JIANGSU JULI
STEEL WIRE ROPE CO.,LTD

HENAN JULI
WIRE ROPE MANUFACTURING CO.,LTD

INDONESIA JULI
WIRE ROPE

BEAR THE WEIGHT STAND THE TIME

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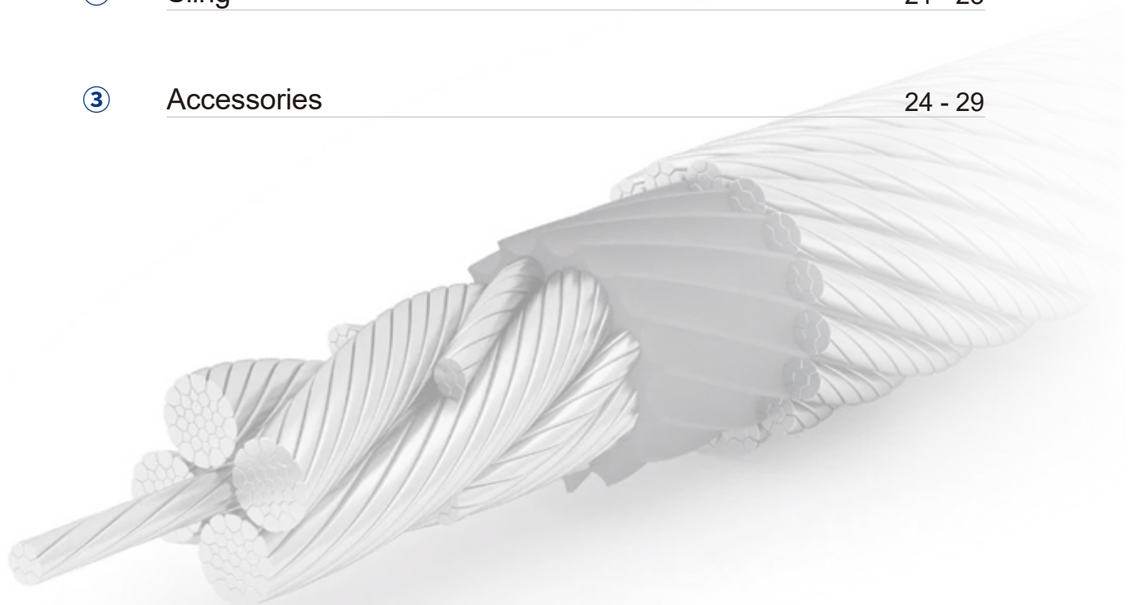


About us

Juli Wire Rope Group is a multinational company mainly engaged in producing and selling steel wire ropes and lifting accessories, with three production bases worldwide: Nantong and Jiyuan production base in China, Bekasi production bases in Indonesia. The company's origins date back to 1958, with total assets of $150 million and covering an area of 350,000 square meters.

The company has an annual production capacity of 250,000 tons of steel wire ropes. The product range includes un-galvanized, electro-galvanized, hot-dip galvanized, stainless and plastic-coated wire ropes. Product constructions consist of bundling ropes, cross laid wire rope, parallel laid wire rope, anti-rotation wire rope, compacted strand ropes, shaped strand wire rope, and locked coil ropes. The product specifications range from 0.5mm to 120mm. The company manufactures according to standards such as API, ISO, EN, ASTM, GB, and JIS, and holds certifications including API, LR, ABS, CCS, ISO9001, CE, GOST, SIRIM, SNI, and MA.

We have established 42 distribution centers in major cities such as Shanghai, Guangzhou, Chengdu, and Xi'an, creating a one-stop procurement platform for a full range of steel wire ropes, sling and accessories. Additionally, the company is actively expanding into international markets. We have set up offices in more than 30 countries and regions, including Europe, the United States, Indonesia, the United Arab Emirates, Egypt, Russia and Brazil to meet global industrial product demands.

Juli Wire Rope Group provides customers with high quality products, attentive service, and a win-win future!

Juli Wire Rope Group offers its employees a platform for struggle and growth, and shares the fruits of development with them!

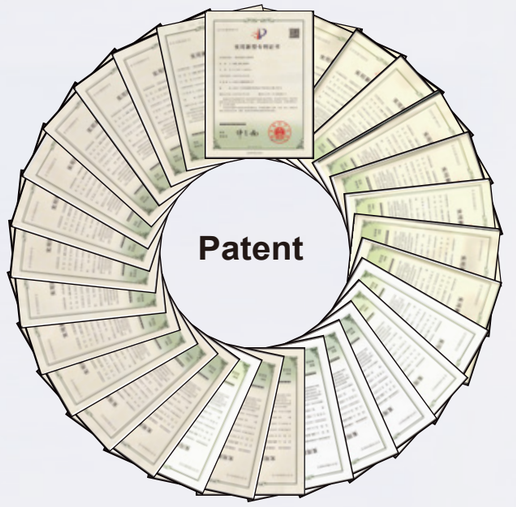
Certification

Business license

Qualification

Management system

Patent and honor

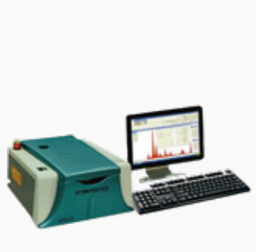


Quality

The company possesses a wide range of precision testing instruments and fully equipped facilities. Through intelligent tracking of the entire production process, including incoming materials, semi-finished products, and finished products, we ensure quality traceability for every product. We implement strict quality control measures to be accountable to our customers and ourselves.

Incoming inspection


drop tester


five elements analyzer


viscometer


salt spray testing machine

Process inspection


tensile strength machine


bending tester


torsion machine


calipers


micrometers


temperature detector


magnetic flux detector


laser calipers


laser length gauge

Finished product inspection


the whole rope horizontal tensile machine


fatigue testing machine

Brand introduction

施力 SHILI

Leading brand in quality

With over 20 years of rope manufacturning experience, Juli has nurtured a new rope brand caled“Shi Li". Our brand sets a new benchmark for wire rope qualty by utlizing high-quality materals,advanced equipment,environmentally friendly processes, streamlined producion flows, and skilled technicians, We have revolutionized traditional industry practices and established a new standard of excellence.

Through our exclusive agency model,we provide customized marketing solutions to our partners, maximizina their benefits and addressing their concerns.

宁绳 NINGSHENG

Special equipment brand

Designed specifically for various important applications: construction machinery, bridge and hydraulicengineering, port and ship operations, mineral extraction, oil extraction, etc.The "Ning Sheng" brandoffers further enhanced product quality, with better breaking force and fatigue resistance.

力炬 LIJU

Leading brand in cost-effectivess

The best interpretation of the "Liju" brand is that it offers equivalent quality at a lower price and superior quality at the same price.Since its establishment, the "Liju" brand has been commited to improving the cost- effectiveness of its products. Through over 20 years of relentless efforts,"Liu" steel ropeproducts have become the leading cost-effectiveness option in terms of single-term usage cost (salesprice divided by the period of use).

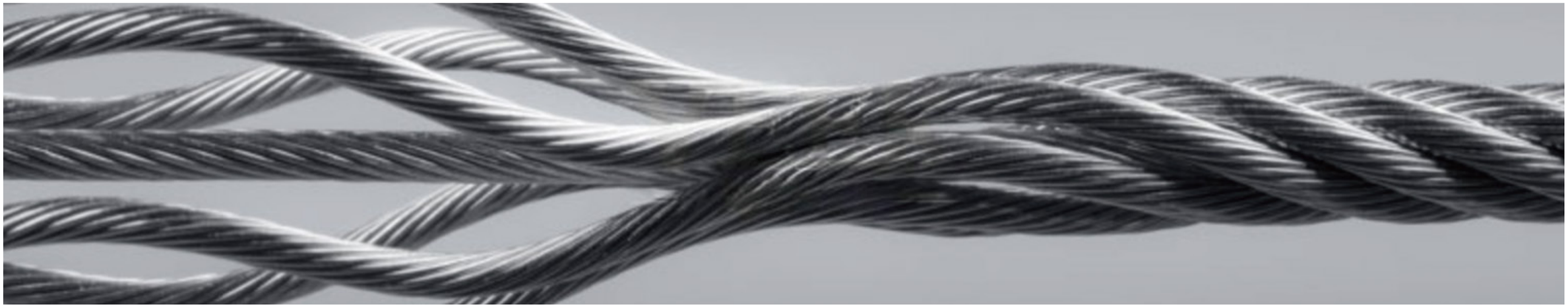
众炬 ZHONGJU

Affordable brand

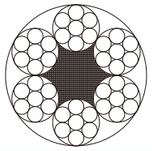
Zhongju is an affordable brand that offers economically suitable steel rope products. With a wide range of applications and varying levels of demand in the market, we provide customized services to meet diverse needs, particularly in the civilian sector.

Brand difference

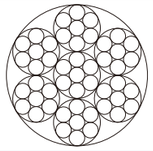
Items	施力 SHILI	宁绳 NINGSHENG	力炬 LIJU	众炬 ZHONGJU
Wire rod	The high-quality wire rods of Baogang and Shaganginclude the following grades:72A、72B、82B、C70DA、C80DA、C82DA、70#、65.	Baogang and Shagang, custom 72A, 72B, 82B, 70# wire.	The high-quality wire rods of Shagang include the following grades:70#、72A、72B、82B、C70DA、C80DA、C82DA.	The high-quality wire rods of Shagang and Jiganginclude the folowing grades:70#、65#.
Wire	Advanced wire drawing machines and intelligent testing equipment are used to ensure that the strength,bending,torsion,elongation,end face shrinkage, and diameter deviation of the steel wire are significantly higher than the standard requirements. The finished wire is produced in fixed lengths to ensure that the rope is seamless and without joints.	Advanced wire drawing machines and intelligent testing equipment are used to ensure that the strength,bending,torsion,elongation,end face shrinkage, and diameter deviation of the steel wire are significantly higher than the standard requirements. The finished wire is produced in fixed lengths to ensure that the rope is seamless and without joints.	Advanced wire drawing machines and intelligent testing equipment ensure that the steel wire has better values for strength, bending,torsion,elongation,end face shrinkage,and diameter deviation than the standard requirements. The production of finished wire in fixed lengths ensures that the rope is seamless and without joints.	Advanced wire drawing machines and intelligent testing equipment are used to ensure that the steel wire meets the standards for strength, bending value,torsional value,elongation,end face shrinkage,and diameter deviation. The productionof finished wire in fixed lengths ensures that therope is seamless and without joints.
Heat treatment	Stable performance of natural gas open-hearth furnace with fine-grained structure, ensuring stable performance of steel wires. Full inspection of stee wires by strength level production,resulting insmaler variations with in the same strength level.	Stable performance of natural gas open-hearth furnace with fine-grained structure, ensuring stable performance of steel wires. Full inspection of stee wires by strength level production,resulting insmaler variations with in the same strength level.	The furnace has stable performance, resulting in steel wire with fine and uniform grain structure. The steel wire also has stable properties with minimal deviation.	The furnace has stable performance, resulting insteel wire with fine and uniform grain structure. Thesteel wire also has stable properties meeting thenational standard.
Strand	Intelligent online monitoring and shutdown system for stranding machines to detect any appearance quality issues such as broken wires or burrs.Laboratory inspection of smal strands to ensureInternal mechanical performance quality. Each stranding machine produces one specification,resulting in strands with optimal twist pitch, uniform deformation,consistent stress,smaller tension range,-compactness,and stable performance.	Intelligent online monitoring and shutdown system for stranding machines to detect any appearance quality issues such as broken wires or burrs.Laboratory inspection of smal strands to ensureInternal mechanical performance quality. Each stranding machine produces one specification,resulting in strands with optimal twist pitch, uniform deformation,consistent stress,smaller tension range,-compactness,and stable performance.	The stranding machine has an intelligent online monitoring and shutdown system that detects any appearance quality issues such as broken wires andburrs. The laboratory conducts full inspections onthe smal strands,ensuring that no internal mechanical properties issues go unnoticed. Each wire twisting machine produces one specific sizeand specification of wire, resulting in twisted strandsthat have an optimal pitch, uniform deformation consistent stress, and tight and stable performance with minimal deviation in tension range.	The stranding machine has an intelligent online monitoring and shutdown system that detects any appearance quality issues such as broken wires and burrs.The laboratory conducts ful inspections onthe smal strands, ensuring that no internal mechanical properties issues go unnoticed.Eachwire twisting machine produces one specific size and specification of wire, resulting in twisted strands that have an optima pitch, uniform deformation,consistent stress, and tight and stable performance,with minimal deviation in tension range.
Rope	Each strand of the wire rope is originated from the same machine, with precision-designed equipment and diameter measuring devices ensuring a small tolerance for rope diameter and ovality deviation.The performance of different strands from the same rope is relatively consistent, resulting in a higher durability.Even softer and easier to splice.	Each strand of the wire rope is originated from the same machine, with precision-designed equipment and diameter measuring devices ensuring a small tolerance for rope diameter and ovality deviation.The performance of different strands from the same rope is relatively consistent, resulting in a higher durability.Even softer and easier to splice.	Each strand of the wire rope is originated from the same machine,with precision-designed equipment and diameter measuring devices ensuring a small tolerance for rope diameter and ovality deviation.The performance of different strands from the same rope is relatively consistent,resulting in a higher durability.	Each strand of the wire rope is originated from the same machine,with precision-designed equipment and diameter measuring devices ensuring a small tolerance for rope diameter and ovality deviation.The performance of different strands from the same rope is relatively consistent,resulting in a higher durability.
Lubricant	Imported grease with good adhesion,excellent lubrication, rust resistance, excellent high and low temperature performance, high drop point, high viscosity,high adhesion rate, water resistance, and sealing properties, widely applicable.	Imported grease with good adhesion,excellent lubrication, rust resistance, excellent high and low temperature performance, high drop point, high viscosity,high adhesion rate, water resistance, and sealing properties, widely applicable.	Selecting domestically excellent grease with good adhesion,lubrication,rust resistance, high and low temperature performance, high viscosity,high adhesion rate,water resistance,and wide application range.	Selecting appropriate grease and lubricants basedon the working conditions of the wire rope is crucial.
Rope core	IWRC、NFC(Sisal)、PPC.	IWRC、NFC(Sisal)、PPC.	IWRC、NFC(Jute).	IWRC、NFC(Jute).
Packaging	Using export-grade solid wood or reinforced iron reels, packaged with export-grade moisture-proofpaper lining.	Using export-grade solid wood or reinforced iron reels, packaged with export-grade moisture-proofpaper lining.	Using three-layer compressed high-quality plywood ,solid wood or reinforced iron reels packaged with high-quality plastic film and innerlining film.	Using common plywood reels and high-qualityplastic film packaging.
Application	Primarily used in special equipment and places that have complex working conditions and hig hrequirements.Examples include marine engineering.petroleum industry,ports and terminals, ships, and construction machinery.	Special scenarios, oil, offshore, mining, ports, fisheries, special equipment.	For special equipment and industrial applications such as power industry,elevators,construction machinery,lifting equipment, port machinery, ships petroleum industry, military, mining, felling.agriculture,and fisheries.	Suitable for agricultural, light industrial, and civilian markets, such as bundling and light lifting.



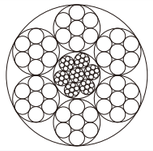
Construction of wire rope: 6×7-FC、6×7-WSC、6×7-IWRC、6×9W-FC、6×9W-WSC、6×9W-IWRC、6×12FC-FC、6×15FC-FC、6×24MFC-FC.



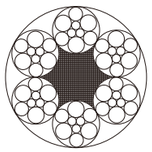
6x7-FC



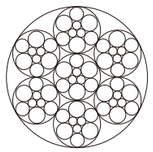
6x7-WSC



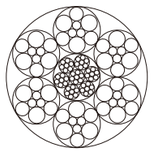
6x7-IWRC



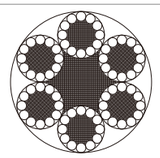
6x9W-FC



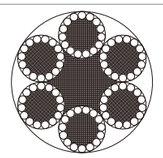
6x9W-WSC



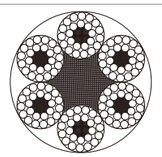
6x9W-IWRC



6x12FC-FC

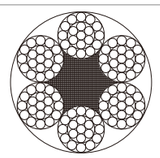


6x15FC-FC

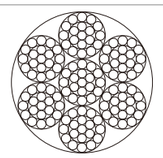


6x24MFC-FC

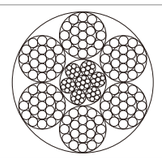
Construction of wire rope: 6×19M-FC、6×19M-WSC、6×19M-IWRC、6×37M-FC、6×37M-WSC、6×37M-IWRC
6×61M-FC、6×61M-IWRC、8×61M-FC、8×61M-IWRC.



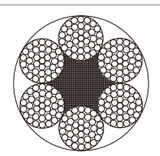
6x19M-FC



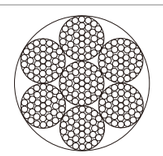
6x19M-WSC



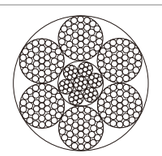
6x19M-IWRC



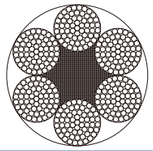
6x37M-FC



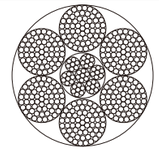
6x37M-WSC



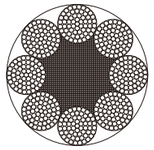
6x37M-IWRC



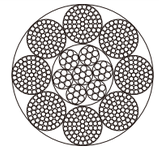
6x61M-FC



6x61M-IWRC

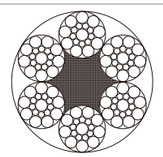


8x61M-FC

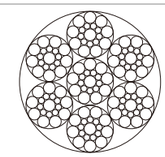


8x61M-IWRC

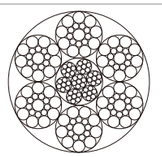
Construction of wire rope: 6×19S-FC、6×19S-WSC、6×19S-IWRC、6×19W-FC、6×19W-WSC、6×19W-IWRC、6×25Fi-FC、6×25Fi-IWRC
6×26WS-FC、6×26WS-IWRC、6×36WS-FC、6×36WS-IWRC、6×29Fi-FC、6×29Fi-IWRC、6×31WS-FC
6×31WS-IWRC、6×41WS-FC、6×41WS-IWRC、6×55SWS-FC、6×55SWS-IWRC.



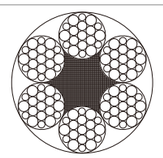
6x19S-FC



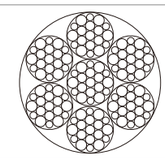
6x19S-WSC



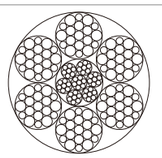
6x19S-IWRC



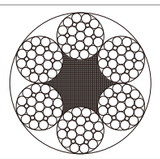
6x19W-FC



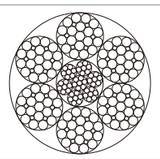
6x19W-WSC



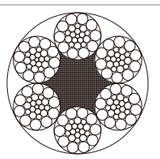
6x19W-IWRC



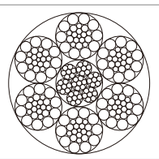
6x25Fi-FC



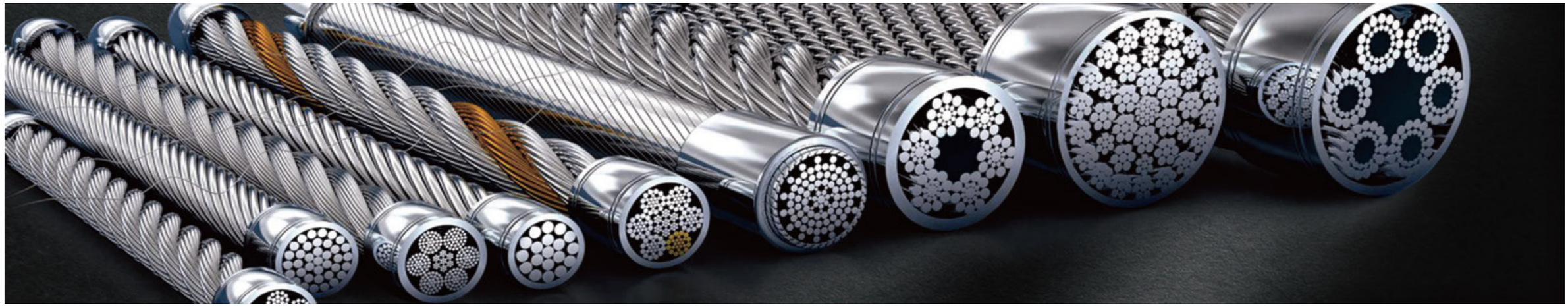
6x25Fi-IWRC

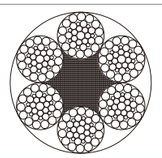
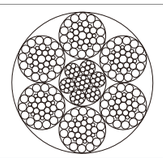
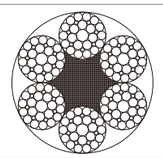
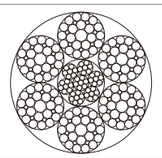
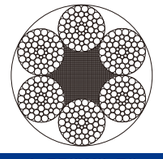
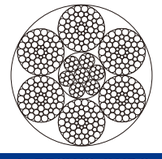


6x26WS-FC

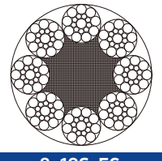


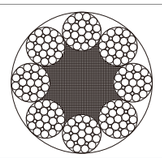
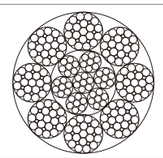
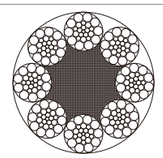
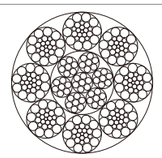
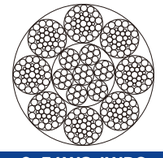
6x26WS-IWRC



			
6x36WS-FC	6x36WS-IWRC	6x29Fi-FC	6x29Fi-IWRC
			
6x31WS-FC	6x31WS-IWRC	6x41WS-FC	6x41WS-IWRC
			
6x55SWS-FC	6x55SWS-IWRC		

Construction of wire rope: 8×19S-FC、8×19S-WSC、8×19S-IWRC、8×19W-FC、8×19W-WSC、8×19W-IWRC、8×25Fi-FC、8×25Fi-IWRC
8×26WS-FC、8×26WS-IWRC、8×36WS-FC、8×36WS-IWRC、8×29Fi-FC、8×29Fi-IWRC、8×31WS-FC
8×31WS-IWRC、8×41WS-FC、8×41WS-IWRC、8×55SWS-FC、8×55SWS-IWRC.

		
8x19S-FC	8x19S-WSC	8x19S-IWRC
		
8x19W-FC	8x19W-WSC	8x19W-IWRC

			
8x25Fi-FC	8x25Fi-IWRC	8x26WS-FC	8x26WS-IWRC
			
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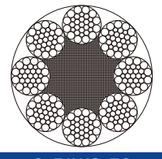
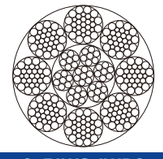
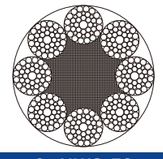
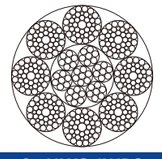
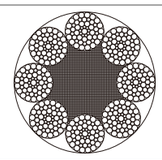
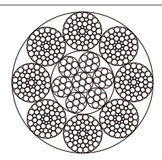
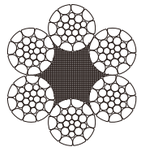
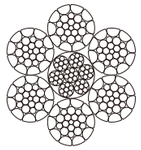
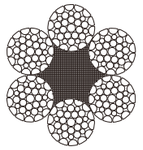
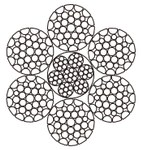
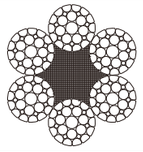
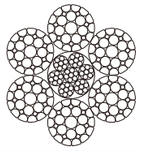
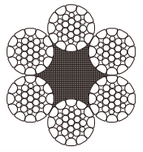
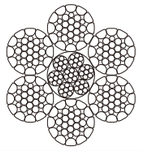
			
8x31WS-FC	8x31WS-IWRC	8x41WS-FC	8x41WS-IWRC
			
8x55SWS-FC	8x55SWS-IWRC		

Construction of wire rope: 6×K19S-FC、6×K19S-IWRC、6×K25Fi-FC、6×K25Fi-IWRC、6×K26WS-FC、6×K26WS-IWRC、6×K36WS-FC
6×K36WS-IWRC、6×K29Fi-FC、6×K29Fi-IWRC、6×K31WS-FC、6×K31WS-IWRC、6×K41WS-FC、6×K41WS-IWRC
6×K46WS-FC、6×K46WS-IWRC、6×K49SWS-FC、6×K49SWS-IWRC、6×K55SWS-FC、6×K55SWS-IWRC
6×K7-FC、6×K7-IWRC、6×K61FWS-IWRC、6×K64SFS-IWRC.

			
6xK19S-FC	6xK19S-IWRC	6xK25Fi-FC	6xK25Fi-IWRC

			
6xK26WS-FC	6xK26WS-IWRC	6xK36WS-FC	6xK36WS-IWRC
			
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	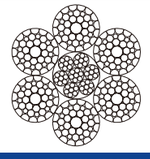		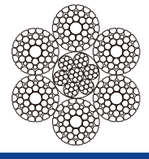
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	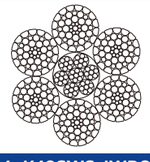		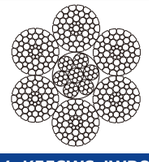
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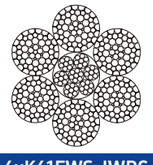
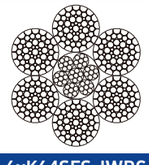
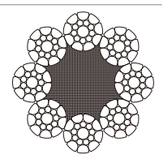
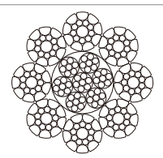
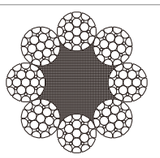
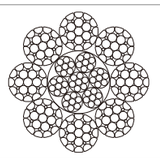
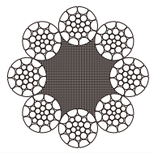
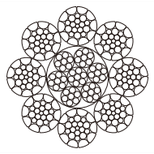
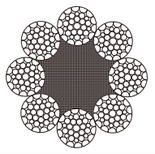
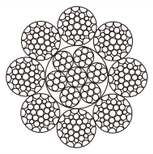
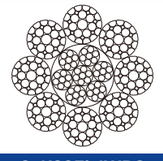
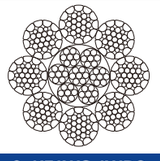
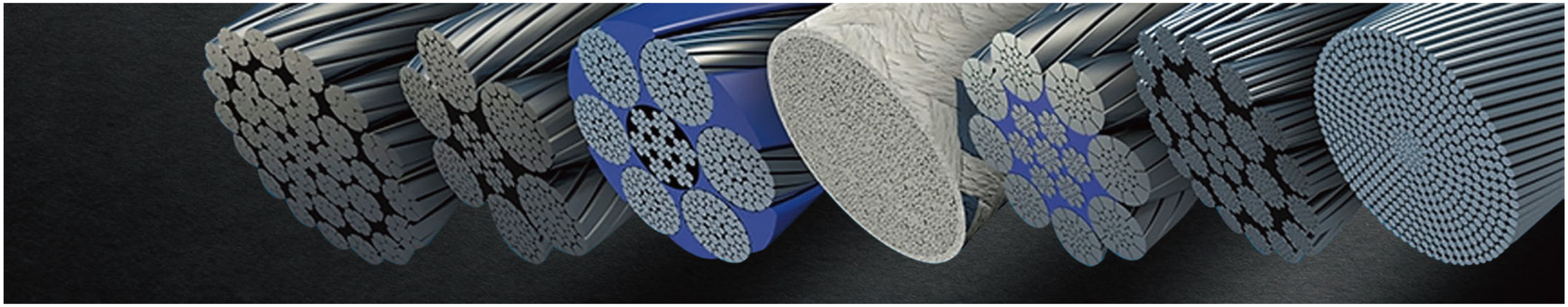
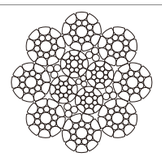
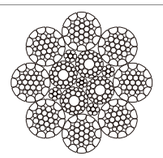
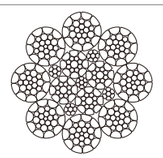
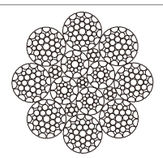
			
6xK7-FC	6xK7-IWRC	6xK61FWS-IWRC	6xK64SFS-IWRC

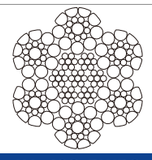
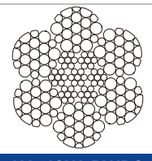
Construction of wire rope: 8×K19S-FC、8×K19S-IWRC、8×K25Fi-FC、8×K25Fi-IWRC、8×K26WS-FC、8×K26WS-IWRC、8×K36WS-FC
8×K36WS-IWRC、8×K29Fi-FC、8×K29Fi-IWRC、8×K31WS-FC、8×K31WS-IWRC、8×K41WS-FC
8×K41WS-IWRC、8×K46WS-FC、8×K46WS-IWRC、8×K49SWS-FC、8×K49SWS-IWRC、8×K55SWS-FC
8×K55SWS-IWRC、8×K19S-PWRC(K)、8×K26WS-PWRC(K)、8×K36WS-PWRC(K)、8×K31WS-PWRC(K).

			
8xK19S-FC	8xK19S-IWRC	8xK25Fi-FC	8xK25Fi-IWRC
			
8xK26WS-FC	8xK26WS-IWRC	8xK36WS-FC	8xK36WS-IWRC
			
8xK29Fi-FC	8xK29Fi-IWRC	8xK31WS-FC	8xK31WS-IWRC
			
8xK41WS-FC	8xK41WS-IWRC	8xK46WS-FC	8xK46WS-IWRC
			
8xK49SWS-FC	8xK49SWS-IWRC	8xK55SWS-FC	8xK55SWS-IWRC



			
8xK19S-PWRC(K)	8xK31WS-PWRC(K)	8xK26WS-PWRC(K)	8xK36WS-PWRC(K)

Construction of wire rope: K6×19S-FC、K6×19S-IWRC、K6×19S-PWRC、K6×19W-FC、K6×19W-IWRC、K6×19W-PWRC、K6×25Fi-FC
K6×25Fi-IWRC、K6×25Fi-PWRC、K6×26WS-FC、K6×26WS-IWRC、K6×26WS-PWRC、K6×36WS-FC
K6×36WS-IWRC、K6×36WS-PWRC、K6×29Fi-FC、K6×29Fi-IWRC、K6×29Fi-PWRC、K6×31WS-FC
K6×31WS-IWRC、K6×31WS-PWRC、K6×41WS-FC、K6×41WS-IWRC、K6×41WS-PWRC、K6×K49SWS-FC
K6×K49SWS-IWRC、K6×K49SWS-PWRC、K6×K55SWS-FC、K6×K55SWS-IWRC、K6×K55SWS-PWRC.

		
K6×19S-FC	K6×19S-IWRC	K6×19S-PWRC
		
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		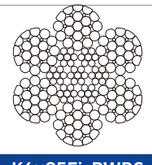
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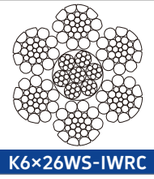
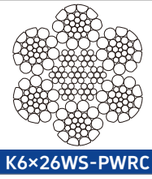
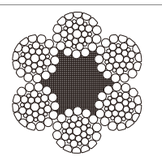
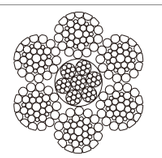
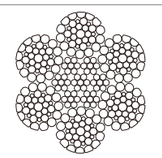
		
K6×26WS-FC	K6×26WS-IWRC	K6×26WS-PWRC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		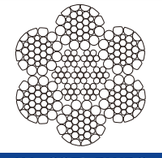
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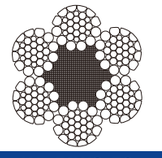
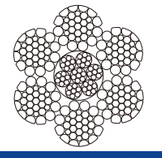
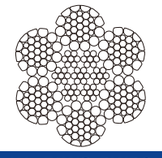
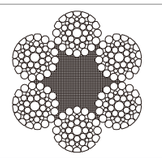
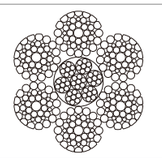
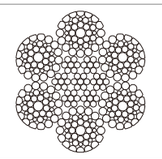
		
K6×31WS-FC	K6×31WS-IWRC	K6×31WS-PWRC
		
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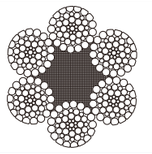
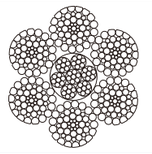
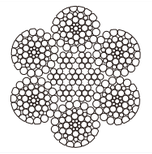
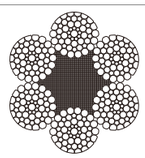
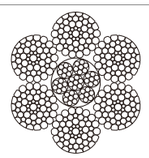
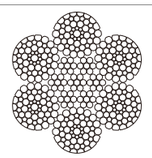
		
K6×K49SWS-FC	K6×K49SWS-IWRC	K6×K49SWS-PWRC



K6×K55SWS-FC

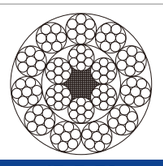


K6×K55SWS-IWRC

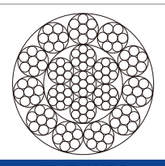


K6×K55SWS-PWRC

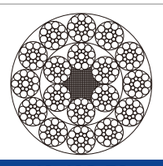
Construction of wire rope: 17×7-FC、17×7-IWRC、18×19S-FC、18×19S-IWRC、18×7-FC、18×7-IWRC、18×19W-FC、18×19W-IWRC.



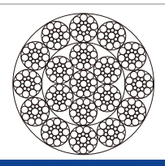
17x7-FC



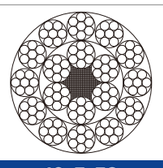
17x7-WSC



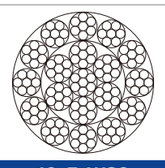
18x19S-FC



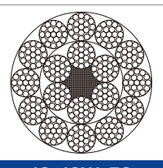
18x19S-WSC



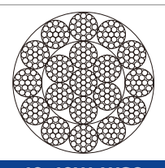
18x7-FC



18x7-WSC

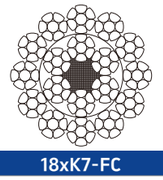


18x19W-FC

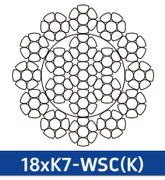


18x19W-WSC

Construction of wire rope: 18×K7-FC、18×K7-WSC(K)、18×K19S-FC、18×K19S-WSC.



18xK7-FC

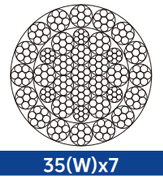


18xK7-WSC(K)

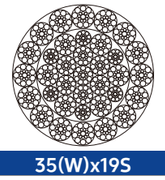
18xK19S-FC

18xK19S-WSC

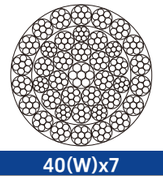
Construction of wire rope: 35(W)×7、35(W)×19S、40(W)×7、35(W)×19W.



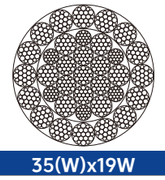
35(W)x7



35(W)x19S

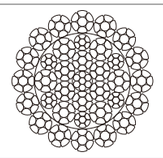


40(W)x7

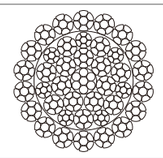


35(W)x19W

Construction of wire rope: 35(W)×K7、40(W)×K7.



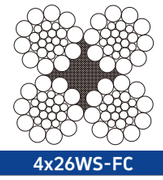
35(W)xK7



40(W)xK7

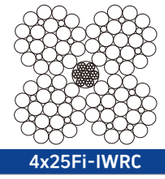
Construction of wire rope: 4×19S-FC、4×26WS-FC、4×36WS-FC、4×25Fi-IWRC、4×31WS-FC.

4x19S-FC

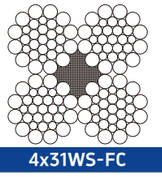


4x26WS-FC

4x36WS-FC

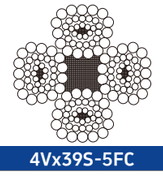


4x25Fi-IWRC

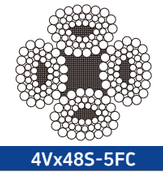


4x31WS-FC

Construction of wire rope: 4V×39S-5FC、4V×48S-5FC.

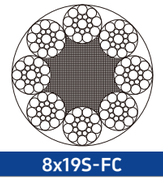


4Vx39S-5FC



4Vx48S-5FC

Construction of wire rope: 8×19S-FC、8×19S-IWRC,(Steel rope for elevators).



8x19S-FC

8x19S-IWRC

Steel wire rope use and replacement maintenance manual

I. Unloading,inspection, and storage

1. Upon the arival of steel wire ropes on the customer's site,the packaging should first be checked for damages during transportation and record-edThen, immediately open the packaging to check for identification and conditions and verify whether they conform to the product certificate description-and the purchase order description.

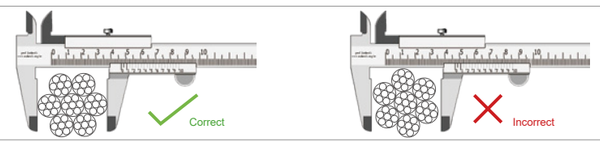
2. To avoid accidents,steel wire ropes should be carefuly unloaded, coiled and spooled, and not allowed to fall or be unloaded with metal hooks or forklift forks.

3. Steel wire ropes should be stored in a cool, dry warehouse and should not bein contact with the ground. Steel wire ropes should never be stored in a place vulnerable to chemical salt spray, steam, or other corosive invasions. The stored steel wire ropes should be checked requlary. if necessary,they should be packed, and if outdoor storage is umavoidable,the steel wire ropes should be covered to prevent moisture from causing rust. If the steel wire ropes need to be stored for a long time, it is notrecommended to stack the pulleys together as it will make the wooden pulleys damp and water wilentel the middle ofthe steel wire ropes, causing oxidation rust, steel wire ropes with a length exceeding 30 meters should be stored on reels.

4. Allowable diameter deviation and non-circularity of steel wire ropes.For steel wire ropes used for important purposes, the measured diameter deviation should be "Round strands 0-5%non-circular strands 0-6%". The non-circularity of steel wire ropes should not exceed 4% of the nominal diamet-erof the steel wire ropes (Reference national standard: GB8918-2006, steel wire ropes used for important purposes).

5. Steel wire rope diameter measurement.Diameter measurement of steel wire ropes should be measured using Vernier calipers with wide jaws. The width of the jaws should be sufficient to span two adjacent strands, The measurement should be carried out on a straight section 15 meters away from the end of the steel wire rope in the absence of tension, on two cross-sectional parts that are at least 1 meter apart, and in the same direction that is mutually straightened, The arithmetic mean value of the four measurement results is the measured diameterof the steel wire rope. (See figure 1.5.1) The ratio of the maximum value measured on the same cross-section to the nominal diameter of the steel wire rope is the non-circularitly, which should meet the requirements of 1,.4.In case of disputes,the diameter measurement of the steel wire rope can be carried out unde a load not exceeding 5% of the minimum breaking tension of the steel wire rope.

figure 1.5.1



II. Installation and use

1. Rolling or unrolling a coil or a rope coil

Various measures should be taken to avoid the twisting of the rope or reduce the degree of twisting when a steel wire rope is unrolled from a coil or a rope.This is because the twisting of steel wire ropes may cause knots, twists or bends inside the rope. To avoid this situation, measures should be taken to keep the steel wire ropein tension and in a straight line, as coiled wire ropes have a largeinertia duringrotation, thus requiring control to slowly release the steel wire rope in order. The steel wire rope should be kept as clean as possible during the releasing process.When the steel wire rope is broken, follow the manufacturer's instructions and do not use cutting methods such as electricor pneumatic quns.It is recommended to use professional steel wire rope cutting tools such as a toothless saw or hydraulic cutting.During instalation,the steel wlre rope should alwavs bend in the same dlrection, le, releasi-na from the ton to the ton otthe col or trom the bottom to the bottom of the coil.(see Fiaure 2.1 2.1.2).

figure 2.1.1

figure 2.1.2

2. Installation

The rope deflection angle in the drum.Smooth drum

In order to obtain a smooth and stable winding of the smooth drum, the following factors must be considered: the drum diameter to wire rope diame-ter ratio, rotation speed, carrying load, and deviation angle. Among them, the deviation angle is the most important factor in wire rope winding. The rope deflection angle can be defined as the angle between two lines: one from the pulley center to the core of the drum, perpendicular to the axis ofthe drum, and the second from the edge of the drum to the bottom of the pulley groove.For smooth drums to achieve optimal eficiency, the angle should not exceed 1°30'. If the angle is too large, problems will arise if a uniform winding is desired as friction is generated between the wire rope and the edge ofthe pulley. On the other hand, if the angle is less than 0°30', the wire rope will stack in one area of the drum.

figure 2.2.1

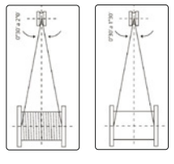


figure 2.2.2

Grooved drum

① For grooved drums, it is recommended to keep the rope deflection angle no qreater than 2° or no less than 0°30'(as shown in figure 2.2.1).

② The winding method and fixing point of the wre rope on the drum: if the wire rope winds over more than one laver on the drum, then the winding method on the drum must folow a certain rule, otherwise the lower laver of wire rope may become loose. This will cause insuficient suppor for the uppellaver of wre rope, and may lead to wire breakage, deformation, and shorten the service life of the wire rope. According to the figure of the wire rope winding on the drum and the fixing position, the right-strand wire rope is represented with the right hand, and the left-strand wire rope is represented with the left hand. Figure 2.2.2 shows the correct winding direction of the wire rope.

③ When winding with drum pulleys or other devices, pay attention to match the wire rope and drum, and the drum surface should not have obvious defects. The first layer of wire rope should be tight, and for the other layers, the wire rope should have certain tension.Pay attention to the surface condition of the pulley during installation, a puley with a problematic surface will shorten the service life of the rope, and pay attention to the adaptability of the pulley with the twist direction of the wire rope.Prevent excessive wear of the wire rope, beause a type ofwire rope can be used in multiple situations, the instalation method of the wire rope should be adiusted based on the specific situation and actua needs.

④ After instalation of the wire rope, for general or regular operations, the user can decide whether to cary out acceptance testing.For new equipm-ent and changes in wire rope specifications, the user must carry out acceptance testing of the installation result. The acceptance process includes.

Running the equipment for a period of time under no load to check the degree of assembly;

Running the equipment for a period oftime with a load increased to 10%-20% ofthe wire rope breaking tension;

Running the equipment under full load.

3. Precautions during installation

① When instaling the wire rope, it is necessaryto prevent it from tangling or knoting,Knotting wil cause permanent damage to the wire rope and make it unusable, requiring replacement. It is necessary to avoid the situation shown in Figure 2.3.1.

② When installing multiple wire ropes,it is necessary to pay atention to the instalation method to ensure that each wire rope works under similar force conditions. Uneven tension of wire ropes, as shown in Figure 2.3.2, cannot share the load together.

③ Using the most reasonable wire rope usage method can effectively improve the carrying capacity of the wire rope. Using a single rope directly conmected with the load directly loaded on the wire rope, using a single loop connection can partially distnibute weight while using a double loop connec-tion can distribute weight to about half of its original weight, which can significantly improve the carrying capacity ofthe wire rope (as shown in fiqure 2.3.3).

④ When using tighteners, connecting rings, hoisting straps, thimbles, iron blocks, pear-shaped sleeves, pulley blocks,triangle rings, swivels, shackles, lifting rings, or other connecting components, attention must be paid to prevent errors. Pay attention to the quality and connection of these components, use atachments with assurance, and ensure that the wire rope matches correctly with them, Follow the manufacturer's provided connection method and steps for installation, Do not installor use the wire rope without understanding its specific situation.

III. Use,maintenance,and repair of steel wire rope

1. Use of steel sire rope

The safe use of steel wire rope is of practical significance in both production and daily life. Safe use can reduce the incidence of accidents and minimize unnecessary losses. The main safety accidents caused by steel wire ropes are the breakage of the steel wire rope, as well as the detach-ment of steel wire rope accessories such as joints and shackles. To prevent accidents when using steel wire rope safely,users must do the folowing:

① The minimum breaking strength of the steel wire rope used must be greater than the reguired working load. Users must ensure this when selecting steel wire rope.

② Regularly inspect the steel wire rope to identify any signs of wear, damage, or corrosion

2. Maintenance and repair of steel wire rope

① Regularly inspect the pulley accessories and steel wire rope components. If damage is found, it should be replaced in atimely manner.

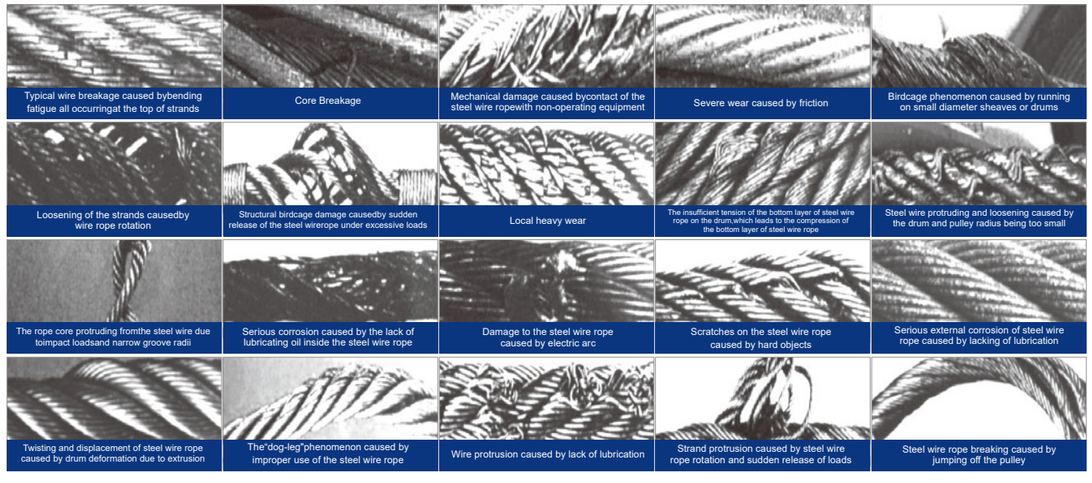
② Make sure that the pulley attachments rotate freely during use. If there is resistance or abnormal sounds, apply ubricating oil to the puley bearings.

③ Ensure that the steel wire rope always moves in the pulley groove during use and maintain the same direction of movement as the tangent direction of the pulley groove. If the direction deviates significantly, causing serious friction between the steel wire rope and the sides of the pulley groove, it should be adiusted promoty or contacted with the locadeaer.

④ When the pulley or steel wire rope is damaged, select accessories with the same specifications and model as the original.

⑤ Regularly inspect and record the steel wire rope, including its service ife, wear condition, broken wire condition,corrosion condition, oil condition, appearance damage, and other abnorma conditions.

IV.Common damages of steel wire ropes

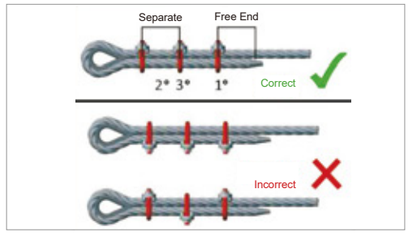


V. Installation of clamps (GB976-86)

① The Buckle ends are installed when a rope loop is needed. When the Buckles are in the correct position and have the appropriate quantity and size, they can save up to 80% of the tensile strength of the steel wire rope. (Refer to Fiqure 2.4.1).

② The minimum number of Buckles on the steel wire rope is shown in Figure 2.4.2 (GB5976-86).

Wire rope diameter	Minimum number of clips
<19	3
>19-32	4
>32-38	5
>38-44	6
>44-60	7



(Figure2.4.1)

③ Installation steps of buckles

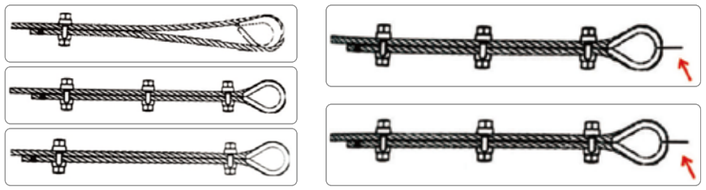
A. Install the first Buckle: fix the triangle ring position at a certain distance from the end of the steel wire rope, and tighten the Buckle bolt with the recommended torque.

B. Install the second buckle: integrate as much as possiblewith the triangle ring and do not overtighten the bolt.

C. Install the other buckles: the distance between two Buckles must be 6-7times the diameter of the steel wire rope.

D. Apply tension to the end of the steel wire rope and tighten all Buckle boltsto the specified torque.

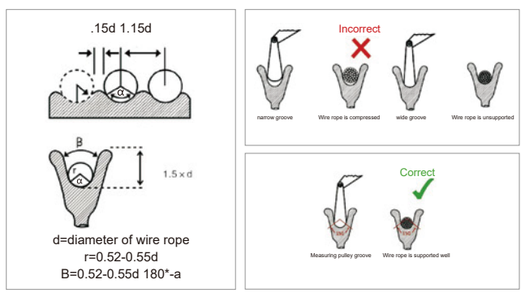
E. After completing the above steps, recheck the torque of all buckle bolts.



VI. Relationship between steel wire rope and drum/pulley

① When the steel wire rope is operating in the groove, most of it touches the groove of the drum or pulley. The strands and wires move to one side, and the groove must provide enough support and space for the steel wire rope to move and bend treely, Theretore, the groove should pe slahtlvy laraer than the maximum dlameter of the steel wire rope, if the groove is too narrow or worn, the steel wire rope will usually accumulate on one side of the groove,creating pressure that restricts the free movement of the strands and wires, and weaken its bending ability. On the other hand, if the groove is too wide, it cannot provide enough support to the steel wire rope, which will cause colisions and restrict the free movement of its structural elements. Therefore, pulleys that do not meet the reguirements must be replaced before installing a new steel wire rope, otherwise the service life of the steel wire rope will be shortened.(Refer to Fiqure 3.1 and Fiqure 3.2).

② Relationship between pulley diameter (D) and steel wire rope (d)(Refer to Fiqure 3.2).



(Figure3.1)

construction	Min D/d	construction	Min D/d
6x7	42	8x26WS	24
6x19S	34	8x36WS	18
6x26WS	30	19x7	34
6x36WS	23	19x19	20
8x19S	26	35x7	20

(Figure3.2)

Sling

The company's rigging products include ferrule securing slings, spliced wire rope slings, resin cast wire rope slings, wire rope cable slings, grommet slings, chain slings and etc.We have various type of pressing machines ranging from 400tons up to 5000tons, and the pressing range from 6mm to 120mm, sockets can be pressed with regular aluminum sleeves, aluminum sleeves with thimbles, aluminum sleeves with heavy-duty/solid thimbles, UT type, OT type, OU type, OW type, UW type ,U type, W type, O type and .etc fixed and adjustable slings.

We have full-spec casting platforms, capable of casting with different materials. The casting range is 6mm-120mm. We can provide wire rope socket casting, adjustable distance turnbuckle sling, pear-shaped socket casting, U-type adjustable sling, O-type adjustable sling, and other products.

We have a platform for producing oversized, extra-long, and super-heavy grommet slings, with product sizes ranging from 26mm to 276mm.

We have complete equipment for processing combined chain slings, capable of manufacturing single-leg, double-leg, four-leg, and other custom combination slings with master links, combined links, swivel rings, and more.

Ferrule-securing sling

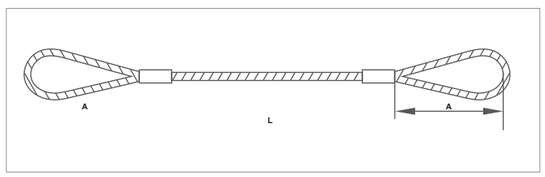
The data in the table is collected based on wire rope specifications:6x37M-1670MPa for wire rope diameter from φ6 to φ70, 6x61-1670MPa for wire rope diameter from φ72 to φ90, and 8x61-1670MPaforwire rope diameter from φ92 to φ140 using round strands.

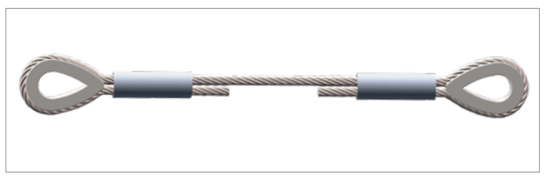
The rigging structure can be determined based on the calculated tension according to the actual usage.

The breaking force ofthe rigging is 6 times the working load.

For pressed steel wire rope rigging with a diameter above φ90, two aluminum alloy tubes should be pressed at each end.

Notes: L: Effective length of the rigging A: Ferrule length of the rigging



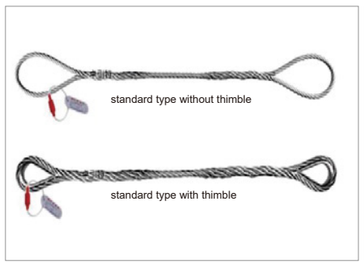


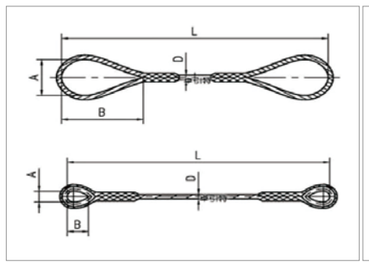
Slings with spliced eye termination

The working load in this table is based on wire rope specifications: 6x37M-1670MPa for wire rope diameter from φ6 to φ70,6x61-1670MPa for wire rope diameter from φ72 to φ90. and 8x61-1670MPa for wire rope diameter from φ92 to φ160 using round strands.

The rigging structure can be determined based on the calculated tension according to the actuausage.

The breaking force of the rigging is 6 times the working load.



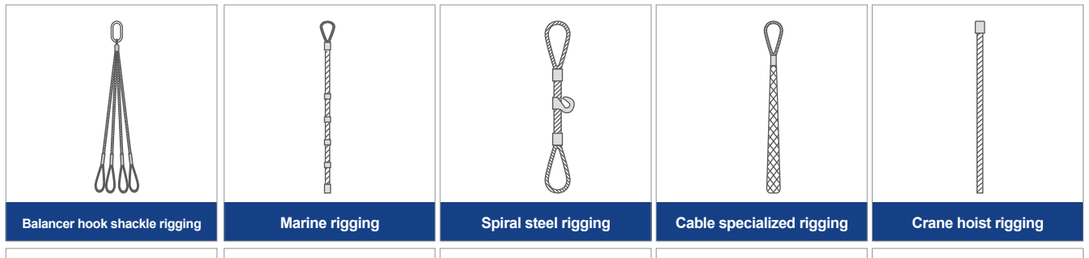


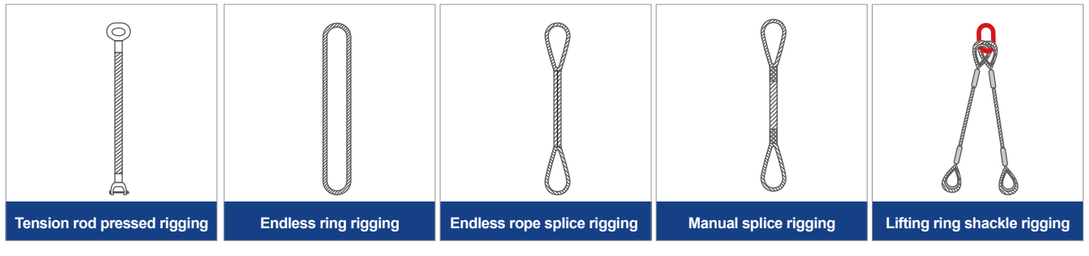
Grommet slings

Slings with resin cast sockets

Chain slings

Different styles of wire rope slings





Accessories

Shackles

US Type Forged Bow Shackle G-209

US Type Forged Bow Shackle G-2130

US Type Forged Dee Shackle G-210

US Type Forged Dee Shackle G-2150

Shackles

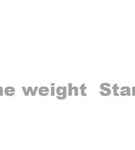
Heavy Duty Shackle

Japanese Type Shackle

European Type Big D Shackle

European Type Big Bow Shackle

Clips



JX Heavy Duty Clip

US Type Forged Clip

US Type Malleable Clip

DIN741 Clip

Clips

A Type Malleable Clamp

JX Malleable Clamp

Heavy Duty Cast Steel Clamp

JX Heavy Duty Open Turnbucke

Turnbuckles

DY Malleable turnbucke

Ship Open turnbucke

US Type Forged Turnbuckle,Jaw&Jaw

JIS Frame Type Turnbuckle

Hooks

Us Type Eye Hook 320A/C

Large Opening Hook

S Hook

Steel Pipe Hook

Hooks

Container Hook

Large Opening Hookwith Latch

US Type Swivel Hook 322A/C

Clevis Slip Hook with Latch

Hooks

Clevis Grab Hook

G80 Eye Sling Hook with Latch

G80 Eye Foundry Hook

Universal Vertical Hook

Links

G80 U.SType Forged Master Link

G80 U.SType Master Link Assembly

G80 EuropeanType Connecting Link

Lifting belt

White Polypropylene sling

Colorful Polyester Plat Suspenders

Loop Head Flexible Sling

Double End Flexible Sling

Hand hoist

Hand Board Hand Hoist

Anti-overload Hand Hoist

Imported Hand Hoist

Explosion-proof Hand Hoist

Rust-Proof Hand Hoist

Pulley type

Pulley

Lifting tongs

Steel Plate Lifting Tongs

Veneer Lifting Pliers

Japanese Vertical Lifting Tongs

LC Type Horizontal Lifting Tongs

Block series

030 Rotary Block

7011 Strong Steel Rope Block

7111 Strong Steel Rope Block

7112 Strong Steel Rope Block

H418 Block

H419 Block

YBO Tackle

Electric Block

National Sstandard Block

Miniature Block

Shack Block

Jack series

Qh Spiral Puller Multi Pose Jack

Hydraulic Jack With Safety Valve

Separate Jack

Split Hydraulic Pulling Jack

Screw Jack

Hydraulic Claw Jack

Hydraulic Jack

Ring Series

National Standard Heavy Duty Ring

DIN 3091 Malleable Heavy Duty Collar

DIN 3091 Iron Ball Lightening Hole Sleeve Ring

BS464 Ring

DIN6899B Chicken Heart Ring

G411 Loop

G414 Loop

Bundle Serie


Binder-1


Binder-2


Binder-3


Bundling Belt

Bracket


Single J Hook

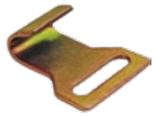

Double J Hook


Claw Hook


Hook And Keepper


Triangle Ring


Metal Delta Ring


Flat Hook


Flat Hook


Flat Snap Hook


Twisted Snap Hook

Accessory


Plastic Handle


Rubber Coated(black)


Finger Handle


Alu Handle


Heavy Duty


Long Handle


Ergo Ratchet


Light Duty


Light Duty


T type

Chain series


Stainless Steel Chain


Mine Chain

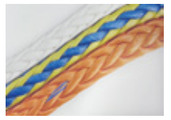

Strapping Chain


Hoisting Chain

Cable series


Polypropylene
Monofilament Cable


Polypropylene
Double Wire Cable


Ultra High Molecular Weight
Polyethyene Cable


Polyester Cable
Type L type LL


High Performance
Polypropylene Cable


High Performance
Polyester Polyolefin
Hybrid Cable


Nylon Cable
Type L Type LL

Aluminum sleeve series


Oval Aluminium Sleeve


Round Aluminium Sleeve


Splay Aluminum Sleeve

Lifting machinery


Fixed Pulley


Skywheel Block


Magnetic Crane

Steel sleeve


S409 Steel-Sleeve


S505 Steel-Sleeve