



**LKS Wire Rope**

**Reliable to the core**

**SINCE 1976.**



**COMPANY**

**LKING STEEL LIMITED**

# COMPANY



## KNOW-HOW AND QUALITY – OUR FUTURE

We know from years of experience what we're doing – we win over customers with our know-how in all areas of production, from the drawing mill to theropy.

Continuous improvement processes in production, constant contact with our dealers, insight into the applications and continuous investments in the most modern manufacturing technologies have made us

a leading manufacturer of steel rope. Furthermore, we continuously develop new technologies and machines to produce standard and special ropes.

In development and manufacturing, we will continue in the future to rely on the independence created by having our own engineers, doing our own research, and building our own machines in order to live up to the driving principles of our founders. Especially in the area of special ropes, we are always happy to assist you with your specific requirements, not only as a supplier, but also as a development and project partner.

### TRADITION. INNOVATION. VISION. SINCE 1889.

Since 1976, our continuous pursuit of progress and the highest quality standards has set the benchmarks that are reflected in our products and services. Mr. Yao and his team the founders of the company, gave utmost priority to developing the company and improving production and technology right from the beginning. Thus, in 1996 they founded their own wire drawing mill to go with the ropery. This was the foundation stone for increased independence from the raw material suppliers, and the term "quality" was thus redefined. Still today we feel obligated to measure up to these standards and to the founders' researching and pioneering spirit.

In the meantime, 10,000 tonnes of steel per year are processed in our plants in Shanghai and Wuxi city with the most modern production technology. In addition to our main products – wires and steel ropes - today we also produce wire rope sling, wire rope assemblies. All products are developed and manufactured with state-of-the-art technology. Wire and steel ropes are used throughout the world. We will contribute to this now and in the future.



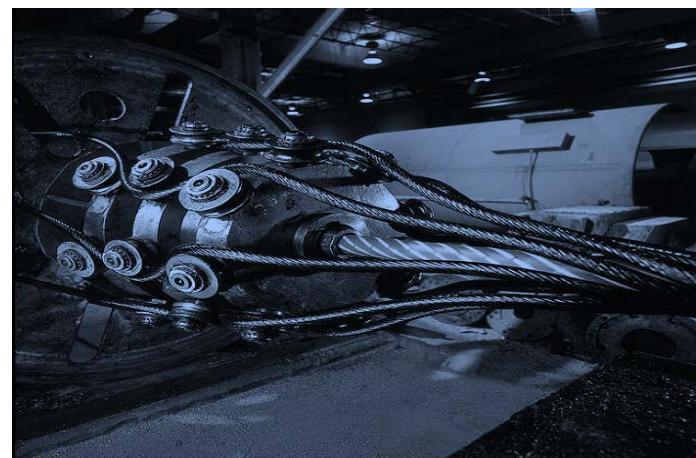
LKING STEEL LIMITED Shanghai 1976

### LKING STEEL LIMITED STEEL ROPES – A SUCCESS STORY

In the 1980s, a significant expansion was planned for the location in Shanghai, and now over 50,000 m<sup>2</sup> of production space are available to the company.

In the middle of the 1990s, we expanded our portfolio with the production location in Wuxi. Today special products for the automotive and bicycle industries are produced there.

Thanks to our close cooperation with our customers and our ability to modify production, we are able to work together with you to establish the conditions for optimal market positioning. Whether through our years of experience in standard wire ropes or our will to innovate in the area of special applications. We will find a solution to your problem.

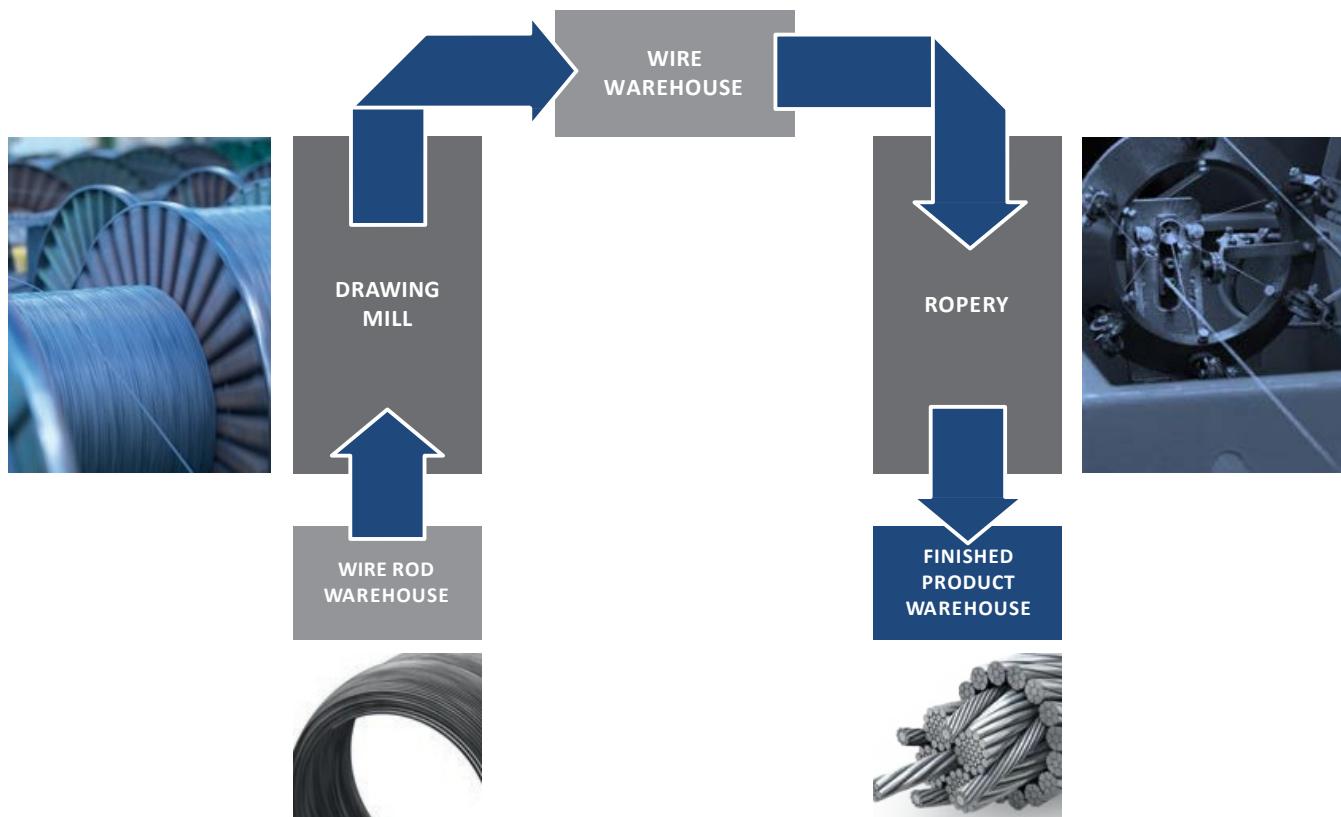


In the ropery

In the wire drawing mill



LKING STEEL LIMITED



### FROM WIRE TO ROPE

Through our know-how and control of all production steps, today we can guarantee consistent, especially high quality – from wire rod to rope. Unlike many competitors, we can begin modifying the properties of our products according to customer requirements right in our own drawing mill. Here, via drawing, heat treatment and surface conditioning, the wires are individually prepared for their tasks in the various rope constructions. Depending where the end product will later be used, we process wires in zinc-coated, phosphate-coated or bright finishes. Quick access to various qualities and technically

required diameters of pre-drawn and finished wires from our wire warehouse allows us to respond to our customers' individual requests in the shortest time possible. These requirements are then fulfilled to the smallest possible manufacturing tolerances in the modern machine park in our ropery, where the wires are stranded and the strands assembled into rope.

We are thus able to react quickly to our customers' requirements regarding, for instance, length of lay, lubrication, degree of compaction, coating or tracer threads. Challenge us.

# CERTIFICATES



English language version of certificate ABS



English language version of certificate BV



Chinese language version of certificate CCS



English language version of certificate Lloyd's



# TECHNICAL NOTES I

## ROPE COMPONENTS

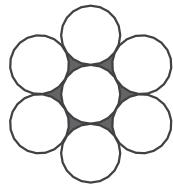
### WIRE

The smallest component of a rope.

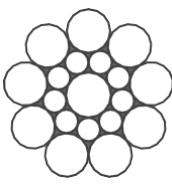
### STRAND

The element of a rope that is composed of a construction of wires which are helically stranded in the same direction in one or more layers around a core.

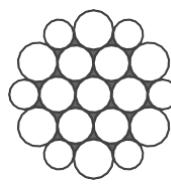
Single-layer Strand



Seale Strand



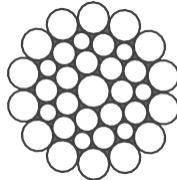
Warrington Strand



Filler Strand



Warrington-Seale Strand



### CORE

The element in the middle of a round rope, around which the strands of a stranded rope or the ropes of a cable laid rope are helically stranded.

### Fibre core FC

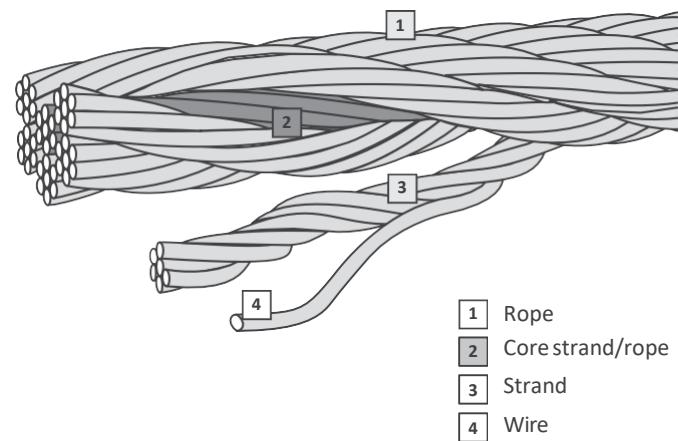
- Natural fibre core NFC
- Synthetic fibre core SFC

### Steel core WC

- Wire strand core WSC
- Independent wire rope core IWRC

### ROPE

Combination of core and strands.



## CLASSIFICATION OF ROPES ACCORDING TO THEIR INTENDED USE

### RUNNING ROPES

Ropes that run over rollers, sheaves or reels and thus assume their bend.

Examples: hoisting ropes, crane ropes, lift ropes, scraper ropes and haulage ropes for cable cars.

### STATIONARY ROPES

Ropes which are for the most part firmly clamped and not moved over rollers.

Examples: anchoring ropes for masts and booms and guide cables for lifts.

### CARRYING ROPES

Ropes on which rolls of conveying devices run.

Examples: carrying ropes for cable cars, cable cranes and gravity return scrapers.

### LIFTING SLINGS

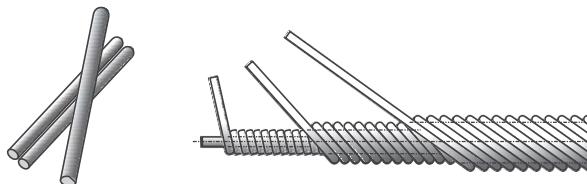
Ropes which are used to suspend loads.

# TECHNICAL NOTES II

## STRANDING TYPES

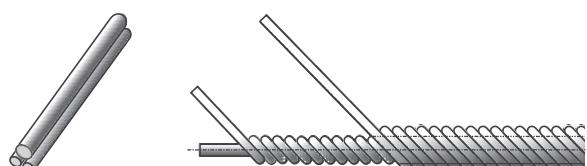
### CROSS-LAY

Cross-laid strands consist of at least two layers of wire that are stranded in the same direction, and the wires of two superimposed layers cross and touch at specific points.



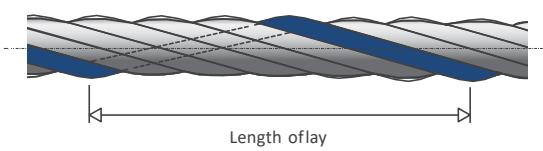
### PARALLEL LAY

Parallel-laid strands consists of at least two wire layers that are all laid in one operation in the same direction. The lengths of lay of all wire layers are the same, and the wires from two superimposed layers are parallel, resulting in linear contact. Parallel lay ropes thus consist of at least two strand layers that are all laid helically around a rope core in a single operation.



## LENGTH OF LAY

The length of lay of a strand is the lead of an external wire measured parallel to the strand's longitudinal axis as it makes a complete spiral around the axis of the strand.



## TYPE OF LAY AND DIRECTION OF LAY

### LANG LAY

The wires in the strands have the same direction of lay as the strands in the rope.

#### Lang lay Right-hand zZ



#### Lang lay Left-hand sS



### ORDINARY LAY

The wires in the strands have the opposite direction of lay as the strands in the rope.

#### Ordinary lay Right-hand sZ



#### Ordinary lay Left-hand zS

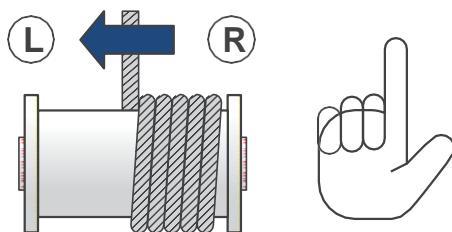


## TECHNICAL NOTES III

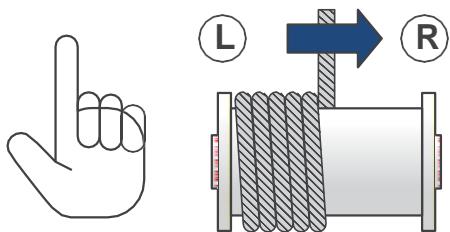
### SELECTING THE DIRECTION OF LAY

#### WINDING FROM BELOW

Right-hand lay rope

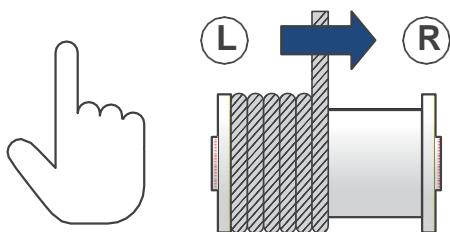


Left-hand lay rope

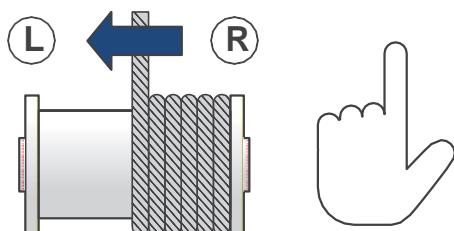


#### WINDING FROM ABOVE

Right-hand lay rope



Left-hand lay rope



### CALCULATION VARIABLES

#### FILLING FACTOR (f)

The relationship between the sum of the metallic nominal cross sections of all wires in the rope (A) and the area (Au) of the circle circumscribed by the rope with nominal diameter (d).

$$f = \frac{A}{Au}$$

#### METALLIC CROSS SECTION (A)

The product of the factor for the metallic nominal cross section (C) and the square of the rope's nominal diameter.

$$A = C \cdot d^2$$

#### MINIMUM BREAKING FORCE ( $F_{min}$ )

A defined value in kN which must not be undershot by the measured breaking force ( $F_m$ ) in a prescribed breaking force test. It is usually calculated as the product of the square of the nominal diameter (d), the rope grade (Rr) and the break force factor (K).

$$F_{min} = \frac{d^2 \cdot Rr \cdot K}{1.000}$$

#### CALCULATED BREAKING FORCE ( $F_{e,min}$ )

A defined value in kN which must not be undershot by the breaking force determined in a test. It is usually calculated as the product of the square of the rope diameter (d), the factor for the metallic cross section (C) and the rope grade (Rr).

$$F_{e,min} = \frac{d^2 \cdot C \cdot Rr}{1.000}$$

#### ACTUAL BREAKING FORCE ( $F_m$ )

The breaking force determined in a test according to a prescribed procedure.

#### CALCULATED LENGTH MASS (M)

A value which is calculated as the product of the factor for the calculated length mass (W) and the square of the rope's nominal diameter.

$$M = W \cdot d^2$$



## TECHNICAL NOTES IV

TABLE OF CALCULATION FACTORS

	FC			IWRC			WSC		
	W1	C1	K1	W2	C2	K2	W3	C3	K3
6 x 7	0.345	0.369	0.332	0.384	0.432	0.359	0.384	0.432	0.388
6 x 19	0.359	0.384	0.330	0.400	0.449	0.356	-	-	-
6 x 19M	0.346	0.357	0.307	-	-	0.332	0.381	0.418	0.362
6 x 36	0.367	0.393	0.330	0.409	0.460	0.356	-	-	-
6 x 37M	0.346	0.357	0.295	0.381	0.418	0.319	0.381	0.418	0.346
8 x 36	0.348	0.357	0.293	0.417	0.468	0.356	-	-	-
18 x 7	0.382	-	0.328	-	-	-	0.401	0.433	0.328

See EN 12385-4

K = minimum breaking force factor

C = factor for the metallic nominal cross section

W= factor for the calculated length mass

### LIFTING CAPACITY

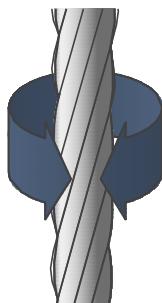
The lifting capacity of a rope is calculated from the minimum breaking force. This is divided by the prescribed safety factor for the respective application.

Example:

$$\text{safety factor } 5 = \frac{\text{minimum breaking force}}{5}$$

### ROTATIONAL PROPERTIES

Rotation-resistant ropes are ropes that are designed such that they create a reduced torque and a reduced rotation under load. In general, they are composed of a construction of at least two strand layers that are helically stranded around a core. The outer strand layers in this construction are stranded opposite to the strand layer below.



### ROTATION-RESISTANT A

The rotational property is less than or equal to 1 rotation/1,000 d, when a load corresponding to 20% of the minimum breaking force is lifted; a swivel may be used.

### ROTATION-RESISTANT B

The rotational property is greater than 1 rotation but less than 4 rotations/1,000 d, when a load corresponding to 20% of the minimum breaking force is lifted; a swivel may be used in accordance with the recommendations of the rope manufacturer and/or with the approval of a competent person.

### NOT ROTATION-RESISTANT

The rotational property is greater than 4 rotations/1,000 d under a load corresponding to 20% of the minimum breaking force; a swivel should not be used.

1 rotation = 360°

d = rope diameter

F<sub>min</sub> = minimum breaking force of the rope



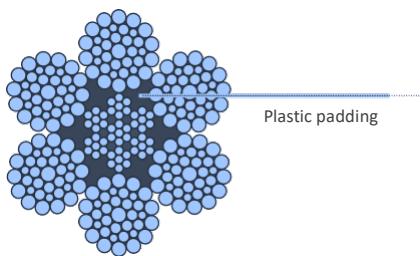
## APPLICATION

PLASTIC PADDING  
PLASTIC COATING  
COMPACTION

# TECHNICAL NOTES V

## PLASTIC PADDING

The plastic padding supports the strands and stabilises the rope structure. The plastic encases the lubricated steel core and thus provides double protection. On the one hand, it encloses the lubricant on the inside and, on the other hand, it simultaneously keeps humidity and dirt particles away from the core. Furthermore, the plastic padding prevents direct friction between the strands in the rope and thus also helps to prevent premature wear. In addition, the rope structure is stabilised by the layer of plastic.



## ADVANTAGES

- Counteracts interior wire breaks
- Preserves the lubrication on the steel core
- Protects the core from humidity and dirt particles
- Minimises friction losses
- Improves shape stability
- Absorbs vibrations

## PLASTIC COATING

As an additional added value, we can coat our ropes with various common types of plastic on modern extrusion equipment. The following materials, among others, are processed: PVC, LDPE, HDPE, PP, PA 6, PA 6.12, PA 11, PA 12, PUR TPU and POM. These plastics can be laid around the rope in various processes, depending on the customer requirement and further use of the product.

**Hose process:** Simple coating, e.g., when the end fittings are later applied to the rope.

**Pressure process:** Very smooth, high-quality surface on the final coated product; very good connection between the coating and the rope.

**Semi-process:** Smoother surface than with the hose process but, depending on the rope construction, easier to strip than a coating in the pressure process.

By adding colour granules, almost any colour setting is possible. Furthermore, the technical properties of the coating, e.g., friction values, can also be positively influenced with the appropriate additives. Here too we will gladly place our know-how at your disposal.

## COMPACTION

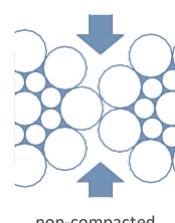
To increase the breaking force of our products without increasing the diameter of the rope, we compact the strands, the rope or both in combination. In addition to higher metal cross section and the resulting higher breaking force, compacted ropes also have smoother strand and rope surfaces.

Compacted strands provide the rope with greater flexibility and minimise both friction and corrosion in the rope. In addition, they reduce the risk of negative imprints in the grooves of the rollers and improve the service life of the rope in the case of multi-layer winding.

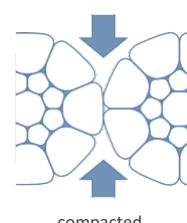
Furthermore, the rope compaction increases the pressure stability and, due to a lower tendency to indent and optimised pressure distribution, again improves the properties of the rope for winding in multiple layers.

## ADVANTAGES

- Increases the metallic cross section and the breaking forces
- Increases the surface contact between individual wires
- Achieves a smoother rope surface
- Improves the contact ratio between the rope and the rope groove
- Reduces the indenting of adjacent rope strands
- Improves the structure stability in the case of multi-layer windings



non-compacted



compacted

## NOTES

### ATTENTION



Selecting the right rope for the appropriate application requires great care. Using the wrong rope might have serious consequences, such as property damage or personal injury. The users must always be familiar with the correct procedures and pertinent safety regulations. If a product is used improperly or is overloaded, dangerous situations can arise. Selecting the correct rope is essential for special applications. Our experts will gladly advise you on selecting the right rope.

### IMPORTANT

The maintenance, monitoring and discard criteria of wire ropes are described in detail in currently valid standards, such as DIN ISO 4309 and the guideline VDI 2358. In addition, please follow all regulations set by public authorities and by employer's liability insurance associations and follow the regulations of the respective device manufacturer as well.

The nominal tensile strengths of the wires listed in the product tables are specified in N/mm<sup>2</sup>.

**You can find additional notes in our printed operating instructions for wire ropes or in the electronic version on our website.**

We reserve the right to make technical changes and we accept no liability for typographical and printing errors.

### SPECIAL ROPE DESIGNATIONS

GT · 16-4 · Z · P

GT	16-4	Z	P
			Plastified
			Compacted
			Type of construction (-1, -2, -3, ...)
			Number of outer strands
			LKING STEEL LIMITED Wire Rope

# EXPLANATION OF SYMBOLS

## FIELDS OF APPLICATION

	Revolving towercrane		Forestry		Optimized quality
	Grabbing crane		Lift		Rotation-resistant
	Telescoping crane		Cable car		With swivel
	Mobile crane		Snow groomer		Compacted
	Container crane (STS)		Stone saw		Plastic padding
	Gantry crane (RTG/RMG)		Stage technology		Double parallel lay
	Lattice boom crane		Automotive industry		Special lubrication
	Bridge crane		Bicycle industry		
	Offshore crane		Medical technology		
	Straddle carrier		Jewellery industry		
	Excavating bucket/ Scrapers				
	Harbour crane				

# QUALITY MANAGEMENT

## KNOW-HOW AND QUALITY

Thanks to our years of experience and the close cooperation with our customers, we are familiar with a number of areas of applications for wire ropes. We have often been able to bring about significant improvements in the application by making technical modifications. However, we are unable to make explicit statements about selecting the correct rope due to the sheer number of applications possible. We will gladly assist you in finding the right rope in consideration of the special features of your equipment. Please feel free to contact us.

## CERTIFICATION



The safety and quality of our products are a matter of course. Independent of the actual application, each product is subject to the same high quality standards that are defined in our certified quality assurance system.



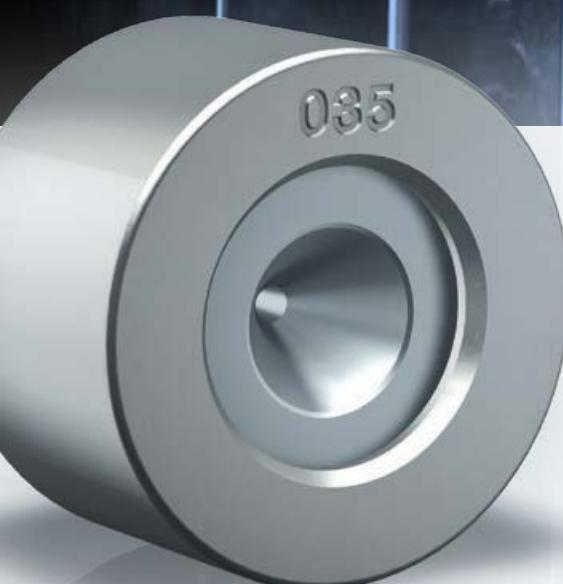
Constant inspections by **LLOYD'S REGISTER QUALITY ASSURANCE** ensure compliance with the specifications of the quality assurance system at both of our locations.

Within our quality management system, we place great value on continuously improving all processes. The insights gained from our close cooperation with our customers on site and from various scientific research institutions, the ideas from the plant suggestions scheme, and the results from our laboratory and the final inspection flow together into the current manufacturing process after critical analysis.

So you can be sure that products from LKING STEEL LIMITED are always reliable. We promise you that.



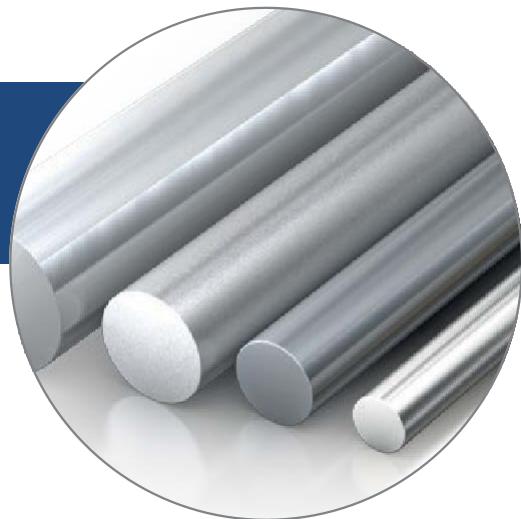
# WIRES



## WIRES FROM OUR OWN DRAWING MILL: TRADITION SINCE 1996

We produced our first wires 1996 in our own drawing mill in the plant in Bad Iburg. A lot has happened since. Today, thanks to the experience we have gathered in the field for over 20 years, we are competent partners and we produce steel and stainless steel wires with state-of-the-art machines.

That's because reliability, quality and the quick availability of the wires used are decisive in the area of technology in particular. The wires from LKING STEEL LIMITED make the fine difference here!



■ Manufactured according to  
wire standard EN 10264

#### Uncoated

Strength N/mm <sup>2</sup>	MBF 1370	MBF 1570	MBF 1770	MBF 1960	MBF 2160
min. Ø	0.25	0.20	0.20	0.20	0.20
max. Ø	3.50	3.50	3.20	2.70	2.30

#### Zinc-coated class B

Strength N/mm <sup>2</sup>	MBF 1370	MBF 1570	MBF 1770	MBF 1960	MBF 2160
min. Ø	0.30	0.20	0.20	0.11	0.11
max. Ø	3.50	3.50	3.20	2.70	2.30

#### Phosphate-coated

Strength N/mm <sup>2</sup>	MBF 1370	MBF 1570	MBF 1770	MBF 1960	MBF 2160
min. Ø	0.25	0.20	0.20	0.20	0.20
max. Ø	3.50	3.50	3.20	2.70	2.30



Breaking test in our material laboratory

#### WIRES FOR EVERY APPLICATION IN THE HIGHEST QUALITY

We are able to guarantee the highest quality in the production of our wires because we have continuously improved our production processes over many decades. Today our experienced, long-term employees work with a process-controlled manufacturing procedure.

With our individual production possibilities, we are able to offer you our wires in completely different variants, adjusted to your specific application:

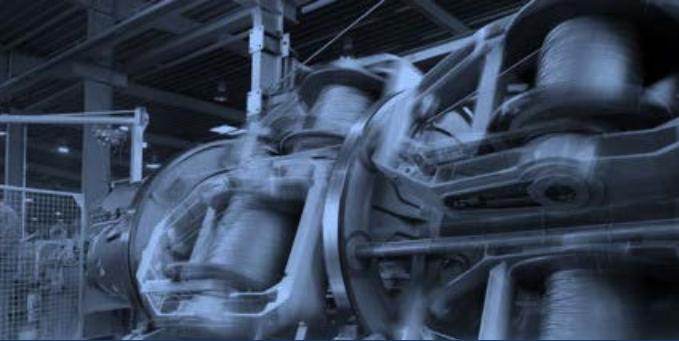
our offering includes various wire thicknesses, surfaces, tensile strengths and spool sizes.

In our wire warehouse, you can find all common wire thickness with bright, phosphate-coated and zinc-coated finishes. In addition, in our manufacturing process, we pay very close attention to consistent quality and repeatedly check all wires for strength, torsion, bending and, if applicable, zinc coating.

If requested, we can issue a certificate for every wire.

#### NOTE

Zinc-coated class A as well as additional diameter and special products upon request.



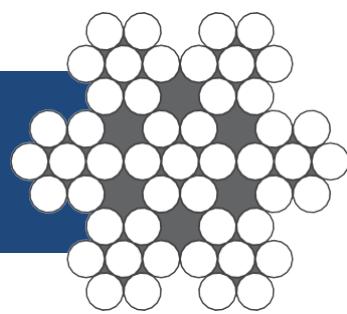
# STAINLESS STEEL ROPES



**RUST-FREE AND  
WEATHER-RESISTANT:  
STAINLESS STEEL ROPES  
PROVE THEIR WORTH  
OUTDOORS**

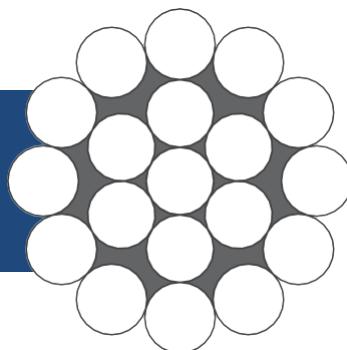
It makes sense to use non-rusting stainless steel material in a variety of applications. With stainless steel, a long service can be guaranteed even in extreme areas of application.

Stainless steel ropes are used primarily outdoors or near chemicals or water. Stainless steel ropes also enjoy great popularity indoors due to their appealing surface.

**Ø 1 – 10 mm****6 x 7-WSC**

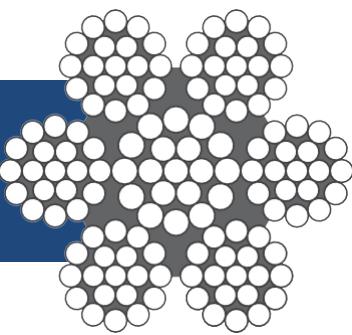
mm
1
2
3
4
5
6
7
8
9
10

	Weight	MBF 1570	MBF 1770
mm	kg/100 m	kN	kN
1	0.38	0.56	0.64
2	1.54	2.25	2.54
3	3.46	5.07	5.72
4	6.14	9.02	10.2
5	9.60	14.1	15.9
6	13.8	20.3	22.9
7	18.8	27.6	31.1
8	24.6	36.1	40.7
9	31.1	45.7	51.5
10	38.4	56.4	63.5

**Ø 1 – 10 mm****1 x 19**

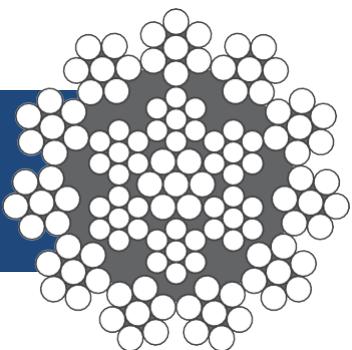
mm
1
2
3
4
5
6
7
8
9
10

	Weight	MBF 1570	MBF 1770
mm	kg/100 m	kN	kN
1	0.49	0.83	0.93
2	1.94	3.30	3.72
3	4.37	7.43	8.38
4	7.76	13.2	14.9
5	12.1	20.6	23.3
6	17.5	29.7	33.5
7	23.8	40.5	45.6
8	31.0	52.8	59.6
9	39.3	66.9	75.4
10	48.5	82.6	93.1

**Ø 3 – 10 mm****6 x19M-WSC**

mm
3
4
5
6
7
8
9
10

	Weight	MBF 1570	MBF 1770
mm	kg/100 m	kN	kN
3	3.43	5.12	5.77
4	6.10	9.09	10.3
5	9.53	14.2	16.0
6	13.7	20.5	23.1
7	18.7	27.8	31.4
8	24.4	36.4	41.0
9	30.9	46.0	51.9
10	38.1	56.8	64.1

**Ø 3 – 10 mm****17 x 7-WSC**

mm
3
4
5
6
7
8
9
10

	Weight	MBF 1570	MBF 1770
mm	kg/100 m	kN	kN
3	3.61	4.63	5.23
4	6.42	8.24	9.29
5	10.0	12.9	14.5
6	14.4	18.5	20.9
7	19.6	25.2	28.4
8	25.7	33.0	37.2
9	32.5	41.7	47.0
10	40.1	51.5	58.1

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





# STANDARD ROPES

**SPIRAL ROPES  
AIRCRAFT CABLES  
STRANDED ROPES  
COMPACTED STRAND ROPES  
LARGE DIAMETER ROPES**



## WE ARE ON OUR MOST FAMILIAR GROUND HERE!

For many decades we have produced various standard wire ropes of steel, stainless steel, brass and iron. With our standard ropes, you profit from our years of experience and high level of quality just like you do with our individual developments. And here too we strive to continuously improve and to develop new manufacturing technologies.

## STANDARD WIRE ROPES ACCORDING TO EN SPECIFICATIONS FOR YOUR APPLICATION

In our ropery, we produce ropes in a variety of designs, not just special ropes for individual applications. Standard ropes of standardised rope types according to EN specifications are also part of our portfolio. The normalised constructions of the standard wire ropes are used in various areas of application.

## FOR EXAMPLE:

- in various crane applications
- in rope winches and rope pulling devices
- in architecture
- as lifting slings for hoisting applications
- in mining and machine construction
- in shipping
- in the medical field
- ... and in many other areas

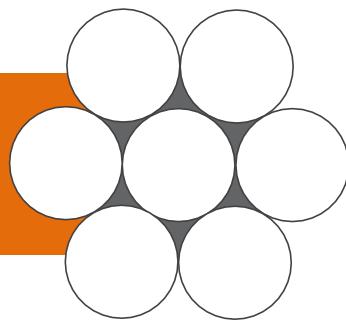
The ropes are optionally manufactured with steel cores or with fibre cores (natural fibres or synthetic).

We offer all ropes dry, lightly lubricated or heavily lubricated to meet the needs of your application. We will gladly advise you on our oils and greases to help you to select the right lubricant.

**Ø 0.6 – 6 mm****1 x 7**

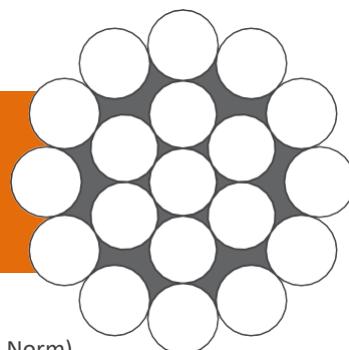
■ GB/T20118

(Up to 2 mm according to Norm)

**Ø 1 – 10 mm****1 x 19**

■ GB/T20118

(Up to 4 mm according to Norm)



<b>Ø</b>	<b>Weight</b>		<b>MBF 1960</b>	<b>MBF 2160</b>
	<b>mm</b>	<b>kg/100 m</b>	<b>kN</b>	<b>kN</b>
0.6		0.18	0.37	0.41
0.8		0.31	0.67	0.73
1		0.49	1.04	1.15
1.5		1.10	2.34	2.58
2		1.96	4.16	4.58
2.5		3.06	6.49	7.16
3		4.40	9.35	10.3
3.5		5.99	12.7	14.0
4		7.82	16.6	18.3
4.5		9.90	21.0	23.2
5		12.2	26.0	28.6
6		17.6	37.4	41.2

<b>Ø</b>	<b>Weight</b>		<b>MBF 1960</b>	<b>MBF 2160</b>
	<b>mm</b>	<b>kg/100 m</b>	<b>kN</b>	<b>kN</b>
1		0.49	1.03	1.14
1.25		0.76	1.61	1.77
1.5		1.09	2.32	2.56
2		1.94	4.12	4.54
2.5		3.03	6.44	7.10
3		4.37	9.28	10.2
3.5		5.94	12.6	13.9
4		7.76	16.5	18.2
5		12.1	25.8	28.4
6		17.5	37.1	40.9
7		23.8	50.5	55.7
8		31.0	66.0	72.7
9		39.3	83.5	92.0
10		48.5	103	114

**NOTES**

Diameter tolerances and limiting deviation can be found in the current part of the DIN EN12385.

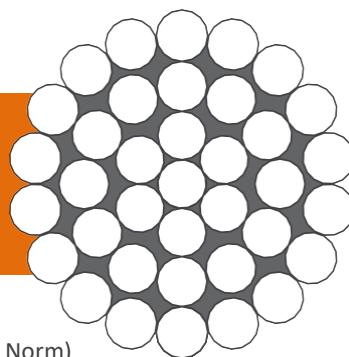
Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





**Ø 3 – 14 mm**

**1 x 37**



■ GB/T20118  
(Up to 5 mm according to Norm)

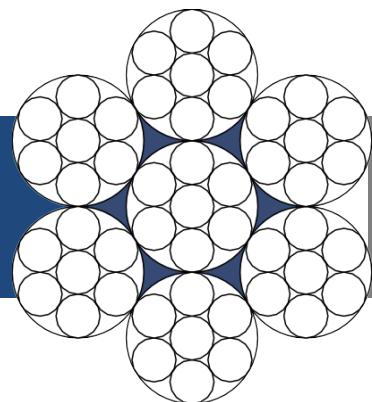
<b>Ø</b> <b>mm</b>	<b>Weight</b> <b>kg/100 m</b>	<b>MBF</b>	
		<b>1960</b> <b>kN</b>	<b>2160</b> <b>kN</b>
<b>3</b>	4.36	9.05	9.97
<b>4</b>	7.74	16.1	17.7
<b>5</b>	12.1	25.1	27.7
<b>6</b>	17.4	36.2	39.9
<b>7</b>	23.7	49.3	54.3
<b>8</b>	31.0	64.3	70.9
<b>9</b>	39.2	81.4	89.7
<b>10</b>	48.4	101	111
<b>12</b>	69.7	145	160
<b>14</b>	94.8	197	217

## NOTES

Diameter tolerances and limiting deviation can be found in the current part of the DIN EN12385.

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".



**6 x 7****Ø 1.8 – 5.4mm**

YB/T 5197  
Rope type 6 x 7

Rope Dia.mm	Tensile strength (Mpa)	MBL(KN)	Weight (kg/100m)
Nominal Dia.	Tolerance%		
1.8	+10 0	2.5	1.50
2.15		3.6	2.20
2.5	+8 0	5	3.00
3.05		7.3	4.40
3.6		10.1	6.20
4.5	+7 0	15	9.60
5.4		20.4	13.80

HIGHER CORROSION RESISTANCE  
HIGHER BREAK STRENGTH  
HIGH STRENGTH AND FLEXIBILITY



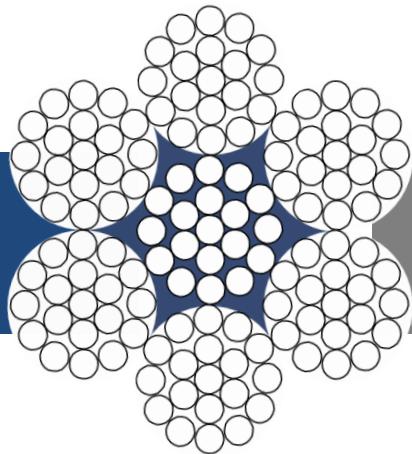
#### Product packaging



- LKS WIRE provides surface coating service. PE and PVC coating can be used on aircraft control wire ropes, stainless wire ropes, wire ropes for mode structure and other ropes which surface coating is needed. Color and thickness of the rope can be custom made.



7X19

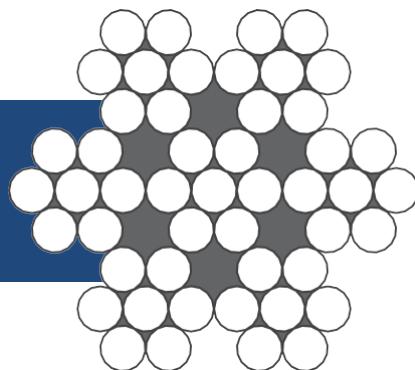
 $\varnothing 1.8 - 5.4\text{mm}$ 

- YB/T 5197
- Rope type 6 x7

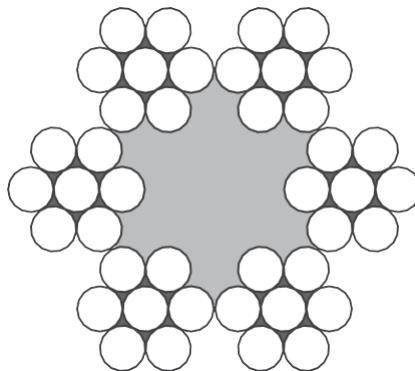
Rope Dia.mm	Tensile strength (Mpa)	MBL(KN)	Weight (kg/100m)
Nominal Dia.	Tolerance%		
3		2060	4.20
3.2	+8 0	2160	4.30
3.6			6.00
4.2	+7	1770	8.20
5.1	0		12.10
6		23.7	16.70
7.5		37.1	26.00
8.25	+5 0	1670	32.00
9		53.4	37.60
9.75		62.6	44.10



- LKS WIRE provides surface coating service. PE and PVC coating can be used on aircraft control wire ropes, stainless wire ropes, wire ropes for mode structure and other ropes which surface coating is needed. Color and thickness of the rope can be custom made.

**6 x 7** **$\varnothing$  1.5 – 8 mm**

- GB/T20118
- Rope type 6 x 7

**6 x 7-WSC****6 x 7-FC**

<b>Ø</b>	<b>WSC</b>			<b>FC</b>		
	<b>mm</b>	<b>Weight</b> <b>kg/100 m</b>	<b>MBF 1960</b> <b>kN</b>	<b>MBF 2160</b> <b>kN</b>	<b>Weight</b> <b>kg/100 m</b>	<b>MBF 1960</b> <b>kN</b>
1.5		0.86	1.58	1.74	0.78	1.46
2		1.54	2.81	3.10	1.38	2.60
2.5		2.40	4.40	4.85	2.16	4.07
3		3.46	6.33	6.98	3.11	5.86
3.5		4.70	8.62	9.50	4.23	7.97
4		6.14	11.3	12.4	5.52	10.4
5		9.60	17.6	19.4	8.63	16.3
6		13.8	25.3	27.9	12.4	23.4
7		18.8	34.5	38.0	16.9	31.9
8		24.6	45.0	49.6	22.1	41.6
						45.9

**NOTES**

Diameter tolerances and limiting deviation can be found in the current part of the DIN EN12385.

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".

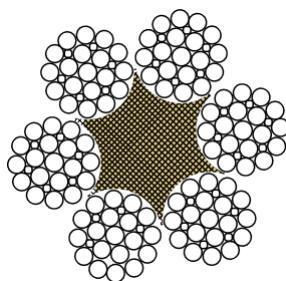


**6X25Fi+FC、6X25Fi+IWR、  
6X26WS+FC、6X26WS+IWR...**

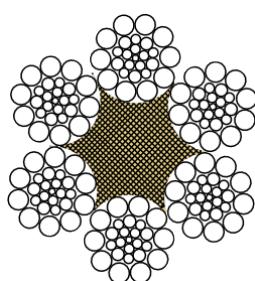
$\varnothing 8mm-120mm$

GB/T20118|GB/T8918

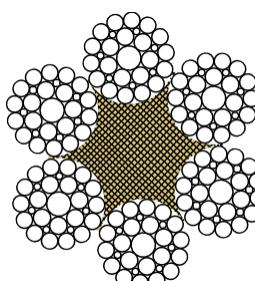
STRANDED ROPES



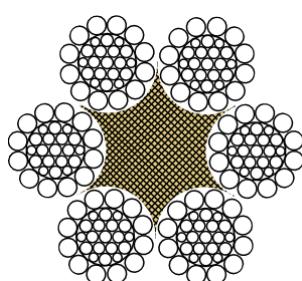
**6X25Fi+FC**



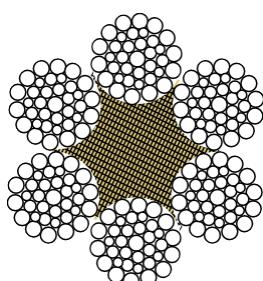
**6X26WS+FC**



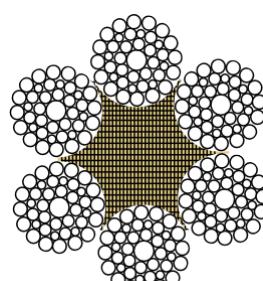
**6X29Fi+FC**



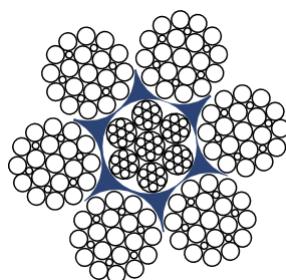
**6X31WS+FC**



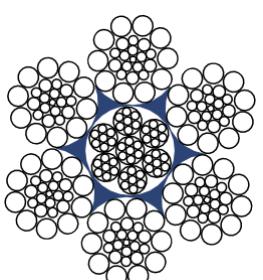
**6X36WS+FC**



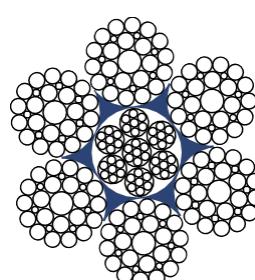
**6X41WS+FC**



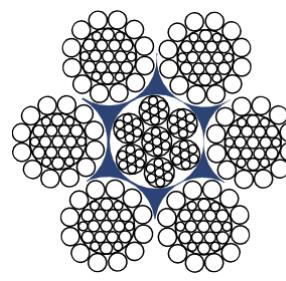
**6X25Fi+IWR**



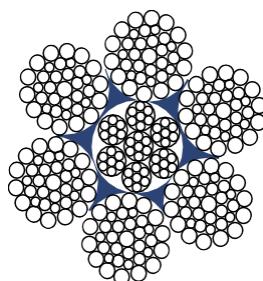
**6X26WS+IWR**



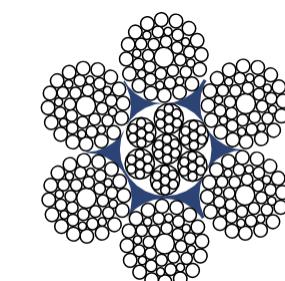
**6X29Fi+IWR**



**6X31WS+IWR**



**6X36WS+IWR**



**6X41WS+IWR**

#### NOTES

Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".



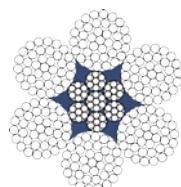
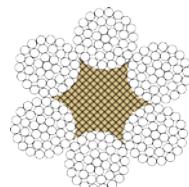
钢丝绳公称直径 Nominal Diameter	钢丝绳近似重量 Approx.Weight		钢丝绳最小破断拉力 ( KN ) Minimum Breaking Load of Rope ( KN )								
	kg/100m		1670MPa		1770MPa		1870MPa		1960MPa		
mm	D	FC	IWR	FC	IWR	FC	IWR	FC	IWR	FC	IWR
	8	24.3	26.8	35.3	38.0	37.4	40.3	39.5	42.6	41.4	44.7
	9	30.8	33.9	44.6	48.2	47.3	51.0	50.0	53.9	52.4	56.5
	10	38.0	41.8	55.1	59.5	58.4	63.0	61.7	66.6	64.7	69.8
	11	46.0	50.6	66.7	71.9	70.7	76.2	74.7	80.6	78.3	84.4
	12	54.7	60.2	79.4	85.6	84.1	90.7	88.9	95.9	93.1	100
	14	74.5	81.9	108	117	114	124	121	130	127	137
	16	97.3	107	141	152	150	161	158	170	166	179
	18	123	135	179	193	189	204	200	216	210	226
	20	152	167	220	238	234	252	247	266	259	279
	22	184	202	267	288	283	305	299	322	313	338
	24	219	241	317	342	336	363	355	383	373	402
	26	257	283	373	402	395	426	417	450	437	472
	28	298	328	432	466	458	494	484	522	507	547
	30	342	376	496	535	526	567	555	599	582	628
	32	389	428	564	609	598	645	632	682	662	715
	34	439	483	637	687	675	728	713	770	748	807
	36	492	542	714	770	757	817	800	863	838	904
	38	549	604	796	858	843	910	891	961	934	1008
	40	608	669	882	951	935	1010	987	1070	1030	1120
	42	670	737	972	1050	1030	1110	1090	1170	1140	1230
	44	736	809	1070	1150	1130	1220	1190	1290	1250	1350
	46	804	884	1170	1260	1240	1330	1310	1410	1370	1480
	48	876	963	1270	1370	1350	1450	1420	1530	1490	1610
	50	950	1050	1380	1490	1460	1580	1540	1660	1620	1740
	52	1030	1130	1490	1610	1580	1700	1670	1800	1750	1890
	54	1110	1220	1610	1730	1700	1840	1800	1940	1890	2030
	56	1190	1310	1730	1860	1830	1980	1940	2090	2030	2190
	58	1280	1410	1850	2000	1960	2120	2080	2240	2180	2350
	60	1370	1500	1980	2140	2100	2270	2220	2400	2330	2510
	62	1460	1610	2120	2290	2250	2420	2370	2560	2490	2680
	64	1560	1710	2260	2440	2390	2580	2530	2730	2650	2860
	66	1660	1820	2400	2590	2540	2740	2690	2900	2820	3040
	68	1760	1930	2550	2750	2700	2910	2850	3080	2990	3230
	70	1860	2050	2700	2910	2860	3090	3020	3260	3170	3420
	72	1970	2170	2860	3080	3030	3270	3200	3450	3350	3620
	74	2080	2290	3020	3260	3200	3450	3380	3650	3540	3820
	76	2190	2410	3180	3430	3370	3640	3560	3850	3740	4030
	78	2310	2540	3350	3620	3550	3830	3750	4050	3940	4250
	80	2430	2680	3530	3800	3740	4030	3950	4260	4140	4470
	85	2750	3020	3980	4300	4220	4550	4460	4810	4670	5040
	90	3080	3390	4460	4820	4730	5100	5000	5390	5240	5650
	95	3430	3770	4970	5370	5270	5690	5570	6010	5840	6300
	100	3800	4180	5510	5950	5840	6300	6170	6660	6470	6980
	105	4190	4610	6080	6550	6440	6950	6800	7340	7130	7690
	110	4600	5060	6670	7190	7070	7620	7470	8060	7830	8440
	115	5030	5530	7290	7860	7720	8330	8160	8800	8550	9230
	120	5470	6020	7940	8560	8410	9070	8890	9590	9310	10000

#### NOTES

Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





6X37+FC

6X37+IWR

钢丝绳公称直径  
Nominal Diameter

钢丝绳近似重量  
Approx.Weight

钢丝绳最小破断拉力 ( KN )  
Minimun Breaking Load of Rope(KN)

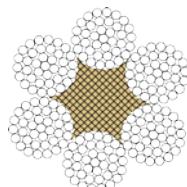
mm	Kg/100m		1670MPa		1770MPa		1870MPa		1960MPa		
	D	FC	IWR	FC	IWR	FC	IWR	FC	IWR	FC	IWR
5	8.65	10		12.3	13.3	13.1	14.1	13.8	14.9	14.5	15.6
6	12.5	14.4		17.7	19.2	18.8	20.3	19.9	21.5	20.8	22.5
7	17	19.6		24.1	26.1	25.6	27.7	27	29.2	28.3	30.6
8	22.1	25.6		31.5	34.1	33.4	36.1	35.3	38.2	37	40
9	28	32.4		39.9	43.2	42.3	45.7	44.7	48.3	46.8	50.6
10	34.6	40		49.3	53.3	52.2	56.5	55.2	59.7	57.8	62.5
11	41.9	48.4		59.6	64.5	63.2	68.3	66.7	72.2	70	75.7
12	49.8	57.6		70.9	76.7	75.2	81.3	79.4	85.9	83.3	90
13	58.5	67.6		83.3	90	88.2	95.4	93.2	101	97.7	106
14	67.8	78.4		96.6	104	102	111	108	117	113	123
15	77.9	90		111	120	118	127	124	134	130	141
16	88.6	102		126	136	134	145	141	153	148	160
18	112	130		160	173	169	183	179	193	187	203
20	138	160		197	213	209	226	221	239	231	250
22	168	194		238	258	253	273	267	289	280	303
24	199	230		284	307	301	325	318	344	333	360
26	234	270		333	360	353	382	373	403	391	423
28	271	314		386	418	409	443	433	468	453	490
30	311	360		443	480	470	508	497	537	520	563
32	354	410		505	546	535	578	565	611	592	640
34	400	462		570	616	604	653	638	690	668	723
36	448	518		639	690	677	732	715	773	749	810
38	500	578		711	769	754	815	797	861	835	903
40	554	640		788	852	835	903	883	954	925	1000
42	610	706		869	940	921	996	973	1052	1020	1100
44	670	774		954	1031	1011	1093	1068	1155	1120	1210
46	732	846		1040	1130	1100	1190	1170	1260	1220	1320
48	797	922		1140	1230	1200	1300	1270	1370	1330	1440
50	865	1000		1230	1330	1310	1410	1380	1490	1450	1560

**NOTES**

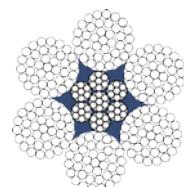
Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





6X37+FC



6X37+IWR

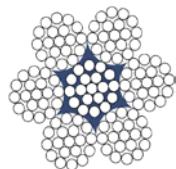
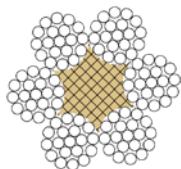
钢丝绳公称直径 Nominal Diameter mm	钢丝绳近似重量 Approx.Weight Kg/100m		钢丝绳最小破断拉力 ( KN ) Minimun Breaking Load of Rope(KN)							
	FC	IWR	1670MPa		1770MPa		1870MPa		1960MPa	
D	FC	IWR	FC	IWR	FC	IWR	FC	IWR	FC	IWR
50	865	1000	1230	1330	1310	1410	1380	1490	1450	1560
52	936	1080	1330	1440	1410	1530	1490	1610	1560	1690
54	1010	1170	1440	1550	1520	1650	1610	1740	1690	1820
56	1090	1250	1550	1670	1640	1770	1730	1870	1810	1960
58	1160	1350	1660	1790	1760	1900	1860	2010	1950	2100
60	1250	1440	1770	1920	1880	2030	1990	2150	2080	2250
62	1330	1540	1890	2050	2010	2170	2120	2290	2220	2400
64	1420	1640	2020	2180	2140	2310	2260	2440	2370	2560
66	1510	1740	2150	2320	2270	2460	2400	2600	2520	2720
68	1600	1850	2280	2460	2410	2610	2550	2760	2670	2890
70	1700	1960	2410	2610	2560	2770	2700	2920	2830	3060
72	1790	2070	2550	2760	2710	2930	2860	3090	3000	3240
74	1890	2190	2700	2920	2860	3090	3020	3270	3170	3420
76	2000	2310	2850	3080	3020	3260	3190	3450	3340	3610
78	2110	2430	3000	3240	3180	3440	3360	3630	3520	3800
80	2210	2560	3150	3410	3340	3610	3530	3820	3700	4000
85	2500	2890	3560	3850	3770	4080	3990	4310	4180	4520
90	2800	3240	3990	4320	4230	4570	4470	4830	4680	5060
95	3120	3610	4450	4810	4710	5100	4980	5380	5220	5640
100	3460	4000	4930	5330	5220	5650	5520	5970	5780	6250
105	3810	4410	5430	5870	5760	6230	6080	6580	6370	6890
110	4190	4840	5960	6450	6320	6830	6680	7220	7000	7570
115	4580	5290	6520	7050	6910	7470	7300	7890	7650	8270
120	4980	5760	7090	7670	7520	8130	7940	8590	8330	9000

**NOTES**

Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".



6x19+F  
C

6x19+IWR

钢丝绳公称直径  
Nominal Diameter      钢丝绳近似重量  
Approx. Weight      钢丝绳最小破断拉力 ( KN )  
Minimun Breaking Load of Rope(KN)

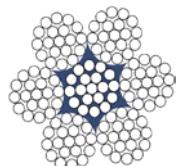
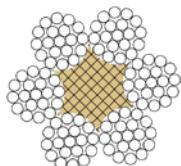
mm	Kg/100m		1670MPa		1770MPa		1870MPa		1960MPa		
	D	FC	IWS	FC	IWS	FC	IWS	FC	IWS	FC	IWS
3	3.16	3.6		4.61	4.99	4.89	5.29	5.17	5.59	5.42	5.86
4	5.62	6.4		8.2	8.87	8.69	9.4	9.19	9.93	9.63	10.4
5	8.78	10		12.8	13.9	13.6	14.7	14.4	15.5	15	16.3
6	12.6	14.4		18.5	20	19.6	21.2	20.7	22.4	21.7	23.4
7	17.2	19.6		25.1	27.2	26.6	28.8	28.1	30.4	29.5	31.9
8	22.5	25.6		32.8	35.5	34.8	37.6	36.7	39.7	38.5	41.7
9	28.4	32.4		41.5	44.9	44	47.6	46.5	50.3	48.7	52.7
10	35.1	40		51.3	55.4	54.3	58.8	57.4	62.1	60.2	65.1
11	42.5	48.4		62	67.1	65.8	71.1	69.5	75.1	72.8	78.7
12	50.5	57.6		73.8	79.8	78.2	84.6	82.7	89.4	86.7	93.7
13	59.3	67.6		86.6	93.7	91.8	99.3	97	105	102	110
14	68.8	78.4		101	109	107	115	113	122	118	128
15	79	90		115	125	122	132	129	140	135	146
16	89.9	102		131	142	139	150	147	159	154	167
17	101	116		148	160	157	170	166	179	174	188
18	114	130		166	180	176	190	186	201	195	211
20	140	160		205	222	217	235	230	248	241	260
22	170	194		248	268	263	284	278	301	291	315
24	202	230		295	319	313	339	331	358	347	375
26	237	270		347	375	367	397	388	420	407	440
28	275	314		402	435	426	461	450	487	472	510

## NOTES

Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".



6x19+F  
C

6x19+IWR

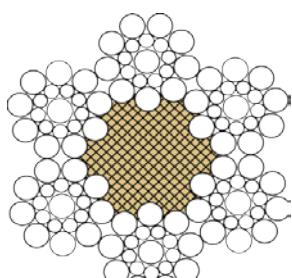
钢丝绳公称直径 Nominal Diameter	钢丝绳近似重量 Approx. Weight		钢丝绳最小破断拉力 ( KN ) Minimun Breaking Load of Rope(KN)									
	mm		Kg/100m		1670MPa		1770MPa		1870MPa		1960MPa	
D	FC	IWS	FC	IWS	FC	IWS	FC	IWS	FC	IWS	FC	IWS
28	275	314	402	435	426	461	450	487	472	510		
30	316	360	461	499	489	529	517	559	542	586		
32	359	410	525	568	556	602	588	636	616	666		
34	406	462	593	641	628	679	664	718	696	752		
36	455	518	664	719	704	762	744	805	780	843		
38	507	578	740	801	785	849	829	897	869	940		
40	562	640	820	887	869	940	919	993	963	1040		
42	619	706	904	978	959	1040	1010	1100	1060	1150		
44	680	774	993	1070	1050	1140	1110	1200	1160	1260		
46	743	846	1080	1170	1150	1240	1210	1310	1270	1380		
48	809	922	1180	1280	1250	1350	1320	1430	1390	1500		
50	878	1000	1280	1390	1360	1470	1440	1550	1500	1630		
52	949	1080	1390	1500	1470	1590	1550	1680	1630	1760		
54	1024	1170	1500	1620	1580	1710	1670	1810	1750	1900		
56	1100	1250	1610	1740	1700	1840	1800	1950	1890	2040		
58	1180	1350	1720	1870	1830	1980	1930	2090	2020	2190		
60	1260	1440	1850	2000	1960	2120	2070	2240	2170	2340		
62	1350	1540	1970	2130	2090	2260	2210	2390	2310	2500		
64	1440	1640	2100	2270	2230	2410	2350	2540	2460	2670		
66	1530	1740	2230	2420	2370	2560	2500	2700	2620	2830		
68	1620	1850	2370	2560	2510	2720	2650	2870	2780	3010		
70	1720	1960	2510	2720	2660	2880	2810	3040	2950	3190		
72	1820	2070	2660	2870	2820	3050	2980	3220	3120	3370		
74	1920	2190	2810	3040	2980	3220	3140	3400	3300	3560		
76	2030	2310	2960	3200	3140	3390	3320	3590	3480	3760		
78	2140	2430	3120	3370	3310	3580	3490	3780	3660	3960		
80	2250	2560	3280	3550	3480	3760	3670	3970	3850	4160		

**NOTES**

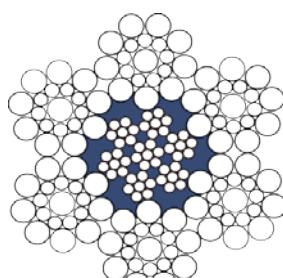
Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".

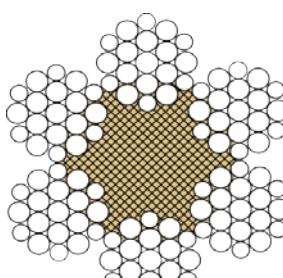




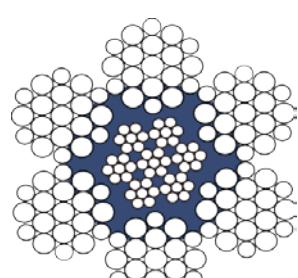
6X19S+FC



6X19S+IWR



6X19W+FC



6X19W+IWR

钢丝绳公称直径  
Nominal Diameter

钢丝绳近似重量  
Approx. Weight

钢丝绳最小破断拉力 ( KN )  
Minimum Breaking Load of Rope(KN)

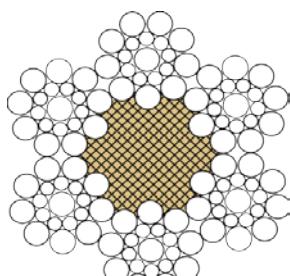
mm D	Kg/100m		1670MPa		1770MPa		1870MPa		1960MPa	
	FC	IWR								
5	9.22	10.1	13.8	14.9	14.6	15.8	15.4	16.6	16.2	17.4
6	13.3	14.6	19.8	21.4	21	22.7	22.2	24	23.3	25.1
7	18.1	19.9	27	29.1	28.6	30.9	30.2	32.6	31.7	34.2
8	23.6	25.9	35.3	38	37.4	40.3	39.5	42.6	41.4	44.7
9	29.9	32.8	44.6	48.2	47.3	51	50	53.9	52.4	56.5
10	36.9	40.5	55.1	59.5	58.4	63	61.7	66.6	64.7	69.8
11	44.6	49.1	66.7	71.9	70.7	76.2	74.7	80.6	78.3	84.4
12	53.1	58.4	79.4	85.6	84.1	90.7	88.9	95.9	93.1	101
13	62.3	68.5	93.1	101	98.7	107	104	113	109	118
14	72.2	79.5	108	117	115	124	121	131	127	137
15	82.9	91.2	124	134	131	142	139	150	146	157
16	94.4	104	141	152	150	161	158	170	166	179
18	119	131	179	193	189	204	200	216	210	226
19	133	146	199	215	211	228	223	240	234	252
20	147	162	220	238	234	252	247	266	259	279
22	178	196	267	288	283	305	299	322	313	338
24	212	234	317	342	336	363	355	384	373	402
26	249	274	373	402	395	426	417	450	437	472
28	289	318	432	466	458	494	484	522	507	547
30	332	365	496	535	526	567	555	599	582	628
32	377	415	564	609	598	645	632	682	662	715
34	426	469	637	687	675	728	713	770	748	807
36	478	526	714	771	757	817	800	863	838	904

#### NOTES

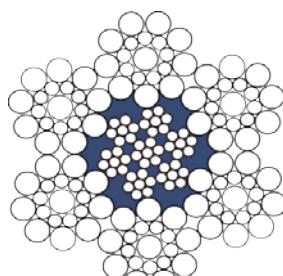
Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".

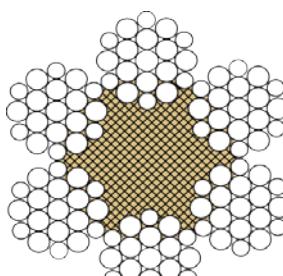




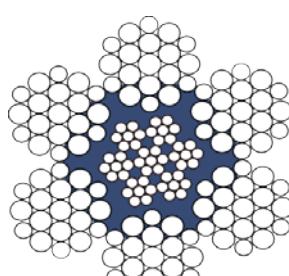
6X19S+FC



6X19S+IWR



6X19W+FC



6X19W+IWR

钢丝绳公称直径  
Nominal Diameter

钢丝绳近似重量  
Approx. Weight

钢丝绳最小破断拉力 ( KN )  
Minimun Breaking Load of Rope(KN)

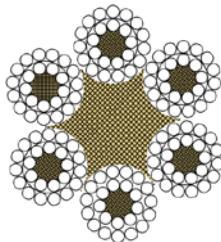
mm D	Kg/100m		1670MPa		1770MPa		1870MPa		1960MPa	
	FC	IWR								
36	478	526	714	771	757	817	800	863	838	904
38	532	586	796	859	843	910	891	961	934	1010
40	590	649	882	951	935	1010	987	1070	1030	1120
42	650	715	972	1050	1030	1110	1090	1170	1140	1230
44	714	785	1070	1150	1130	1220	1190	1290	1250	1350
46	780	858	1170	1260	1240	1330	1310	1410	1370	1480
48	849	934	1270	1370	1350	1450	1420	1530	1490	1610
50	922	1010	1380	1490	1460	1580	1540	1660	1620	1740
52	997	1100	1490	1610	1580	1700	1670	1800	1750	1890
54	1080	1180	1610	1730	1700	1840	1800	1940	1890	2030
56	1160	1270	1730	1860	1830	1980	1940	2090	2030	2190
58	1240	1360	1850	2000	1960	2120	2080	2240	2180	2350
60	1330	1460	1980	2140	2100	2270	2220	2400	2330	2510
62	1420	1560	2120	2290	2250	2420	2370	2560	2490	2680
64	1510	1660	2260	2440	2390	2580	2530	2730	2650	2860
66	1610	1770	2400	2590	2540	2740	2690	2900	2820	3040
68	1700	1870	2550	2750	2700	2910	2850	3080	2990	3230
70	1810	1990	2700	2910	2860	3090	3020	3260	3170	3420
72	1910	2100	2860	3080	3030	3270	3200	3450	3350	3620
74	2020	2220	3020	3260	3200	3450	3380	3650	3540	3820
76	2130	2340	3180	3430	3370	3640	3560	3850	3740	4030
78	2240	2470	3350	3620	3550	3830	3750	4050	3940	4250
80	2360	2590	3530	3800	3740	4030	3950	4260	4140	4470

#### NOTES

Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





6X24+7FC

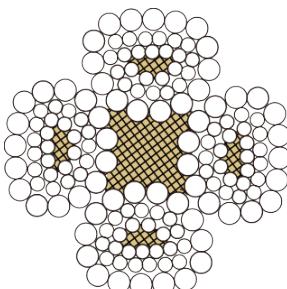
Dia. ( mm )	Approx weight (kg/100m)	钢丝绳最小破断拉力Minimum Breaking Load ( KN )		
		1470Mpa	1570Mpa	1670Mpa
8	20.40	26.30	28.10	29.90
9	25.80	33.30	35.60	37.90
10	31.80	41.20	44.00	46.80
11	38.50	49.80	53.20	56.60
12	45.80	59.30	63.30	67.30
13	53.70	69.60	74.30	79.00
14	62.30	80.70	86.20	91.60
16	81.40	105.00	113.00	120.00
18	103.00	133.00	142.00	152.00
20	127.00	165.00	176.00	187.00
22	154.00	199.00	213.00	226.00
24	183.00	237.00	253.00	269.00
26	215.00	278.00	297.00	316.00
28	249.00	323.00	345.00	367.00
30	286.00	370.00	396.00	421.00
32	326.00	421.00	450.00	479.00
34	368.00	476.00	508.00	541.00
36	412.00	533.00	570.00	606.00
38	459.00	594.00	635.00	675.00
40	509.00	659.00	703.00	748.00

**NOTES**

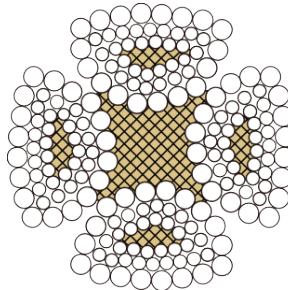
Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





4VX39S+5FC



4VX48S+5FC

钢丝绳公称直径  
Nominal Diameter

钢丝绳近似重量  
Approx. Weight

钢丝绳最小破断拉力 ( KN )  
Minimum Breaking Load of Rope ( KN )

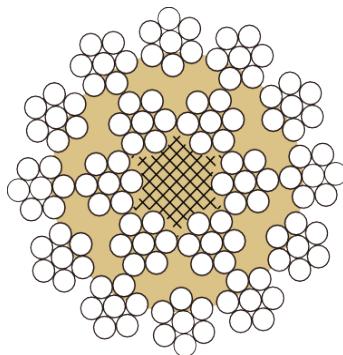
mm	Kg/100m	1670MPa	1770MPa	1870MPa	1960MPa	2160MPa
8	26.2	38.5	40.8	43.1	45.2	49.8
10	41	60.1	63.7	67.3	70.6	77.8
12	59	86.6	91.8	96.9	102	112
14	80.4	118	125	132	138	152
16	105	154	163	172	181	199
18	133	195	206	218	229	252
20	164	240	255	269	282	311
22	198	291	308	326	342	376
24	236	346	367	388	406	448
26	277	406	431	455	477	526
28	321	471	500	528	553	610
30	369	541	573	606	635	700
32	420	616	652	689	723	796
34	474	695	737	778	816	899
36	531	779	826	872	914	1010
38	592	868	920	972	1020	1120
40	656	962	1020	1080	1130	1240
42	723	1060	1120	1190	1240	1370
44	794	1160	1230	1300	1370	1510
46	868	1270	1350	1420	1490	1650
48	945	1390	1470	1550	1630	1790
50	1030	1500	1590	1680	1760	1940

#### NOTES

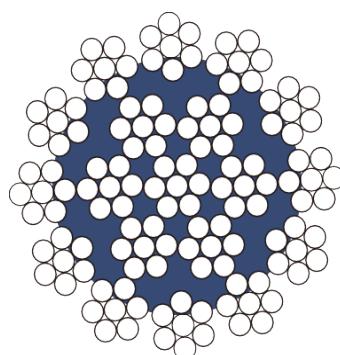
Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".

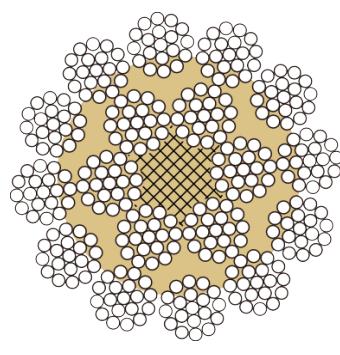




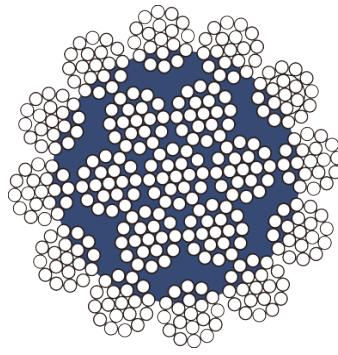
18X7+FC



18X7+IWS



18X19+FC



18X19+IWS

钢丝绳公称  
直径  
Nominal  
Diameter

钢丝绳近似  
重量  
Approx.  
Weight

钢丝绳最小破断拉力 ( KN )  
Minimum Breaking Load of Rope ( KN )

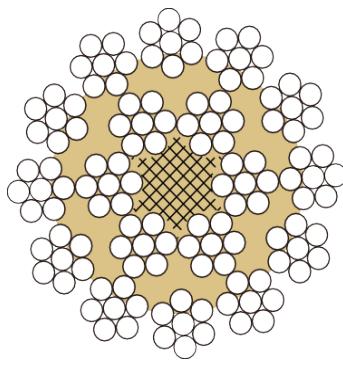
mm	Kg/100m		1670MPa		1770MPa		1870MPa		1960MPa		2160MPa	
	FC	IWS										
D												
6	14	15.5	18.6	19.7	19.8	20.9	20.9	22.1	21.9	23.1	24.1	25.5
7	19.1	21.1	25.4	26.8	26.9	28.4	28.4	30.1	29.8	31.5	32.8	34.7
8	25	27.5	33.1	35.1	35.1	37.2	37.1	39.3	38.9	41.1	42.9	45.3
9	31.6	34.8	41.9	44.4	44.4	47	47	49.7	49.2	52.1	54.2	57.4
10	39	43	51.8	54.8	54.9	58.1	58	61.3	60.8	64.3	67	70.8
11	47.2	52	62.6	66.3	66.4	70.2	70.1	74.2	73.5	77.8	81	85.7
12	56.2	61.9	74.5	78.9	79	83.6	83.5	88.3	87.5	92.6	96.4	102
13	65.9	72.7	87.5	92.6	92.7	98.1	98	104	103	109	113	120
14	76.4	84.3	101	107	108	114	114	120	119	126	131	139
16	99.8	110	133	140	140	149	148	157	156	165	171	181
18	126	139	168	177	178	188	188	199	197	208	217	230
20	156	172	207	219	219	232	232	245	243	257	268	283
22	189	208	251	265	266	281	281	297	294	311	324	343
24	225	248	298	316	316	334	334	353	350	370	386	408
26	264	291	350	370	371	392	392	415	411	435	453	479
28	306	337	406	429	430	455	454	481	476	504	525	555
30	351	387	466	493	494	523	522	552	547	579	603	638

#### NOTES

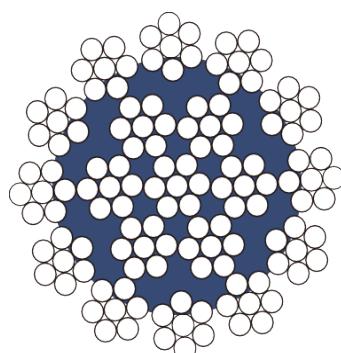
Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".

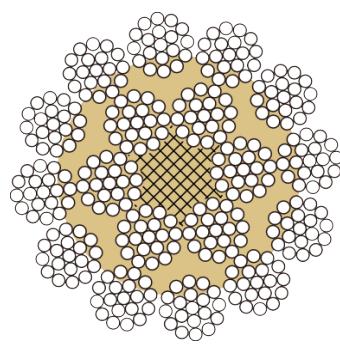




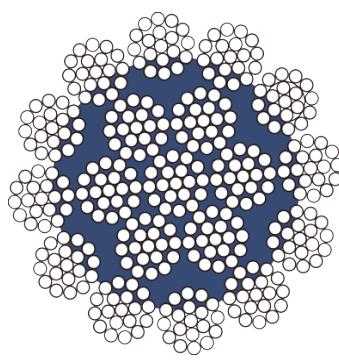
18X7+FC



18X7+IWS



18X19+FC



18X19+IWS

钢丝绳公称  
直径  
Nominal  
Diameter

钢丝绳近似  
重量  
Approx.  
Weight

钢丝绳最小破断拉力 ( KN )  
Minimum Breaking Load of Rope ( KN )

mm	Kg/100m		1670MPa		1770MPa		1870MPa		1960MPa		2160MPa	
	D	FC	IWS	FC								
30	351	387	466	493	494	523	522	552	547	579	603	638
32	399	440	530	561	562	594	594	628	622	658	686	725
34	451	497	598	633	634	671	670	709	702	743	774	819
36	505	557	671	710	711	752	751	795	787	833	868	918
38	563	621	748	791	792	838	837	886	877	928	967	1020
40	624	688	828	876	878	929	928	981	972	1030	1070	1130
42	688	759	913	966	968	1020	1020	1080	1070	1130	1180	1250
44	755	832	1000	1060	1060	1120	1120	1190	1180	1240	1300	1370
46	825	910	1100	1160	1160	1230	1230	1300	1290	1360	1420	1500
48	899	991	1190	1260	1260	1340	1340	1410	1400	1480	1540	1630
50	975	1080	1290	1370	1370	1450	1450	1530	1520	1610	1670	1770
52	1050	1160	1400	1480	1480	1570	1570	1660	1640	1740	1810	1920
54	1140	1250	1510	1600	1600	1690	1690	1790	1770	1870	1950	2070
56	1220	1350	1620	1720	1720	1820	1820	1920	1910	2020	2100	2220
58	1310	1450	1740	1840	1850	1950	1950	2060	2040	2160	2250	2380
60	1400	1550	1860	1970	1980	2090	2090	2210	2190	2310	2410	2550

#### NOTES

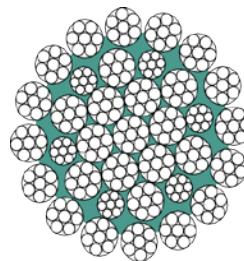
Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".



钢丝绳公称直径  
Nominal Diameter

钢丝绳近似重量  
Approx.Weight



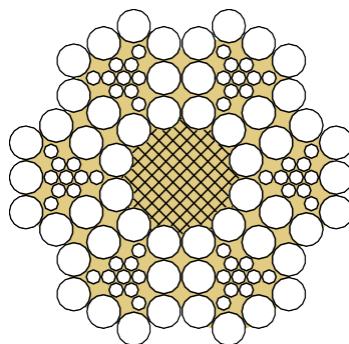
mm	Kg/100m	1670MPa	1770MPa	1870MPa	1960MPa	2160MPa
6	16.6	21.6	22.9	24.2	25.4	28
8	29.4	38.5	40.8	43.1	45.2	49.8
10	46	60.1	63.7	67.3	70.6	77.8
12	66.2	86.6	91.8	96.9	102	112
14	90.2	118	125	132	138	152
16	118	154	163	172	181	199
18	149	195	206	218	229	252
20	184	240	255	269	282	311
22	223	291	308	326	342	376
24	265	346	367	388	406	448
26	311	406	431	455	477	526
28	361	471	500	528	553	610
30	414	541	573	606	635	700
32	471	616	652	689	723	796
34	532	695	737	778	816	899
36	596	779	826	872	914	1010
38	664	868	920	972	1020	1120
40	736	962	1020	1080	1130	1240
42	811	1060	1120	1190	1240	1370
44	891	1160	1230	1300	1370	1510
46	973	1270	1350	1420	1490	1650
48	1060	1390	1470	1550	1630	1790
50	1150	1500	1590	1680	1760	1940
52	1240	1630	1720	1820	1910	2100
54	1340	1750	1860	1960	2060	2270
56	1440	1890	2000	2110	2210	2440
58	1550	2020	2140	2260	2370	2620
60	1660	2160	2290	2420	2540	2800

**NOTES**

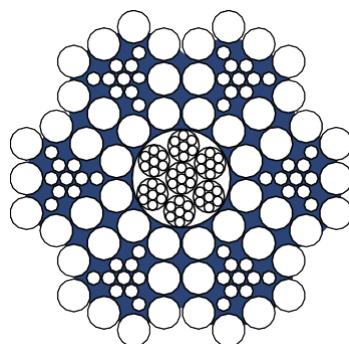
Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





6VX19+FC



6VX19+IWR

钢丝绳公称直径  
Nominal Diameter钢丝绳近似重量  
Approx.Weight钢丝绳最小破断拉力 ( KN )  
Minimun Breaking Load of Rope(KN)

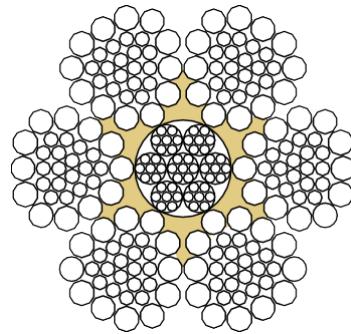
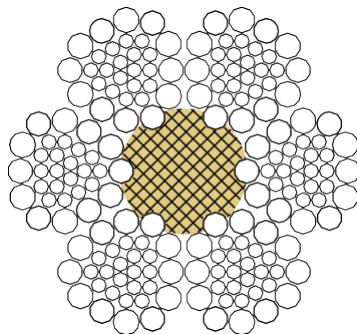
mm D	kg/100m		1670MPa		1770MPa		1870MPa		1960MPa	
	FC	IWR								
20	165	175	251	266	266	282	281	298	294	312
22	199	212	303	322	321	341	339	360	356	378
24	237	252	361	383	382	406	404	429	423	449
26	279	295	423	449	449	476	474	503	497	527
28	323	343	491	521	520	552	550	584	576	612
30	371	393	564	598	597	634	631	670	662	702
32	422	447	641	681	680	721	718	762	753	799
34	476	505	724	768	767	814	811	860	850	902
36	534	566	812	861	860	913	909	965	953	1010
38	595	631	904	960	959	1020	1010	1070	1060	1130
40	659	699	1000	1060	1060	1130	1120	1190	1180	1250
42	727	771	1100	1170	1170	1240	1240	1310	1300	1380
44	798	846	1210	1290	1290	1360	1360	1440	1420	1581
46	872	925	1330	1410	1400	1490	1480	1570	1560	1650
48	949	1010	1440	1530	1530	1620	1620	1710	1690	1800
50	1030	1090	1570	1660	1660	1760	1750	1860	1840	1950
52	1110	1180	1690	1800	1800	1900	1900	2010	1990	2110

**NOTES**

Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





## 6VX30+FC

## 6VX30+IWR

钢丝绳公称直径  
Nominal Diameter

钢丝绳近似重量  
Approx. Weight

钢丝绳最小破断拉力 ( KN )  
Minimum Breaking Load of Rope(KN)

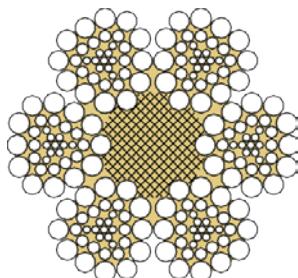
mm	kg/100m		1670MPa		1770MPa		1870MPa		1960MPa	
	FC	IWR								
18	131	139	175	186	186	197	196	208	206	218
20	162	172	216	230	229	243	242	257	254	270
22	196	208	262	278	278	295	293	311	307	326
24	233	247	312	331	330	351	349	370	366	388
26	274	290	366	388	388	411	410	435	429	456
28	318	336	424	450	450	477	475	504	498	528
30	365	386	487	517	516	548	545	579	572	607
32	415	439	554	588	587	623	620	658	650	690
34	468	496	626	664	663	704	700	743	734	779
36	525	556	701	744	743	789	785	833	823	873
38	585	619	781	829	828	879	875	928	917	973
40	648	686	866	919	918	974	969	1030	1020	1080
42	714	757	955	1010	1010	1070	1070	1130	1120	1190
44	784	831	1050	1110	1110	1180	1170	1240	1230	1300
46	857	908	1140	1210	1210	1290	1280	1360	1340	1430
48	933	988	1250	1320	1320	1400	1400	1480	1460	1550
50	1010	1070	1350	1440	1430	1520	1510	1610	1590	1680
52	1100	1160	1460	1550	1550	1650	1640	1740	1720	1820
54	1180	1250	1580	1670	1670	1770	1770	1870	1850	1960
56	1270	1350	1700	1800	1800	1910	1900	2020	1990	2110
58	1360	1440	1820	1930	1930	2050	2040	2160	2140	2270
60	1460	1540	1950	2070	2060	2190	2180	2310	2290	2430

## NOTES

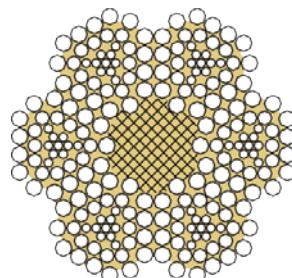
Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".

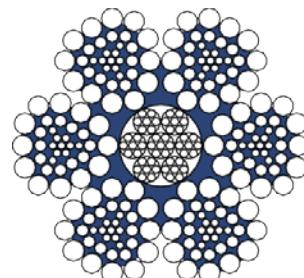




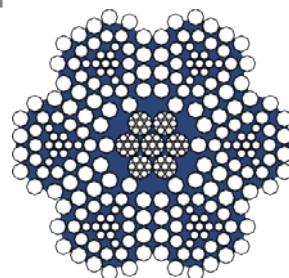
6VX34+FC



6VX37+FC



6VX34+IWR



6VX37+IWR

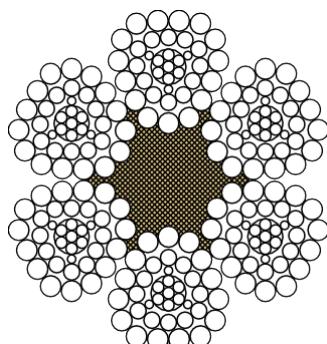
钢丝绳公称直径 Nominal Diameter	钢丝绳近似重量 Approx.Weight		钢丝绳最小破断拉力 ( KN ) Minimun Breaking Load of Rope(KN)							
	kg/100m		1670MPa		1770MPa		1870MPa		1960MPa	
D mm	FC	IWR	FC	IWR	FC	IWR	FC	IWR	FC	IWR
18	131	139	195	207	207	219	218	231	229	243
20	162	172	241	255	255	271	269	286	282	300
22	196	208	291	309	308	327	326	346	342	362
24	233	247	346	368	367	390	388	412	406	431
26	274	290	406	431	431	457	455	483	477	506
28	318	336	471	500	500	530	528	560	553	587
30	365	386	541	574	574	609	606	643	635	674
32	415	439	616	653	653	692	689	732	723	767
34	468	496	695	738	737	782	778	826	816	866
36	525	556	779	827	826	876	873	926	915	970
38	585	619	868	921	920	976	972	1030	1020	1080
40	648	686	962	1020	1020	1080	1080	1140	1130	1200
42	714	757	1060	1130	1120	1190	1190	1260	1240	1320
44	784	831	1160	1240	1230	1310	1300	1380	1370	1450
46	857	908	1270	1350	1350	1430	1420	1510	1490	1580
48	933	998	1380	1470	1470	1560	1550	1650	1630	1730
50	1010	1070	1500	1590	1590	1690	1680	1790	1760	1870
52	1100	1160	1630	1720	1720	1830	1820	1930	1910	2020
54	1180	1250	1750	1860	1860	1970	1960	2080	2060	2180
56	1270	1350	1890	2000	2000	2120	2110	2240	2210	2350
58	1360	1440	2020	2150	2140	2270	2260	2400	2370	2520
60	1460	1540	2160	2300	2290	2430	2420	2570	2540	2700

#### NOTES

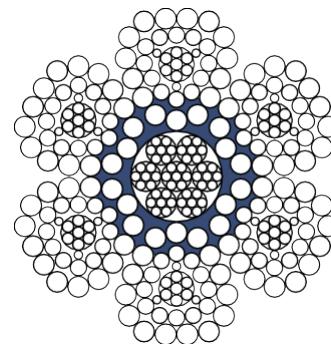
Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





6VX37S+FC



6VX37S+IWR

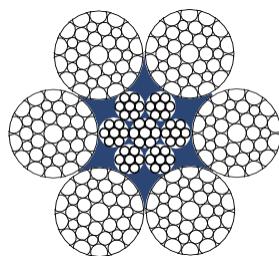
钢丝绳公称直径 Nominal Diameter	钢丝绳近似重量 Approx.Weight	钢丝绳最小破断拉力 ( KN ) Minimun Breaking Load of Rope(KN)							
		1670MPa		1770MPa		1870MPa		1960MPa	
mm	Kg/100m	FC	IWR	FC	IWR	FC	IWR	FC	IWR
D		FC	IWR	FC	IWR	FC	IWR	FC	IWR
18	135	143	201	213	213	226	225	238	236
20	167	177	248	263	263	279	277	294	291
22	202	214	300	318	318	337	336	356	352
24	240	255	357	379	378	401	399	424	419
26	282	299	419	444	444	471	469	497	491
28	327	346	486	515	515	546	544	577	570
30	375	398	557	591	591	627	624	662	654
32	427	452	634	673	672	713	710	753	744
34	482	511	716	760	759	805	802	851	840
36	541	573	803	852	851	903	899	954	942
38	602	638	894	949	948	1010	1000	1060	1050
40	667	707	991	1050	1050	1110	1110	1180	1160
42	736	779	1090	1160	1160	1230	1220	1300	1280
44	808	855	1200	1270	1270	1350	1340	1420	1410
46	883	935	1310	1390	1390	1470	1470	1560	1540
48	961	1020	1430	1510	1510	1600	1600	1700	1670
50	1040	1100	1550	1640	1640	1740	1730	1840	1820
52	1130	1190	1670	1780	1770	1880	1870	1990	1970
54	1220	1290	1810	1920	1910	2030	2020	2150	2120
56	1310	1390	1940	2060	2060	2180	2170	2310	2280
58	1400	1490	2080	2210	2210	2340	2330	2480	2440
60	1500	1590	2230	2370	2360	2510	2500	2650	2620
									2780

**NOTES**

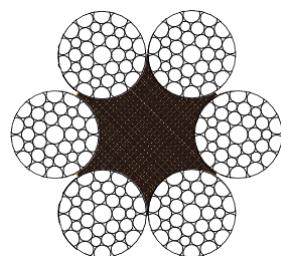
Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".

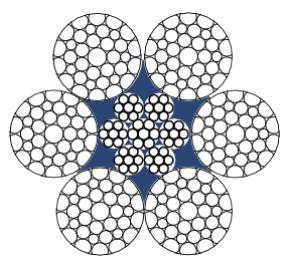




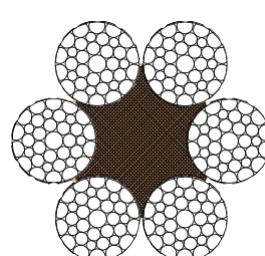
6XK19S+IWR



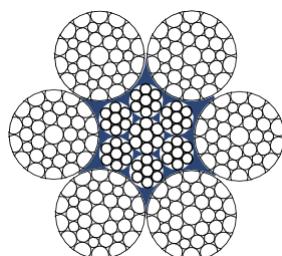
6XK19S+FC



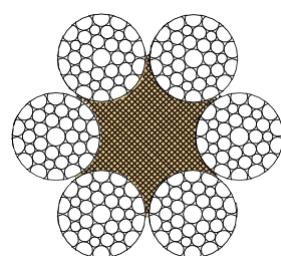
6XK31WS+IWR



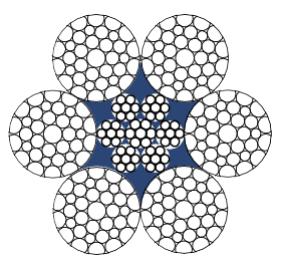
6XK31WS+FC



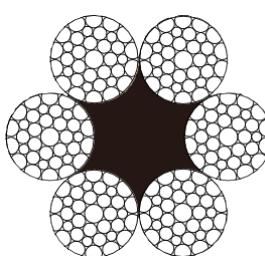
6XK25FI+IWR



6XK25FI+FC



6XK36WS+IWR



6XK36WS+FC

钢丝绳公称直径  
Nominal Diameter

钢丝绳近似重量  
Approx.Weight

钢丝绳最小破断拉力 ( KN )  
Minimun Breaking Load of Rope ( KN )

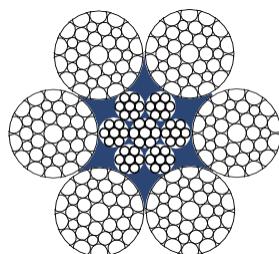
mm			1670MPa		1770MPa		1870MPa	
	D		FC	IWR	FC	IWR	FC	IWR
12	61.2	68.7	89.7	98.6	95.1	105	100	110
14	83.3	93.5	122	134	129	142	137	150
16	109	122	159	175	169	186	179	196
18	138	155	202	222	214	235	226	248
20	170	191	249	274	264	290	279	307
22	206	231	301	331	320	351	338	371
24	245	275	359	394	380	418	402	442
26	287	322	421	463	446	491	472	518
28	333	374	488	537	518	569	547	601
30	383	429	561	616	594	653	628	690
32	435	488	638	701	676	743	714	785
34	491	551	720	792	763	839	806	886
36	551	618	807	887	856	941	904	994

#### NOTES

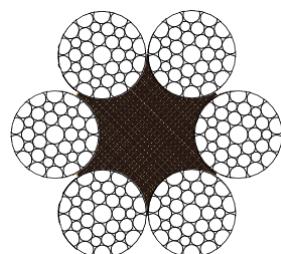
Diameter tolerances and limiting deviation can be found in the current part of the YB/T5359

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".

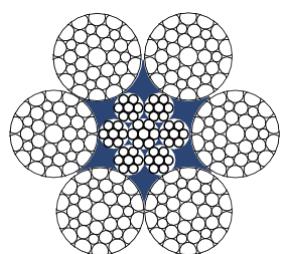




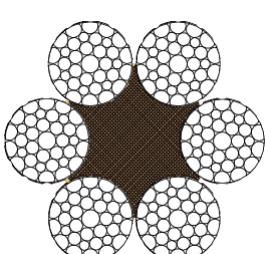
6XK19S+IWR



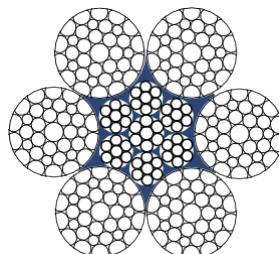
6XK19S+FC



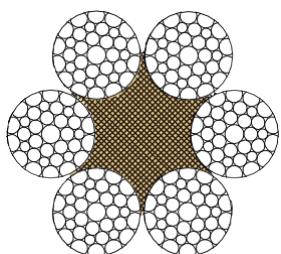
6XK31WS+IWR



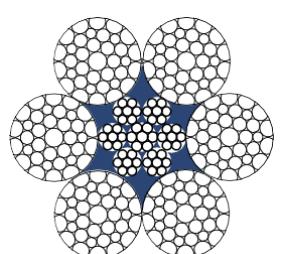
6XK31WS+FC



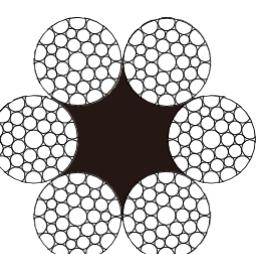
6XK25FI+IWR



6XK25FI+FC



6XK36WS+IWR



6XK36WS+FC

钢丝绳公称直径  
Nominal Diameter

钢丝绳近似重量  
Approx. Weight

钢丝绳最小破断拉力 ( KN )  
Minimun Breaking Load of Rope ( KN )

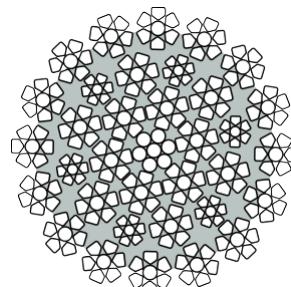
mm D	kg/100m		1670MPa		1770MPa		1870MPa	
	FC	IWR	FC	IWR	FC	IWR	FC	IWR
36	551	618	807	887	856	941	904	994
38	614	689	899	898	953	1050	1010	1110
40	680	763	997	1100	1060	1160	1120	1230
42	750	841	1100	1210	1160	1280	1230	1350
44	823	923	1210	1330	1280	1400	1350	1480
46	899	1010	1320	1450	1400	1540	1480	1620
48	979	1100	1440	1580	1520	1670	1610	1770
50	1060	1190	1560	1710	1650	1810	1740	1920
52	1150	1290	1680	1850	1790	1960	1890	2070
54	1240	1390	1820	2000	1930	2120	2030	2240
56	1330	1500	1950	2150	2070	2280	2190	2400
58	1430	1600	2100	2300	2220	2440	2350	2580
60	1530	1720	2240	2460	2380	2610	2510	2760
62	1630	1830	2390	2630	2540	2790	2680	2950
64	1740	1950	2550	2800	2700	2970	2860	3140
66	1850	2080	2710	2980	2880	3160	3040	3340
68	1970	2210	2880	3170	3050	3360	3230	3550

#### NOTES

Diameter tolerances and limiting deviation can be found in the current part of the YB/T5359

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





35WK7

钢丝绳公称直径  
Nominal Diameter钢丝绳近似重量  
Approx. Weight钢丝绳最小破断拉力 ( KN )  
Minimun Breaking Load of Rope(KN)

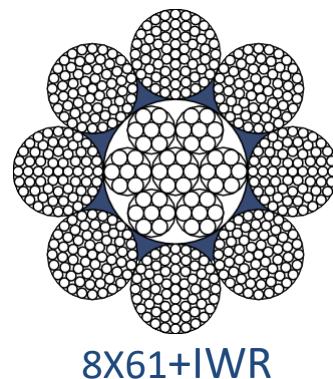
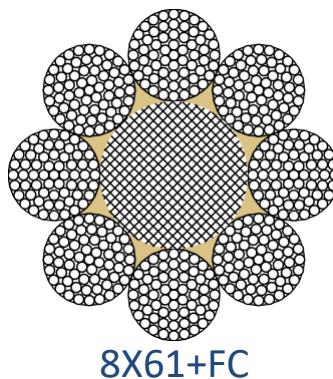
D/mm	kg/100m	1670Mpa	1770Mpa	1870Mpa	1960Mpa
14	100	134	142	150	158
16	131	175	186	196	206
18	165	222	235	248	260
20	204	274	290	307	321
22	247	331	351	371	389
24	294	394	418	442	463
26	345	463	491	518	543
28	400	537	569	601	630
30	459	616	653	690	720
32	522	701	740	790	820
34	590	790	840	890	930
36	661	890	940	990	1040
38	736	990	1050	1110	1160
40	816	1100	1160	1230	1290
42	900	1210	1280	1350	1420
44	987	1330	1400	1480	1560
46	1080	1450	1540	1620	1700
48	1180	1580	1670	1770	1850
50	1280	1710	1810	1920	2010
52	1380	1850	1960	2070	2170
54	1490	2000	2120	2240	2340
56	1600	2150	2280	2400	2520
58	1720	2300	2440	2580	2700
60	1840	2460	2610	2760	2890

**NOTES**

Diameter tolerances and limiting deviation can be found in the current part of the YB/T5359

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





钢丝绳公称直径  
Nominal Diameter

钢丝绳近似重量  
Approx.Weight

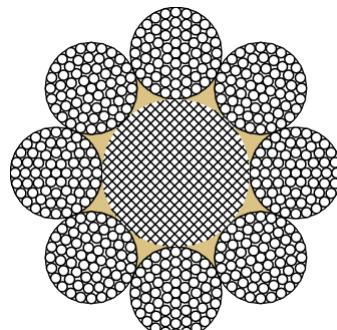
mm D	Kg/100m		1670MPa		1960MPa			
	FC	IWR	FC	IWR	FC	IWR	FC	IWR
80	2280	2660	2680	3170	2840	3360	3000	3550
82	2390	2790	2820	3340	2990	3530	3160	3730
84	2510	2930	2960	3500	3130	3710	3310	3920
86	2630	3070	3100	3670	3290	3890	3470	4110
88	2760	3210	3250	3840	3440	4070	3630	4300
90	2880	3360	3400	4020	3600	4260	3800	4500
92	3010	3510	3550	4200	3760	4450	3970	4700
94	3150	3670	3700	4380	3930	4640	4150	4910
96	3280	3820	3860	4570	4090	4840	4330	5120
98	3420	3990	4030	4760	4270	5050	4510	5330
100	3560	4150	4190	4960	4440	5260	4690	5550
106	4000	4660	4710	5570	4990	5910	5270	6240
110	4310	5020	5070	6000	5380	6360	5680	6720
116	4790	5580	5640	6670	5980	7070	6320	7470
120	5130	5980	6040	7140	6400	7570	6760	8000

#### NOTES

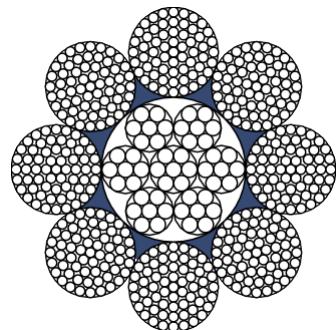
Diameter tolerances and limiting deviation can be found in the current part of the GB/T 20067

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





8X61+FC



8X61+IWR

钢丝绳公称直径  
Nominal Diameter

钢丝绳近似重量  
Approx.Weight

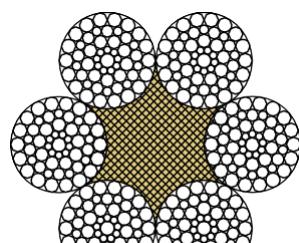
mm D	Kg/100m		1670MPa		1960MPa	
	FC	IWR	FC	IWR	FC	IWR
120	5130	5980	6040	7140	6400	7570
126	5650	6590	6650	7870	7050	8350
130	6020	7010	7080	8380	7510	8880
136	6580	7680	7750	9170	8220	9720
140	6980	8130	8220	9720	8710	10300
146	7590	8850	8940	10500	9470	11200
150	8010	9340	9430	11100	10000	11800
156	8660	10100	10200	12000	10800	12800
160	9110	10600	10700	12700	11300	13400
166	9810	11400	11500	13600	12200	14500
170	10200	12000	12100	14300	12800	15200
176	11000	12800	13000	15300	13700	16300
180	11500	13400	13600	16000	14400	17000
186	12300	14300	14500	17100	15300	18200
190	12800	15000	15100	17900	16000	19000
196	13600	15900	16100	19000	17000	20200
200	14200	16600	16700	19800	17700	21000

**NOTES**

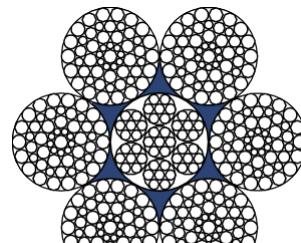
Diameter tolerances and limiting deviation can be found in the current part of the GB/T 20067

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".

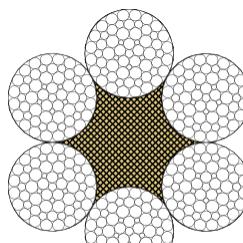




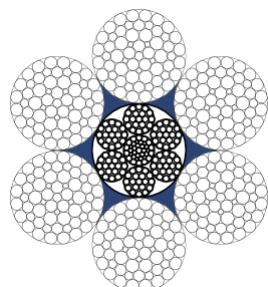
6X55SWS+FC



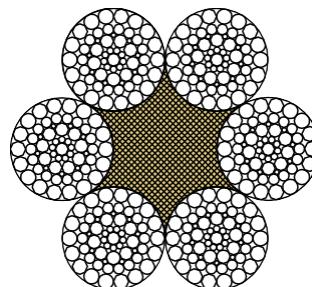
6X55SWS+IWR



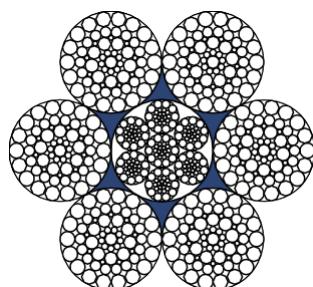
6X61FWS+FC



6X61FWS+IWR



6X64SFS+FC



6X64SFS+IWR

钢丝绳公称直径

Nominal  
Diameter

钢丝绳近似重量

Approx.Weight

mm	kg/100m									
	D	FC	IWR	FC	IWR	FC	IWR	FC	IWR	FC
30	350	390	500	540	530	570	560	600	580	630
32	400	450	560	610	600	650	630	680	660	710
34	450	500	640	690	680	730	710	770	750	810
36	580	560	710	770	760	820	800	860	840	900
38	560	630	800	860	840	910	890	960	930	1010
40	620	700	880	950	930	1010	990	1070	1030	1120
42	680	770	970	1050	1030	1110	1090	1170	1140	1230
44	750	840	1070	1150	1130	1220	1190	1290	1250	1350
46	820	920	1170	1260	1240	1330	1310	1410	1370	1480
48	890	1000	1270	1370	1350	1450	1420	1530	1490	1610
50	970	1090	1380	1490	1460	1580	1540	1660	1620	1740
52	1040	1180	1490	1610	1580	1700	1670	1800	1750	1890
54	1130	1270	1610	1730	1700	1840	1800	1940	1890	2030
56	1210	1360	1730	1860	1830	1980	1940	2090	2030	2190
58	1300	1460	1850	2000	1960	2120	2080	2240	2180	2350
60	1390	1570	1980	2140	2100	2270	2220	2400	2330	2510
62	1480	1670	2120	2290	2250	2420	2370	2560	2490	2680
64	1580	1780	2260	2440	2390	2580	2530	2730	2650	2860
66	1680	1890	2400	2590	2540	2740	2690	2900	2820	3040

#### NOTES

Diameter tolerances and limiting deviation can be found in the current part of the GB/T 20067

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".



钢丝绳公称直径  
Nominal  
Diameter钢丝绳近似重量  
Approx.Weight

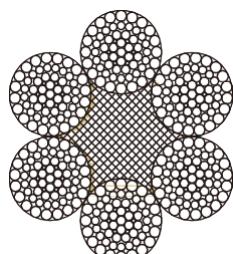
mm	kg/100m									
D	FC	IWR	FC	IWR	FC	IWR	FC	IWR	FC	IWR
66	1680	1890	2400	2590	2540	2740	2690	2900	2820	3040
68	1780	2010	2550	2750	2700	2910	2850	3080	2990	3230
70	1890	2130	2700	2910	2860	3090	3020	3260	3170	3420
72	2000	2260	2860	3080	3030	3270	3200	3450	3350	3620
74	2110	2380	3020	3260	3200	3450	3380	3650	3540	3820
76	2230	2510	3180	3430	3370	3640	3560	3850	3740	4030
78	2350	2650	3350	3620	3550	3830	3750	4050	3940	4250
80	2470	2780	3530	3800	3740	4030	3950	4260	4140	4470
82	2600	2920	3710	4000	3930	4240	4150	4480	4350	4690
84	2720	3070	3890	4190	4120	4450	4350	4700	4560	4920
86	2850	3220	4080	4400	4320	4660	4560	4920	4780	5160
88	2990	3370	4270	4600	4520	4880	4780	5160	5010	5400
90	3130	3520	4460	4820	4730	5100	5000	5390	5240	5650
92	3270	3680	4660	5030	4940	5330	5220	5630	5470	5910
94	3410	3840	4870	5250	5160	5570	5450	5880	5720	6170
96	3560	4010	5080	5480	5380	5810	5690	6140	5960	6430
98	3710	4180	5290	5710	5610	6050	5930	6390	6210	6700
100	3860	4350	5510	5950	5840	6300	6170	6660	6470	6980
102	4020	4530	5730	6190	6080	6560	6420	6930	6730	7260
104	4170	4700	5960	6430	6320	6820	6670	7200	7000	7550
106	4340	4890	6190	6680	6560	7080	6930	7480	7270	7840
108	4500	5070	6430	6930	6810	7350	7200	7760	7540	8140
110	4670	5260	6670	7190	7070	7620	7470	8060	7830	8440
112	4840	5460	6910	7460	7330	7900	7740	8350	8110	8750
114	5020	5650	7160	7730	7590	8190	8020	8650	8410	9070
116	5190	5850	7420	8000	7860	8480	8300	8960	8700	9390
118	5370	6060	7670	8280	8130	8770	8590	9270	9010	9720
120	5560	6260	7940	8560	8410	9070	8890	9590	9310	10000

**NOTES**

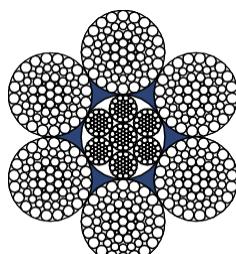
Diameter tolerances and limiting deviation can be found in the current part of the GB/T 20067

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".

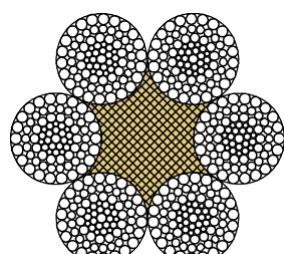




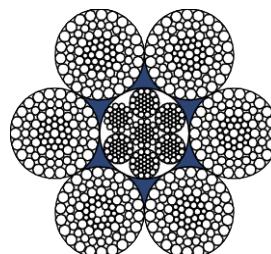
6X65FNS+FC



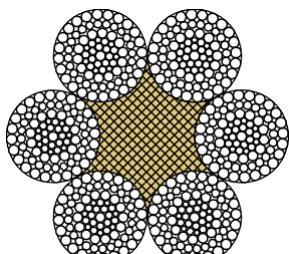
6X65FNS+IWR



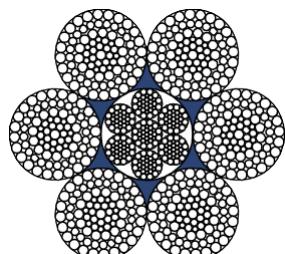
6X80WSNS+FC



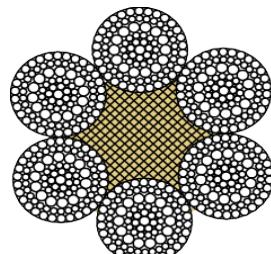
6X80WSNS+IWR



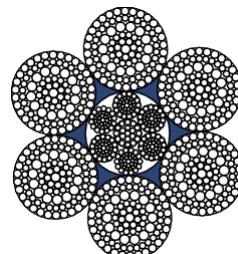
6X84WSNS+FC



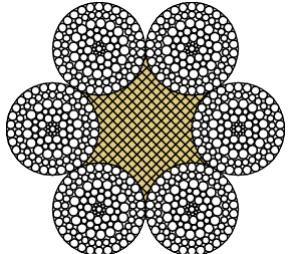
6X84WSNS+IWR



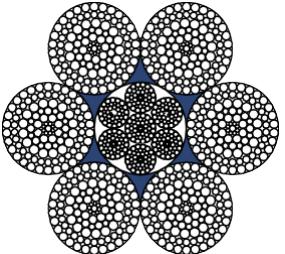
6X103FSNS+FC



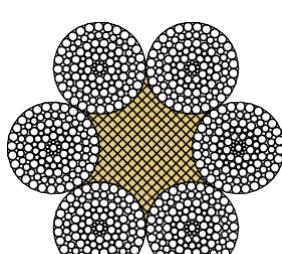
6X103FSNS+IWR



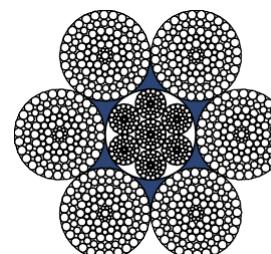
6X109WSNS+FC



6X109WSNS+IWR



6X111WSNS+FC



6X111WSNS+IWR

钢丝绳公称直径  
Nominal Diameter

钢丝绳近似重量  
Approx. Weight

钢丝绳最小破断拉力 ( KN )  
Minimum Breaking Load of Rope ( KN )

mm	kg/100m		1670		1770		1870		1960	
	FC	IWR	FC	IWR	FC	IWR	FC	IWR	FC	IWR
60	1370	1570	1910	2080	2030	2200	2140	2330	2240	2440
62	1460	1670	2040	2220	2160	2350	2290	2490	2400	2610
64	1560	1780	2180	2370	2310	2510	2440	2650	2550	2780
66	1660	1890	2310	2520	2450	2670	2590	2820	2720	2950
68	1760	2010	2460	2670	2600	2830	2750	2990	2880	3140
70	1860	2130	2600	2830	2760	3000	2910	3170	3050	3320
72	1970	2260	2750	3000	2920	3170	3080	3350	3230	3520
74	2080	2380	2910	3160	3080	3350	3260	3540	3410	3710
76	2190	2510	3070	3340	3250	3540	3430	3740	3600	3920
78	2310	2650	3230	3520	3420	3730	3620	3940	3790	4130
80	2430	2780	3400	3700	3600	3920	3810	4140	3990	4340

#### NOTES

Diameter tolerances and limiting deviation can be found in the current part of the GB/T 20067

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".



钢丝绳公称直径  
Nominal Diameter

钢丝绳近似重量  
Approx. Weight

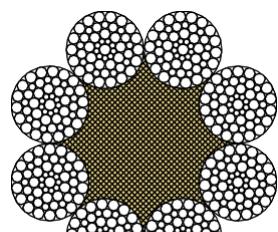
钢丝绳最小破断拉力 ( KN )  
Minimum Breaking Load of Rope ( KN )

mm	kg/100m		1670		1770		1870		1960	
	D	FC	IWR	FC	IWR	FC	IWR	FC	IWR	FC
60	1370	1570	1910	2080	2030	2200	2140	2330	2240	2440
62	1460	1670	2040	2220	2160	2350	2290	2490	2400	2610
64	1560	1780	2180	2370	2310	2510	2440	2650	2550	2780
66	1660	1890	2310	2520	2450	2670	2590	2820	2720	2950
68	1760	2010	2460	2670	2600	2830	2750	2990	2880	3140
70	1860	2130	2600	2830	2760	3000	2910	3170	3050	3320
72	1970	2260	2750	3000	2920	3170	3080	3350	3230	3520
74	2080	2380	2910	3160	3080	3350	3260	3540	3410	3710
76	2190	2510	3070	3340	3250	3540	3430	3740	3600	3920
78	2310	2650	3230	3520	3420	3730	3620	3940	3790	4130
80	2430	2780	3400	3700	3600	3920	3810	4140	3990	4340
82	2560	2920	3570	3890	3780	4120	4000	4350	4190	4560
84	2680	3070	3750	4080	3970	4320	4200	4570	4400	4790
86	2810	3220	3930	4270	4160	4530	4400	4790	4610	5020
88	2940	3370	4110	4470	4360	4740	4610	5010	4830	5250
90	3080	3520	4300	4680	4560	4960	4820	5240	5050	5490
92	3220	3680	4490	4890	4760	5180	5030	5480	5280	5740
94	3360	3840	4690	5110	4970	5410	5250	5720	5510	5990
96	3500	4010	4890	5330	5190	5640	5480	5960	5740	6250
98	3650	4180	5100	5550	5410	5880	5710	6210	5990	6510
100	3800	4350	5310	5780	5630	6120	5950	6470	6230	6780
102	3950	4530	5530	6010	5860	6370	6190	6730	6480	7060
104	4110	4700	5740	6250	6090	6620	6430	7000	6740	7330
106	4270	4890	5970	6490	6320	6880	6680	7270	7000	7620
108	4430	5070	6190	6740	6570	7140	6940	7550	7270	7910
110	4600	5260	6430	6990	6810	7410	7200	7830	7540	8210
112	4770	5460	6660	7250	7060	7680	7460	8120	7820	8510
114	4940	5650	6900	7510	7310	7960	7730		8100	8810
116	5110	5850	7150	7780	7570	8240	8000	8710	8390	9130
118	5290	6060	7390	8050	7840	8530	8280	9010	8680	9440
120	5470	6260	7650	8320	8110	8820	8560	9320	8980	9770

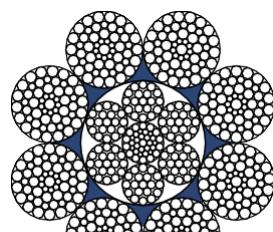
Diameter tolerances and limiting deviation can be found in the current part of the GB/T 20067

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".

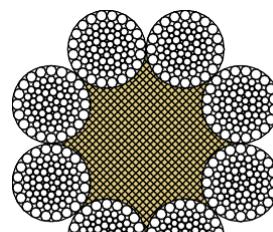




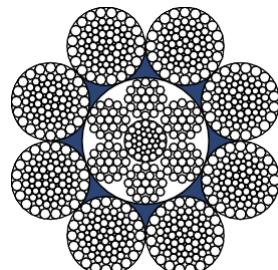
8X55SWS+FC



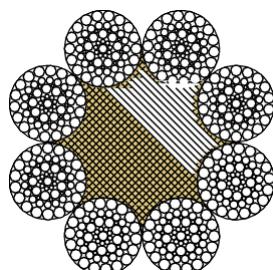
8X55SWS+IWR



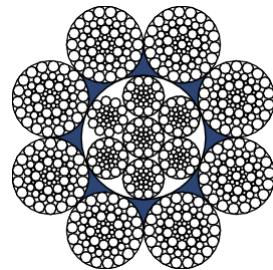
8X61FWS+FC



8X61FWS+IWR



8X64SFS+FC



8X64SFS+IWR

钢丝绳公称直径 Nominal Diameter	钢丝绳近似重量 Approx. Weight		钢丝绳最小破断拉力 ( KN ) Minimum Breaking Load of Rope ( KN )							
	kg/100m		1670		1770		1870		1960	
D mm	FC	IWR	FC	IWR	FC	IWR	FC	IWR	FC	IWR
40	610	730	780	920	830	980	880	1040	920	1090
42	670	800	860	1020	910	1080	970	1140	1010	1200
44	740	880	950	1120	1000	1190	1060	1250	1110	1310
46	800	960	1040	1220	1100	1300	1160	1370	1220	1430
48	880	1050	1130	1330	1190	1410	1260	1490	1320	1560
50	950	1140	1220	1440	1300	1530	1370	1620	1440	1700
52	1030	1230	1320	1560	1400	1660	1480	1750	1550	1830
54	1110	1330	1430	1680	1510	1790	1600	1890	1670	1980
56	1190	1430	1530	1810	1630	1920	1720	2030	1800	2130
58	1280	1530	1650	1940	1740	2060	1840	2180	1930	2280
60	1370	1640	1760	2080	1870	2200	1970	2330	2070	2440
62	1460	1750	1880	2220	1990	2350	2110	2490	2210	2610
64	1560	1860	2000	2370	2120	2510	2240	2650	2350	2780
66	1660	1980	2130	2520	2260	2670	2390	2820	2500	2950
68	1760	2100	2260	2670	2400	2830	2530	2990	2660	3140
70	1860	2230	2400	2830	2540	3000	2680	3170	2810	3320
72	1970	2360	2540	3000	2690	3170	2840	3350	2980	3520
74	2080	2490	2680	3160	2840	3350	3000	3540	3140	3710
76	2190	2630	2830	3340	3000	3540	3160	3740	3320	3920

#### NOTES

Diameter tolerances and limiting deviation can be found in the current part of the GB/T 20067

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".



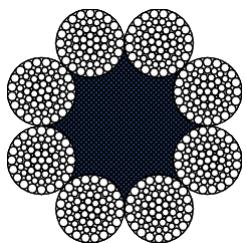
钢丝绳公称直径 Nominal Diameter	钢丝绳近似重量 Approx. Weight		钢丝绳最小破断拉力 ( KN ) Minimun Breaking Load of Rope ( KN )							
	kg/100m		1670		1770		1870		1960	
mm	FC	IWR	FC	IWR	FC	IWR	FC	IWR	FC	IWR
D										
76	2190	2630	2830	3340	3000	3540	3160	3740	3320	3920
78	2310	2770	2980	3520	3160	3730	3330	3940	3490	4130
80	2430	2910	3130	3700	3320	3920	3510	4140	3680	4340
82	2560	3060	3290	2890	3490	4120	3680	4350	3860	4560
84	2680	3210	3450	4080	3660	4320	3870	4570	4050	4790
86	2810	3370	3620	4270	3840	4530	4050	4790	4250	5020
88	2940	3520	3790	4470	4020	4740	4240	5010	4450	5250
90	3080	3690	3960	4680	4200	4960	4440	5240	4650	5490
92	3220	3850	4140	4890	4390	5180	4640	5480	4860	5740
94	3360	4020	4320	5110	4580	5410	4840	5720	5070	5990
96	3500	4190	4510	5330	4780	5640	5050	5960	5290	6250
98	3650	4370	4700	5550	4980	5880	5260	6210	5520	6510
100	3800	4550	4890	5780	5190	6120	5480	6470	5740	6780
102	3950	4730	5090	6010	5400	6370	5700	6730	5970	7060
104	4110	4920	5290	6250	5610	6620	5930	7000	6210	7330
106	4270	5110	5500	6490	5830	6880	6160	7270	6450	7620
108	4430	5310	5710	6740	6050	7140	6390	7550	6700	7910
110	4600	5510	5920	6990	6280	7410	6630	7830	6950	8210
115	5030	6020	6470	7640	6860	8100	7250	8560	7590	8970
120	5470	6550	7050	8320	7470	8820	7890	9320	8270	9770
125	5940	7110	7650	9030	8100	9570	8560	10100	8970	10600
130	6420	7690	8270	9770	8760	10300	9260	10900	9710	11500
135	6930	8290	8920	10500	9450	11200	9990	11800	10500	12400
140	7450	8920	9590	11300	10200	12000	10700	12700	11300	13300
145	7990	9570	10300	12100	10900	12900	11500	13600	12100	14300
150	8550	10200	11000	13000	11700	13800	12300	14600	12900	15300
155	9130	10900	11800	13900	12500	14700	13200	15500	13800	16300
160	9730	11600	12500	14800	13300	15700	14000	16600	14700	17400

#### NOTES

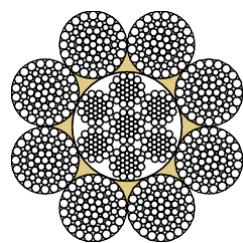
Diameter tolerances and limiting deviation can be found in the current part of the GB/T 20067

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".

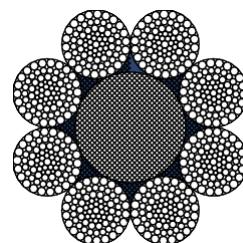




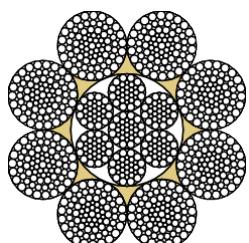
8X65FNS+FC



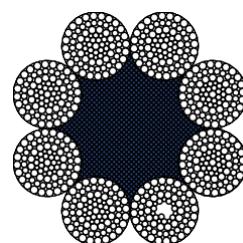
8X65FNS+IWR



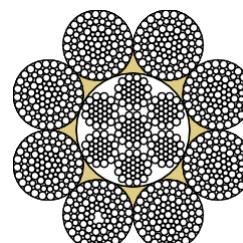
8X80WSNS+FC



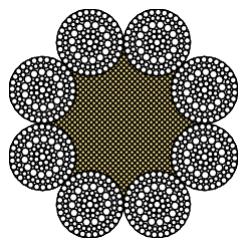
8X80WSNS+IWR



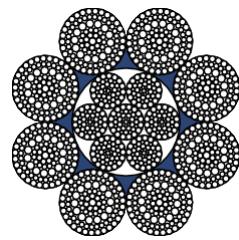
8X84WSNS+FC



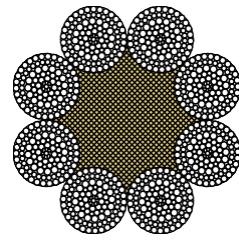
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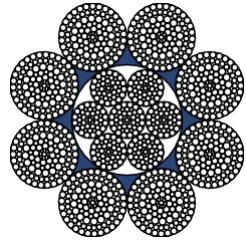
8X103FSNS+FC



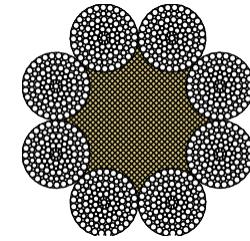
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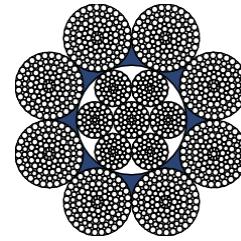
8X109WSNS+FC



8X109WSNS+IWR



8X111WSNS+FC



8X111WSNS+IWR

#### NOTES

Diameter tolerances and limiting deviation can be found in the current part of the GB/T 20067

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".



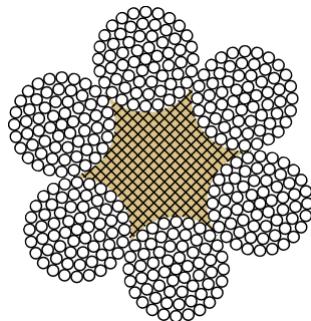
钢丝绳公称直径 Nominal Diameter	钢丝绳近似重量 Approx.Weight		钢丝绳最小破断拉力 ( KN ) Minimun Breaking Load of Rope ( KN )							
	kg/100m		1670		1770		1870		1960	
mm	FC	IWR	FC	IWR	FC	IWR	FC	IWR	FC	IWR
D	FC	IWR	FC	IWR	FC	IWR	FC	IWR	FC	IWR
60	1330	1590	1620	2020	1720	2140	1820	2260	1910	2370
62	1420	1700	1730	2160	1840	2290	1940	2420	2030	2530
64	1520	1810	1850	2300	1960	2440	2070	2570	2170	2700
66	1610	1930	1960	2440	2080	2590	2200	2740	2310	2870
68	1710	2050	2080	2590	2210	2750	2330	2910	2450	3050
70	1810	2170	2210	2750	2340	2910	2470	3080	2590	3230
72	1920	2300	2340	2910	2480	3080	2620	3260	2740	3410
76	2140	2560	2600	3240	2760	3440	2920	3630	3060	3800
78	2250	2700	2740	3410	2910	3620	3070	3820	3220	4010
80	2370	2840	2890	3590	3060	3810	3230	4020	3390	4210
82	2490	2980	3030	3770	3210	4000	3390	4220	3560	4430
84	2610	3130	3180	3960	3370	4200	3560	4430	3730	4650
86	2740	3280	3330	4150	3530	4400	3730	4650	3910	4870
88	2870	3430	3490	4350	3700	4610	3910	4870	4100	5100
90	3000	3590	3650	4550	3870	4820	4090	5090	4290	5330
92	3130	3750	3820	4750	4040	5030	4270	5320	4480	5570
94	3270	3910	3980	4960	4220	5250	4460	5550	4680	5820
96	3410	4080	4160	5170	4400	5480	4650	5790	4880	6070
98	3550	4250	4330	5390	4590	5710	4850	6030	5080	6320
100	3700	4430	4510	5610	4780	5950	5050	6280	5290	6590
102	3850	4610	4690	5840	4970	6190	5250	6540	5510	6850
104	4000	4790	4880	6070	5170	6430	5460	6800	5720	7120
106	4160	4980	5070	6300	5370	6680	5670	7060	5950	7400
108	4320	5170	5260	6540	5570	6940	5890	7330	6170	7680
110	4480	5360	5460	6790	5780	7200	6110	7600	6400	7970
120	5330	6380	6490	8080	6880	8560	7270	9050	7620	9480
125	5780	6920	7050	8770	7470	9290	7890	9820	8270	10300
130	6250	7490	7620	9480	8080	10100	8530	10600	8940	11100
135	6740	8070	8220	10200	8710	10800	9200	11500	9640	12000
140	7250	8680	8840	11000	9370	11700	9900	12300	10400	12900
145	7780	9310	9480	11800	10000	12500	10600	13200	11100	13800
150	8330	9970	10100	12600	10800	13400	11400	14100	11900	14800
155	8890	10600	10800	13500	11500	14300	12100	15100	12700	15800
160	9470	11300	11500	14400	12200	15200	12900	16100	13500	16900
165	10100	12100	12300	15300	13000	16200	13700	17100	14400	17900
170	10700	12800	13000	16200	13800	17200	14600	18200	15300	19000
175	11300	13600	13800	17200	14600	18200	15500	19200	16200	20200
180	12000	14400	14600	18200	15500	19300	16400	20400	17100	21300
190	13400	16000	16300	20300	17300	21500	18200	22700	19100	23800
200	14800	17700	18000	22400	19100	23800	20200	25100	21200	26300

**NOTES**

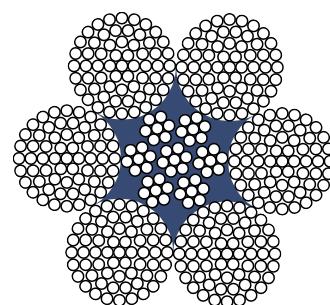
Diameter tolerances and limiting deviation can be found in the current part of the GB/T 20067

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





6X61+FC



6X61+IWR

钢丝绳公称直径 Nominal Diameter	钢丝绳近似重量 Approx.Weight		钢丝绳最小破断拉力 ( KN ) Minimun Breaking Load of Rope(KN)									
	mm		Kg/100m		1670MPa		1770MPa		1870MPa		1960MPa	
D	FC	IWR	FC	IWR	FC	IWR	FC	IWR	FC	IWR	FC	IWR
80	2310	2550	3020	3270	3210	3470	3390	3660	3550	3840		
85	2610	2880	3410	3690	3620	3910	3820	4130	4010	4330		
90	2920	3220	3830	4140	4060	4390	4290	4630	4490	4860		
95	3260	3590	4270	4610	4520	4890	4780	5160	5010	5410		
100	3610	3980	4730	5110	5010	5420	5290	5720	5550	6000		
105	3980	4390	5210	5630	5520	5970	5830	6310	6120	6610		
110	4370	4820	5720	6180	6060	6550	6400	6920	6710	7260		
115	4770	5260	6250	6760	6620	7160	7000	7570	7340	7930		
120	5200	5730	6810	7360	7210	7800	7620	8240	7990	8640		
125	5640	6220	7380	7980	7830	8460	8270	8940	8670	9370		
130	6100	6730	7990	8640	8470	9150	8940	9670	9370	10100		
135	6580	7250	8610	9310	9130	9870	9640	10400	10100	10900		
140	7080	7800	9260	10000	9820	10600	10400	11200	10900	11800		
145	7590	8370	9940	10700	10500	11400	11100	12000	11700	12600		
150	8120	8960	10600	11500	11300	12200	11900	12900	12500	13500		
155	8670	9560	11400	12300	12000	13000	12700	13700	13300	14400		
160	9240	10200	12100	13100	12800	13900	13500	14600	14200	15400		

**NOTES**

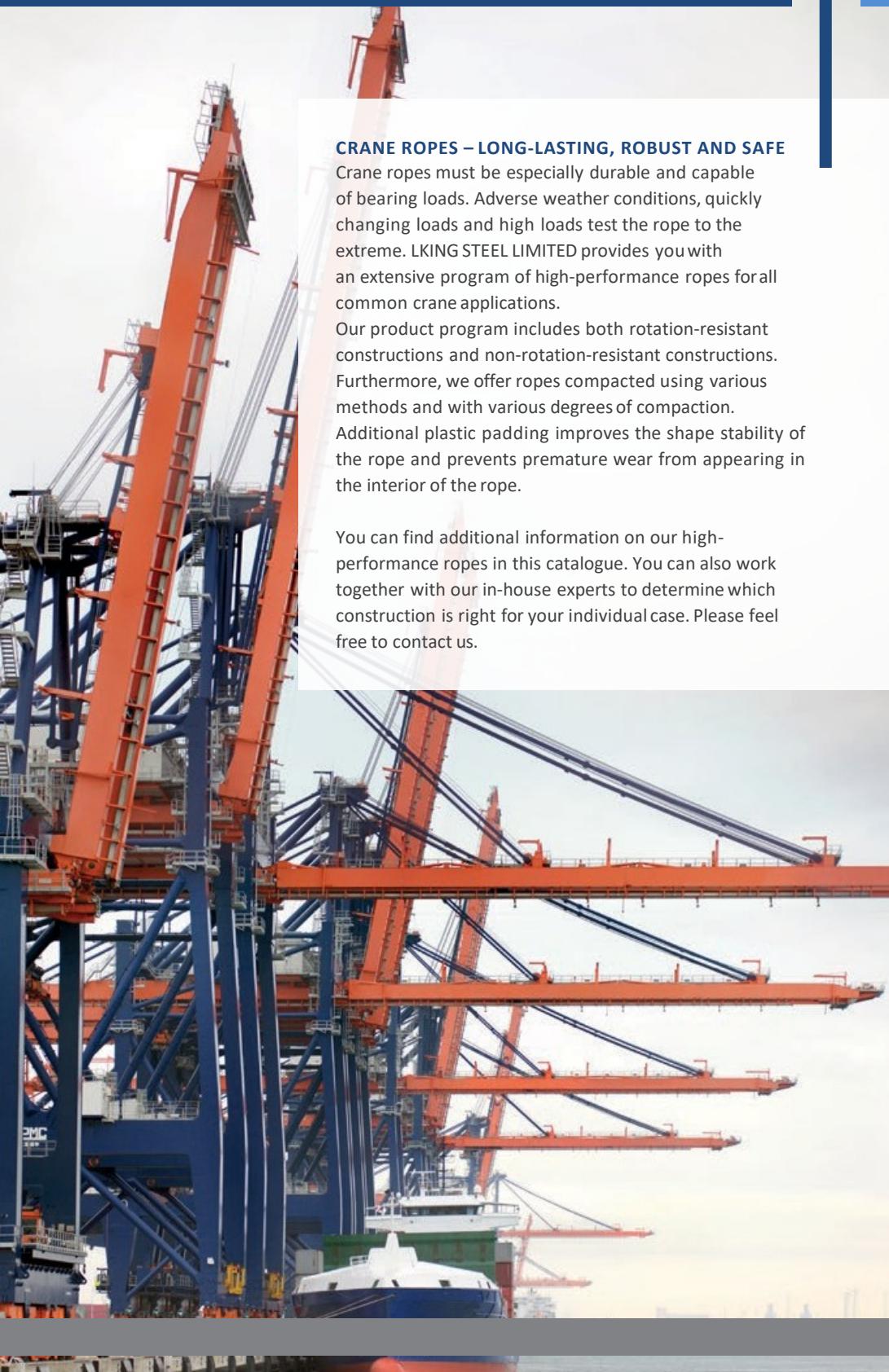
Diameter tolerances and limiting deviation can be found in the current part of the GB/T 20067

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





# CRANE ROPES



## CRANE ROPES – LONG-LASTING, ROBUST AND SAFE

Crane ropes must be especially durable and capable of bearing loads. Adverse weather conditions, quickly changing loads and high loads test the rope to the extreme. LKING STEEL LIMITED provides you with an extensive program of high-performance ropes for all common crane applications. Our product program includes both rotation-resistant constructions and non-rotation-resistant constructions. Furthermore, we offer ropes compacted using various methods and with various degrees of compaction. Additional plastic padding improves the shape stability of the rope and prevents premature wear from appearing in the interior of the rope.

You can find additional information on our high-performance ropes in this catalogue. You can also work together with our in-house experts to determine which construction is right for your individual case. Please feel free to contact us.

## SPECIAL ROPES: TRADITION WITH THE MOST MODERN TECHNOLOGY

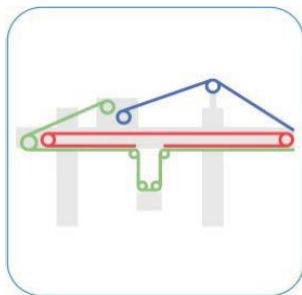
With the development of special ropes, individual application options are at the forefront. Our knowledge and experience are in demand in this area in particular. The complex design of these ropes and the combination of various materials lead to special product properties specific for the area of application.

## INDIVIDUAL SOLUTIONS AT THE HIGHEST LEVEL

The numerous requirements and special applications always require new and further technological developments. In this process, our team of experts is always happy to provide you with support as a competent partner. It is not our product program that determines the solution to your problem; rather your individual requirement determines our individual realization to meet your requests. Contact us about the possibility of using special manufacturing to meet your needs.

# APPLICATION CRANE ROPES I

## Container Crane



● Trolley rope  
● Boom wire rope  
● Main hoisting rope

### GT6



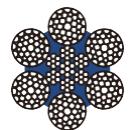
- Structurally tight strands
- High breaking load
- Good fatigue resistance

### GT6 PZ



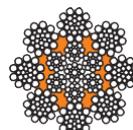
- Plastic inside reduces wear
- Stable performance
- Over-long service life, less rope change and shutdown losses
- High cost effective

### GT6 Z



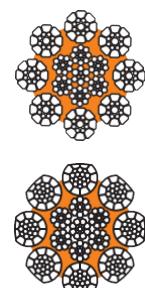
- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective

### GT8 P



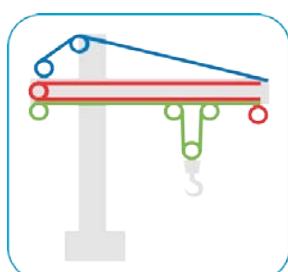
- Structurally tight strands
- High breaking load
- Good fatigue resistance
- Good bending property

### GT8 PZD&GT8 PZ



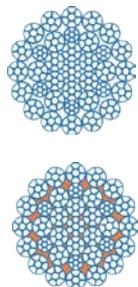
- Plastic inside reduces wear
- Compacted structure, extrusion resistance
- Reducing Extension
- Suitable for multi-layer rope winding
- 8 strands structure with high flexibility
- High breaking tension
- High cost effective

## Tower Crane



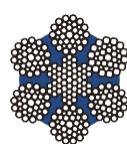
● Trolley rope  
● Boom wire rope  
● Main hoisting rope

### GT34 Z &GT34 PZ



- Anti-rotation
- High hoisting height applications
- Good compressive performance, suitable for multi-layer drum winding
- Reduce pulley wear
- Long service life
- High breaking tension

### GT6



- Structurally tight strands
- High breaking load
- Good fatigue resistance

### GT6 Z



- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective

### GT8 P



- Structurally tight strands
- High breaking load
- Good fatigue resistance
- Good bending property

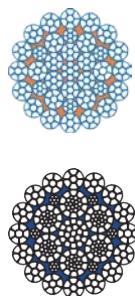
## APPLICATION CRANE ROPES II

### Rotary drilling rig



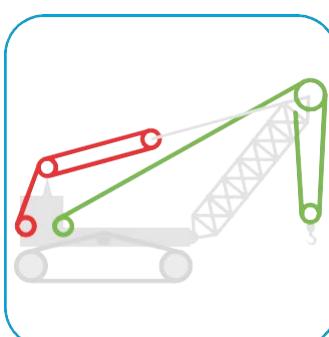
- Drawing pipe rope
- Main hoisting rope

### GT34 PZ & GT28 PZ



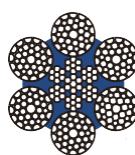
- Low rotation Dyform structure
- Recommended for high-hoisting height application
- High strength
- Reduce the wear of pulleys
- Accurate rope diameter
- Suitable for single or multi-winding rope
- Long service life

### Crawler crane



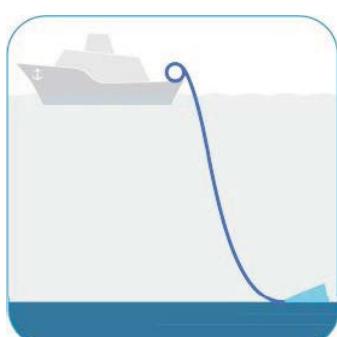
- Boom wire rope
- Main hoisting rope

### GT6 Z



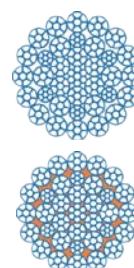
- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective

### SUBSEA WINCHES



- Subsea winch ropes

### GT34 Z & GT34 PZ



- Anti-rotation
- High hoisting height applications
- Good compressive performance, suitable for multi-layer drum winding
- Reduce pulley wear
- Long service life
- High breaking tension

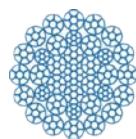


## APPLICATION CRANE ROPES II

### Offshore foundation rope



#### GT34 Z



- Low rotation Dyform structure
- Recommended for high-hoisting height application
- High strength
- Reduce the wear of pulleys
- Accurate rope diameter
- Suitable for single or multi-winding rope
- Long service life

#### GT6 Z



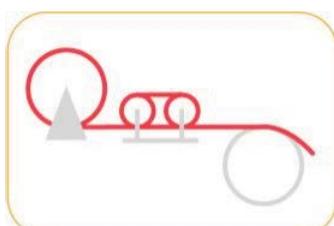
- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective

#### GT8 PZ

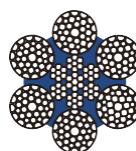


- Plastic inside reduces wear
- Compacted structure, extrusion resistance
- Reducing Extension
- Suitable for multi-layer rope winding
- 8 strands structure with high flexibility
- High breaking tension
- High cost effective

### Ocean winch rope



#### GT6 Z



- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective

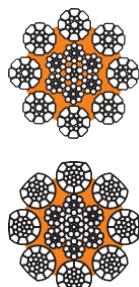
# APPLICATION CRANE ROPES III

## SUBSEA WINCHES



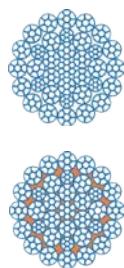
● Main hoisting Rope

### GT8 PZD&GT8 PZ



- Plastic inside reduces wear
- Compacted structure, extrusion resistance
- Reducing Extension
- Suitable for multi-layer rope winding
- 8 strands structure with high flexibility
- High breaking tension
- High cost effective

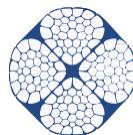
### GT34 Z & GT34 PZ & GT34 Z & GT34 ZPD



- Low rotation Dyform structure
- Recommended for high-hoisting height application
- High strength
- Reduce the wear of pulleys
- Accurate rope diameter
- Suitable for single or multi-winding rope
- Long service life



### GT4 Z



- Rotary-resistant 4 compacted strands
- Fully lubrication
- High flexibility
- High breaking load
- Very stable under strong torsion

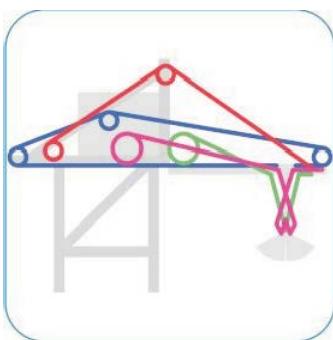


Selecting the right rope for the appropriate application requires great care. Using the wrong rope might have serious consequences, such as property damage or personal injury.

Selecting the correct rope is essential for special applications. For further information refer to our notes. The classification above and the applications listed in the following are only intended as general guidelines. Please contact us for help in selecting the right rope for your application.

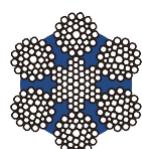
# APPLICATION CRANE ROPES III

## SHIP UNLOADER



- Boom wire rope
- Frame wire rope
- Main hoisting wire rope
- Grab wire rope

### GT6



- Structurally tight strands
- High breaking load
- Good fatigue resistance

### GT6 Z



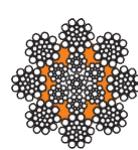
- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective

### GT6 PZ



- Plastic inside reduces wear
- Stable performance
- Over-long service life, less rope change and shutdown losses
- High cost effective

### GT8 P



- Structurally tight strands
- High breaking load
- Good fatigue resistance
- Good bending property

### GT8 PZ



- Plastic inside reduces wear
- Compacted structure, extrusion resistance
- Reducing Extension
- Suitable for multi-layer rope winding
- 8 strands structure with high flexibility
- High breaking tension
- High cost effective

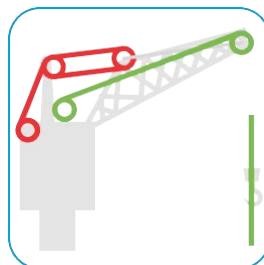


Selecting the right rope for the appropriate application requires great care. Using the wrong rope might have serious consequences, such as property damage or personal injury.

Selecting the correct rope is essential for special applications. For further information refer to our notes. The classification above and the applications listed in the following are only intended as general guidelines. Please contact us for help in selecting the right rope for your application.

# APPLICATION CRANE ROPES III

## HARBOUR CRANE



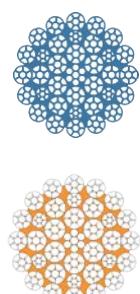
- Boom wire rope
- Main hoisting rope

### GT34 Z & GT34 PZ



- Anti-rotation
- High hoisting height applications
- Good compressive performance, suitable for multi-layer drum winding
- Reduce pulley wear
- Long service life
- High breaking tension

### GT34 ZD & GT34 PZD



- Low rotation Dyform structure
- Recommended for high-hoisting height application
- High strength
- Reduce the wear of pulleys
- Accurate rope diameter
- Suitable for single or multi-winding rope
- Long service life

### GT6 Z



- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective

### GT6



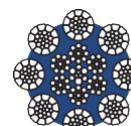
- Structurally tight strands
- High breaking load
- Good fatigue resistance

### GT8 PZ



- Plastic inside reduces wear
- Compacted structure, extrusion resistance
- Reducing Extension
- Suitable for multi-layer rope winding
- 8 strands structure with high flexibility
- High breaking tension
- High cost effective

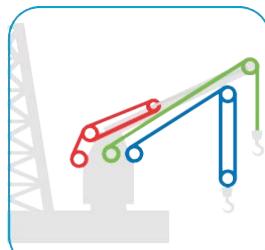
### GT8 Z



- Parallel lay 8 strands
- Compacted structure
- Extremely high breaking tension
- Anti extrusion
- Suitable for multi-layer drum
- Recommended boom rope for fixed ends

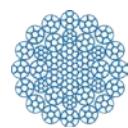
# APPLICATION CRANE ROPES III

## OFFSHORE SITTING CRANE



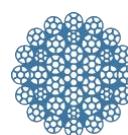
- Boom wire rope
- Main hoisting rope
- Boom adjusting rope

### GT34 Z & GT34 PZ ●●



- Anti-rotation
- High hoisting height applications
- Good compressive performance, suitable for multi-layer drum winding
- Reduce pulley wear
- Long service life
- High breaking tension

### GT34 ZD & GT34 PZD ●



- Low rotation Dyform structure
- Recommended for high-hoisting height application
- High strength
- Reduce the wear of pulleys
- Accurate rope diameter
- Suitable for single or multi-winding rope
- Long service life

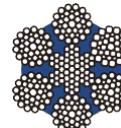


### GT6 Z ●



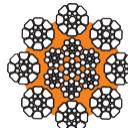
- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective

### GT6 ●●●



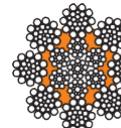
- Structurally tight strands
- High breaking load
- Good fatigue resistance

### GT8 PZ ●



- Plastic inside reduces wear
- Compacted structure, extrusion resistance
- Reducing Extension
- Suitable for multi-layer rope winding
- 8 strands structure with high flexibility
- High breaking tension
- High cost effective

### GT8 P ●●●



- Structurally tight strands
- High breaking load
- Good fatigue resistance
- Good bending property

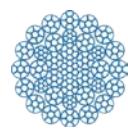
# APPLICATION CRANE ROPES III

## OFFSHORE SITTING CRANE



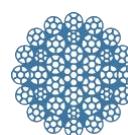
- Boom wire rope
- Main hoisting rope
- Boom adjusting rope

### GT34 Z & GT34 PZ ●●



- Anti-rotation
- High hoisting height applications
- Good compressive performance, suitable for multi-layer drum winding
- Reduce pulley wear
- Long service life
- High breaking tension

### GT34 ZD & GT34 PZD ●



- Low rotation Dyform structure
- Recommended for high-hoisting height application
- High strength
- Reduce the wear of pulleys
- Accurate rope diameter
- Suitable for single or multi-winding rope
- Long service life

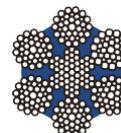


### GT6 Z ●



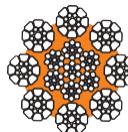
- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective

### GT6 ●●●



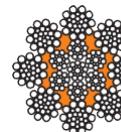
- Structurally tight strands
- High breaking load
- Good fatigue resistance

### GT8 PZ ●



- Plastic inside reduces wear
- Compacted structure, extrusion resistance
- Reducing Extension
- Suitable for multi-layer rope winding
- 8 strands structure with high flexibility
- High breaking tension
- High cost effective

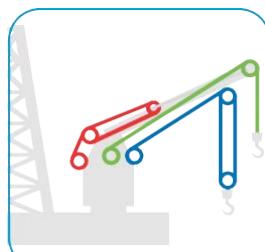
### GT8 P ●●●



- Structurally tight strands
- High breaking load
- Good fatigue resistance
- Good bending property

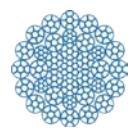
# APPLICATION CRANE ROPES III

## OFFSHORE SITTING CRANE



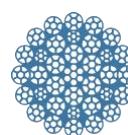
- Boom wire rope
- Main hoisting rope
- Boom adjusting rope

### GT34 Z & GT34 PZ ●●

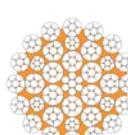


- Anti-rotation
- High hoisting height applications
- Good compressive performance, suitable for multi-layer drum winding
- Reduce pulley wear
- Long service life
- High breaking tension

### GT34 ZD & GT34 PZD ●



- Low rotation Dyform structure
- Recommended for high-hoisting height application
- High strength
- Reduce the wear of pulleys
- Accurate rope diameter
- Suitable for single or multi-winding rope
- Long service life

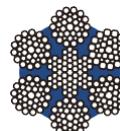


### GT6 Z ●



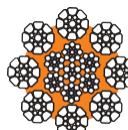
- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective

### GT6 ●●●



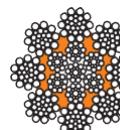
- Structurally tight strands
- High breaking load
- Good fatigue resistance

### GT8 PZ ●



- Plastic inside reduces wear
- Compacted structure, extrusion resistance
- Reducing Extension
- Suitable for multi-layer rope winding
- 8 strands structure with high flexibility
- High breaking tension
- High cost effective

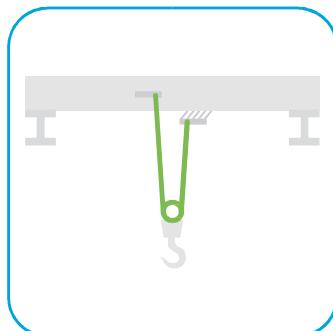
### GT8 P ●●●



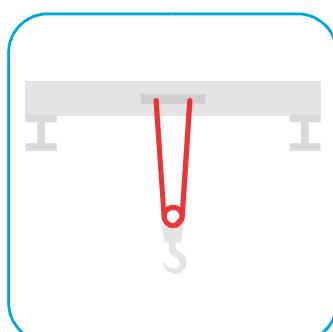
- Structurally tight strands
- High breaking load
- Good fatigue resistance
- Good bending property

# APPLICATION CRANE ROPES III

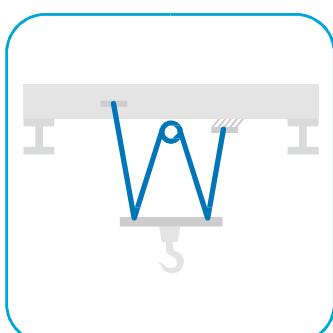
## BRIDGE CRANE



● Main hoisting wire rope

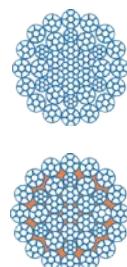


● Main hoisting wire rope



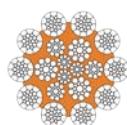
● Main hoisting wire rope

### GT34 Z & GT34 PZ ●●



- Anti-rotation
- High hoisting height applications
- Good compressive performance, suitable for multi-layer drum winding
- Reduce pulley wear
- Long service life
- High breaking tension

### GT10PZ ●



- High breaking load
- Rotating Resistance Reducing pulley friction
- Long service life
- Shorten downtime

### GT6 Z ●●●



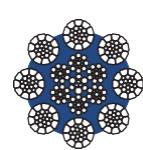
- Long service life
- Strong compressive structure
- Rope diameter accuracy
- Reduce the cost of use

### GT6 ●●●



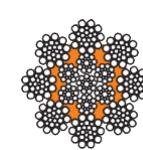
- Structurally tight strands
- High breaking load
- Good fatigue resistance

### GT8 Z ●●●



- Long service life
- Short downtime
- 8-strand structure with high flexibility
- High temperature resistance after lubrication
- Constant high quality
- Reduce the cost of use

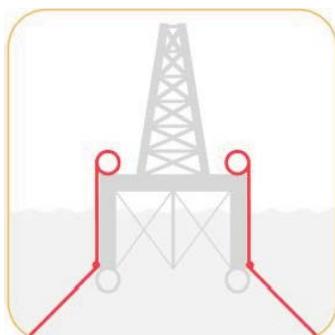
### GT8 P ●●●



- Structurally tight strands
- High breaking load
- Good fatigue resistance
- Good bending property

## APPLICATION CRANE ROPES II

### Exploration rig

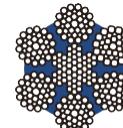


#### GT6 Z



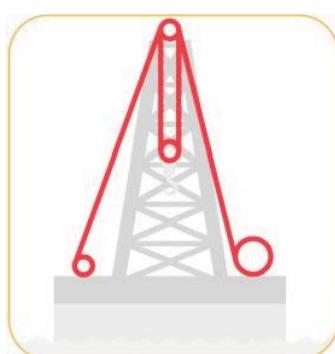
- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective

#### GT6



- Structurally tight strands
- High breaking load
- Good fatigue resistance

### Drilling line



#### GT6 Z



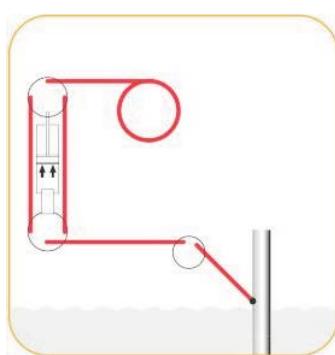
- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective

#### GT6



- Structurally tight strands
- High breaking load
- Good fatigue resistance

### Tensioner wire rope

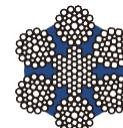


#### GT6 Z



- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective

#### GT6



- Structurally tight strands
- High breaking load
- Good fatigue resistance

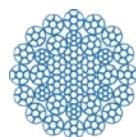


## APPLICATION CRANE ROPES II

### Offshore foundation rope

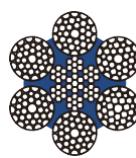


#### GT34 Z



- Low rotation Dyform structure
- Recommended for high-hoisting height application
- High strength
- Reduce the wear of pulleys
- Accurate rope diameter
- Suitable for single or multi-winding rope
- Long service life

#### GT6 Z



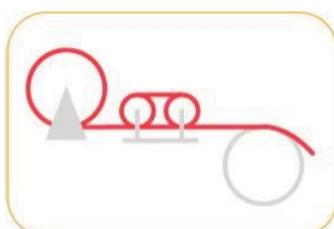
- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective

#### GT8 PZ

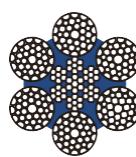


- Plastic inside reduces wear
- Compacted structure, extrusion resistance
- Reducing Extension
- Suitable for multi-layer rope winding
- 8 strands structure with high flexibility
- High breaking tension
- High cost effective

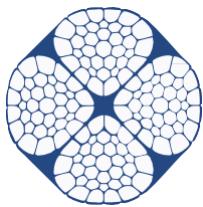
### Ocean winch rope



#### GT6 Z



- Compacted structure, extrusion resistance
- Precise rope diameter helps multi-layer rope winding
- Stable performance
- Long service life, reduce rope change and stoppage
- High cost effective



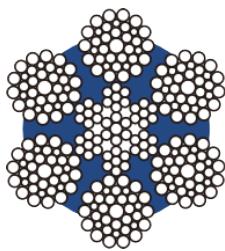
丝绳公称直径 Nominal Diameter	参考重量 Reference weight	钢丝绳公称抗拉强度/MPa Tensile strength/MPa			
		1770	1870	1960	2160
		最小破断拉力 Minimum breaking load			
mm	kg/m	kN	kN	kN	kN
6.00	0.153	27.94		30.94	33.37
7.00	0.212	38.12		42.20	45.40
8.00	0.276	49.18		54.42	58.59
9.00	0.351	62.47		69.16	74.40
10.00	0.426	77.02		85.26	91.76
11.00	0.519	93.41		103.50	111.36
12.00	0.631	111.36		123.29	132.60
13.00	0.728	130.56		144.53	155.49
14.00	0.854	151.61		167.81	180.61
15.00	0.975	173.82		192.45	207.00
16.00	1.105	200.01		221.55	238.33
17.00	1.264	222.71		246.57	265.30
18.00	1.395	251.13		278.00	299.15
19.00	1.562	280.62		310.79	334.36
20.00	1.729	308.17		341.25	367.15
21.00	1.898	338.34		374.61	403.04
22.00	2.077	371.90		411.86	443.10
23.00	2.305	411.77		455.90	490.53
24.00	2.483	449.11		497.32	535.05
25.00	2.711	480.83		532.43	572.79
26.00	2.936	526.52		583.07	627.30
27.00	3.157	568.61		629.72	677.45
28.00	3.391	604.12		669.01	719.74
29.00	3.634	654.75		725.08	779.98
30.00	3.889	700.44		775.71	834.49
31.00	4.132	743.89		824.02	886.48
32.00	4.403	793.07		878.24	944.78
33.00	4.683	842.93		933.82	1004.53
34.00	4.971	901.23		997.94	1073.60
36.00	5.573	1005.89		1113.95	1198.34
38.00	6.209	1119.48		1239.56	1333.56
40.00	6.88	1232.68		1364.98	1468.39

**NOTES**

Diameter tolerances and limiting deviation can be found in the current part of the EN 12385

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





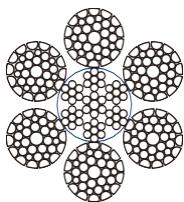
钢丝绳公称直径 Nominal Diameter	参考重量 Reference weight	钢丝绳公称抗拉强度/MPa Tensile strength/MPa			
		1770	1870	1960	2160
		最小破断拉力 Minimum breaking load			
mm	kg/m	kN	kN	kN	kN
6.00	0.15	23	24	25	28
7.00	0.20	31	33	34	38
8.00	0.27	40	43	45	49
9.00	0.34	51	54	57	62
10.00	0.42	63	67	70	77
11.00	0.51	76	81	84	93
12.00	0.60	91	96	100	111
13.00	0.71	106	113	118	130
14.00	0.82	124	130	137	151
15.00	0.94	142	150	157	173
16.00	1.07	161	170	179	197
17.00	1.21	182	192	202	222
18.00	1.35	204	216	226	249
19.00	1.51	227	240	252	278
20.00	1.67	252	266	279	308
22.00	2.02	305	322	338	372
24.00	2.41	363	383	402	443
26.00	2.83	426	450	472	520
28.00	3.28	494	522	547	603
30.00	3.76	567	599	628	692
32.00	4.28	645	682	715	787
34.00	4.83	728	770	807	889
36.00	5.42	817	863	904	997
38.00	6.04	910	961	1010	1110
40.00	6.69	1010	1070	1120	1230
42.00	7.37	1110	1170	1230	1356
44.00	8.09	1220	1290	1350	1489
46.00	8.84	1330	1410	1480	1627
48.00	9.63	1450	1530	1610	1772
50.00	10.45	1580	1660	1740	1922
52.00	11.30	1700	1800	1890	2079
54.00	12.19	1840	1940	2030	2242
56.00	13.11	1980	2090	2190	2411
58.00	14.06	2120	2240	2350	2587
60.00	15.05	2270	2400	2510	2768
62.00	16.30	2430	2568	2685	2980
64.00	17.40	2624	2773	2899	3230
66.00	18.50	2886	3050	3188	3620

**NOTES**

Diameter tolerances and limiting deviation can be found in the current part of the GB/T20118 or GB/T8918

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





GT6 Z



GT6 PZ

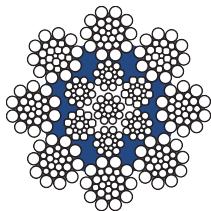
钢丝绳公称直径 Nominal Diameter	参考重量 Reference weight	钢丝绳公称抗拉强度/MPa Tensile strength/MPa	
		1960	2160
		最小破断拉力 Minimum breaking load	
mm	kg/m	kN	kN
6.00	0.17	31	34
7.00	0.23	43	46
8.00	0.29	56	58
9.00	0.37	70	73
10.00	0.46	87	82
11.00	0.56	105	90
12.00	0.66	125	110
13.00	0.78	142	152
14.00	0.90	165	176
15.00	1.04	190	202
16.00	1.18	212	230
17.00	1.33	239	260
18.00	1.49	268	291
19.00	1.66	299	324
20.00	1.84	331	359
22.00	2.23	401	435
24.00	2.65	477	518
26.00	3.11	560	607
28.00	3.61	649	704
30.00	4.14	745	809
32.00	4.71	848	920
34.00	5.32	957	1040
36.00	5.96	1070	1160
38.00	6.64	1200	1300
40.00	7.36	1320	1440
42.00	8.11	1460	1600
44.00	8.91	1600	1760
46.00	9.73	1750	1910
48.00	10.60	1910	2100
50.00	11.50	2070	2280
52.00	12.44	2280	2460
54.00	13.41	2485	2650
56.00	14.43	2670	2860
58.00	15.47	2865	3080
60.00	16.56	3065	3300
62.00	17.30	3190	3380
64.00	18.40	3320	3500
66.00	19.60	3520	3720

**NOTES**

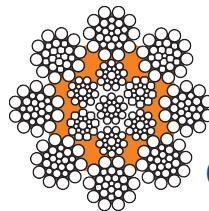
Diameter tolerances and limiting deviation can be found in the current part of the ISO 4309

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





GT8



GT8P

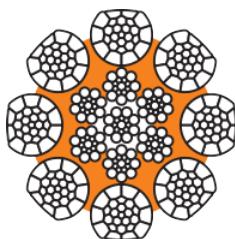
钢丝绳公称直径 Nominal Diameter	参考重量 Reference weight	钢丝绳公称抗拉强度/MPa Tensile strength/MPa			
		1770	1870	1960	2160
		最小破断拉力 Minimum breaking load			
mm	kg/m	kN	kN	kN	kN
6.00	0.15	23	24	25	28
7.00	0.20	31	33	34	38
8.00	0.26	40	43	45	49
9.00	0.33	51	54	57	62
10.00	0.41	63	67	70	77
11.00	0.49	76	81	84	93
12.00	0.59	91	96	100	111
13.00	0.69	106	113	118	130
14.00	0.80	124	130	137	151
15.00	0.92	142	150	157	173
16.00	1.04	161	170	179	197
17.00	1.18	182	192	202	222
18.00	1.32	204	216	226	249
19.00	1.47	227	240	252	278
20.00	1.63	252	266	279	308
22.00	1.97	305	322	338	372
24.00	2.34	363	383	402	443
26.00	2.75	426	450	472	520
28.00	3.19	494	522	547	603
30.00	3.66	567	599	628	692
32.00	4.17	645	682	715	787
34.00	4.70	728	770	807	889
36.00	5.27	817	863	904	997
38.00	5.88	910	961	1008	1110
40.00	6.51	1008	1065	1116	1230
42.00	7.18	1112	1174	1231	1356
44.00	7.88	1220	1289	1351	1489
46.00	8.61	1333	1409	1476	1627
48.00	9.38	1452	1534	1608	1772
50.00	10.18	1575	1664	1744	1922
52.00	11.01	1704	1800	1887	2079
54.00	11.87	1837	1941	2035	2242
56.00	12.76	1976	2088	2188	2411
58.00	13.69	2120	2239	2347	2587
60.00	14.65	2268	2397	2512	2768

**NOTES**

Diameter tolerances and limiting deviation can be found in the current part of the ISO 4309

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





## GT8PZD

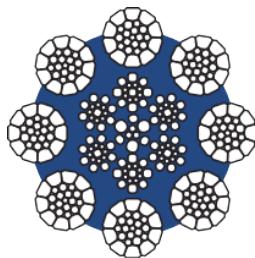
钢丝绳公称直径 Nominal Diameter	参考重量 Reference weight	钢丝绳公称抗拉强度/MPa Tensile strength/MPa		
		1770	1960	2160
		最小破断拉力 Minimum breaking load		
mm	kg/m	kN	kN	kN
6.00	0.18	31	34	35
7.00	0.24	42	46	48
8.00	0.32	55	60	63
9.00	0.40	69	76	79
10.00	0.50	85	94	98
11.00	0.60	103	114	118
12.00	0.71	123	136	141
13.00	0.84	144	159	165
14.00	0.97	167	185	192
15.00	1.12	192	212	220
16.00	1.27	218	242	250
17.00	1.43	246	273	283
18.00	1.61	276	306	317
19.00	1.79	308	341	353
20.00	1.98	341	377	391
22.00	2.40	412	457	473
24.00	2.85	491	544	563
26.00	3.35	576	638	661
28.00	3.89	668	740	766
30.00	4.46	767	849	880
32.00	5.07	873	966	1001
34.00	5.73	985	1091	1130
36.00	6.42	1105	1223	1267
38.00	7.16	1231	1363	1412
40.00	7.93	1364	1510	1564
42.00	8.74	1503	1665	1725
44.00	9.59	1650	1827	1893
46.00	10.49	1803	1997	2069
48.00	11.42	1964	2174	2253
50.00	12.39	2131	2359	2444
52.00	13.40	2304	2552	2644
54.00	14.45	2485	2752	2851
56.00	15.54	2673	2960	3066
58.00	16.67	2867	3175	3289
60.00	17.84	3068	3397	3520
62.00	19.05	3276	3478	3606
64.00	20.30	3491	3721	3848
66.00	21.59	3712	3981	4091

## NOTES

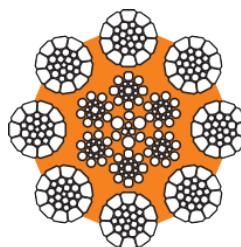
Diameter tolerances and limiting deviation can be found in the current part of the ISO 4309

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





GT8Z



GT8PZ

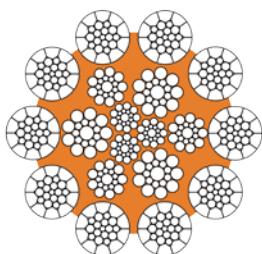
钢丝绳公称直径 Nominal Diameter	参考重量 Reference weight	钢丝绳公称抗拉强度/MPa Tensile strength/MPa	
		1960	2160
		最小破断拉力 Minimum breaking load	
mm	kg/m	kN	kN
6.00	0.17	32	33
7.00	0.23	43	45
8.00	0.30	56	59
9.00	0.38	71	75
10.00	0.47	88	92
11.00	0.57	107	112
12.00	0.68	127	133
13.00	0.80	149	156
14.00	0.93	173	181
15.00	1.06	198	208
16.00	1.21	226	236
17.00	1.36	255	267
18.00	1.53	286	299
19.00	1.70	318	333
20.00	1.89	353	369
22.00	2.28	427	446
24.00	2.72	508	531
26.00	3.19	596	623
28.00	3.70	691	723
30.00	4.25	794	830
32.00	4.83	903	944
34.00	5.46	1020	1066
36.00	6.12	1143	1195
38.00	6.82	1274	1332
40.00	7.55	1411	1476
42.00	8.29	1557	1628
44.00	9.10	1709	1787
46.00	9.95	1868	1953
48.00	10.83	2034	2126
50.00	11.75	2206	2307
52.00	12.71	2386	2496
54.00	13.71	2574	2691
56.00	14.74	2768	2894
58.00	15.81	2969	3105
60.00	16.92	3177	3322

**NOTES**

Diameter tolerances and limiting deviation can be found in the current part of the ISO 4309

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





GT10PZ

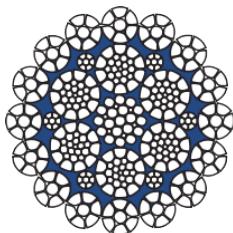
钢丝绳公称直径 Nominal Diameter	参考重量 Reference weight	钢丝绳公称抗拉强度/MPa Tensile strength/MPa	
		1960	2160
		最小破断拉力 Minimum breaking load	
mm	kg/m	kN	kN
6.00	0.17	34	35
7.00	0.24	47	48
8.00	0.31	61	62
9.00	0.39	78	79
10.00	0.48	96	98
11.00	0.58	116	118
12.00	0.69	138	140
13.00	0.81	162	165
14.00	0.94	188	191
15.00	1.08	215	219
16.00	1.23	245	250
17.00	1.39	277	282
18.00	1.56	310	316
19.00	1.73	345	352
20.00	1.92	383	390
22.00	2.32	463	472
24.00	2.76	551	562
26.00	3.24	647	659
28.00	3.76	750	765
30.00	4.32	861	878
32.00	4.92	980	999
34.00	5.55	1106	1127
36.00	6.22	1240	1264
38.00	6.93	1382	1408
40.00	7.68	1531	1560
42.00	8.47	1688	1720
44.00	9.29	1853	1888
46.00	10.16	2025	2064
48.00	11.06	2205	2247
50.00	12.00	2392	2438
52.00	12.98	2588	2637
54.00	14.00	2791	2844
56.00	15.05	3001	3058
58.00	16.15	3219	3281
60.00	17.28	3445	3511
62.00	18.45	3679	3749
64.00	19.66	3920	3995
66.00	20.91	4169	4248

**NOTES**

Diameter tolerances and limiting deviation can be found in the current part of the ISO 4309

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





## GT28Z

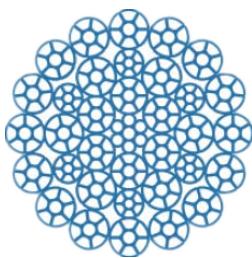
钢丝绳公称直径 Nominal Diameter	参考重量 Reference weight	钢丝绳公称抗拉强度/MPa Tensile strength/MPa			
		1770	1870	1960	2160
		最小破断拉力 Minimum breaking load			
mm	kg/m	kN	kN	kN	kN
12.00	0.743	118.0		130.7	139.5
13.00	0.872	138.5		153.4	163.7
14.00	1.011	160.6		177.9	189.9
15.00	1.161	184.4		204.2	218.0
16.00	1.321	209.8		232.3	248.0
17.00	1.491	236.8		262.3	280.0
18.00	1.672	265.5		294.1	313.9
19.00	1.863	295.8		327.7	349.8
20.00	2.064	327.8		363.1	387.5
21.00	2.275	361.4		400.2	427.3
22.00	2.497	396.6		439.3	468.9
23.00	2.729	433.5		480.2	512.5
24.00	2.972	472.0		522.7	558.0
25.00	3.225	512.2		567.3	605.5
26.00	3.488	554.0		613.5	654.9
27.00	3.761	597.4		661.6	706.3
28.00	4.045	642.5		711.6	759.6
29.00	4.339	689.2		763.3	814.8
30.00	4.644	737.6		816.8	871.9
31.00	4.958	787.5		872.2	931.0
32.00	5.283	839.2		929.4	992.3
33.00	5.619	892.4		988.4	1055.4
34.00	5.964	947.4		1049.5	1120.4
35.00	6.32	1003.9		1111.6	1187.3
36.00	6.687	1062.1		1176.6	1255.2
38.00	7.45	1183.4		1310.5	1398.7
40.00	8.255	1311.2		1452.1	1550.1

## NOTES

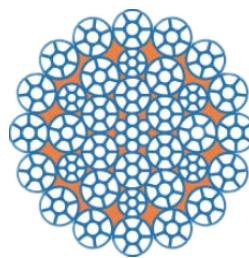
Diameter tolerances and limiting deviation can be found in the current part of the ISO 4309

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





GT34Z



GT34PZ

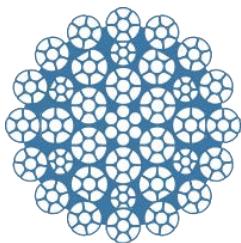
钢丝绳公称直径 Nominal Diameter	参考重量 Reference weight	钢丝绳公称抗拉强度/MPa Tensile strength/MPa	
		1960	2160
		最小破断拉力 Minimum breaking load	
mm	kg/m	kN	kN
8.00	0.33	59	62
9.00	0.41	74	78
10.00	0.51	92	97
11.00	0.62	111	117
12.00	0.73	132	139
13.00	0.86	155	163
14.00	1.00	180	189
15.00	1.15	207	217
16.00	1.31	235	247
17.00	1.47	266	279
18.00	1.65	298	313
19.00	1.84	332	349
20.00	2.04	368	387
22.00	2.47	445	468
24.00	2.94	529	557
26.00	3.45	621	653
28.00	4.00	721	758
30.00	4.59	827	870
32.00	5.22	941	990
34.00	5.90	1063	1117
36.00	6.61	1191	1253
38.00	7.36	1327	1396
40.00	8.16	1471	1547
42.00	9.00	1622	1705
44.00	9.87	1780	1871
46.00	10.79	1945	2045
48.00	11.75	2118	2227
50.00	12.75	2298	2417
52.00	13.79	2486	2614
54.00	14.87	2681	2819
56.00	15.99	2883	3031
58.00	17.16	3092	3252
60.00	18.36	3309	3480
62.00	19.60	3534	3716
64.00	20.89	3765	3959
66.00	22.22	4004	4211

**NOTES**

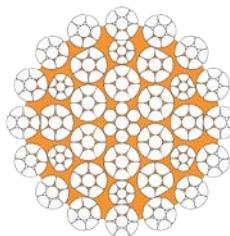
Diameter tolerances and limiting deviation can be found in the current part of the ISO 4309

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





GT34ZD



GT34PZD

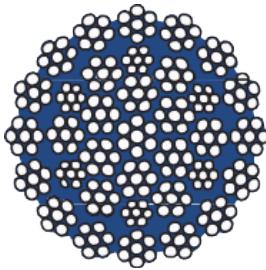
钢丝绳公称直径 Nominal Diameter	参考重量 Reference weight	钢丝绳公称抗拉强度/MPa Tensile strength/MPa	
		1960	2160
		最小破断拉力 Minimum breaking load	
mm	kg/m	kN	kN
8.00	0.34	61	64
9.00	0.43	77	81
10.00	0.53	95	100
11.00	0.64	115	120
12.00	0.76	136	143
13.00	0.89	160	168
14.00	1.03	186	195
15.00	1.18	213	224
16.00	1.34	242	255
17.00	1.52	274	288
18.00	1.70	307	323
19.00	1.90	342	359
20.00	2.10	379	398
22.00	2.54	458	482
24.00	3.02	545	573
26.00	3.55	640	673
28.00	4.12	742	781
30.00	4.73	852	896
32.00	5.38	970	1019
34.00	6.07	1095	1151
36.00	6.80	1227	1290
38.00	7.58	1367	1438
40.00	8.40	1515	1593
42.00	9.26	1670	1756
44.00	10.16	1833	1927
46.00	11.11	2003	2107
48.00	12.10	2181	2294
50.00	13.13	2367	2489
52.00	14.20	2560	2692
54.00	15.31	2761	2903
56.00	16.46	2969	3122
58.00	17.66	3185	3349
60.00	18.90	3409	3584
62.00	20.18	3640	3827
64.00	21.50	3878	4078
66.00	22.87	4124	4337

**NOTES**

Diameter tolerances and limiting deviation can be found in the current part of the ISO 4309

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".





GT35

钢丝绳公称直径 Nominal Diameter	参考重量 Reference weight	钢丝绳公称抗拉强度/MPa Tensile strength/MPa		
		1770		1960
		最小破断拉力 Minimum breaking load		
mm	kg/m	kN		kN
7.00	0.225	33.1		36.7
8.00	0.295	43.2		47.8
9.00	0.367	53.7		59.5
10.00	0.465	67.1		74.3
11.00	0.56	80.6		89.3
12.00	0.665	96.9		107.4
13.00	0.782	113.8		125.9
14.00	0.904	131.8		146.0
15.00	1.044	151.6		167.8
16.00	1.191	172.8		191.3
17.00	1.33	194.1		215.0
18.00	1.49	215.9		239.1
19.00	1.679	243.4		269.5
20.00	1.845	269.4		298.3
21.00	2.04	297.1		329.0
22.00	2.25	326.9		362.0
23.00	2.441	355.5		393.7
24.00	2.664	388.5		430.2
25.00	2.879	418.9		464.0
26.00	3.123	455.1		503.9
27.00	3.356	493.1		546.0
28.00	3.619	532.3		589.5
29.00	3.892	568.2		629.1
30.00	4.183	608.3		673.6
31.00	4.438	645.6		714.8
32.00	4.737	689.2		763.1
33.00	5.022	730.5		808.9
34.00	5.321	779.8		863.5
36.00	5.953	878.9		973.3
38.00	6.683	975.3		1080.1
40.00	7.363	1078.5		1194.4
42.00	8.124	1197.1		1325.6
44.00	8.95	1312.1		1453.0
46.00	9.753	1429.7		1583.1
48.00	10.678	1559.9		1727.3
50.00	11.525	1687.8		1868.9
52.00	12.575	1777.5		1968.3
54.00	13.512	1917.1		2122.8
56.00	14.487	2077.1		2300.0
58.00	15.535	2216.8		2454.9
60.00	16.624	2382.2		2637.9
62.00	17.751	2544.4		2817.6
64.00	18.915	2715.3		3006.8
66.00	20.116	2889.4		3199.5
68.00	21.353	3078.7		3409.2
70.00	22.628	3236.4		3583.9
72.00	23.939	3439.2		3808.4

**NOTES**

Diameter tolerances and limiting deviation can be found in the current part of the ISO 4309

Additional diameters and special designs upon request.  
Please read our notes on rope selection in "Application".



# WIRE ROPE SLING



**RUST-FREE AND  
WEATHER-RESISTANT:  
STAINLESS STEEL ROPES  
PROVE THEIR WORTH  
OUTDOORS**

It makes sense to use non-rusting stainless steel material in a variety of applications. With stainless steel, a long service can be guaranteed even in extreme areas of application.

Stainless steel ropes are used primarily outdoors or near chemicals or water. Stainless steel ropes also enjoy great popularity indoors due to their appealing surface.



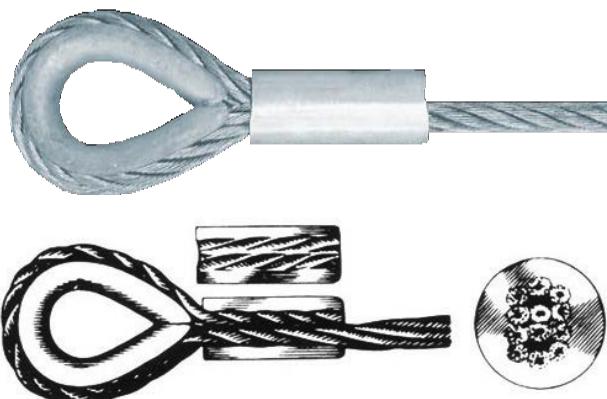
# General Information

## WIRE ROPE SLINGS

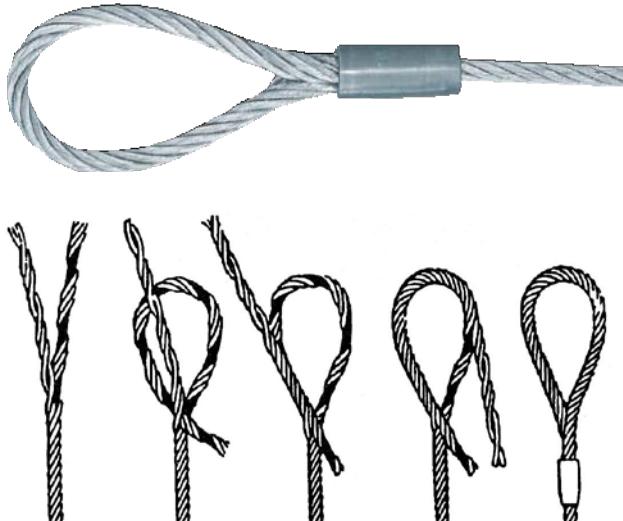
TO AS 1666

### Aluminium Ferrule Secured Slings

- = Ferrule secured splice
- + Proof load testing of each sling
- + WLL markings
- + Sling production site marking
- + Test Number for easy matching with test certificate



### Ferrule Secured Flemish Eye Slings



Flemish eyes with steel sleeves are recommended for corrosive conditions where a steel ferrule or sleeve is able to withstand electrolytic reactions, which can affect other metals. In hot working areas the steel retains its strength at higher temperatures.

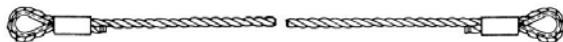
In abrasive conditions steel can withstand more mechanical stresses than other ferrules. In the above situations the Flemish eyes with steel sleeves have the back up strength of a Flemish eye even if by some means the ferrule is damaged.

### Hand-spliced Slings

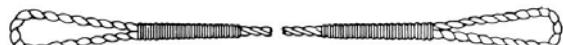


Although aluminium ferrule secured has become the most popular type of wire rope sling there is still some demand for Hand-spliced slings which have more flexibility at the splice.

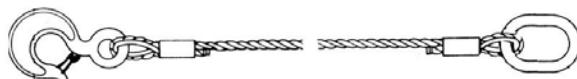
### Wire Rope Sling Types



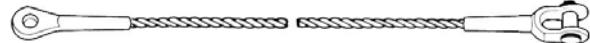
Wire rope sling with ferrule secured thimble eye each end



Wire rope sling with hand spliced soft eye each end

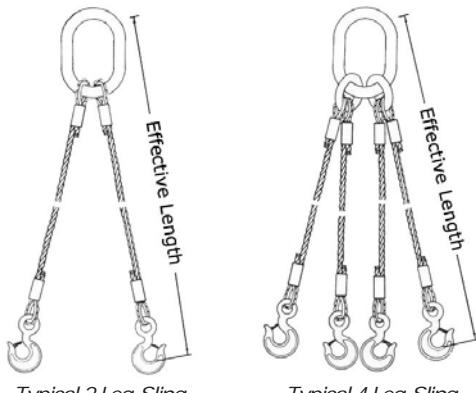


Wire rope sling with ferrule secured thimble eye each end with hook captive one end and master link captive other end



Wire rope assembly with open swage socket one end and closed swage socket other end

Effective Length  
= inside bearing point to inside bearing point



Typical 2 Leg Sling

Typical 4 Leg Sling



# General Information

## WIRE ROPE SLINGS

TO AS 1666

### Inspection Before Use

A sling will eventually deteriorate as a result of abrasive wear, wire breaks, loss of lubrication, corrosion and consolidation of the core and rope strands. Damage is not always readily evident. The normal types of damage are described in this section.

The pre-use inspection for wire rope slings shall give particular emphasis to:

1. Check the identification stamp or tag and ensure the WLL of the sling is clearly legible.
2. Check load-bearing points for excessive wear, kinking, broken wires and corrosion.
3. Check each strand along its length, opening the rope as much as practicable to enable examination of the surfaces of the strands towards the inside of the rope.
4. Check end fittings and attachments for any signs of deformation, excessive wear or corrosion.
5. Check the sling for heat damage. This is usually obvious through the discolouration of the wires.

### Types of Damage

Wire rope can be damaged in different ways and the resulting damage can take the forms of external wear, local abrasion, broken wires, internal wear, physical deterioration, corrosion, kinking and flattening of eyes.

Severe overloading of wire ropes is evidenced by an increasing rate of fracture of the wires and excessive stretch under load accompanied by marked reduction in diameter.

External wear can be caused by dragging the sling over rough surfaces and is the most readily noticeable cause of weakness, particularly if a new sling is available for comparison. In the extreme, the outer strands become worn as the outer wires within the strands are flattened and worn.

Local abrasion, as distinct from external wear, can be caused by the passage of the sling over sharp edges whilst under tension and can cause a serious loss of strength. It is good economy to protect slings at points where excessive local abrasion can occur. Cuts, bruises and similar damage can be internal as well as external. This type of damage is indicated by local rupturing or loosening of wires or strands. It is caused by lack of care in use such as hammering of the slings and careless placement of the load. Internal wear is caused by repeated flexing of the sling and by particles of grit picked up in service. Internal wear is accelerated by lack of lubrication and by corrosion.

Corrosion is caused by dampness and exposure to acids, alkalis, other chemicals, flue gases, industrial dusts, ashes and similar substances.

High temperatures, such as those found in foundries, steel works and like applications, reduce both the strength and the safety of a sling.

Distortion, permanent set or any physical deformation of end fittings, particularly at load bearing points should be regarded as dangerous and the sling should not be used.

### Discarding Slings

The decision whether or not to withdraw a sling from use shall be based on an assessment of the general condition of the sling. After examination, if any doubt exists about the safety of a sling, it shall be withdrawn from service.

Slight damage to the outer wires of a wire rope sling may be disregarded. Serious damage of one strand or somewhat less serious damage to more than one stand however, merits rejection of the sling.

Slings that have been subjected to impact loads, overloaded or loaded in a kinked condition shall be destroyed and discarded.

Where kinking is such that it creates a hazard in taking up loads through hand injuries or causing unevenness or jerking during loading, the kinked slings shall be discarded.

### Care in Use

Wire rope slings are particularly susceptible to kinking, local abrasion and mechanical damage and care should be taken to ensure they are protected as much as is practical to prevent or lessen the extent of such damage. Some common safe use practices for wire rope slings are:

1. Never exceed the WLL of a wire rope sling. Always ensure you know the lifting capacity of the sling in the configuration you intend to use it.
2. Ensure that wire rope slings are not used on sharp corners of a load. This will almost certainly kink the sling and render it unusable. If a load with sharp corners is to be lifted the corner should be packed or a protective sleeve placed over the sling.
3. Splices in rope slings shall not be bent around corners or edges whether sharp or curved.
4. The inside radius of any bend in a wire rope around a corner of a load, (except at the point of reeving in choke hitches) shall be not less than the rope diameter where the included angle of the bend of the rope is more than 90 degrees or five times the rope diameter where the included angle of the rope is less than 90 degrees.
5. Practice such as hammering or "battening down" of slings to force the sling down in a choke hitch configuration is dangerous. The wire rope sling should be left to find its natural angle. If positive choking is required a synthetic sling may better serve the application.
6. Never lift a load over people or dangerous parts of plant.
7. Do not use slings that are knotted or kinked.
8. Wire rope slings should not be exposed to welding or cutting operations.
9. Careless placement of the load is a sure way to damage a sling and must be avoided. Loads should always be placed on battens.
10. When using multi leg slings ensure that the load is as evenly balanced as possible in order for all sling legs to take an equal amount of load.
11. Never shorten a sling by tying a knot in it. If the load is unequal and varying leg lengths are required a specially designed wire rope sling shall be used or an alternative slinging method.

### WARNING

- Weakening effects are more serious on smaller sizes of rope than on larger sizes of rope because of the greater ratio between the diameter and cross-sectional area.
- Good inspection practice will isolate causes of deterioration and enable the detection of damage to wire rope slings and end fittings. This can improve storage, handling and application practices. Advice on discarding slings is also given in this section.
- Slings in storage shall be regularly inspected for deterioration and, when necessary, withdrawn from use and discarded.
- Slings used in circumstances, areas or atmospheres prone to acid, alkali, chemical or other damaging action shall be inspected for possible deterioration prior to reuse.



# General Information

## WIRE ROPESLINGS

WLL TONNES - AS 1666

### 1570 GRADE FC

#### Single Leg

Method of Loading	Direct Loaded	Choke Hitch		Basket Hitch			Direct Loaded			Choke Hitch		
		Round load	Rectangula r load	Round Load	Other than round load					Round load SingleWrap	Other SingleWrap	
Included Angle a	—	—	—	60°	90°	60°	90°	0° to 60°	90°	120°	0° to 45°	0° to 45°
Loading factors	1	0.75	0.5	1.73	1.41	0.87	0.71	1.73	1.41	1	1.30	0.87
Rope dia. (mm)												
8	0.55	0.41	0.27	0.96	0.78	0.48	0.39	0.96	0.78	0.55	0.72	0.48
9	0.70	0.52	0.35	1.21	0.99	0.61	0.50	1.21	0.99	0.70	0.91	0.61
10	0.86	0.65	0.43	1.50	1.22	0.75	0.61	1.50	1.22	0.86	1.13	0.75
11	1.05	0.78	0.52	1.81	1.48	0.91	0.74	1.81	1.48	1.05	1.36	0.91
12	1.23	0.92	0.61	2.14	1.74	1.07	0.88	2.14	1.74	1.23	1.61	1.07
13	1.47	1.10	0.73	2.54	2.07	1.27	1.04	2.54	2.07	1.47	1.91	1.27
14	1.70	1.27	0.85	2.94	2.40	1.48	1.21	2.94	2.40	1.70	2.21	1.48
16	2.22	1.67	1.11	3.85	3.14	1.93	1.58	3.85	3.14	2.22	2.89	1.93
18	2.80	2.10	1.40	4.85	3.95	2.44	1.99	4.85	3.95	2.80	3.65	2.44
20	3.48	2.61	1.74	6.03	4.91	3.03	2.47	6.03	4.91	3.48	4.53	3.03
22	4.20	3.15	2.10	7.27	5.92	3.65	2.98	7.27	5.92	4.20	5.46	3.65
24	5.01	3.76	2.50	8.67	7.07	4.36	3.56	8.67	7.07	5.01	6.52	4.36
26	5.88	4.41	2.94	10.18	8.30	5.12	4.18	10.18	8.30	5.88	7.65	5.12
28	6.81	5.11	3.40	11.79	9.61	5.93	4.84	11.79	9.61	6.81	8.86	5.93
32	8.90	6.68	4.45	15.41	12.56	7.75	6.32	15.41	12.56	8.90	11.58	7.75

### 1770 GRADE IWRC

#### Single Leg

Method of Loading	Direct Loaded	Choke Hitch		Basket Hitch			Direct Loaded			Choke Hitch		
		Round load	Rectangula r load	Round Load	Other than round load					Round load SingleWrap	Other SingleWrap	
Included Angle a	—	—	—	60°	90°	60°	90°	0° to 60°	90°	120°	0° to 45°	0° to 45°
Loading factors	1	0.75	0.5	1.73	1.41	0.87	0.71	1.73	1.41	1	1.30	0.87
Rope dia. (mm)												
8	0.78	0.58	0.39	1.35	1.10	0.68	0.55	1.35	1.10	0.78	1.01	0.68
9	0.99	0.74	0.49	1.71	1.40	0.86	0.70	1.71	1.40	0.99	1.29	0.86
10	1.22	0.92	0.61	2.10	1.72	1.06	0.87	2.10	1.72	1.22	1.59	1.06
11	1.48	1.11	0.74	2.60	2.10	1.29	1.05	2.60	2.10	1.48	1.92	1.29
12	1.76	1.32	0.88	3.00	2.50	1.53	1.25	3.00	2.50	1.76	2.30	1.53
13	2.10	1.55	1.04	3.60	2.90	1.80	1.47	3.60	2.90	2.10	2.70	1.80
14	2.40	1.80	1.20	4.20	3.40	2.10	1.71	4.20	3.40	2.40	3.10	2.10
16	3.10	2.30	1.56	5.40	4.40	2.70	2.20	5.40	4.40	3.10	4.10	2.70
18	4.00	3.00	1.98	6.80	5.60	3.40	2.80	6.80	5.60	4.00	5.10	3.40
20	4.90	3.70	2.40	8.40	6.90	4.20	3.50	8.40	6.90	4.90	6.30	4.20
22	5.90	4.40	3.00	10.20	8.30	5.10	4.20	10.20	8.30	5.90	7.70	5.10
24	7.00	5.30	3.50	12.20	9.90	6.10	5.00	12.20	9.90	7.00	9.10	6.10
26	8.30	6.20	4.10	14.30	11.60	7.20	5.90	14.30	11.60	8.30	10.70	7.20
28	9.60	7.20	4.80	16.60	13.50	8.30	6.80	16.60	13.50	9.60	12.40	8.30
32	12.50	9.40	6.30	22.00	17.60	10.90	8.90	22.00	17.60	12.50	16.30	10.90
36	15.80	11.90	7.90	27.00	22.00	13.80	11.20	27.00	22.00	15.80	21.00	13.80
40	19.60	14.70	9.80	34.00	28.00	17.00	13.90	34.00	28.00	19.60	25.00	17.00
44	24.00	17.70	11.80	41.00	33.00	21.00	16.80	41.00	33.00	24.00	31.00	21.00
48	28.00	21.00	14.00	49.00	40.00	24.00	19.90	49.00	40.00	28.00	37.00	24.00
52	33.00	25.00	16.60	57.00	47.00	29.00	24.00	57.00	47.00	33.00	43.00	29.00
56	38.00	29.00	19.20	66.00	54.00	33.00	27.00	66.00	54.00	38.00	50.00	33.00
58	42.00	31.50	21.00	73.00	59.00	36.50	30.00	74.00	60.00	42.00	54.00	36.50
64	52.00	39.00	26.00	90.00	73.00	45.00	37.00	90.00	73.00	52.00	67.00	45.00
75	70.00	52.50	35.00	121.00	99.00	61.00	50.00	121.00	99.00	70.00	91.00	50.00



# General Information

## WIRE ROPE SLINGS

### 1960 GRADE IWRC

#### Single Leg

Method of Loading	Direct Loaded	Choke Hitch		Basket Hitch		Direct Loaded	Choke Hitch	
		Round load	Rectangular load	Round Load	Other than round load		Round load Single Wrap	Other Single Wrap
Included Angle a	—	—	—	60°	90°	60°	90°	120°
Loading factors	1	0.75	0.5	1.73	1.41	0.87	0.71	1.73
Rope dia. (mm)	8	0.87	0.65	0.43	1.50	1.22	0.75	0.61
	9	1.09	0.82	0.55	1.89	1.54	0.95	0.78
	10	1.35	1.01	0.68	2.30	1.91	1.18	0.96
	11	1.63	1.23	0.82	2.80	2.30	1.42	1.16
	12	1.94	1.45	0.97	3.30	2.70	1.69	1.38
	13	2.20	1.71	1.14	3.90	3.20	1.99	1.62
	14	2.60	1.99	1.33	4.50	3.70	2.30	1.88
	16	3.40	2.60	1.73	6.00	4.80	3.00	2.40
	18	4.30	3.20	2.10	7.50	6.10	3.80	3.10
	20	5.40	4.00	2.70	9.30	7.60	4.70	3.80
	22	6.50	4.90	3.20	11.30	9.20	5.70	4.60
	24	7.70	5.80	3.80	13.40	10.90	6.70	5.50
	26	9.10	6.80	4.50	15.80	12.80	7.90	6.40
	28	10.50	7.90	5.30	18.30	14.90	9.20	7.50
	32	13.80	10.30	6.90	23.90	19.50	12.00	9.80
	36	17.50	13.10	8.70	30.20	24.60	15.20	12.40
	40	21.60	16.20	10.80	37.50	30.50	18.80	15.40
	44	26.10	19.60	13.00	45.20	36.80	22.70	18.50
	48	31.10	23.30	15.50	53.90	43.90	27.10	22.10
	52	36.60	27.40	18.30	63.30	51.60	31.80	25.90
	56	42.40	31.80	21.20	73.30	59.80	36.90	30.10
	58	47.20	35.40	23.60	81.70	66.60	41.10	33.50
	60	48.60	36.40	24.30	84.10	68.50	42.20	34.50
							84.10	84.10
							68.50	68.50
							48.60	48.60
							63.20	63.20
								42.20

### Notes on Wire Rope Sling Tables

- (a) The tables apply to slings with ferrule-secured eyes and the WLL values include a reduction factor of 0.95.
- (b) The tables are based on general conditions of use with an M3 group classification of crane mechanisms as specified in AS 1418.1.
- (c) The tables apply to slings used for general purposes and are based on a design factor of 5.
- (d) Where the sling is subject to unusual dynamic loading, the sling shall be derated.
- (e) These loading factors and values are based on single part sling legs. The WLL values may be increased by 50% for double-part sling legs.
- (f) Ropes shall be effectively protected from contact with sharp corners.
- (g) Splices shall not be bent around edges or sharp corners.
- (h) For slings with other types of termination, the relevant factor for terminations shall be used.
- (i) Where an endless sling or soft eye of a sling interfaces with a fitting the supporting surface of the fitting shall have a diameter not less than the rope diameter. Where the diameter of such a fitting is less than two rope diameters the sling shall be derated by 50%.

### On 2, 3 and 4 leg sling tables.

This method of rating general-purpose multi-leg slings follows the principle that loads could be supported by only two legs, the other legs only balancing the load. It makes allowance for adverse conditions, such as unequal leg lengths, an uneven load shape, a rigid load and an off-centred centre of gravity.

The WLL for a multi-leg sling having an included angle of 60 degrees between the legs is the maximum WLL for the sling, even when the included angle between the legs is less than 60 degrees. Under no circumstances should the included angle between the legs of a multi-leg sling be allowed to exceed 120 degrees. The WLL of lifting components and end fittings of a multi-leg sling should be considered when determining the maximum WLL of the sling.



# General Information

## WIRE ROPE SLINGS

TO AS 1666

### Marking

Each sling assembly must be stamped or have an identification tag including the following information as a minimum:

- Identification of manufacturer or supplier
- WLL for single leg slings or WLL for applicable angles of multi-leg slings
- Test certification number and date

### Minimum Length of Leg

The effective length of a sling shall be not less than;

- (a) Hand-spliced single-part spliced leg: 70 rope diameters
- (b) Mechanically spliced

With thimble reinforced eyes: 36 rope diameters

With soft eyes (minimum length): 46 rope diameters

Ferrule-secured sling legs shall have a distance between the ferrules securing the eyes of the sling leg of not less than 12 rope diameters.

### Internal Length of Soft Eyes

For general use, the internal length of soft eyes in their natural unloaded shape should be not less than 12 times the diameter of the rope.

For specified applications, the internal length of soft eyes in their natural unloaded shape should not be less than three times the width of the support (e.g. width of hook, diameter of supporting pin).

### Factors for Terminations

Type of Termination	Rope Diameter (mm)	Termination Factor
Double-part slings and grommets	All	1.5
Ferrule-secured slings	≤ 80	0.95
	> 80	0.9
Hand-spliced slings	≤ 20	0.9
	> 20	0.8
Spelter socket (poured)	All	1
Swage socket	All	1



# General Information

## WIRE ROPE SLINGS

LKING STEEL LIMITED, based in Shanghai, has the capability to produce very large lifting slings in varying configurations.

### End Connection Factors

Type of End Connection	Max. Rope Diameter mm	Loss Due to End Connection %
Grommet (Endless)	305	25
Hand Splice (Cable Laid)	305	10 - 25*
Flemish Eye (Steel Sleeves)	128	5**
Aluminium Ferrule Secured	76	5**
Steel End Socket (Swaged)	76	0
Resin or Zinc Socket	160	0

\* Depending on rope diameter and construction.

\*\* AS 1666 specifies 10% loss for wire ropes above 80mm dia.

### Rope Bending Diameter

#### (Cable laid / round strand ropes)

Small bending diameters reduce the load capacity. The suggested respective reductions are listed in the tables.

#### Suggested Minimum Bending Diameter For Eyes

Type of Sling	Normal Application	Special Application
In the eye of single leg ropes		
Round strand ropes	3 x d	2 x d
Cable laid / 3 part rope - absolute minimum	4 x d	2 to 3 x d 1 x d
In the bend of grommets		
Round strand grommets	7 x d	4 to 6 x d
Cable laid grommets	8 x d	4 to 6 x d

#### Suggested Minimum Bending Diameter For Body of Rope

Type of Sling	Normal Application	Special Application
Round strand ropes	4 x d	3 x d
Cable laid	6 x d	4 x d

### 3 Part Slings

Rope Construction

= 3 Part Rope

Special Feature

= rotation resistant under load



Approximate Diameter mm	Unit Rope Diameter mm	* Aggregate 3 Parts kN	Mas kg/m	MBL Sling kN
88	44	3,660	24.3	3,095
96	48	4,350	28.9	3,681
104	52	5,130	33.9	4,338
114	58	6,600	41.7	5,328
128	64	8,073	51.9	6,546
152	75	10,866	70.8	9,000
184*	92	17,730	105.4	15,070
208*	104	23,550	136.3	20,017

Det Norske Veritas approved. Certificate No. S-608

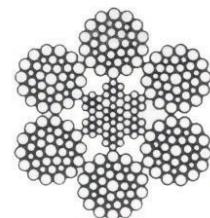
\* A 15% deration is applied to arrive at the MBL of the sling

\* Unit ropes are 8 stranded G1960.

### Rope Construction

#### Round Strand Wire Rope

LKING STEEL LIMITED can manufacture aluminium ferrule secured slings or grommets to 75mm diameter



Nominal Rope Diameter mm	1770 Grade MBL kN	Mass Weight kg/m
26	426	2.83
28	494	3.28
32	646	4.28
36	817	5.42
40	1,010	6.69
44	1,220	8.1
48	1,450	9.64
52	1,710	11.3
58	2,200	13.9
64	2,691	17.3
75	3,622	23.6
92*	5,910	35.1
104*	7,850	45.4

\*These ropes are 8 strand construction and 1960 grade



LKS slings in use 100mm wire rope sling with aluminium ferrules in Donghai Bridge



# General Information

## WIRE ROPE SLINGS

### Cable Laid Slings

Diameter mm	Weight kg/m	Calculated Rope Breaking Load tonnes	Calculated Sling Breaking Load tonnes
120	43	600	450
142	63	900	675
164	87	1,200	900
188	115	1,500	1,125
212	147	1,800	1,350
224	166	2,100	1,575
240	187	2,400	1,800
262	218	2,700	2,025
270	264	3,000	2,250
288	270	3,300	2,475
300	290	3,600	2,700
314	320	3,900	2,925
328	356	4,200	3,150
337	380	4,500	3,375
352	412	4,800	3,600
361	432	5,100	3,825
376	465	5,400	4,050
382	474	5,700	4,275
398	514	6,000	4,500
406	523	6,300	4,725
424	579	6,600	4,950
434	605	6,900	5,175
440	632	7,200	5,400
453	672	7,500	5,625
460	696	7,800	5,850
470	705	8,100	6,075

The calculated rope breaking load of the cable laid rope is the sum of the individual breaking force of the component ropes multiplied by a spinning loss coefficient of 0.85.

For slings this result is multiplied by a termination efficiency for hand splice of 0.75.

For slings and grommets the WLL is the maximum mass that a sling may raise, lower or sustain under specific working conditions.

### Body of Rope Bending Factor (Cable Laid)

Bending Ratio: Bending Diameter to Nominal Rope Diameter $1 = \frac{D}{d}$	Loss Due to Bending Ratio %
5	25
7.5	20
10	16
15	10
20	7
25	5
30	4
35	2
40	0

### Cable Laid Grommets

Diameter mm	Weight kg/m	Calculated Grommet Breaking Load tonnes
78	21	450
96	32	675
114	45	900
126	55	1,125
138	65	1,350
150	78	1,575
156	79	1,800
162	89	2,025
168	96	2,250
171	100	2,475
180	111	2,700
192	124	2,925
201	137	3,150
204	143	3,375
216	160	3,600
222	170	3,825
228	179	4,050
240	193	4,275
249	209	4,500
252	210	4,725
258	225	4,950
267	242	5,175
276	259	5,400
282	265	5,625
288	277	5,850
294	296	6,075
306	315	6,763
312	342	6,865
324	369	7,446
336	396	7,803
342	413	8,211
360	448	8,843
381	502	9,874
399	553	10,812
438	668	12,852

### Note:

For the above calculated sling or grommet breaking load, no loss has been deducted for D/d ratio at the bearing points for grommets. This also applies for slings used "on the double". The bending loss factor (EB) should be calculated as follows:

$$EB = 1 - \sqrt{\frac{0.5}{D/d}}$$

d = the single part sling/grommet diameter

D = diameter over which the sling/grommet is bent



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