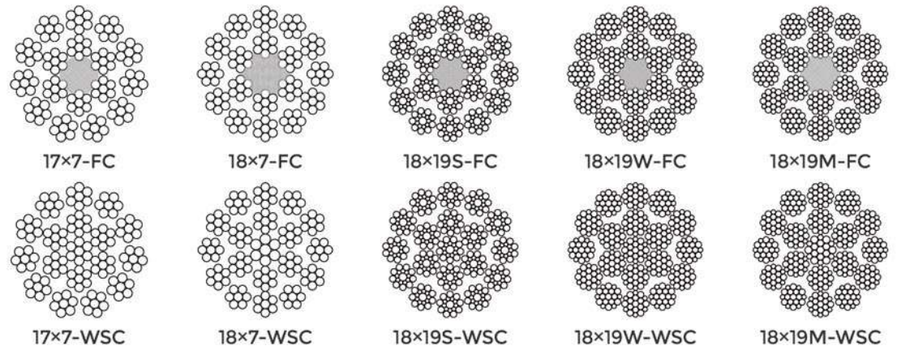
34(M)×7-FC 34(M)×7-WSC 36(M)×7-FC 36(M)×7-WSC

Nominal rope diameter	Approx. weight		Minimum breaking load					
			Rope grades, MPa					
			1570		1770		1960	
	FC	WC	FC	WC	FC	WC	FC	WC
mm	kg/100m		kN	kN	kN	kN	kN	kN
10	40.0	43.0	48.4	49.9	54.5	56.3	60.4	62.3
11	48.4	52.0	58.5	60.4	66.0	68.1	73.0	75.4
12	57.6	61.9	69.6	71.9	78.5	81.1	86.9	89.8
13	67.6	72.7	81.7	84.4	92.1	95.1	102	105
14	78.4	84.3	94.8	97.9	107	110	118	122
16	102	110	124	128	140	144	155	160
18	130	139	157	162	177	182	196	202
20	160	172	193	200	218	225	241	249
22	194	208	234	242	264	272	292	302
24	230	248	279	288	314	324	348	359
26	270	291	327	337	369	380	408	421
28	314	337	379	391	427	441	473	489
30	360	387	435	449	491	507	543	561
32	410	440	495	511	558	576	618	638
36	518	557	627	647	707	729	782	808
40	640	688	774	799	872	901	966	997
44	774	832	936	967	1060	1090	1170	1210
48	922	991	1110	1150	1260	1300	1390	1440
52	1080	1160	1310	1350	1470	1520	1630	1690
56	1250	1350	1520	1570	1710	1770	1890	1950
60	1440	1550	1740	1800	1960	2030	2170	2240

1 Total minimum breaking force of wire = Minimum breaking force x 1.334 2 Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class 18×7 rotation resistant



17×7-FC 18×7-FC 18×19S-FC 18×19W-FC 18×19M-FC

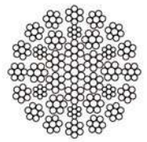
17×7-WSC 18×7-WSC 18×19S-WSC 18×19W-WSC 18×19M-WSC

Nominal rope diameter	Approx. weight		Minimum breaking load							
			Rope grades, MPa							
			1570		1770		1960		2160	
	FC	WC	FC	WC	FC	WC	FC	WC	FC	WC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN
6	14.0	15.5	17.5	18.5	19.8	20.9	21.9	23.1	24.1	25.5
7	19.1	21.1	23.8	25.2	26.9	28.4	29.8	31.5	32.8	34.7
8	25.0	27.5	31.1	33.0	35.1	37.2	38.9	41.1	42.9	45.3
9	31.6	34.8	39.4	41.7	44.4	47.0	49.2	52.1	54.2	57.4
10	39.0	43.0	48.7	51.5	54.9	58.1	60.8	64.3	67.0	70.8
11	47.2	52.0	58.9	62.3	66.4	70.2	73.5	77.8	81.0	85.7
12	56.2	61.9	70.1	74.2	79.0	83.6	87.5	92.6	96.4	102
13	65.9	72.7	82.3	87.0	92.7	98.1	103	109	113	120
14	76.4	84.3	95.4	101	108	114	119	126	131	139
16	100	110	125	132	140	149	156	165	171	181
18	126	139	158	167	178	188	197	208	217	230
20	156	172	195	206	219	232	243	257	268	283
22	189	208	236	249	266	281	294	311	324	243
24	225	248	280	297	316	334	350	370	386	408
26	264	291	329	348	371	392	411	435	453	479
28	306	337	382	404	430	455	476	504	525	555
30	351	387	438	463	494	523	547	579	603	638
32	399	440	498	527	562	594	622	658	686	725
36	505	557	631	667	711	752	787	833	868	918
40	624	688	779	824	878	929	972	1030	1070	1130
44	755	832	942	997	1060	1120	1180	1240	1300	1370
48	899	991	1120	1190	1260	1340	1400	1480	1540	1630
52	1050	1160	1320	1390	1480	1570	1640	1740	1810	1920
56	1220	1350	1530	1610	1720	1820	1910	2020	2100	2220
60	1400	1550	1750	1850	1980	2090	2190	2310	2410	2550

1 Total minimum breaking force of wire = Minimum breaking force x 1.283 2 Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class 35(W)×7 rotation resistant



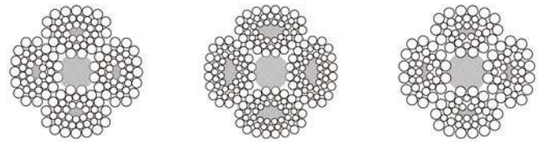
35(W)×7

Nominal rope diameter	Approx. weight	Minimum breaking load			
		Rope grades, MPa			
		1570	1770	1960	2160
mm	kg/100m	kN	kN	kN	kN
10	46.0	56.5	63.7	70.6	75.6
11	55.7	68.4	77.1	85.4	91.5
12	66.2	81.4	91.8	102	109
13	77.7	95.5	108	119	128
14	90.2	111	125	138	148
16	118	145	163	181	194
18	149	183	206	229	245
20	184	226	255	282	302
22	223	274	308	342	366
24	265	326	367	406	435
26	311	382	431	477	511
28	361	443	500	553	593
30	414	509	573	635	680
32	471	579	652	723	774
36	596	732	826	914	980
40	736	904	1020	1130	1210
44	891	1090	1230	1370	1460
48	1060	1300	1470	1630	1740
52	1240	1530	1720	1910	2040
56	1440	1770	2000	2210	2370
60	1660	2030	2290	2540	2720

1 Total minimum breaking force of wire = Minimum breaking force x 1.287 **2** Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class 4V×39 Shaped strand



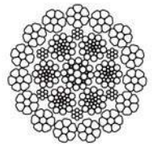
4V×39SFC-FC 4V×48SFC-FC 4V×35WSFC-FC

Nominal rope diameter	Approx. weight	Minimum breaking load		
		Rope grades, MPa		
		1570	1770	1960
mm	kg/100m	kN	kN	kN
10	41.0	56.5	63.7	70.6
11	49.6	68.4	77.1	85.4
12	59.0	81.4	91.8	102
13	69.3	95.5	108	119
14	80.4	111	125	138
16	105	145	163	181
18	133	183	206	229
20	164	226	255	282
22	198	274	308	342
24	236	326	367	406
26	277	382	431	477
28	321	443	500	553
30	369	509	573	635
32	420	579	652	723
36	531	732	826	914
40	656	904	1020	1130
44	794	1090	1230	1370
48	945	1300	1470	1630

1 Total minimum breaking force of wire = Minimum breaking force x 1.191 **2** Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class DL1315HK compacted strand



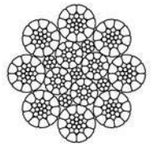
DL1315HK

Nominal rope diameter	Approx. weight	Minimum breaking load			
		Rope grades, MPa			
		1670	1770	1870	1960
mm	kg/100m	kN	kN	kN	kN
12	69.1	106	112	118	124
13	81.1	124	132	139	146
14	94.1	144	153	161	169
15	108	165	175	185	194
16	123	188	199	211	221
17	139	212	225	238	249
18	156	238	252	267	279
19	173	265	281	297	311
20	192	294	312	329	345
21	212	324	343	363	380
22	232	356	377	398	417
23	254	389	412	435	456
24	276	423	449	474	497
25	300	459	487	514	539
26	324	497	526	556	583
27	350	536	568	600	629
28	376	576	611	645	676
29	404	618	655	692	725
30	432	661	701	741	776
32	492	752	797	843	883
34	555	849	900	951	997
36	622	952	1009	1066	1118
38	693	1061	1125	1188	1245
40	768	1176	1246	1316	1380

1 Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class DL08PAK compacted strand



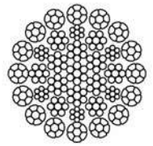
DL08PAK

Nominal rope diameter	Approx. weight	Minimum breaking load			
		Rope grades, MPa			
		1670	1770	1870	1960
mm	kg/100m	kN	kN	kN	kN
12	71.3	111	117	124	130
13	83.7	130	138	145	152
14	97.0	151	160	169	177
15	111	173	183	194	203
16	127	197	208	220	231
17	143	222	235	249	261
18	160	249	264	279	292
19	179	277	294	311	325
20	198	307	326	344	361
21	218	339	359	379	398
22	240	372	394	416	436
23	262	406	431	455	477
24	285	442	469	495	519
25	309	480	509	538	564
26	335	519	550	581	609
27	361	560	594	627	657
28	388	602	638	674	707
29	416	646	685	723	758
30	446	691	733	774	811

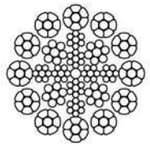
1 Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class DL1916HK & DL1212HK compacted strand



DL1916HK



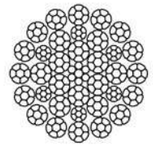
DL1212HK
Diameter: 12mm - 30mm

Nominal rope diameter	Approx. weight	Minimum breaking load			
		Rope grades, MPa			
		1670	1770	1870	1960
mm	kg/100m	kN	kN	kN	kN
12	67.0	93.8	99.4	105	110
13	78.6	110	117	123	129
14	91.1	128	135	143	150
15	105	147	155	164	172
16	119	167	177	187	196
17	134	188	199	211	221
18	151	211	224	236	248
19	168	235	249	263	276
20	186	261	276	292	306
21	205	287	304	322	337
22	225	315	334	353	370
23	246	345	365	386	404
24	268	375	398	420	440
25	291	407	431	456	478
26	314	440	467	493	517
27	339	475	503	532	557
28	365	511	541	572	599
29	391	548	581	613	643
30	419	586	621	656	688
32	476	(667)	(707)	(747)	(783)
34	538	(753)	(798)	(843)	(884)
36	603	(844)	(895)	(945)	(991)
38	671	(940)	(997)	(1053)	(1104)
40	744	(1042)	(1104)	(1167)	(1223)

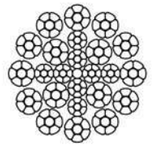
1 Standard: GB/T 8918 **2** Data in () do not apply to DL1212HK

SPECIFICATIONS OF CRANE WIRE ROPES

Class DL1916AK & DL1212AK compacted strand



DL1916AK



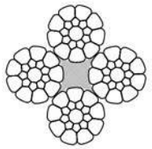
DL1212AK
Diameter: 12mm - 30mm

Nominal rope diameter	Approx. weight	Minimum breaking load			
		Rope grades, MPa			
		1670	1770	1870	1960
mm	kg/100m	kN	kN	kN	kN
12	67.7	98.6	105	110	116
13	79.4	116	123	130	136
14	92.1	134	142	150	158
15	106	154	163	173	181
16	120	175	186	196	206
17	136	198	210	222	232
18	152	222	235	248	260
19	170	247	262	277	290
20	188	274	290	307	321
21	207	302	320	338	354
22	227	331	351	371	389
23	249	362	384	406	425
24	271	394	418	442	463
25	294	428	454	479	502
26	318	463	491	518	543
27	343	499	529	559	586
28	368	537	569	601	630
29	395	576	610	645	676
30	423	616	653	690	723
32	481	(701)	(743)	(785)	(823)
34	543	(792)	(839)	(886)	(929)
36	609	(887)	(941)	(994)	(1041)
38	679	(989)	(1048)	(1107)	(1160)
40	752	(1096)	(1161)	(1227)	(1286)

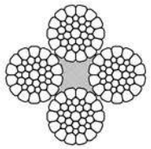
1 Standard: GB/T 8918 **2** Data in () do not apply to DL1212AK

SPECIFICATIONS OF CRANE WIRE ROPES

Class 4×K19 & 4×K36 compacted strand



4×K19S-FC



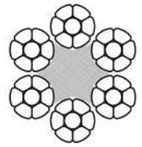
4×K36WS-FC

Nominal rope diameter	Approx. weight	Minimum breaking load			
		Rope grades, MPa			
		1570	1770	1960	2160
mm	kg/100m	kN	kN	kN	kN
22	218	312	351	389	429
24	259	371	418	463	510
26	304	435	491	543	599
28	353	505	569	630	694
30	405	579	653	723	797
32	461	659	743	823	907
34	520	744	839	929	1020
36	583	834	941	1040	1150
38	650	930	1050	1160	—
40	720	1030	1160	1290	—
42	794	1140	1280	1420	—
44	871	1250	1400	1560	—
46	952	1360	1540	1700	—
48	1040	1480	1670	1850	—

1 Standard: GB/T 8918 **2** Data in () do not apply to DL1212AK

SPECIFICATIONS OF CRANE WIRE ROPES

Class 6×K7-FC compacted strand



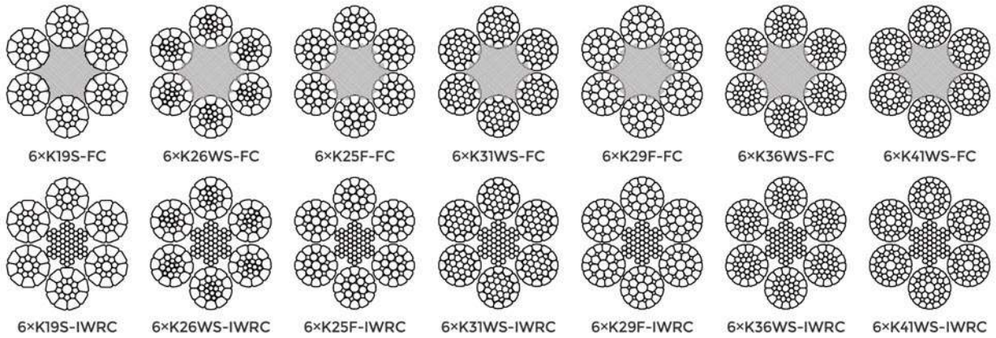
6×K7-FC

Nominal rope diameter	Approx. weight	Minimum breaking load		
		Single tensile,MPa		
		1570	1770	1960
mm	kg/100m	kN	kN	kN
10	41.0	58.9	66.4	73.5
12	59.0	84.8	95.6	106
14	80.4	115	130	144
16	105	151	170	188
18	133	191	215	238
20	164	236	266	294
22	198	285	321	356
24	236	339	382	423
26	277	398	449	497
28	321	462	520	576
30	369	530	597	662
32	420	603	680	753
34	474	681	767	850
36	531	763	860	953
38	592	850	958	1060
40	656	942	1060	1180

1 Total minimum breaking force of wire = Minimum breaking force x 1.134 **2** Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class 6×K19 & 6×K36 compacted strand

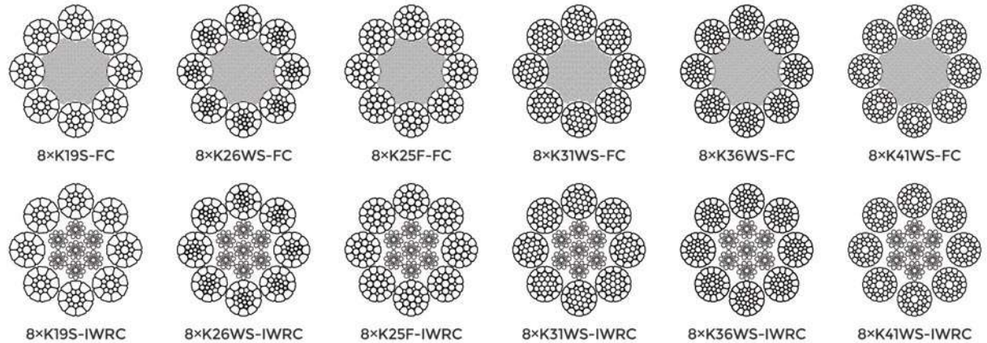


Nominal rope diameter	Approx. weight		Minimum breaking load											
			Rope grades, MPa											
			1570		1670		1770		1870		1960		2160	
	FC	WC	FC	WC	FC	WC	FC	WC	FC	WC	FC	WC	FC	WC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN	kN	kN	kN	kN
10	42.5	46.5	58.6	65.2	62.3	69.3	66.0	73.5	69.8	77.6	73.1	81.3	80.6	89.6
12	61.2	67.0	84.3	93.8	89.7	99.8	95.1	106	100	112	105	117	116	129
14	83.3	91	115	128	122	136	129	144	137	152	143	159	158	176
16	109	119	150	167	159	177	169	188	179	199	187	208	206	230
18	138	151	190	211	202	225	214	238	226	251	237	264	261	290
20	170	186	234	261	249	277	264	294	279	310	292	325	222	359
22	206	225	283	315	301	335	320	356	338	376	354	394	390	434
24	245	268	337	375	359	399	380	423	402	447	421	469	464	516
26	287	314	396	440	421	469	446	497	472	525	494	550	545	606
28	333	365	459	511	488	543	518	576	547	608	573	638	632	703
30	382	419	527	586	561	624	594	661	628	698	658	732	725	807
32	435	476	600	667	638	710	676	752	714	795	749	833	825	918
34	491	538	677	753	720	801	763	849	806	897	845	940	931	1040
36	551	603	759	844	807	898	856	952	904	1010	947	1050	1040	1160
38	614	671	846	941	899	1000	953	1060	1010	1120	1060	1170	1160	1290
40	680	744	937	1040	1000	1110	1060	1180	1120	1240	1170	1300	1290	1430
42	750	820	1030	1150	1100	1220	1160	1300	1230	1370	1290	1430	1420	1580
44	823	900	1130	1260	1210	1340	1280	1420	1350	1500	1420	1570	1560	1740
46	899	984	1240	1380	1320	1470	1400	1550	1480	1640	1550	1720	1700	1900
48	979	1070	1350	1500	1440	1600	1520	1690	1610	1790	1680	1870	1860	2070
50	1060	1160	1460	1630	1560	1730	1650	1840	1740	1940	1830	2030	2010	2240
52	1150	1260	1580	1760	1680	1870	1790	1990	1890	2100	1980	2200	2180	2420
54	1240	1360	1710	1900	1820	2020	1930	2140	2030	2260	2130	2370	2350	2610
56	1330	1460	1840	2040	1950	2170	2070	2300	2190	2430	2290	2550	2530	2810
58	1430	1560	1970	2190	2100	2330	2220	2470	2350	2610	2460	2740	2710	3020
60	1530	1670	2110	2350	2240	2490	2380	2640	2510	2790	2630	2930	2900	3230

1 Total minimum breaking force of wire = Minimum breaking force x 1.214(FC) or 1.260(WC) 2 Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class 8×K19 & 8×K36 compacted strand

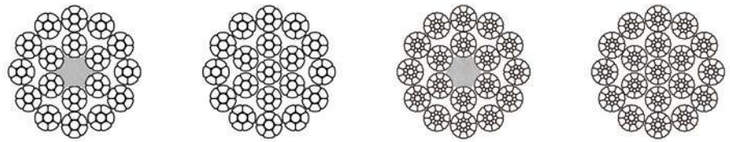


Nominal rope diameter	Approx. weight		Minimum breaking load											
			Rope grades, MPa											
			1570		1670		1770		1870		1960		2160	
	FC	WC	FC	WC	FC	WC	FC	WC	FC	WC	FC	WC	FC	WC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN	kN	kN	kN	kN
10	40.5	48.5	51.8	65.2	55.1	69.3	58.4	73.5	61.7	77.6	64.7	81.3	71.2	89.6
12	58.3	69.8	74.6	93.8	79.4	99.8	84.1	106	88.9	112	93.1	117	103	129
14	79.4	95.1	102	128	108	136	114	144	121	152	127	159	140	176
16	104	124	133	167	141	177	150	188	158	199	166	208	183	230
18	131	157	168	211	179	225	189	238	200	251	210	264	231	290
20	162	194	207	261	220	277	234	294	247	310	259	325	285	359
22	196	235	251	315	267	335	283	356	299	376	313	394	345	434
24	233	279	298	375	317	399	336	423	355	447	373	469	411	516
26	274	328	350	440	373	469	395	497	417	525	437	550	482	606
28	318	380	406	511	432	543	458	576	484	608	507	638	559	703
30	364	437	466	586	496	624	526	661	555	698	582	732	642	807
32	415	497	531	667	564	710	598	752	632	795	662	833	730	918
34	468	561	599	753	637	801	675	849	713	897	748	940	824	1040
36	525	629	671	844	714	898	757	952	800	1010	838	1050	924	1160
38	585	700	748	941	796	1000	843	1060	891	1120	934	1170	1030	1290
40	648	776	829	1040	882	1110	935	1180	987	1240	1030	1300	1140	1430
42	714	856	914	1150	972	1220	1030	1300	1090	1370	1140	1430	1260	1580
44	784	939	1000	1260	1070	1340	1130	1420	1190	1500	1250	1570	1380	1740
46	857	1030	1100	1380	1170	1470	1240	1550	1310	1640	1370	1720	1510	1900
48	933	1120	1190	1500	1270	1600	1350	1690	1420	1790	1490	1870	1640	2070
50	1010	1210	1300	1630	1380	1730	1460	1840	1540	1940	1620	2030	1780	2240
52	1100	1310	1400	1760	1490	1870	1580	1990	1670	2100	1750	2200	1930	2420
54	1180	1410	1510	1900	1610	2020	1700	2140	1800	2260	1890	2370	2080	2610
56	1270	1520	1620	2040	1730	2170	1830	2300	1940	2430	2030	2550	2240	2810
58	1360	1630	1740	2190	1850	2330	1960	2470	2080	2610	2180	2740	—	3020
60	1460	1750	1870	2350	1980	2490	2100	2640	2220	2790	2330	2930	—	3230

1 Total minimum breaking force of wire = Minimum breaking force x 1.214(FC) or 1.260(WC) 2 Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class 18×K7 & 18×K19 compacted strand



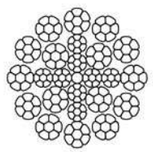
18×K7-FC 18×K7-WSC 18×K19S-FC 18×K19S-WSC

Nominal rope diameter	Approx. weight		Minimum breaking load											
			Rope grades, MPa											
			1570		1670		1770		1870		1960		2160	
	FC	WC	FC	WC	FC	WC	FC	WC	FC	WC	FC	WC	FC	WC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN	kN	kN	kN	kN
14	83.7	90.2	108	114	115	121	121	128	128	136	134	142	148	157
16	109	118	141	149	150	158	159	168	168	177	176	186	194	205
18	138	149	178	188	189	200	201	212	212	224	222	235	245	259
20	171	184	220	232	234	247	248	262	262	277	274	290	302	320
22	207	223	266	281	283	299	300	317	317	335	332	351	366	387
24	246	265	317	335	337	356	357	377	377	399	395	418	436	460
26	289	311	371	393	395	418	419	443	442	468	464	490	511	540
28	335	361	431	455	458	484	486	513	513	542	538	569	593	627
30	384	414	495	523	526	556	558	589	589	632	617	653	680	719
32	437	471	563	595	599	633	634	671	670	709	702	743	774	818
34	494	532	635	672	676	714	716	757	757	800	793	838	874	924
36	553	596	712	753	758	801	803	849	848	897	889	940	980	1040
38	617	664	793	839	844	892	895	946	945	999	991	1050	1090	1150
40	683	736	879	929	935	989	991	1050	1050	1110	1100	1160	1210	1280
42	753	811	969	1020	1030	1090	1090	1160	1150	1220	1210	1280	1330	1410
44	827	891	1060	1120	1130	1200	1200	1270	1270	1340	1330	1400	1460	1550
46	904	973	1160	1230	1240	1310	1310	1390	1380	1460	1450	1530	1600	1690
48	984	1060	1270	1340	1350	1420	1430	1510	1510	1590	1580	1670	1740	1840
50	1070	1150	1370	1450	1460	1540	1550	1640	1640	1730	1720	1810	1890	2000
52	1150	1240	1490	1570	1580	1670	1680	1770	1770	1870	1850	1960	2040	2160
54	1250	1340	1600	1690	1700	1800	1810	1910	1910	2020	2000	2110	2200	2330
56	1340	1440	1720	1820	1830	1940	1940	2050	2050	2170	2150	2270	2370	2510
58	1440	1550	1850	1950	1970	2080	2080	2200	2200	2330	2310	2440	2540	2690
60	1540	1660	1980	2090	2100	2220	223	2360	2360	2490	2470	2610	2720	2880

1 Total minimum breaking force of wire = Minimum breaking force x 1.283 **2** Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class 24(W)×K7 compacted strand



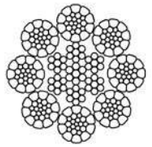
24(W)×K7

Nominal rope diameter	Approx. weight	Minimum breaking load			
		Rope grades, MPa			
		1570	1770	1960	2160
mm	kg/100m	kN	kN	kN	kN
10	49.0	64.4	72.6	80.4	88.6
12	70.6	92.7	104	116	128
14	96.0	126	142	158	174
16	125	165	186	206	227
18	159	209	235	260	287
20	196	257	290	321	354
22	237	312	351	389	429
24	282	371	418	463	510
26	331	435	491	543	599
28	384	505	569	630	694
30	441	579	653	723	797
32	502	659	743	823	907
34	566	744	839	929	1020
36	635	834	941	1040	—
38	708	930	1050	1160	—
40	784	1030	1160	1290	—
42	864	1140	1280	1420	—
44	949	1250	1400	1560	—
46	1040	1360	1540	1700	—

1 Total minimum breaking force of wire = Minimum breaking force x 1.287 **2** Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class 8×K26WS-IWRC compacted strand



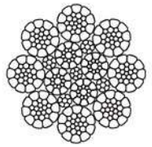
8×K26WS-IWRC

Nominal rope diameter	Approx. weight	Minimum breaking load		
		Rope grades, MPa		
		1770	1960	2160
mm	kg/100m	kN	kN	kN
10	48.0	76.8	85.1	93.7
11	58.1	92.9	103	113
12	69.1	111	122	135
13	81.1	130	144	158
14	94.1	151	167	184
15	108	173	191	211
16	123	197	218	240
17	139	222	246	271
18	156	249	276	304
19	173	277	307	338
20	192	307	340	375
21	212	339	375	413
22	232	372	412	454
23	254	406	450	496
24	276	442	490	540
25	300	480	532	586
26	324	519	575	634
27	350	560	620	683
28	376	602	667	735
29	404	646	715	788
30	432	691	766	844
32	492	787	871	960
34	555	888	983	1080
36	622	1000	1100	1210
38	693	1110	1230	1350
40	768	1230	1360	1500
42	847	1360	1500	1650
44	929	1490	1650	1810
46	1020	1630	1800	1980
48	1110	1770	1960	2160
50	1200	1920	2130	2340
52	1300	2080	2300	2530
54	1400	2240	2480	2730
56	1510	2410	2670	2940
58	1610	2580	2860	3150
60	1730	2770	3060	3370

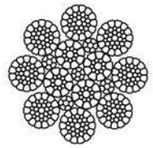
1 Total minimum breaking force of wire = Minimum breaking force x 1.260 **2** Standard: GB/T 8918
3 Allowable diameter deviation:+1% ~ +3.5%

SPECIFICATIONS OF CRANE WIRE ROPES

Class 8×K26WS-PWRC(K) & 8×K36WS-PWRC(K) compacted strand



8×K26WS-PWRC(K)



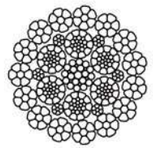
8×K36WS-PWRC(K)

Nominal rope diameter	Approx. weight	Minimum breaking load		
		Rope grades, MPa		
		1770	1960	2160
mm	kg/100m	kN	kN	kN
12	75.3	124	137	151
13	88.4	145	161	177
14	103	169	187	206
15	118	194	214	236
16	134	220	244	269
17	151	249	275	303
18	169	279	309	340
19	189	311	344	379
20	209	344	381	420
21	231	379	420	463
22	253	416	461	508
23	277	455	504	555
24	301	495	549	605
25	327	538	595	656
26	354	582	644	710
27	381	627	694	765
28	410	674	747	823
29	440	723	801	883
30	471	774	857	945
32	536	881	975	1070
34	605	994	1100	1210
36	678	1110	1230	1360
38	755	1240	1380	1520
40	837	1380	1520	1680
42	923	1520	1680	1850
44	1010	1670	1840	2030
46	1110	1820	2020	2220
48	1200	1980	2190	2420
50	1310	2150	2380	2620
52	1410	2330	2580	2840
54	1530	2510	2780	3060
56	1640	2700	2990	3290
58	1760	2890	3200	3530
60	1880	3100	3430	3780

1 Total minimum breaking force of wire = Minimum breaking force x 1.250 **2** Standard: GB/T 8918
3 Allowable diameter deviation:+2% ~ +4.5%

SPECIFICATIONS OF CRANE WIRE ROPES

Class 15×K7: IWRC(K) compacted strand



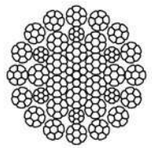
15×K7:IWRC(K)

Nominal rope diameter	Approx. weight	Minimum breaking load		
		Rope grades, MPa		
		1770	1960	2160
mm	kg/100m	kN	kN	kN
20	209	348	385	424
21	231	383	424	468
22	253	421	466	513
23	277	460	509	561
24	301	501	554	611
25	327	543	601	663
26	354	587	651	717
27	381	634	702	773
28	410	681	754	831
29	440	731	809	892
30	471	782	866	955
32	536	890	985	1090
34	605	1000	1110	1230
36	678	1130	1250	1370
38	755	1250	1390	1530
40	837	1390	1540	1700
42	923	1530	1700	1870
44	1010	1680	1860	2050

1 Total minimum breaking force of wire = Minimum breaking force x 1.287 2 Standard: GB/T 8918
3 Allowable diameter deviation:+2% ~ +4.5%

SPECIFICATIONS OF CRANE WIRE ROPES

Class 35(W)×K7 compacted strand



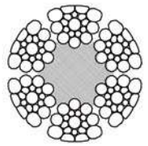
35W×K7

Nominal rope diameter	Approx. weight	Minimum breaking load		
		Rope grades, MPa		
		1770	1960	2160
mm	kg/100m	kN	kN	kN
12	77.5	123	136	150
13	90.9	144	160	176
14	105	167	185	204
15	121	192	213	234
16	138	218	242	267
17	155	247	273	301
18	174	276	306	337
19	194	308	341	376
20	215	341	378	416
21	237	376	417	459
22	260	413	457	504
23	285	451	500	551
24	310	491	544	600
25	336	533	590	651
26	364	577	639	704
27	392	622	689	759
28	422	669	741	816
29	452	717	795	876
30	484	768	850	937
32	551	874	967	1070
34	622	986	1090	1200
36	697	1110	1220	1350
38	777	1230	1360	1500
40	861	1370	1510	1670
42	949	1500	1670	1840
44	1040	1650	1830	2020
46	1140	1810	2000	2200
48	1240	1970	2180	2400
50	1350	2130	2360	2600
52	1450	2310	2550	2820
54	1570	2490	2750	3040
56	1690	2680	2960	3260
58	1810	2870	3180	3500
60	1940	3070	3400	3750

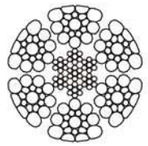
1 Total minimum breaking force of wire = Minimum breaking force x 1.287 2 Standard: GB/T 8918
3 Allowable diameter deviation:+2% ~ +4.5%

SPECIFICATIONS OF CRANE WIRE ROPES

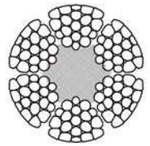
Class K6×19 compacted



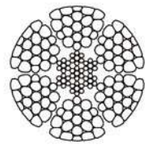
K6×19S-FC



K6×19S-IWRC
Diameter: 6mm ~ 52mm



K6×19W-FC



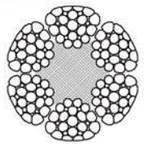
K6×19W-IWRC
Diameter: 6mm ~ 58mm

Nominal rope diameter	Approx. weight		Minimum breaking load Rope grades, MPa									
			1570		1670		1770		1870		1960	
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN	kN	kN
6	14.7	16.4	21.1	23.2	22.4	24.6	23.8	26.1	25.1	27.6	26.3	28.9
7	20.0	22.3	28.7	31.5	30.5	33.6	32.4	35.6	34.2	37.6	35.8	39.4
8	26.1	29.2	37.5	41.2	39.9	43.8	42.3	46.4	44.6	49.1	46.8	51.4
9	33.0	36.9	47.4	52.1	50.5	55.5	53.5	58.8	56.5	62.1	59.2	65.1
10	40.7	45.6	58.6	64.4	62.3	68.5	66.0	72.6	69.8	76.7	73.1	80.4
11	49.3	55.2	70.9	77.9	75.4	82.8	79.9	87.8	84.4	92.8	88.5	97.2
12	58.7	65.6	84.3	92.7	89.7	98.6	95.1	105	100	110	105	116
13	68.9	77.0	99.0	109	105	116	112	123	118	130	124	136
14	79.9	89.4	115	126	122	134	129	142	137	150	143	158
15	91.7	103	132	145	140	154	149	163	157	173	164	181
16	104	117	150	165	159	175	169	186	179	196	187	206
17	118	132	169	186	180	198	191	210	202	222	211	232
18	132	148	190	209	202	222	214	235	226	248	237	260
19	147	165	211	232	225	247	238	262	252	277	264	290
20	163	182	234	257	249	274	264	290	279	307	292	321
22	197	221	283	312	301	331	320	351	338	371	354	389
24	235	263	337	371	359	394	380	418	402	442	421	463
26	275	308	396	435	421	463	446	491	472	518	494	543
28	319	357	459	505	488	537	518	569	547	601	573	630
30	367	410	527	579	561	616	594	653	628	690	658	723
32	417	467	600	659	638	701	676	743	714	785	749	823
34	471	527	677	744	720	792	763	839	806	886	845	929
36	528	591	759	834	807	887	856	941	904	994	947	1040
38	588	658	846	930	899	989	953	1050	1010	1110	1060	1160
40	652	729	937	1030	997	1100	1060	1160	1120	1230	1170	1290
42	719	804	1030	1140	1100	1210	1160	1280	1230	1350	1290	1420
44	789	883	1130	1250	1210	1330	1280	1410	1350	1480	1420	1560
46	862	965	1240	1360	1320	1450	1400	1540	1480	1620	1550	1700
48	939	1050	1350	1480	1440	1580	1520	1670	1610	1770	1680	1850
50	1020	1140	1460	1610	1560	1710	1650	1810	1740	1920	1830	2010
52	1100	1230	1580	1740	1684	1850	1780	1960	1890	2070	1980	2170
54	1190	1330	1710	1880	1820	2000	1920	2120	2030	2240	2130	2340
56	1280	1430	1840	2020	1950	2150	2070	2280	2190	2400	2290	2520
58	1370	1530	1970	2170	2100	2300	2220	2440	2350	2580	2460	2703

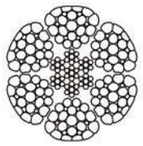
1 Total minimum breaking force of wire = Minimum breaking force x 1.168(FC) or 1.260(WC) **2** Standard: YB/T 4398

SPECIFICATIONS OF CRANE WIRE ROPES

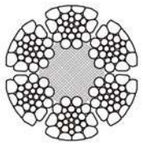
Class K6×19 & K6×36 compacted



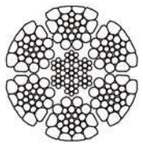
K6×25F-FC



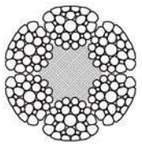
K6×25F-IWRC
Diameter: 8mm ~ 60mm



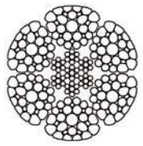
K6×26WS-FC



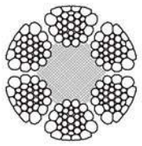
K6×26WS-IWRC
Diameter: 12mm ~ 56mm



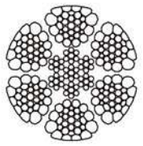
K6×29F-FC



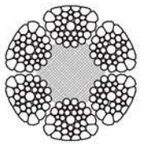
K6×29F-IWRC
Diameter: 10mm ~ 60mm



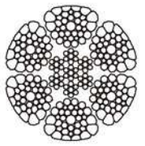
K6×31WS-FC



K6×31WS-IWRC
Diameter: 12mm ~ 60mm



K6×36WS-FC



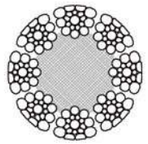
K6×36WS-IWRC
Diameter: 12mm ~ 60mm

Nominal rope diameter	Approx. weight		Minimum breaking load Rope grades, MPa									
			1570		1670		1770		1870		1960	
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN	kN	kN
8	26.9	30.1	37.5	41.2	39.9	43.8	42.3	46.4	44.6	49.1	46.8	51.4
9	34.0	38.1	47.4	52.1	50.5	55.5	53.5	58.8	56.5	62.1	59.2	65.1
10	42.0	47.0	58.6	64.4	62.3	68.5	66.0	72.6	69.8	76.7	73.1	80.4
11	50.8	56.9	70.9	77.9	75.4	82.8	79.9	87.8	84.4	92.8	88.5	97.2
12	60.5	67.7	84.3	92.7	89.7	98.6	95.1	105	100	110	105	116
13	71.0	79.4	99.0	109	105	116	112	123	118	130	124	136
14	82.3	92.1	115	126	122	134	129	142	137	150	143	158
15	94.5	106	132	145	140	154	149	163	157	173	164	181
16	108	120	150	165	159	175	169	186	179	196	187	206
17	121	136	169	186	180	198	191	210	202	222	211	232
18	136	152	190	209	202	222	214	235	226	248	237	260
19	152	170	211	232	225	247	238	262	252	277	264	290
20	168	188	234	257	249	274	264	290	279	307	292	321
22	203	227	283	312	301	331	320	351	338	371	354	389
24	242	271	337	371	359	394	380	418	402	442	421	463
26	284	318	396	435	421	463	446	491	472	518	494	543
28	329	368	459	505	488	537	518	569	547	601	573	630
30	378	423	527	579	561	616	594	653	628	690	658	723
32	430	481	600	659	638	701	676	743	714	785	749	823
34	486	543	677	744	720	792	763	839	806	886	845	929
36	544	609	759	834	807	887	856	941	904	994	947	1040
38	606	679	846	930	899	989	953	1050	1010	1110	1060	1160
40	672	752	937	1030	997	1100	1060	1160	1120	1230	1170	1290
42	741	829	1030	1140	1100	1210	1160	1280	1230	1350	1290	1420
44	813	910	1130	1250	1210	1330	1280	1410	1350	1480	1420	1560
46	889	995	1240	1360	1320	1450	1400	1540	1480	1620	1550	1700
48	968	1080	1350	1480	1440	1580	1520	1670	1610	1770	1680	1850
50	1050	1180	1460	1610	1560	1710	1650	1810	1740	1920	1830	2010
52	1140	1270	1580	1740	1684	1850	1780	1960	1890	2070	1980	2170
54	1220	1370	1710	1880	1820	2000	1920	2120	2030	2240	2130	2340
56	1320	1470	1840	2020	1950	2150	2070	2280	2190	2400	2290	2520
58	1410	1580	1970	2170	2100	2300	2220	2440	2350	2580	2460	2703
60	1510	1690	2110	2320	2240	2460	2380	2610	2510	2760	2630	2890

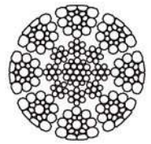
1 Total minimum breaking force of wire = Minimum breaking force x 1.180(FC) or 1.260(WC) **2** Standard: YB/T 4398

SPECIFICATIONS OF CRANE WIRE ROPES

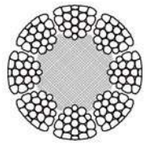
Class K8×19 compacted



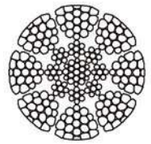
K8×19S-FC



K8×19S-IWRC
Diameter: 10mm ~ 60mm



K8×19W-FC



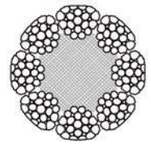
K8×19W-IWRC
Diameter: 10mm ~ 60mm

Nominal rope diameter	Approx. weight		Minimum breaking load Rope grades, MPa									
			1570		1670		1770		1870		1960	
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN	kN	kN
10	38.8	47.4	51.8	63.6	55.1	67.6	58.4	71.7	61.7	75.7	64.7	79.4
11	46.9	57.4	62.7	76.9	66.7	81.8	70.7	86.7	74.7	91.6	78.3	96.0
12	55.9	68.3	74.6	91.6	79.4	97.4	84.1	103	88.9	109	93.1	114
13	65.6	80.2	87.6	107	93.1	114	98.7	121	104	128	109	134
14	76.0	93.0	102	125	108	133	114	141	121	148	127	156
15	87.3	107	117	143	124	152	131	161	139	170	146	179
16	99.3	121	133	163	141	173	150	184	158	194	166	203
17	112	137	150	184	159	195	169	207	178	219	187	229
18	126	154	168	206	179	219	189	232	200	245	210	257
19	140	171	187	230	199	244	211	259	223	273	233	287
20	155	190	207	254	220	271	234	287	247	303	259	318
22	188	230	251	308	267	327	283	347	299	367	313	384
24	223	273	298	366	317	390	336	413	355	436	373	457
26	262	321	350	430	373	457	395	485	417	512	437	537
28	304	372	406	499	432	530	458	562	484	594	507	622
30	349	427	466	572	496	609	526	645	555	682	582	714
32	397	486	531	651	564	693	598	734	632	776	662	813
34	449	548	599	735	637	782	575	829	713	875	748	918
36	503	615	671	824	714	877	757	929	800	982	838	1030
38	560	685	748	918	796	977	843	1040	891	1090	934	1150
40	621	759	829	1020	882	1080	935	1150	987	1210	1030	1270
42	684	837	914	1120	972	1190	1030	1270	1090	1340	1140	1400
44	751	918	1000	1230	1070	1310	1130	1390	1190	1470	1250	1540
46	821	1004	1100	1350	1170	1430	1240	1520	1310	1600	1370	1680
48	894	1093	1190	1470	1270	1560	1350	1650	1420	1750	1490	1830
50	970	1186	1300	1590	1380	1690	1460	1790	1540	1890	1620	1990
52	1050	1283	1400	1720	1490	1830	1580	1940	1670	2050	1750	2150
54	1130	1383	1510	1850	1610	1970	1700	2090	1800	2210	1890	2320
56	1220	1487	1630	1990	1730	2120	1830	2250	1930	2370	2030	2490
58	1300	1596	1740	2140	1850	2280	1970	2410	2080	2550	2180	2670
60	1400	1708	1870	2250	1980	2440	2100	2580	2220	2730	2330	2860

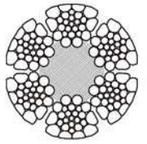
1 Total minimum breaking force of wire = Minimum breaking force x 1.168(FC) or 1.260(WC) **2** Standard: YB/T 4398

SPECIFICATIONS OF CRANE WIRE ROPES

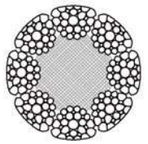
Class K8×19 & K8×36 compacted



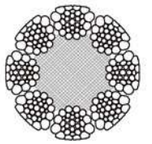
K8×25F-FC



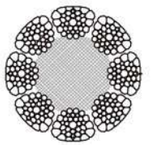
K8×26WS-FC



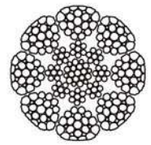
K8×29F-FC



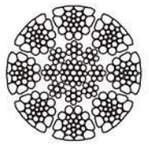
K8×31WS-FC



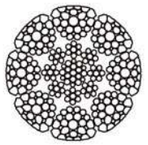
K8×36WS-FC



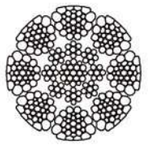
K8×25F-IWRC
Diameter: 18mm ~ 60mm



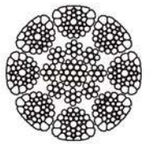
K8×26WS-IWRC
Diameter: 16mm ~ 60mm



K8×29F-IWRC
Diameter: 12mm ~ 60mm



K8×31WS-IWRC
Diameter: 14mm ~ 60mm



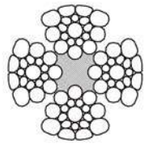
K8×36WS-IWRC
Diameter: 14mm ~ 60mm

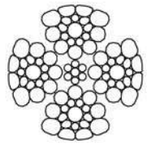
Nominal rope diameter	Approx. weight		Minimum breaking load Rope grades, MPa									
			1570		1670		1770		1870		1960	
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN	kN	kN
10	40.0	48.9	51.8	63.6	55.1	67.6	58.4	71.7	61.7	75.7	64.7	79.4
11	48.4	59.2	62.7	76.9	66.7	81.8	70.7	86.7	74.7	91.6	78.3	96.0
12	57.6	70.4	74.6	91.6	79.4	97.4	84.1	103	88.9	109	93.1	114
13	67.6	82.6	87.6	107	93.1	114	98.7	121	104	128	109	134
14	78.4	95.8	102	125	108	133	114	141	121	148	127	156
15	90.0	110	117	143	124	152	131	161	139	170	146	179
16	102	125	133	163	141	173	150	184	158	194	166	203
17	116	141	150	184	159	195	169	207	178	219	187	229
18	130	158	168	206	179	219	189	232	200	245	210	257
19	144	177	187	230	199	244	211	259	223	273	233	287
20	160	196	207	254	220	271	234	287	247	303	259	318
22	194	237	251	308	267	327	283	347	299	367	313	384
24	230	282	298	366	317	390	336	413	355	436	373	457
26	270	331	350	430	373	457	395	485	417	512	437	537
28	314	383	406	499	432	530	458	562	484	594	507	622
30	360	440	466	572	496	609	526	645	555	682	582	714
32	410	501	531	651	564	693	598	734	632	776	662	813
34	462	565	599	735	637	782	675	829	713	875	748	918
36	518	634	671	824	714	877	757	929	800	982	838	1030
38	578	706	748	918	796	977	843	1040	891	1090	934	1150
40	640	782	829	1020	882	1080	935	1150	987	1210	1030	1270
42	706	863	914	1120	972	1190	1030	1270	1090	1340	1140	1400
44	774	947	1000	1230	1070	1310	1130	1390	1190	1470	1250	1540
46	846	1035	1100	1350	1170	1430	1240	1520	1310	1600	1370	1680
48	922	1127	1190	1470	1270	1560	1350	1650	1420	1750	1490	1830
50	1000	1223	1300	1590	1380	1690	1460	1790	1540	1890	1620	1990
52	1080	1322	1400	1720	1490	1830	1580	1940	1670	2050	1750	2150
54	1170	1426	1510	1850	1610	1970	1700	2090	1800	2210	1890	2320
56	1250	1534	1630	1990	1730	2120	1830	2250	1930	2370	2030	2490
58	1350	1645	1740	2140	1850	2280	1970	2410	2080	2550	2180	2670
60	1440	1760	1870	2250	1980	2440	2100	2580	2220	2730	2330	2860

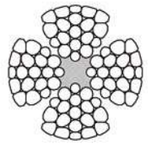
1 Total minimum breaking force of wire = Minimum breaking force x 1.180(FC) or 1.260(WC) **2** Standard: YB/T 4398

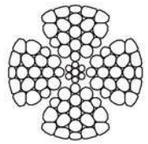
SPECIFICATIONS OF CRANE WIRE ROPES

Class K4×19 compacted


K4×19S-FC


K4×19S-WSC


K4×19W-FC

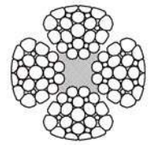

K4×19W-WSC

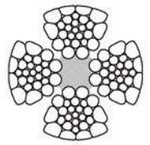
Nominal rope diameter	Approx. weight	Minimum breaking load				
		Rope grades, MPa				
		1570	1670	1770	1870	1960
mm	kg/100m	kN	kN	kN	kN	kN
10	39.8	57.3	61.0	64.6	68.3	71.5
11	48.1	69.3	73.8	78.2	82.6	86.6
12	57.3	82.5	87.8	93.0	98.3	103
13	67.2	96.8	103	109	115	121
14	77.9	112	119	127	134	140
15	89.5	129	137	145	154	161
16	102	147	156	165	175	183
17	115	166	176	187	197	207
18	129	186	197	209	221	232
19	144	207	220	233	246	258
20	159	229	244	258	273	286
22	192	277	295	313	330	346
24	229	330	351	372	393	412
26	269	387	412	437	461	484
28	312	449	478	507	535	561
30	358	516	549	581	614	644
32	407	587	624	662	699	733
34	460	662	705	747	789	827
36	515	743	790	837	885	927
38	574	827	880	933	986	1030
40	636	917	975	1030	1090	1140

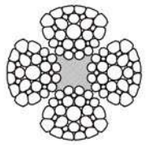
1 Total minimum breaking force of wire = Minimum breaking force x 1.146 **2** Standard: YB/T 4398

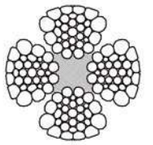
SPECIFICATIONS OF CRANE WIRE ROPES

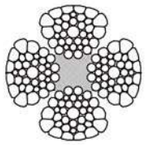
Class K4×19 & K4×36 compacted

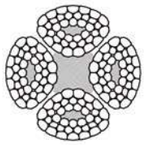

K4×25F-FC

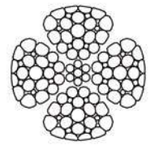

K4×26WS-FC

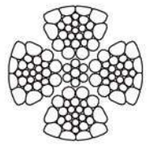

K4×29F-FC

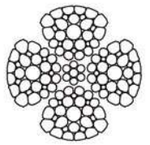

K4×31WS-FC

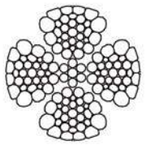

K4×36WS-FC

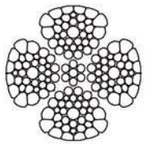

K4×39SFC-FC

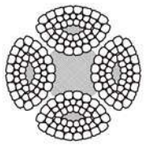

K4×25F-WSC
Diameter: 12mm ~ 48mm


K4×26WS-WSC
Diameter: 12mm ~ 44mm


K4×29F-WSC
Diameter: 10mm ~ 50mm


K4×31WS-WSC
Diameter: 12mm ~ 50mm


K4×36WS-WSC
Diameter: 14mm ~ 58mm

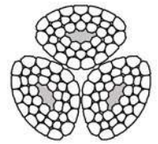

K4×48SFC-FC
Diameter: 16mm ~ 40mm

Nominal rope diameter	Approx. weight	Minimum breaking load				
		Rope grades, MPa				
		1570	1670	1770	1870	1960
mm	kg/100m	kN	kN	kN	kN	kN
10	41.0	57.3	61.0	64.6	68.3	71.5
11	49.6	69.3	73.8	78.2	82.6	86.6
12	59.0	82.5	87.8	93.0	98.3	103
13	69.3	96.8	103	109	115	121
14	80.4	112	119	127	134	140
15	92.3	129	137	145	154	161
16	105	147	156	165	175	183
17	118	166	176	187	197	207
18	133	186	197	209	221	232
19	148	207	220	233	246	258
20	164	229	244	258	273	286
22	198	277	295	313	330	346
24	236	330	351	372	393	412
26	277	387	412	437	461	484
28	321	449	478	507	535	561
30	369	516	549	581	614	644
32	420	587	624	662	699	733
34	474	662	705	747	789	827
36	531	743	790	837	885	927
38	592	827	880	933	986	1030
40	656	917	975	1030	1090	1140
42	723	1010	1080	1140	1200	1260
44	794	1110	1180	1250	1320	1380
46	868	1210	1290	1370	1440	1510
48	945	1320	1400	1490	1570	1650
50	1020	1430	1520	1620	1710	1790
52	1110	1550	1650	1750	1850	1930
54	1200	1670	1780	1880	1990	2090
56	1290	1800	1910	2030	2140	2240
58	1380	1930	2050	2170	2300	2410

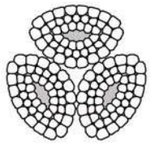
1 Total minimum breaking force of wire = Minimum breaking force x 1.146 **2** Standard: YB/T 4398

SPECIFICATIONS OF CRANE WIRE ROPES

Class K3×36 compacted



K3×39SFC-FC
Diameter: 8mm - 28mm



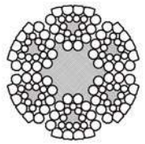
K3×48SFC-FC
Diameter: 12mm - 40mm

Nominal rope diameter	Approx. weight	Minimum breaking load				
		Rope grades, MPa				
		1570	1670	1770	1870	1960
mm	kg/100m	kN	kN	kN	kN	kN
8	26.2	40.7	43.3	45.9	48.5	50.8
9	33.2	51.5	54.8	58.1	61.3	64.3
10	41.0	63.6	67.6	71.7	75.7	79.4
11	49.6	76.9	81.8	86.7	91.6	96.0
12	59.0	91.6	97.4	103	109	114
13	69.3	107	114	121	128	134
14	80.4	125	133	141	148	156
15	92.3	143	152	161	170	179
16	105	163	173	184	194	203
17	118	184	195	207	219	229
18	133	206	219	232	245	257
19	148	230	244	259	273	287
20	164	254	271	287	303	318
22	198	308	327	347	367	384
24	236	366	390	413	436	457
26	277	430	457	485	512	537
28	321	499	530	562	594	622
30	369	572	609	645	682	714
32	420	651	693	734	776	813
34	474	735	782	829	875	918
36	531	824	877	929	982	1030
38	592	918	977	1040	1090	1150
40	656	1020	1080	1147	1212	1270

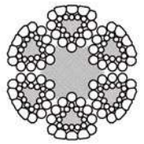
1 Total minimum breaking force of wire = Minimum breaking force x 1.146 **2** Standard: YB/T 4398

SPECIFICATIONS OF CRANE WIRE ROPES

Class K6×19FC-FC compacted



K6×21FC-FC



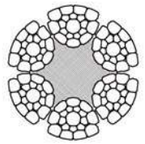
K6×24FC-FC

Nominal rope diameter	Approx. weight	Minimum breaking load				
		Rope grades, MPa				
		1570	1670	1770	1870	1960
mm	kg/100m	kN	kN	kN	kN	kN
10	40.5	57.3	61.0	64.6	68.3	71.5
11	49.0	69.3	73.8	78.2	82.6	86.6
12	58.3	82.5	87.8	93.0	98.3	103
13	68.4	96.8	103	109	115	121
14	79.4	112	119	127	134	140
15	91.1	129	137	145	154	161
16	104	147	156	165	175	183
17	117	166	176	187	197	207
18	131	186	197	209	221	232
19	146	207	220	233	246	258
20	162	229	244	258	273	286
22	196	277	295	313	330	346
24	233	330	351	372	393	412
26	274	387	412	437	461	484
28	318	449	478	507	535	561
30	365	516	549	581	614	644
32	415	587	624	662	699	733
34	468	662	705	747	789	827
36	525	743	790	837	885	927
38	585	827	880	933	986	1030
40	648	917	975	1030	1090	1140
42	714	1010	1080	1140	1200	1260
44	784	1110	1180	1250	1320	1380
46	857	1210	1290	1370	1440	1510
48	933	1320	1400	1490	1570	1650
50	1010	1430	1520	1620	1710	1790
52	1100	1550	1650	1750	1850	1930
54	1180	1670	1780	1880	1990	2090
56	1270	1800	1910	2030	2140	2240
58	1360	1930	2050	2170	2300	2410
60	1460	2060	2190	2330	2460	2580

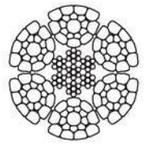
1 Total minimum breaking force of wire = Minimum breaking force x 1.132 **2** Standard: YB/T 4398

SPECIFICATIONS OF CRANE WIRE ROPES

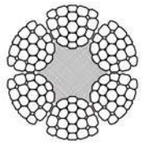
Class K6×K19 compacted



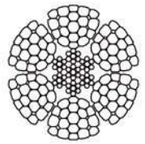
K6×K19S-FC



K6×K19S-IWRC
Diameter: 6mm ~ 52mm



K6×K19W-FC



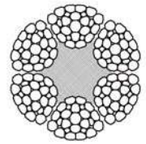
K6×K19W-IWRC
Diameter: 6mm ~ 56mm

Nominal rope diameter	Approx. weight		Minimum breaking load Rope grades, MPa									
			1570		1670		1770		1870		1960	
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN	kN	kN
6	15.1	16.9	21.8	23.9	23.1	25.4	24.5	26.9	25.9	28.4	27.2	29.8
7	20.6	23.1	29.6	32.5	31.5	34.5	33.4	36.6	35.3	38.7	37.0	40.5
8	26.9	30.1	38.7	42.4	41.4	45.1	43.6	47.8	46.1	50.5	48.3	52.9
9	34.0	38.1	49.0	53.7	52.1	57.1	55.2	60.5	58.3	63.9	61.1	67.0
10	42.0	47.0	60.4	66.3	64.3	70.5	68.1	74.7	72.0	78.9	75.5	82.7
11	50.8	56.9	73.5	80.2	77.8	85.3	82.5	90.4	87.1	95.5	91.3	100
12	60.5	67.7	87.0	95.4	92.6	101	98	108	104	114	109	119
13	71.0	79.5	102	112	109	119	115	126	122	133	128	140
14	82.3	92.2	118	130	126	138	134	146	141	155	148	162
15	94.5	106	136	149	145	159	153	168	162	178	170	186
16	108	120	155	170	165	180	174	191	184	202	193	212
17	121	136	175	191	186	204	197	216	208	228	218	239
18	136	152	196	215	208	228	221	242	233	256	244	268
19	152	170	218	239	232	254	246	270	260	285	272	299
20	168	188	242	265	257	282	273	299	288	316	302	331
22	203	228	293	321	311	341	330	362	348	382	365	400
24	242	271	348	382	370	406	393	430	415	455	435	476
26	284	318	409	448	435	476	461	505	487	533	510	559
28	329	369	474	519	504	553	534	586	564	619	592	648
30	378	423	544	596	579	634	613	672	648	710	679	744
32	430	482	619	678	658	722	698	765	737	808	773	847
34	486	544	699	766	743	815	788	863	832	912	872	956
36	544	610	783	859	833	913	883	968	933	1020	978	1070
38	606	679	873	957	928	1020	984	1080	1040	1140	1090	1190
40	672	753	967	1060	1030	1130	1090	1200	1150	1260	1210	1320
42	741	830	1070	1170	1130	1240	1200	1320	1270	1390	1330	1460
44	813	911	1170	1280	1240	1360	1320	1450	1390	1530	1460	1600
46	889	995	1280	1400	1360	1490	1440	1580	1520	1670	1600	1750
48	968	1080	1390	1530	1480	1620	1570	1720	1660	1820	1740	1910
50	1050	1180	1510	1660	1610	1760	1700	1870	1800	1970	1890	2070
52	1140	1270	1630	1790	1740	1910	1840	2020	1950	2130	2040	2240
54	1220	1370	1760	1930	1880	2060	1990	2180	2100	2300	2200	2410
56	1320	1480	1900	2080	2020	2210	2140	2340	2260	2480	2370	2590

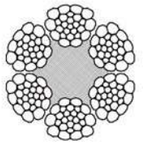
1 Total minimum breaking force of wire = Minimum breaking force x 1.153(FC) or 1.243(WC) **2** Standard: YB/T 4398

SPECIFICATIONS OF CRANE WIRE ROPES

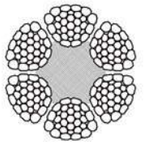
Class K6×K19 & K6×K36 compacted



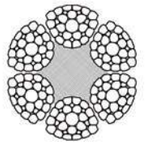
K6×K25F-FC



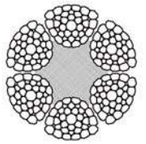
K6×K26WS-FC



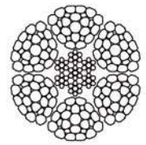
K6×K31WS-FC



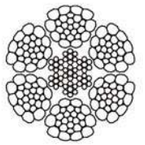
K6×K29F-FC



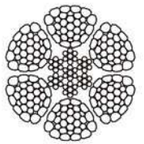
K6×K36WS-FC



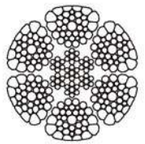
K6×K25F-IWRC
Diameter: 8mm ~ 60mm



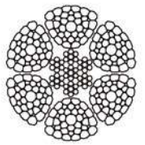
K6×K26WS-IWRC
Diameter: 12mm ~ 56mm



K6×K31WS-IWRC
Diameter: 12mm ~ 60mm



K6×K29F-IWRC
Diameter: 10mm ~ 60mm



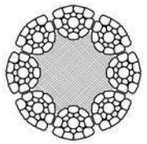
K6×K36WS-IWRC
Diameter: 12mm ~ 60mm

Nominal rope diameter	Approx. weight		Minimum breaking load Rope grades, MPa									
			1570		1670		1770		1870		1960	
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN	kN	kN
8	27.7	31.0	38.7	42.4	41.1	45.1	43.6	47.8	46.1	50.5	48.3	52.9
9	35.1	39.3	49.0	53.7	52.1	57.1	55.2	60.5	58.3	63.9	61.1	67.0
10	43.3	48.5	60.4	66.3	64.3	70.5	68.1	74.7	72.0	78.9	75.5	82.7
11	52.4	58.7	73.1	80.2	77.8	85.3	82.5	90.4	87.1	95.5	91.3	100
12	62.4	69.8	87.0	95.4	92.6	101	98.0	108	104	114	109	119
13	73.2	82.0	102	112	109	119	115	126	122	133	128	140
14	84.9	95.1	118	130	126	138	134	146	141	155	148	162
15	97.4	109	136	149	145	159	153	168	162	178	170	186
16	111	124	155	170	165	180	174	191	184	202	193	212
17	125	140	175	191	186	204	197	216	208	228	218	239
18	140	157	196	215	208	228	221	242	233	256	244	268
19	156	175	218	239	232	254	246	270	260	285	272	299
20	173	194	242	265	257	282	273	299	288	316	302	331
22	210	235	293	321	311	341	330	362	348	382	365	400
24	249	279	348	382	370	406	393	430	415	455	435	476
26	293	328	409	448	435	476	461	505	487	533	510	559
28	339	380	474	519	504	553	534	586	564	619	592	648
30	390	437	544	596	579	634	613	672	648	710	679	744
32	443	497	619	678	658	722	698	765	737	808	773	847
34	501	561	699	766	743	815	788	863	832	912	872	956
36	561	629	783	859	833	913	883	968	933	1020	978	1070
38	625	700	873	957	928	1020	984	1080	1040	1140	1090	1190
40	693	776	967	1060	1030	1130	1090	1200	1150	1260	1210	1320
42	764	856	1070	1170	1130	1240	1200	1320	1270	1390	1330	1460
44	838	939	1170	1280	1240	1360	1320	1450	1390	1530	1460	1600
46	916	1030	1280	1400	1360	1490	1440	1580	1520	1670	1600	1750
48	998	1120	1390	1530	1480	1620	1570	1720	1660	1820	1740	1910
50	1080	1210	1510	1660	1610	1760	1700	1870	1800	1970	1890	2070
52	1170	1310	1630	1790	1740	1910	1840	2020	1950	2130	2040	2240
54	1260	1410	1760	1930	1880	2060	1990	2180	2100	2300	2200	2410
56	1360	1520	1900	2080	2020	2210	2140	2340	2260	2480	2370	2590
58	1460	1630	2030	2230	2160	2370	2290	2510	2420	2660	2540	2780
60	1560	1750	2180	2380	2320	2540	2450	2690	2590	2840	2720	2980

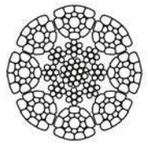
1 Total minimum breaking force of wire = Minimum breaking force x 1.165(FC) or 1.250(WC) **2** Standard: YB/T 4398

SPECIFICATIONS OF CRANE WIRE ROPES

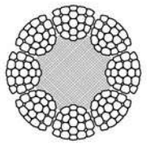
Class K8×K19 compacted



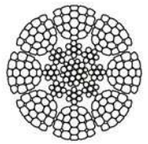
K8×K19S-FC



K8×K19S-IWRC
Diameter: 10mm ~ 60mm



K8×K19W-FC



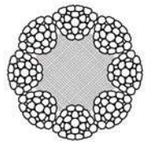
K8×K19W-IWRC
Diameter: 10mm ~ 60mm

Nominal rope diameter	Approx. weight		Minimum breaking load Rope grades, MPa									
			1570		1670		1770		1870		1960	
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN	kN	kN
10	40.3	48.5	54.2	65.9	57.6	70.1	61.1	74.3	64.5	78.5	67.6	82.3
11	48.7	58.7	65.5	79.8	69.7	84.9	73.9	90.0	78.1	95.0	81.8	99.6
12	58.0	69.8	78.0	95.0	83.0	101	87.9	107	92.9	113	97	119
13	68.0	82.0	91.5	111	97.4	119	103	126	107	133	114	139
14	78.9	95.1	106	129	113	137	120	146	126	154	133	161
15	90.6	109	122	148	130	158	137	167	145	177	152	185
16	103	124	139	169	147	180	156	190	165	201	173	211
17	116	140	157	191	167	203	176	215	186	227	195	238
18	130	157	175	214	187	227	198	241	209	254	219	267
19	145	175	196	238	208	253	220	268	233	284	244	297
20	161	194	217	264	230	281	244	297	258	314	270	329
22	195	235	262	319	279	339	296	360	312	380	327	398
24	232	279	312	380	332	404	352	428	372	452	389	474
26	272	328	366	446	389	474	413	503	436	531	457	556
28	316	380	425	517	452	550	479	583	506	616	530	645
30	362	437	487	593	519	631	550	669	581	707	609	741
32	412	497	555	675	590	718	625	761	661	804	692	843
34	465	561	626	762	666	811	706	859	746	908	782	952
36	522	629	702	855	747	909	791	963	836	1020	876	1070
38	581	700	782	952	832	1013	882	1070	932	1130	976	1190
40	644	776	867	1060	922	1120	977	1190	1030	1260	1080	1320
42	710	856	955	1160	1020	1240	1080	1310	1140	1380	1190	1450
44	779	939	1049	1280	1120	1360	1180	1440	1250	1520	1310	1590
46	852	1030	1146	1400	1220	1480	1290	1570	1360	1660	1430	1740
48	927	1120	1248	1520	1330	1620	1410	1710	1490	1810	1560	1900
50	1010	1210	1354	1650	1440	1750	1530	1860	1610	1960	1690	2060
52	1090	1310	1465	1780	1560	1900	1650	2010	1740	2120	1830	2230
54	1170	1410	1579	1920	1680	2040	1780	2170	1880	2290	1970	2400
56	1260	1520	1699	2070	1810	2200	1920	2330	2020	2460	2120	2580
58	1350	1630	1822	2220	1940	2360	2050	2500	2170	2640	2280	2770
60	1450	1750	1950	2380	2070	2520	2200	2680	2320	2830	2430	2960

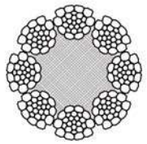
1 Total minimum breaking force of wire = Minimum breaking force x 1.153(FC) or 1.250(WC) **2** Standard: YB/T 4398

SPECIFICATIONS OF CRANE WIRE ROPES

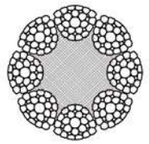
Class K8×K19 & K8×K36 compacted



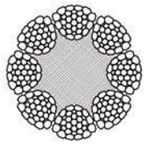
K8×K25F-FC



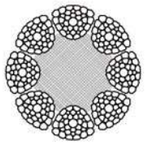
K8×K26WS-FC



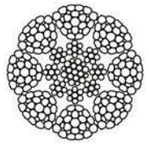
K8×K29F-FC



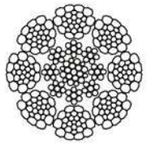
K8×K31WS-FC



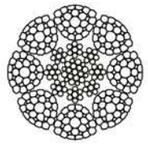
K8×K36WS-FC



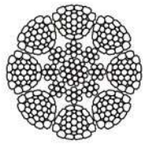
K8×K25F-IWRC
Diameter: 18mm ~ 60mm



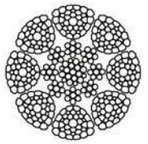
K8×K26WS-IWRC
Diameter: 16mm ~ 60mm



K8×K29F-IWRC
Diameter: 12mm ~ 60mm



K8×K31WS-IWRC
Diameter: 14mm ~ 60mm



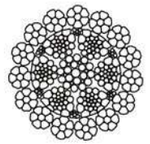
K8×K36WS-IWRC
Diameter: 14mm ~ 60mm

Nominal rope diameter	Approx. weight		Minimum breaking load Rope grades, MPa									
			1570		1670		1770		1870		1960	
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN	kN	kN
10	41.5	50.0	54.2	65.9	57.6	70.1	61.1	74.3	64.5	78.5	67.6	82.3
11	50.2	60.5	65.5	79.8	69.7	84.9	73.9	90.0	78.1	95.0	81.8	99.6
12	59.8	72.0	78.0	95.0	83.0	101	87.9	107	92.9	113	97.0	119
13	70.1	84.5	91.5	111	97.4	119	103	126	109	133	114	139
14	81.3	98.0	106	129	113	137	120	146	126	154	133	161
15	93.4	113	122	148	130	158	137	167	145	177	152	185
16	106	128	139	169	147	180	156	190	165	201	173	211
17	120	145	157	191	167	203	176	215	186	227	195	238
18	134	162	175	214	187	227	198	241	209	254	219	267
19	150	181	196	238	208	253	220	268	233	284	244	297
20	166	200	217	264	230	281	244	297	258	314	270	329
22	201	242	262	319	279	339	296	360	312	380	327	398
24	239	288	312	380	332	404	352	428	372	452	389	474
26	281	338	366	446	389	474	413	503	436	531	457	556
28	325	392	425	517	452	550	479	583	506	616	530	645
30	374	450	487	593	519	631	550	669	581	707	609	741
32	425	512	555	675	590	718	625	761	661	804	692	843
34	480	578	626	762	666	811	706	859	746	908	782	952
36	538	648	702	855	747	909	791	963	836	1020	876	1070
38	599	722	782	952	832	1013	882	1070	932	1130	976	1190
40	664	800	867	1060	922	1120	977	1190	1030	1260	1080	1320
42	732	882	955	1160	1020	1240	1080	1310	1140	1380	1190	1450
44	803	968	1049	1280	1120	1360	1180	1440	1250	1520	1310	1590
46	878	1060	1146	1400	1220	1480	1290	1570	1360	1660	1430	1740
48	956	1150	1248	1520	1330	1620	1410	1710	1490	1810	1560	1900
50	1040	1250	1354	1650	1440	1750	1530	1860	1610	1960	1690	2060
52	1120	1350	1465	1780	1560	1900	1650	2010	1740	2120	1830	2230
54	1210	1460	1579	1920	1680	2040	1780	2170	1880	2290	1970	2400
56	1300	1570	1699	2070	1810	2200	1920	2330	2020	2460	2120	2580
58	1400	1680	1822	2220	1940	2360	2050	2500	2170	2640	2280	2770
60	1490	1800	1950	2380	2070	2520	2200	2680	2320	2830	2430	2960

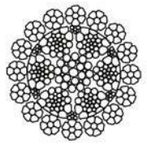
1 Total minimum breaking force of wire = Minimum breaking force x 1.165(FC) or 1.250(WC) **2** Standard: YB/T 4398

SPECIFICATIONS OF CRANE WIRE ROPES

Class NK15×K7 compacted



NK15×K7-IWRC



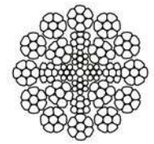
NK16×K7-IWRC

Nominal rope diameter	Approx. weight	Minimum breaking load				
		Rope grades, MPa				
		1570	1670	1770	1870	1960
mm	kg/100m	kN	kN	kN	kN	kN
10	49.5	69.1	73.5	77.9	82.3	86.2
11	59.9	83.6	88.9	94.2	99.6	104
12	71.3	99.5	106	112	118	124
13	83.7	117	124	132	139	146
14	97.0	135	144	153	161	169
15	111	155	165	175	185	194
16	127	177	188	199	211	221
17	143	200	212	225	238	249
18	160	224	238	252	267	279
19	179	249	265	281	297	311
20	198	276	294	312	329	345
22	240	334	356	377	398	417
24	285	398	423	449	474	497
26	335	467	497	526	556	583
28	388	542	576	611	645	676
30	446	622	661	701	741	776
32	507	707	752	797	843	883
34	572	799	849	900	951	997
36	642	895	952	1010	1070	1120
38	715	998	1060	1120	1190	1240
40	792	1100	1180	1250	1320	1380
42	873	1220	1300	1370	1450	1520
44	958	1340	1420	1510	1590	1670
46	1050	1460	1560	1650	1740	1820
48	1140	1590	1690	1790	1900	1990
50	1240	1730	1840	1950	2060	2160

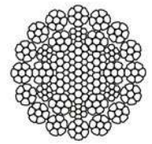
1 Total minimum breaking force of wire = Minimum breaking force x 1.250 **2** Standard: YB/T 4398

SPECIFICATIONS OF CRANE WIRE ROPES

Class NK24(W)×K7 & NK35(W)×K7 compacted



NK24(W)×K7
Diameter: 10mm ~ 50mm



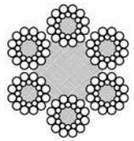
NK35(W)×K7
Diameter: 12mm ~ 50mm

Nominal rope diameter	Approx. weight	Minimum breaking load				
		Rope grades, MPa				
		1570	1670	1770	1870	1960
mm	kg/100m	kN	kN	kN	kN	kN
10	49.7	62.8	66.8	70.8	74.8	78.4
11	60.1	76.0	80.2	85.7	90.5	94.9
12	71.6	90.4	96.2	102	108	113
13	84.0	106	113	120	126	132
14	97.4	123	131	139	147	154
15	112	141	150	159	168	176
16	127	161	171	181	191	201
17	144	181	193	205	216	227
18	161	203	216	229	242	254
19	179	227	241	256	270	283
20	199	251	267	283	299	314
22	241	304	323	343	362	379
24	286	362	385	408	431	452
26	336	425	452	479	506	530
28	390	492	524	555	586	615
30	447	565	601	637	673	706
32	509	643	684	725	766	803
34	575	726	772	818	865	906
36	644	814	866	918	969	1020
38	718	907	965	1020	1080	1130
40	795	1010	1070	1130	1200	1250
42	877	1110	1180	1250	1320	1380
44	962	1220	1290	1370	1450	1520
46	1050	1330	1410	1500	1580	1660
48	1140	1450	1540	1630	1720	1810
50	1240	1570	1670	1770	1870	1960

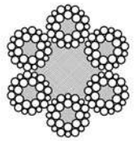
1 Total minimum breaking force of wire = Minimum breaking force x 1.250 **2** Standard: YB/T 4398

SPECIFICATIONS OF CRANE WIRE ROPES

Class 6×24 parallel laid



6×24SFC-FC



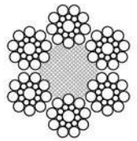
6×24WFC-FC

Nominal rope diameter	Approx. weight	Minimum breaking load	
		Rope grades, MPa	
		1570	1770
mm	kg/100m	kN	kN
8	21.2	29.2	33.0
9	26.8	37.0	41.7
10	33.1	45.7	51.5
11	40.1	55.3	62.3
12	47.7	65.8	74.2
13	55.9	77.2	87.0
14	64.9	89.5	101
15	74.5	103	116
16	84.7	117	132
18	107	148	167
20	132	183	206
22	160	221	249
24	191	263	297
26	224	309	348
28	260	358	404
30	298	411	464
32	339	468	527
36	429	592	668
40	530	731	824

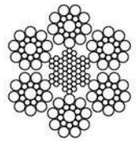
1 Total minimum breaking force of wire = Minimum breaking force x 1.150 2 Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

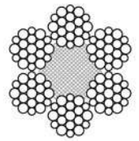
Class 6×19 parallel laid



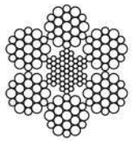
6×19S-FC



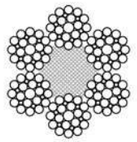
6×19S-IWRC



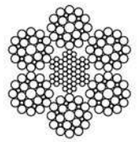
6×19W-FC



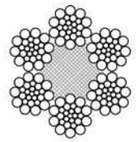
6×19W-IWRC



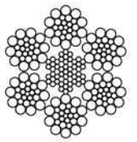
6×25F-FC



6×25F-IWRC



6×26WS-FC



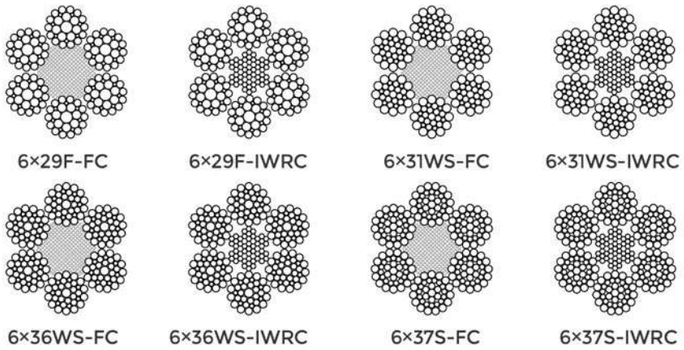
6×26WS-IWRC

Nominal rope diameter	Approx. weight		Minimum breaking load							
			Rope grades, MPa							
			1570		1770		1960		2160	
	FC	WC	FC	WC	FC	WC	FC	WC	FC	WC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN
6	13.7	15.0	18.7	20.1	21.0	22.7	23.3	25.1	25.7	27.7
7	18.6	20.5	25.4	27.4	28.6	30.9	31.7	34.2	34.9	37.7
8	24.3	26.8	33.2	35.8	37.4	40.3	41.4	44.7	45.6	49.2
9	30.8	33.9	42.0	45.3	47.3	51.0	52.4	56.5	57.7	62.3
10	38.0	41.8	51.8	55.9	58.4	63.0	64.7	69.8	71.3	76.9
11	46.0	50.6	62.7	67.6	70.7	76.2	78.3	84.4	86.2	93.0
12	54.7	60.2	74.6	80.5	84.1	90.7	93.1	100	103	111
13	64.2	70.6	87.6	94.5	98.7	106	109	118	120	130
14	74.5	81.9	102	110	114	124	127	137	140	151
16	97.3	107	133	143	150	161	166	179	182	197
18	123	135	168	181	189	204	210	226	231	249
20	152	167	207	224	234	252	259	279	285	308
22	184	202	251	271	283	305	313	338	345	372
24	219	241	298	322	336	363	373	402	411	443
26	257	283	350	378	395	426	437	472	482	520
28	298	328	406	438	458	494	507	547	559	603
32	389	428	531	572	598	645	662	715	730	787
36	492	542	671	724	757	817	838	904	924	997
40	608	669	829	894	935	1010	1030	1120	1140	1230
44	736	809	1000	1080	1130	1220	1250	1350	1380	1490
48	876	963	1190	1290	1350	1450	1490	1610	1640	1770
52	1030	1130	1400	1510	1530	1700	1750	1890	1930	2080
56	1190	1310	1620	1750	1830	1980	2030	2190	2240	2410

1 Total minimum breaking force of wire = Minimum breaking force x 1.214(FC) or 1.308(WC) 2 Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class 6×36 parallel laid

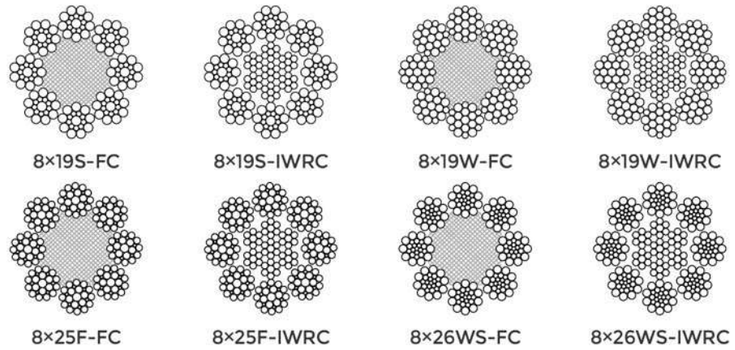


Nominal rope diameter	Approx. weight		Minimum breaking load							
			Rope grades, MPa							
			1570		1770		1960		2160	
	FC	WC	FC	WC	FC	WC	FC	WC	FC	WC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN
8	24.3	26.8	33.2	35.8	37.4	40.3	41.4	44.7	45.6	49.2
9	30.8	33.9	42.0	45.3	47.3	51.0	52.4	56.5	57.7	62.3
10	38.0	41.8	51.8	55.9	58.4	63.0	64.7	69.8	71.3	76.9
11	46.0	50.6	62.7	67.6	70.7	76.2	78.3	84.4	86.2	93.0
12	54.7	60.2	74.6	80.5	84.1	90.7	93.1	100	103	111
13	64.2	70.6	87.6	94.5	98.7	106	109	118	120	130
14	74.5	81.9	102	110	114	124	127	137	140	151
16	97.3	107	133	143	150	161	166	179	182	197
18	123	135	168	181	189	204	210	226	231	249
20	152	167	207	224	234	252	259	279	285	308
22	184	202	251	271	283	305	313	338	345	372
24	219	241	298	322	336	363	373	402	411	443
26	257	283	350	378	395	426	437	472	482	520
28	298	328	406	438	458	494	507	547	559	603
32	389	428	531	572	598	645	662	715	730	787
36	492	542	671	724	757	817	838	904	924	997
40	608	669	829	894	935	1010	1030	1120	1140	1230
44	736	809	1000	1080	1130	1220	1250	1350	1380	1490
48	876	963	1200	1290	1350	1450	1490	1610	1640	1770
52	1030	1130	1400	1510	1580	1700	1750	1890	1930	2080
56	1190	1310	1620	1750	1830	1980	2030	2190	2230	2410
60	1370	1500	1870	2010	2100	2270	2330	2510	2570	2770

1 Total minimum breaking force of wire = Minimum breaking force x 1.214(FC) or 1.360(WC) **2** Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class 8×19 parallel laid

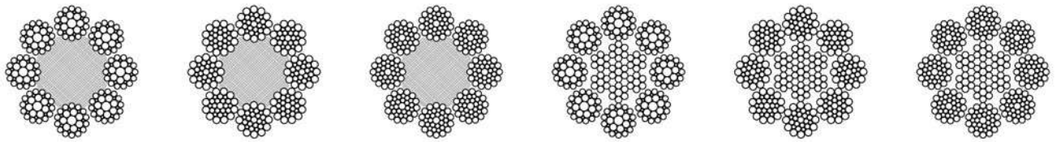


Nominal rope diameter	Approx. weight		Minimum breaking load							
			Rope grades, MPa							
			1570		1770		1960		2160	
	FC	WC	FC	WC	FC	WC	FC	WC	FC	WC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN
8	22.8	27.8	29.4	34.8	33.2	39.2	36.8	43.4	40.5	47.8
9	28.9	35.2	37.3	44.0	42.0	49.6	46.5	54.9	51.3	60.5
10	35.7	43.5	46.0	54.3	51.9	61.2	57.4	67.8	63.3	74.7
11	43.2	52.6	55.7	65.7	62.8	74.1	69.5	82.1	76.6	90.4
12	51.4	62.6	66.2	78.2	74.7	88.2	82.7	97.7	91.1	108
13	60.3	73.5	77.7	91.8	87.6	103	97.1	115	107	126
14	70.0	85.3	90.2	106	102	120	113	133	124	146
16	91.4	111	118	139	133	157	147	174	162	191
18	116	141	149	176	168	198	186	220	205	242
20	143	174	184	217	207	245	230	271	253	299
22	173	211	223	263	251	296	278	328	306	362
24	206	251	265	313	299	353	331	391	365	430
26	241	294	311	367	351	414	388	458	428	505
28	280	341	361	426	407	480	450	532	496	586
32	366	445	471	556	531	627	588	694	648	765
36	463	564	596	704	672	794	744	879	820	969
40	571	696	736	869	830	980	919	1090	1010	1200
44	691	842	891	1050	1000	1190	1110	1310	1230	1450
48	823	1000	1060	1250	1190	1410	1320	1560	1460	1720
52	965	1180	1240	1470	1400	1660	1550	1830	1710	2020
56	1120	1360	1440	1700	1630	1920	1800	2130	1980	2340
60	1290	1570	1660	1960	1870	2200	2070	2440	2280	2690

1 Total minimum breaking force of wire = Minimum breaking force x 1.214(FC) or 1.360(WC) **2** Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class 8×36 parallel laid



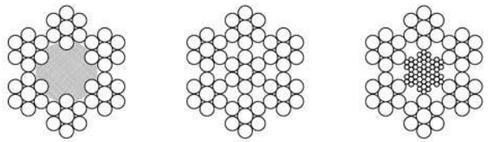
8×29F-FC 8×31WS-FC 8×36WS-FC 8×29F-IWRC 8×31WS-IWRC 8×36WS-IWRC

Nominal rope diameter	Approx. weight		Minimum breaking load							
			Rope grades, MPa							
			1570		1770		1960		2160	
	FC	WC	FC	WC	FC	WC	FC	WC	FC	WC
mm	kg/100m		kN	kN	kN	kN	kN	kN	kN	kN
12	51.4	62.6	66.2	78.2	74.7	88.2	82.7	97.7	91.1	108
13	60.3	73.5	77.7	91.8	87.6	103	97.1	115	107	126
14	70.0	85.3	90.2	106	102	120	113	133	124	146
16	91.4	111	118	139	133	157	147	174	162	191
18	116	141	149	176	168	198	186	220	205	242
20	143	174	184	217	207	245	230	271	253	299
22	173	211	223	263	251	296	278	328	306	362
24	206	251	265	313	299	353	331	391	365	430
26	241	294	311	367	351	414	388	458	428	505
28	280	341	361	426	407	480	450	532	496	586
32	366	445	471	556	531	627	588	694	648	765
36	463	564	596	704	672	794	744	879	820	969
40	571	696	736	869	830	980	919	1090	1010	1200
44	691	842	891	1050	1000	1190	1110	1310	1230	1450
48	823	1000	1060	1250	1190	1410	1320	1560	1460	1720
52	965	1180	1240	1470	1400	1660	1550	1830	1710	2020
56	1120	1360	1440	1700	1630	1920	1800	2130	1980	2340
60	1290	1570	1660	1960	1870	2200	2070	2440	2280	2690

1 Total minimum breaking force of wire = Minimum breaking force x 1.226(FC) or 1.374(WC) **2** Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class 6×7 parallel laid



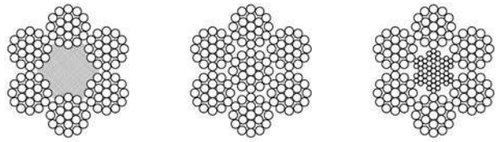
6×7-FC 6×7-WSC 6×7-IWRC

Nominal rope diameter	Approx. weight		Minimum breaking load					
			Rope grades, MPa					
			1570		1770		1960	
	FC	WC	FC	WC	FC	WC	FC	WC
mm	kg/100m		kN	kN	kN	kN	kN	kN
2	1.40	1.55	2.08	2.25	2.35	2.54	2.60	2.81
3	3.16	3.48	4.69	5.07	5.29	5.72	5.86	6.33
4	5.62	6.19	8.34	9.02	9.40	10.2	10.4	11.3
5	8.78	9.68	13.0	14.1	14.7	15.9	16.3	17.6
6	12.6	13.9	18.8	20.3	21.2	22.9	23.4	25.3
7	17.2	19.0	25.5	27.6	28.8	31.1	31.9	34.5
8	22.5	24.8	33.4	36.1	37.6	40.7	41.6	45.0
9	28.4	31.3	42.2	45.7	47.6	51.5	52.7	57.0
10	35.1	38.7	52.1	56.4	58.8	63.5	65.1	70.4
11	42.5	46.8	63.1	68.2	71.1	76.9	78.7	85.1
12	50.5	55.7	75.1	81.2	84.6	91.5	93.7	101
13	59.3	65.4	88.1	95.3	99.3	107	110	119
14	68.8	75.9	102	110	115	125	128	138
16	89.9	99.1	133	144	150	163	167	180
18	114	125	169	183	190	206	211	228
20	140	155	208	225	235	254	260	281
22	170	187	252	273	284	308	315	341
24	202	223	300	325	338	366	375	405
26	237	262	352	381	397	430	440	476
28	275	303	409	442	461	498	510	552
32	359	396	534	577	602	651	666	721
36	455	502	676	730	762	824	843	912
40	562	619	834	902	940	1020	1041	1130
44	680	749	1010	1090	1140	1230	1260	1360

1 Total minimum breaking force of wire = Minimum breaking force x 1.134(FC) or 1.214(WC) **2** Standard: GB/T 8918

SPECIFICATIONS OF CRANE WIRE ROPES

Class 6×19M cross laid



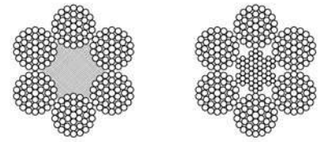
6×19M-FC 6×19M-WSC 6×19M-IWRC

Nominal rope diameter	Approx. weight		Minimum breaking load					
			Rope grades, MPa					
			1570		1770		1960	
	FC	WC	FC	WC	FC	WC	FC	WC
mm	kg/100m		kN	kN	kN	kN	kN	kN
3	3.16	3.60	4.34	4.69	4.89	5.29	5.42	5.86
4	5.62	6.40	7.71	8.34	8.69	9.40	9.63	10.4
5	8.78	10.0	12.0	13.0	13.6	14.7	15.0	16.3
6	12.6	14.4	17.4	18.8	19.6	21.2	21.7	23.4
7	17.2	19.6	23.6	25.5	26.6	28.8	29.5	31.9
8	22.5	25.6	30.8	33.4	34.8	37.6	38.5	41.6
9	28.4	32.4	39.0	42.2	44.0	47.6	48.7	52.7
10	35.1	40.0	48.2	52.1	54.3	58.8	60.2	65.1
11	42.5	48.4	58.3	63.1	65.8	71.1	72.8	78.7
12	50.5	57.6	69.4	75.1	78.2	84.6	86.6	93.7
13	59.3	67.6	81.5	88.1	91.8	99.3	102	110
14	68.8	78.4	94.5	102	107	115	118	128
16	89.9	102	123	133	139	150	154	167
18	114	130	156	169	176	190	195	211
20	140	160	193	208	217	235	241	260
22	170	194	233	252	263	284	291	315
24	202	230	278	300	313	338	347	375
26	237	270	326	352	367	397	407	440
28	275	314	378	409	426	461	472	510
32	359	410	494	534	556	602	616	666
36	455	518	625	676	704	762	780	843
40	562	640	771	834	869	940	963	1041
44	680	774	933	1010	1050	1140	1160	1260
48	809	922	1110	1200	1250	1350	1390	1500
52	949	1080	1300	1410	1470	1590	1630	1760

1 Total minimum breaking force of wire = Minimum breaking force x 1.226(FC) or 1.321(WC) **2** Standard: GB/T 20118

SPECIFICATIONS OF CRANE WIRE ROPES

Class 6×37M cross laid



6×37M-FC 6×37M-IWRC

Nominal rope diameter	Approx. weight		Minimum breaking load					
			Rope grades, MPa					
			1570		1770		1960	
	FC	WC	FC	WC	FC	WC	FC	WC
mm	kg/100m		kN	kN	kN	kN	kN	kN
5	8.65	10.0	11.6	12.5	13.1	14.1	14.5	15.6
6	12.5	14.4	16.7	18.0	18.8	20.3	20.8	22.5
7	17.0	19.6	22.7	24.5	25.6	27.7	28.3	30.6
8	22.1	25.6	29.6	32.1	33.4	36.1	37.0	40.0
9	28.0	32.4	37.5	40.6	42.3	45.7	46.8	50.6
10	34.6	40.0	46.3	50.1	52.2	56.5	57.8	62.5
11	41.9	48.4	56.0	60.6	63.2	68.3	70.0	75.7
12	49.8	57.6	66.7	72.1	75.2	81.3	83.3	90.0
13	58.5	67.6	78.3	84.6	88.2	95.4	97.7	106
14	67.8	78.4	90.8	98.2	102	111	113	123
16	88.6	102	119	128	134	145	148	160
18	112	130	150	162	169	183	187	203
20	138	160	185	200	209	226	231	250
22	167	194	224	242	253	273	280	303
24	199	230	267	288	301	325	333	360
26	234	270	313	339	353	382	391	423
28	271	314	363	393	409	443	453	490
32	354	410	474	513	535	578	592	640
36	448	518	600	649	677	732	749	810
40	554	640	741	801	835	903	925	1000
44	670	774	897	970	1010	1090	1120	1210
48	797	922	1070	1150	1200	1300	1330	1440
52	936	1082	1250	1350	1410	1530	1560	1690
56	1090	1254	1450	1570	1640	1770	1810	1960
60	1250	1440	1670	1800	1880	2030	2080	2250

1 Total minimum breaking force of wire = Minimum breaking force x 1.249(FC) or 1.336(WC) **2** Standard: GB/T 20118

WIRE ROPE TERMINATION TYPES

FERRULE-PRESSED EYE WITH THIMBLE/SHACKLE

A thimble can be installed inside the loop to preserve the natural shape of the loop, and protect the wire rope from pinching and abrading on the inside of the loop.
Shackles are used in lifting and static systems as removable links to connect steel wire rope, chain and other fittings.

FERRULE-PRESSED EYE WITH SOLID THIMBLE

Fits pin for open spelter socket and wedge socket.

CLOSED SWAGE SOCKET

Special swaging techniques are used to achieve 100% termination efficiency.

THREADED SWAGE STUD

Wire rope termination fixed by swaging. Ideal for length adjustment of wire rope.

TURNBUCKLE

Ideal for lashing and tiedown as well as general tensioning applications.

CABLE STOCKING

Designed to securely grip all types of bare wire ropes devoid of end fittings.
Used in the construction industry, for crane maintenance, electrical installation, and a wide range of pulling hauling operations.

WEDGE SOCKET

Wedge sockets are popular in the field because they are easy to install and are used where end termination can be made only after the wire rope has been reeved into place.

OPEN SPELTER SOCKET

Permanent, heavy duty wire rope termination fixed with resin. Spelter socket terminations can achieve efficiency rating of 100%.

CLOSED SPELTER SOCKET

Permanent, heavy duty wire rope termination fixed with resin. Spelter socket terminations can achieve an efficiency rating of 100%.

PEAR-SHAPED SPELTER SOCKET

Permanent, heavy duty wire rope termination fixed with resin. Design of bail allows for easy connection to shackles and other connecting links.

FLAT-BODIED SPELTER SOCKET

Use casting and consolidation method to fix the cable joint to the rope end to ensure that the rope is evenly loaded and does not slip.

WIRELOCK® RESIN

We use WIRELOCK® resin for our spelter sockets, 100% termination efficiency can be achieved.

SELECTION OF CRANE WIRE ROPES

Selection must refer to the relevant safety rules first, then consider the characteristics of various wire ropes. Pphysical structure and characteristics are one of the main factors affecting the service life of wire ropes.

1 Safety factor
Safety factor reflects the degree of safety in the engineering structure designing. Different equipment requires different safety factors.

2 Breaking force
Breaking force mainly depends on the tensile strength, diameter and structure to ensure the safety factor. When diameter and structure are determined, the higher tensile strength is, the greater the breaking force is. Generally, choosing higher tensile strength can improve the safety factor, but increasing the strength will affect the Strength and toughness.

3 Crush Resistance
Crush resistance is mainly shown at the resistance of lateral extrusion. Consider it when wire ropes winded on the drum with multi layers. Generally, the structure of wire ropes with steel core are more stable than the ones with fiber core, Ropes with less wire in strand is stabler, parallel laid is stabler than cross laid and the facial laid is better than parallel laid.

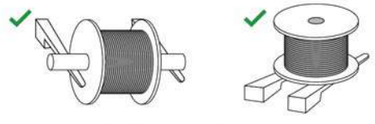
4 Anti-rotation
Rotating phenomenon will happen when the lifting height and weight increase which may cause mutual entanglement and danger. Considering using rotation-resistance wire ropes based on the working environment. Generally, tower crane, drilling rig and high lifting equipments must install rotation-resistance wire ropes.

5 Cores
Fiber core and steel core are common used. Selection should based on the working environment and equipment require-ments. Generally, steel cores are selected under the condition of high temperature environment (such as blast furnace and pouring) and multi-layer winding. We suggest referring to the standard GB/T 8918 when choosing

STORAGE OF ELEVATOR WIRE ROPES

1. Inspect the wire ropes upon receiving to identify any areas which may be damaged in shipment.
2. Be careful when transporting the reels to prevent damages to rope surfaces and the wooden pipe in the reel center hole.
3. Wire rope should be stored indoors, off wet ground and covered to protect it from moisture, dirt, dust, sunlight, rain etc.
4. Store the wire rope clear away from corrosives and chemicals.
5. Ropes must be protected against strong sunlight in order to prevent the softening and dripping of lubricants from the ropes.

Avoid direct touch with forks or other hard surfaces.



Use appropriate lifting devices when transporting reels.

INSTALLMENT OF CRANE WIRE ROPES

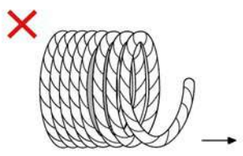
1. Care must be taken during installation since the rope is not supported from unrolled from the reel to installed.
2. Care must be taken to unroll and not laterally pull wire rope when paying it off the reel. Be careful not to get any loops.
3. Wire rope cutting: Both sides of cutting point apart 10-20mm should be tied up by using iron wires. The tie length is 2-4 times of rope diameter. Please use proper tools to cut wire ropes. If such tools are not available and a cutting torch can be used, prevent short circuit occurring between the touch tip and the wire rope.
4. If the wire rope is not straight right off the reel, apply tension to the rope and fix it to proper form.
5. Prevent any dirt and debris sticking on the rope and do not drag ropes over sharp edges. This will cause damage to the traction groove and rope itself.
6. Check the rope tension after mounting with a suitable device. Make sure all ropes in the same group are evenly tensioned.

Ropes may be damaged if handled improperly 01

- ☒ Paying wire rope off a reel improperly
- ☒ Loops and knits
- ☒ Rope untwists
- ☒ Rope is dragged over sharp edges
- ☒ Rope is dragged on a dusty, dirty surface

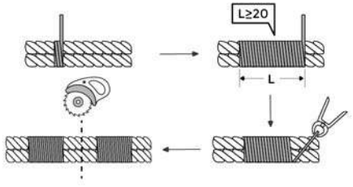
Service life of rope will shorten if 02

- ☒ Poorly installment of driving wheel and guiding pulley
- ☒ Wrong selection for wire ropes and rope material
- ☒ Prolonged rope vibration
- ☒ Rope diameter does not fit the groove
- ☒ Insufficient lubrication



Careless uncoiling of rope causes rope damage

Loop

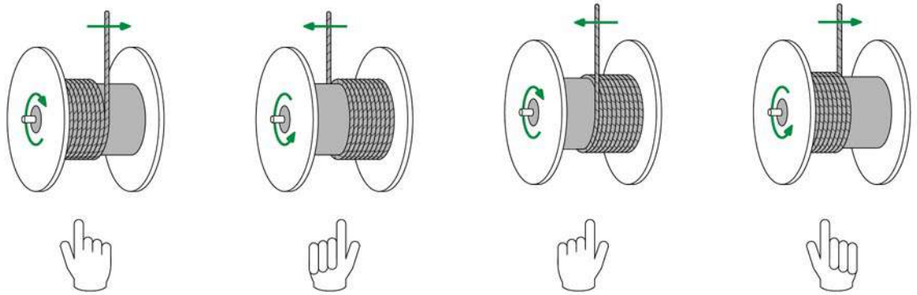


Appropriate methods to tie up when cutting ropes

The correct way to unwind the wire rope

WIRE ROPE INSTALLATION

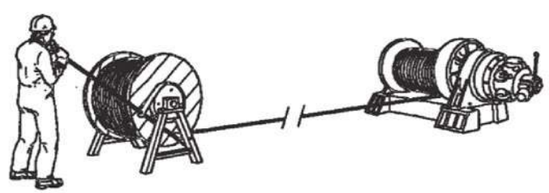
1. Before wire rope installation, the following should be checked: type, structure, diameter, strength grade, surface, etc. Only the qualified may be installed.
2. Storage and transportation of wire rope: storage and transportation loading and unloading of wire rope, lifting should be regulated. In order to avoid wooden reel and packaging damage or scratches on the surface of wire rope. when we unwind wire rope, a rope plate shall be put in the specified shelf. Another way is using a steel pipe through the rope reel hole and add rope on both ends to sling up the rope plate, then slowly turning the rope plate (as shown in figure 3). If knot happened, stop at once and solve, then to be continue.
3. Wire rope arrangement on the drum: The winding direction of wire rope on the drum must be according to wire rope's lay direction. From left to right for right layed ropes, from right to left for left layed ropes, as shown below.



From left to right for right layed ropes

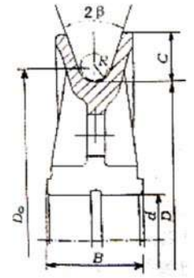
From right to left for left layed ropes

4. Wire rope winding on the drum should be neat, avoid even the appearance of partial around or clamp around.
5. Wire rope winding should be in the tension condition (as shown in figure 5), especially the multi-layer winding. If the first layer winding not tightly, wire rope will be easy to collapse when winding the second layer. The wire rope will be easy to damage when operation. So the correct winding of wire rope is very important.
6. After the installation, the new steel wire rope operated several times with more than 10% of the rated load. That is to makes wire rope steady in place and more firmly attached on the drum. Especially for high in tower crane, we should pay more attention.



PULLEYS AND PULLEY GROOVE

The proper size of the pulley and the geometry size of pulley groove is an important factor influencing service life of wire rope (as shown in figure 7). Choosing the appropriate pulley can increase the service life of wire rope.



The main dimensions of the pulley should be as follows: Domin≧25d

R= (0.53~0.6) d, mm。

B= 35°~40° 。

C - pulley groove depth, the sufficient depth to prevent the wire rope jumping out.

D - diameter of wire rope：mm

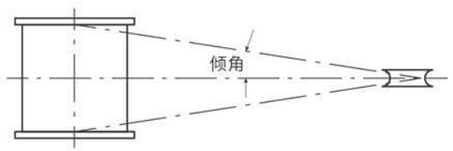
With the continuous operation of wire rope, the diameter will be decreased, and pulley groove wear will also be happened, it will become deep and narro, so the regular check is necessary.

If pulley can run freely and presence of loose and get stuck; the diameter of the pulley groove, the bottom of the channel surface ever has indentation. If pulley was wear and tear seriously, it must be replaced immediately. Otherwise it will affect the service life of wire rope seriously.

When replace the wire rope, the pulley groove must be checked carefully. The diameter of the groove should be greater than the actual diameter of new wire rope due to wheel groove wear. According to regulations, the new wire rope's actual diameter is greater than the nominal diameter. The actual diameter of pulley is less than the actual diameter of new steel wire rope. If not, it will affect the service life of wire rope.

Attention: the diameter of the pulley groove should always be bigger than the actual diameter of wire rope, this is very important for multilayer strands wire rope. If you replace the wire rope, you must test the actual diameter of pulley groove carefully.

DIP ANGLE



Wire rope roll on the drum, it is recommended that the dip angle at 0.5°~2.5°.

If there is helical sheave groove on the drum, the actual angle is plus or minus the helical angle of the sheave groove.

Dip angel is less than 2.5°, wire rope easy accumulate at the edge of the drum.Solution:add a propulsion system or increase assembles one rope sheave to correct.

Dip angel is larger than 2.5°,wire rope prematurely return to drum,produce clearance between the rope tings that close to the edge and increase the pressure on the contact points of the wire rope.Even use a drum with the sheave groove,the dip angle is too large and will make the steel wire squash each other,inevitably occur local mechanical damage.(This phenomenon is usually referred to as"interference").Solution:if the rope rolling system allows,using lang lay can reduce this phenomenon.It is also can use floating rope sheave or design a dip angle compensation device to reduce the influence of dip angle.

OUR SERVICE

CONTACT DETAILS

24-hour national service hotline 400-015-8885, E-mail: market@safety-rope.com, which will provide you with high-quality, meticulous and professional consulting services.

TRAINING

We can provide you with basic knowledge and technical training about the purchase, use, maintenance of elevator wire ropes to help your business.

CUSTOMIZED

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LEADER OF POLYMER WIRE ROPES