



NORTHERN STRANDS

MINING WIRE ROPE CATALOGUE

NORTHERN STRANDS

ABOUT US

Northern Strands supplies various industries and has evolved into six major divisions. Northern Strands offers the essential tools and technical expertise necessary for mine hoisting and attachments, general rigging, engineered fall protection, suspended access, agriculture terminal maintenance, and training services.



NORTHERN
STRANDS

PROUDLY PART OF THE
NORTHERN STRANDS
GROUP OF COMPANIES





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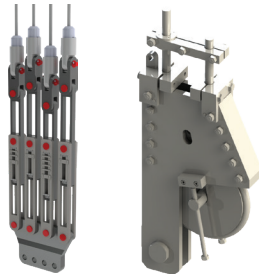
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MINING WIRE ROPE ATTACHMENTS CATALOGUE

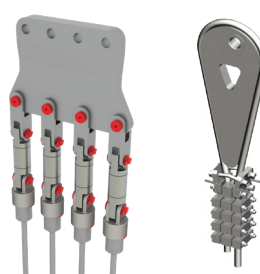
Sinking Rope



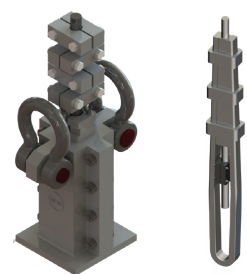
Hoist Rope



Balance Rope



Guide Rope



MINING WIRE ROPE APPLICATIONS

By working with customers in the mining industry since 1970, Northern Strands has provided products and technical expertise for some of the world's most challenging and complex hoist installations. Regardless of the hoist configuration or the stage of mine development, Northern Strands provides a complete range of wire ropes.

Friction (Koepe), Drum, and Blair Hoist Ropes

There are various wire rope constructions to consider for your hoisting operation, each with its own characteristics and advantages.

- 35×7 (multi-strand)
- 24×7
- 24×17 / 27×7 / 24×16
- Flattened Strand
- 8KMC
- 6 strand or 8 strand
- Full Lock Coil

Shaft Sinking Ropes

A rotation-resistant rope is required for sinking ropes. As the shaft gets deeper, the resistance to rotation becomes critical.

Slope Hoists & Surface Mining

Flattened Strand, 6 Strand, and 8 Strand are the most common varieties here. The number of wires, level of compaction, and inclusion of plastic are all part of the design process.

Balance (Tail) Ropes

If you have a Friction (Koepe) hoist and you need balance (or tail) ropes.

- 34×7 / 34×17 / 34×19; plastic outer cover and plastic filled valley
- Flat balance ropes

Guide Ropes

Half-lock coil ropes are the most common choice for Guide ropes. Full-lock coil ropes are also considered in certain situations.

Applications						
Construction	Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance (Tail)	Guide
Compacted 35×7	•	•	•			
27×7/ 24×7/ 24×16		•	•			
24×17	•	•	•		•	
Full Locked Coil	•		•			•
Flattened Strand		•		•		
8KMC		•		•		
6 Strand/ 8 Strand		•	•	•		
34 Strand					•	
Flat Balance					•	
Half Locked Coil						•

MINING SERVICES

CAPABILITIES

- Project assessment
- Rope up & rope change specialists
- Accident remediation
- Consulting & procedure development
- Custom fabrication & machining
- Mining rope supply
- Conveyance installation & removal
- Wire rope spooling services

SEMINARS

- Mine Hoisting
- Socketing
- Safety Rigging
- Equipment Operators
- Spare Reels

RENTALS

- Specialty Shaft Rigging
- Reel Stand
- Winders & Unwinders
- Tensioner
- Tuggers & Load Winches

ROPE FEATURES & OPTIONS

Rotation in Wire Rope

Rotation-resistant rope is defined as rope designed to generate reduced levels of torque and rotation when loaded. It is designed with two or more layers of strands laid helically around the center, with the lay of the outer strands opposite that of the underlying layer. However, there are different levels of rotation resistance to consider.

Non-Rotating ropes can be used with swivels and have at least 15 outer strands and at least 3 layers of strands. *Rotation Resistant* rope have at least 10 outer strands and two or more layers of strands. *Spin Resistant ropes* have 9 outer strands or less and two layers of strands

Rope Finishes

Bright steel ropes are recommended for dry environments, while *galvanized* wire ropes are recommended for wet climates. Wires coated in an *aluminum-zinc alloy (Galfan)* are the best choice for corrosive environments.

Compacted Strands

Many of our hoist and sinking ropes come with compacted strands on the outer, inner, or all layers. Compaction can be customized to meet specific requirements. When compared to round strands with the same diameter, compacted strands have: Higher metallic area, Higher MBS, Added resistance to side pressure, wear, and abrasion, Better spooling and resistance to crushing.

Plastic Encased Core

In hoist ropes with plastic-encased cores, a plastic sheathing is inserted between the outer and inner layers of strands. This plastic filler reduces the potential sliding of the various components while still allowing necessary movement. The plastic also fills the free space between the exterior strands, preventing friction and wear damage. The most significant advantage of this product is its ability to seal the lubrication in the inner strands and keep out the polluting agents that lead to corrosion.

Features							
Construction	Non Rotating	Rotation Resistant	Rotating	Compact Outer Strands	Plastic Encased Core	Plastic Outer Cover	Shaped Wires
Compacted 35×7	•			•	Optional		
27×7/ 24×7/ 24×16		•		Optional	Optional		
24×17		•		Optional			
Full Locked Coil	•						•
Flattened Strand			•				
8KMC			•	•			
6 Strand/ 8 Strand			•	Optional	Optional	Optional	
34 Strand	•				Optional	Optional	
Flat Balance	•						
Half Locked Coil							•

LUBRICATION

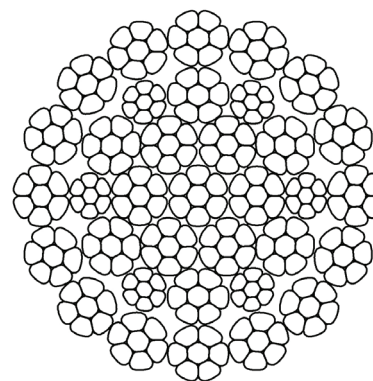
Proper lubrication of wire rope is crucial during manufacturing, installation, and ongoing maintenance. Different hoists and applications necessitate specific types of lubrication. Northern Strands has the expertise to recommend and provide suitable lubrication products and advise on the most effective lubrication methods.

WIRE ROPE LUBRICATION SYSTEMS

Northern Strands is the North American distributor of CoreLube wire rope lubrication equipment and cleaners.

Specifications					
Diameter		Mass		*MBS	
mm	in	kg/m	lb/ft	kN	lbs
19	3/4	1.84	1.23	347	77,900
20	-	2.04	1.37	384	86,300
22	-	2.46	1.66	465	104,000
-	7/8	2.51	1.69	474	107,000
24	-	2.93	1.97	553	124,000
25	-	3.18	2.14	600	135,000
-	1	3.28	2.21	619	139,000
26	-	3.44	2.31	649	146,000
28	-	3.99	2.68	753	169,000
-	1 1/8	4.16	2.79	784	176,000
30	-	4.58	3.08	864	194,000
-	1 1/4	5.13	3.45	968	218,000
32	-	5.21	3.50	983	221,000
34	-	5.88	3.95	1,110	249,000
35	1 3/8	6.21	4.17	1,170	263,000
36	-	6.60	4.43	1,240	280,000
38	1 1/2	7.35	4.94	1,390	312,000
40	-	8.14	5.47	1,540	345,000
41	1 5/8	8.67	5.83	1,640	368,000
42	-	8.98	6.03	1,690	381,000
44	-	9.85	6.62	1,860	418,000
-	1 3/4	10.10	6.76	1900	426,000
46	-	10.80	7.24	2030	457,000
48	1 7/8	11.70	7.88	2,210	497,000
50	-	12.70	8.55	2,400	540,000
-	2	13.10	8.83	2,480	557,000
52	-	13.80	9.25	2,600	584,000
54	2 1/8	14.80	9.97	2,800	629,000
56		16.00	10.70	3,010	677,000
58	2 1/4	17.10	11.50	3,230	726,000
60	2 3/4	18.50	12.40	3,490	785,000
64	2 1/2	20.80	14.00	3,930	884,000
65	-	21.50	14.50	4,060	912,000
67	2 5/8	22.80	15.40	4,310	969,000
70	2 3/4	24.90	16.80	4,700	1,060,000

*MBS are for 1960 Grade. These figures are for guidance only



Features:

- Recommended for sinking
- Multiple layer winding
- Extremely high breaking force
- High radial stiffness
- Excellent rotational stability

Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance/Tail	Guide
•	•	•			

Specifications	
Non-Rotating	•
Rotation Resistant	
Rotating	
Compact Outer Strands	•
Plastic Encased Core	o
Plastic Outer Cover	
Shaped Wires	
o = Optional	

Finish Options
Bright
Galvanized
Zinc Aluminum Alloy

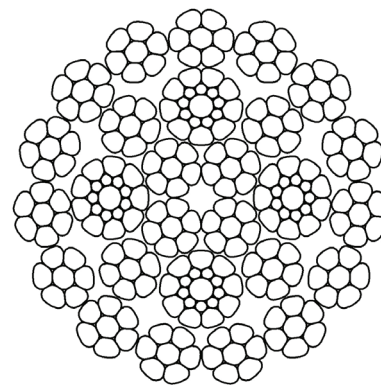
Grade Options
1770
1960
2160
Contact for more options

Wire Rope Options	
Plastic Encased Core	

Other features, such as MBF, mass, diameter, lay type and plastic fill can be designed on request.

Specifications					
Diameter		Mass		*MBS	
mm	in	kg/m	lb/ft	kN	lbs
19	3/4	1.70	1.15	314	70,600
20	-	1.89	1.27	348	78,200
22	-	2.28	1.54	421	94,700
-	7/8	2.33	1.57	430	96,600
24	-	2.72	1.83	501	113,000
25	-	2.95	1.98	544	122,000
-	1	3.05	2.05	561	126,000
26	-	3.19	2.14	588	132,000
28	-	3.70	2.49	682	153,000
-	1 1/8	3.85	2.59	710	160,000
30	-	4.25	2.85	783	176,000
-	1 1/4	4.76	3.20	877	197,000
32	-	4.83	3.25	891	200,000
34	-	5.46	3.67	1,010	226,000
35	1 3/8	5.76	3.87	1,060	239,000
36	-	6.12	4.11	1,130	253,000
38	1 1/2	6.82	4.58	1,260	282,000
40	-	7.55	5.07	1,390	313,000
41	1 5/8	8.04	5.40	1,480	333,000
42	-	8.33	5.60	1,530	345,000
44	-	9.14	6.14	1,680	379,000
-	1 3/4	9.33	6.27	1,720	386,000
46	-	9.99	6.71	1,840	414,000
48	1 7/8	10.90	7.31	2,000	451,000
50	-	11.80	7.93	2,180	489,000
-	2	12.20	8.19	2,250	505,000
52	-	12.80	8.58	2,350	529,000
54	2 1/8	13.80	9.25	2,540	570,000
56	-	14.80	9.95	2,730	613,000
58	2 1/4	15.90	10.70	2,930	658,000
60	2 3/4	17.20	11.50	3,170	712,000
64	2 1/2	19.30	13.00	3,560	801,000
65	-	19.90	13.40	3,680	826,000
67	2 5/8	21.20	14.20	3,910	878,000
70	2 3/4	23.10	15.50	4,260	958,000

*MBS are for 1960 Grade. These figures are for guidance only



Features:

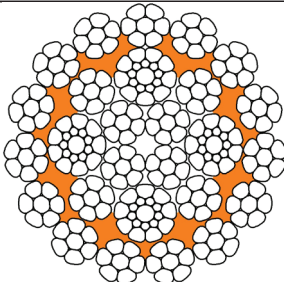
- For use on Friction, Drum or Blair Hoist
- Compacted inner and outer strands
- High load capacity
- High wear resistance
- High resistance to fatigue

Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance/Tail	Guide
•	•	•			

Specifications	
Non-Rotating	
Rotation Resistant	•
Rotating	
Compact Outer Strands	o
Plastic Encased Core	o
Plastic Outer Cover	
Shaped Wires	
o = Optional	

Finish Options
Bright
Galvanized
Zinc Aluminum Alloy

Grade Options
1770
1960
2160
Contact for more options

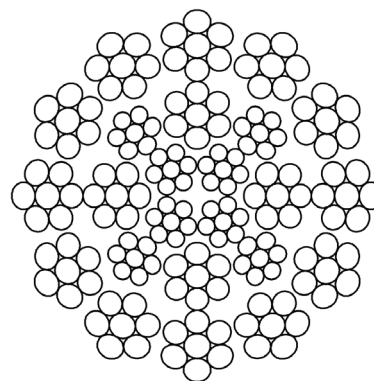
Wire Rope Options	
Plastic Encased Core	

Other features, such as MBF, mass, diameter, lay type and plastic fill can be designed on request.

Specifications

Diameter		Mass		*MBS	
mm	in	kg/m	lb/ft	kN	lbs
19	3/4	1.49	1.00	265	59,600
20	-	1.65	1.11	294	66,100
22	-	2.00	1.34	356	80,000
-	7/8	2.04	1.37	363	81,600
24	-	2.38	1.60	423	95,200
25	-	2.58	1.73	459	103,000
-	1	2.66	1.79	474	107,000
26	-	2.79	1.88	497	112,000
28	-	3.24	2.18	576	130,000
-	1 1/8	3.37	2.27	600	135,000
30	-	3.72	2.50	662	149,000
-	1 1/4	4.16	2.80	741	167,000
32	-	4.23	2.84	753	169,000
34	-	4.77	3.21	850	191,000
35	1 3/8	5.04	3.39	897	202,000
36	-	5.35	3.60	953	214,000
38	1 1/2	5.96	4.01	1,060	239,000
40	-	6.61	4.44	1,180	264,000
41	1 5/8	7.04	4.73	1,250	281,000
42	-	7.29	4.90	1,300	291,000
44	-	8.00	5.37	1,420	320,000
-	1 3/4	8.16	5.48	1,450	326,000
46	-	8.74	5.87	1,560	350,000
48	1 7/8	9.52	6.39	1,690	381,000
50	-	10.30	6.94	1,840	413,000
-	2	10.70	7.16	1,900	426,000

*MBS are for 1960 Grade. These figures are for guidance only



Features:

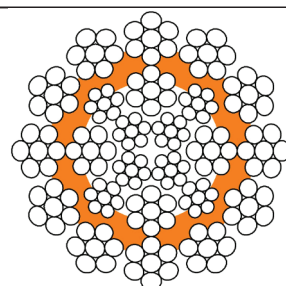
- For use on Friction, Drum or Blair Hoist
- Compacted inner and outer strands
- Good rotational stability
- High flexibility
- Good handling properties

Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance/Tail	Guide
	•	•			

Specifications	
Non-Rotating	
Rotation Resistant	•
Rotating	
Compact Outer Strands	o
Plastic Encased Core	o
Plastic Outer Cover	
Shaped Wires	
o = Optional	

Finish Options
Bright
Galvanized
Zinc Aluminum Alloy

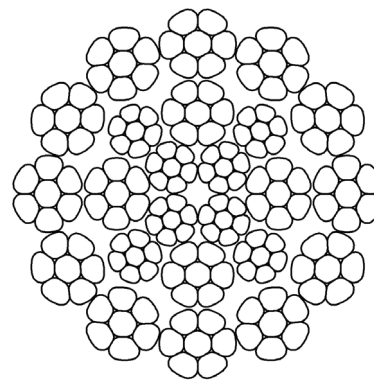
Grade Options
1770
1960
2160
Contact for more options

Wire Rope Options	
Plastic Encased Core	

Other features, such as MBF, mass, diameter, lay type and plastic fill can be designed on request.

Specifications					
Diameter		Mass		*MBS	
mm	in	kg/m	lb/ft	kN	lbs
19	3/4	1.70	1.14	305	68,600
20	-	1.88	1.27	338	76,000
22	-	2.28	1.53	409	91,900
-	7/8	2.33	1.56	417	93,800
24	-	2.71	1.82	487	109,000
25	-	2.94	1.98	528	119,000
-	1	3.04	2.04	545	123,000
26	-	3.18	2.14	571	128,000
28	-	3.69	2.48	662	149,000
-	1 1/8	3.85	2.58	690	155,000
30	-	4.24	2.85	761	171,000
-	1 1/4	4.75	3.19	852	191,000
32	-	4.82	3.24	865	195,000
34	-	5.44	3.66	977	220,000
35	1 3/8	5.75	3.86	1,030	232,000
36	-	6.10	4.10	1,100	246,000
38	1 1/2	6.80	4.57	1,220	274,000
40	-	7.54	5.06	1,350	304,000
41	1 5/8	8.02	5.39	1,440	324,000
42	-	8.31	5.58	1,490	335,000
44	-	9.12	6.13	1,640	368,000
-	1 3/4	9.31	6.25	1,670	375,000
46	-	9.97	6.70	1,790	402,000
48	1 7/8	10.90	7.29	1,950	438,000
50	-	11.80	7.91	2,110	475,000
-	2	12.20	8.17	2,180	490,000

*MBS are for 1960 Grade. These figures are for guidance only



Features:

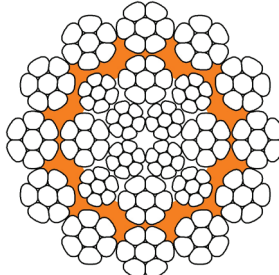
- Recommended for sinking
- Multiple layer winding
- Extremely high breaking force
- High radial stiffness
- Excellent rotational stability

Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance/ Tail	Guide
	•	•			

Specifications	
Non-Rotating	
Rotation Resistant	•
Rotating	
Compact Outer Strands	•
Plastic Encased Core	o
Plastic Outer Cover	
Shaped Wires	
o = Optional	

Finish Options
Bright
Galvanized
Zinc Aluminum Alloy

Grade Options
1770
1960
2160
Contact for more options

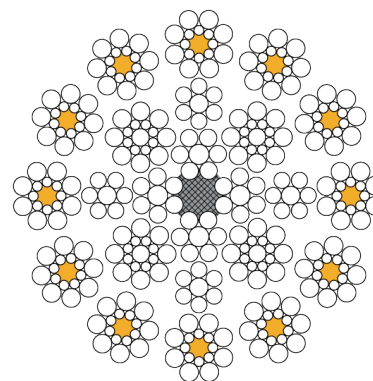
Wire Rope Options	
Plastic Encased Core	

Other features, such as MBF, mass, diameter, lay type and plastic fill can be designed on request.

Specifications

Diameter		Mass		*MBS	
mm	in	kg/m	lb/ft	kN	lbs
36	-	5.44	3.65	912	205,026
37	-	5.75	3.86	967	217,390
38	1 ½	6.07	4.08	1,023	229,980
39	-	6.40	4.30	1,080	242,794
40	-	6.74	4.53	1,138	255,833
41	1 ⅝	7.08	4.76	1,197	269,096
42	-	7.43	5.00	1,258	282,810
43	-	7.79	5.24	1,319	296,523
44	1 ¾	8.16	5.49	1,382	310,686
45	-	8.54	5.74	1,446	325,074
46	-	8.92	6.00	1,510	339,461
47	-	9.31	6.26	1,576	354,299
48	1 ⅞	9.71	6.53	1,643	369,361
49	-	10.12	6.80	1,711	384,648
50	-	10.53	7.08	1,780	400,160
51	2	10.96	7.36	1,851	416,121
52	-	11.39	7.65	1,922	432,083
53	-	11.83	7.95	1,994	448,269
54	2 ⅛	12.27	8.25	2,068	464,905
55	-	12.73	8.55	2,142	481,541
56	-	13.19	8.86	2,218	498,626
57	2 ¼	13.66	9.18	2,295	515,937
58	-	14.14	9.50	2,373	533,472
59	-	14.62	9.82	2,452	551,232
60	2 ⅜	15.11	10.16	2,532	569,216
61	-	15.62	10.49	2,613	587,426
62	-	16.12	10.84	2,695	605,860
63	-	16.64	11.18	2,779	624,744
64	2 ½	17.17	11.53	2,863	643,628

*MBS are for 1960 Grade. These figures are for guidance only



Features:

- For use on Friction Hoist >36mm
- High service life
- High resistance to fatigue
- Low stretch

Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance/Tail	Guide
	•	•			

Specifications	
Non-Rotating	
Rotation Resistant	•
Rotating	
Compact Outer Strands	
Plastic Encased Core	
Plastic Outer Cover	
Shaped Wires	
o = Optional	

Finish Options
Bright
Galvanized
Zinc Aluminum Alloy

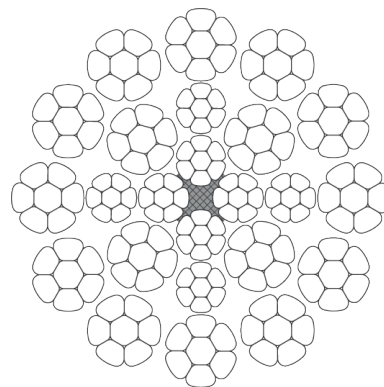
Grade Options
1770
1960
2160
Contact for more options

Other features, such as MBF, mass, diameter, lay type and plastic fill can be designed on request.

Specifications					
Diameter		Mass		*MBS	
mm	in	kg/m	lb/ft	kN	lbs
20	-	1.91	1.28	321	72,164
21	-	2.09	1.41	351	78,908
22	7/8	2.29	1.54	384	86,327
23	-	2.50	1.68	418	93,970
24	15/16	2.72	1.83	454	102,063
25	-	2.95	1.98	491	110,381
26	1	3.19	2.14	531	119,374
27	-	3.44	2.31	572	128,591
28	-	3.70	2.49	615	138,257
29	1 1/8	3.98	2.67	660	148,374
30	-	4.26	2.86	707	158,940
31	-	4.55	3.06	755	169,731
32	1 1/4	4.86	3.26	806	181,196
33	-	5.17	3.48	857	192,661
34	-	5.50	3.69	911	204,801
35	1 3/8	5.83	3.92	966	217,165
36	-	6.18	4.15	1,023	229,980
37	-	6.53	4.39	1,082	243,243
38	1 1/2	6.90	4.63	1,142	256,732
39	-	7.27	4.89	1,204	270,670
40	-	7.66	5.15	1,268	285,058
41	1 5/8	8.05	5.41	1,333	299,670
42	-	8.46	5.68	1,400	314,733
43	-	8.87	5.96	1,468	330,020
44	1 3/4	9.30	6.25	1,538	345,756
45	-	9.73	6.54	1,610	361,942
46	-	10.18	6.8	1,683	378,353
47	-	10.63	7.1	1,758	395,214
48	1 7/8	11.09	7.5	1,834	412,300
49	-	11.57	7.8	1,912	429,835
50	-	12.05	8.1	1,992	447,819
51	2	12.54	8.4	2,073	466,029
52	-	13.04	8.8	2,155	484,463
53	-	13.55	9.1	2,239	503,347
54	2 1/8	14.07	9.5	2,324	522,456
55	-	12.73	8.55	2,142	542,014
56	-	15.14	10.17	2,500	562,022
57	2 1/4	15.69	10.54	2,589	582,030
58	-	16.24	10.92	2,681	602,713

*MBS are for 1960 Grade. These figures are for guidance only

larger sizes available upon request



Features:

- For use on Drum or Blair Hoists
- Friction Hoist up to 35mm
- High breaking strength
- Very high resistance to fatigue

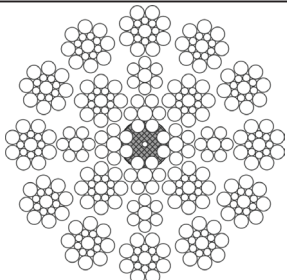
Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance/Tail	Guide
•	•	•		**	

Specifications	
Non-Rotating	
Rotation Resistant	•
Rotating	
Compact Outer Strands	o
Plastic Encased Core	
Plastic Outer Cover	
Shaped Wires	
o = Optional	

Finish Options
Bright
Galvanized
Zinc Aluminum Alloy

Grade Options
1770
1960
2160
Contact for more options

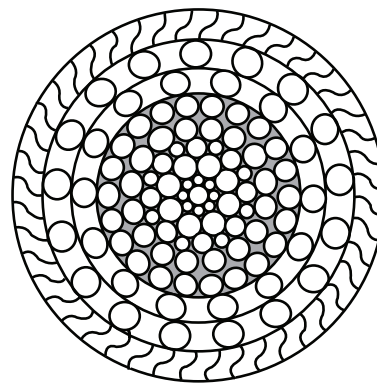
Wire Rope Options
** Non Compacted



Other features, such as MBF, mass, diameter, lay type and plastic fill can be designed on request.

Specifications				
Diameter	Mass		*MBS	
mm	kg/m	lb/ft	kN	lbs
16	1.48	0.995	208	46,760
18	1.88	1.26	264	59,350
19	2.09	1.40	294	66,094
20	2.32	1.56	326	73,288
21	2.56	1.72	359	80,706
22	2.81	1.89	394	88,575
24	3.34	2.24	469	105,435
25	3.63	2.44	509	114,428
26	3.92	2.63	550	123,645
27	4.23	2.84	593	133,312
28	4.47	3.00	638	143,428
29	4.79	3.22	685	153,994
30	5.13	3.45	733	164,785
32	5.84	3.92	834	187,491
34	6.59	4.43	941	211,545
35	6.98	4.69	997	224,135
36	7.39	4.97	1,055	237,173
37	7.80	5.24	1,114	250,437
38	8.23	5.53	1,176	264,375
39	8.67	5.83	1,238	278,313
40	9.12	6.13	1,303	292,926
42	10.1	6.75	1,436	322,826
44	11.0	7.42	1,576	354,299
46	12.1	8.10	1,723	387,346
48	13.1	8.82	1,876	421,742
51	14.8	9.97	2,117	475,921
54	16.6	11.2	2,374	533,696
57	18.5	12.4	2,645	594,620
60	20.5	13.8	2,931	658,915

*MBS are for 1570 Grade. These figures are for guidance only



Features:

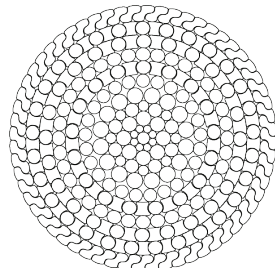
- For use on Friction Hoist
- Use a Sinking rope on Deep shafts
- Can be designed for guide rope use
- Z-lock shaped wires on outer surface
- Combination of Z-lock, X-lock or Round wires for inner layers

Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance/Tail	Guide
•		•			•

Specifications	
Non-Rotating	•
Rotation Resistant	
Rotating	
Compact Outer Strands	
Plastic Encased Core	
Plastic Outer Cover	
Shaped Wires	•
o = Optional	

Finish Options
Bright
Galvanized

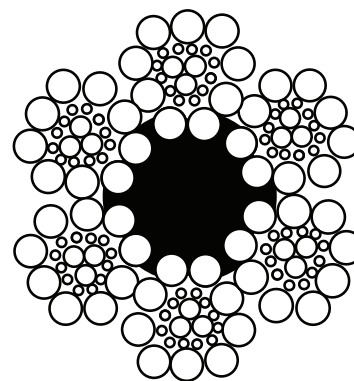
Grade Options
1570
1770
1960
2160
Contact for more options

Wire Rope Options	
3 inner X-lock layers	

Other features, such as MBF, mass, diameter, lay type and plastic fill can be designed on request.

Specifications				
Diameter	Mass		*MBS	
mm	kg/m	lb/ft	kN	lbs
16	1.05	0.71	159	35,745
18	1.33	0.89	201	45,187
20	1.64	1.10	249	55,977
22	1.98	1.33	301	67,667
24	2.36	1.59	358	80,482
25	2.56	1.72	388	87,226
26	2.77	1.86	420	94,420
28	3.21	2.16	487	109,482
29	3.45	2.32	522	117,350
32	4.2	2.82	636	142,978
33	4.46	3.00	677	152,196
35	5.02	3.37	761	171,080
36	5.31	3.57	805	180,971
37	5.61	3.77	851	191,312
38	5.92	3.98	897	201,654
40	6.56	4.41	994	223,460

*MBS are for 1770 Grade. These figures are for guidance only



Features:

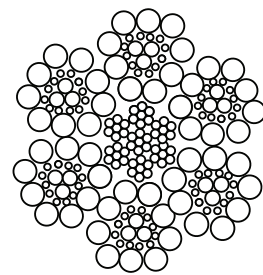
- For use on Friction, Drum or Blair Hoist
- Reduces wear on sheaves and drums
- High resistance to crushing and distortion

Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance/Tail	Guide
	•		•		

Specifications	
Non-Rotating	
Rotation Resistant	
Rotating	•
Compact Outer Strands	
IWRC Core*	o
Plastic Outer Cover	
Shaped Wires	
o = Optional	

Finish Options
Bright
Galvanized

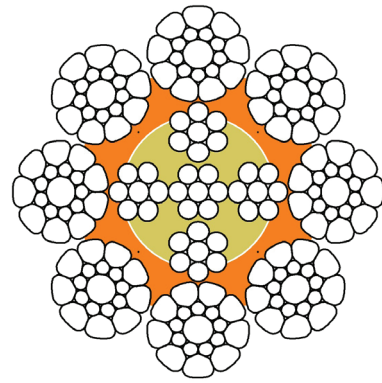
Grade Options
1570
1770
1960
2160
Contact for more options

Wire Rope Options	
*Independent Wire Rope Core (IWRC)	

Other features, such as MBF, mass, diameter, lay type and plastic fill can be designed on request.

Specifications					
Diameter		Mass		*MBS	
mm	in	kg/m	lb/ft	KN	lbs
28	-	3.21	2.16	604	136,000
-	1 1/8	3.35	2.25	629	141,000
30	-	3.69	2.48	693	156,000
-	1 1/4	4.13	2.78	776	174,000
32	-	4.20	2.82	788	177,000
34	-	4.74	3.19	890	200,000
35	1 3/8	5	3.36	939	211,000
36	-	5.31	3.57	998	224,000
38	-	5.92	3.98	1110	250,000
40	-	6.56	4.41	1230	277,000
41	1 5/8	6.98	4.69	1310	295,000
42	-	7.23	4.86	1,360	305,000
44	-	7.94	5.33	1,490	335,000
-	1 3/4	8.10	5.44	1,520	342,000
46	-	8.68	5.83	1,630	366,000
48	-	9.45	6.35	1,770	399,000
50	-	10.30	6.89	1,930	433,000
-	2	10.60	7.11	1,990	447,000
52	-	11.10	7.45	2,080	468,000
54	2 1/8	12.00	8.03	2,250	505,000
56	-	12.90	8.64	2,410	543,000
58	2 1/4	13.80	9.27	2,590	582,000
60	2 3/8	14.90	10.00	2,800	630,000
64	2 1/2	16.80	11.30	3,150	709,000
65	-	17.30	11.60	3,250	731,000

*MBS are for 1960 Grade. These figures are for guidance only



Features:

- Mass and breaking strength equivalent to triangular strand ropes
- High compaction level giving smooth contact surface
- High resistance to wear
- In the special hybrid mixed core, plastic and steel strands are covered by a layer of plastic
- Ease of inspection due to large size wires
- Lower torque factor compared to conventional 8 strand ropes

Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance/Tail	Guide
	•	•	•		

Specifications	
Non-Rotating	
Rotation Resistant	
Rotating	•
Compact Outer Strands	•
Plastic Encased Core	•
Plastic Outer Cover	
Shaped Wires	
o = Optional	

Finish Options
Bright
Galvanized
Zinc Aluminum Alloy

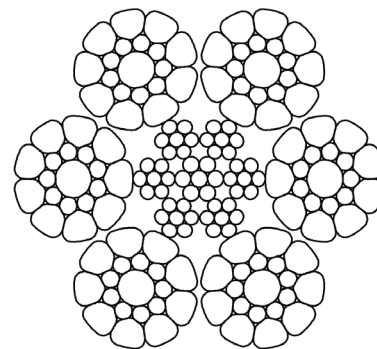
Grade Options
1770
1960
2160
Contact for more options

Other features, such as MBF, mass, diameter, lay type and plastic fill can be designed on request.

Specifications					
Diameter		Mass		*MBS	
mm	in	kg/m	lb/ft	KN	lbs
16	-	1.16	0.779	218	48,900
17	-	1.31	0.88	246	55,200
18	-	1.47	0.99	275	61,900
19	3/4	1.64	1.10	307	69,000
20	-	1.81	1.22	340	76,400
22	-	2.19	1.47	411	92,500
-	7/8	2.24	1.50	420	94,400
24	-	2.61	1.75	490	110,000
25	-	2.83	1.90	531	119,000
-	1	2.92	1.96	548	123,000
26	-	3.06	2.06	575	129,000
28	-	3.55	2.39	666	150,000
-	1 1/8	3.70	2.49	694	156,000
30	-	4.08	2.74	765	172,000
-	1 1/4	4.57	3.07	857	193,000
32	-	4.64	3.12	870	196,000
34	-	5.24	3.52	983	221,000
35	1 3/8	5.53	3.71	1,040	233,000
36	-	5.87	3.95	1100	248,000
38	1 1/2	6.54	4.40	1230	276,000
40	-	7.25	4.87	1360	306,000
41	1 5/8	7.72	5.19	1,450	326,000
42	-	7.99	5.37	1,500	337,000
44	-	8.77	5.89	1,650	370,000
-	1 3/4	8.95	6.01	1,680	378,000
46	-	9.59	6.44	1,800	404,000
48	1 7/8	10.40	7.01	1,960	440,000
50	-	11.30	7.61	2,130	478,000
-	2	11.70	7.86	2,190	493,000
52	-	12.20	8.23	2,300	517,000
54	2 1/8	13.20	8.88	2,480	557,000
56	-	14.20	9.55	2,670	599,000
58	2 1/4	15.20	10.20	2,860	643,000
60	2 3/8	16.50	11.10	3,090	695,000
64	2 1/2	18.6	12.50	3,480	783,000
65	-	19.1	12.9	3,590	807,000

*MBS are for 1960 Grade. These figures are for guidance only

IWRC data shown, contact for Fiber Core



Features:

- For use on Friction, Drum or Blair Hoist
- Good resistance to wear
- Good resistance to corrosion
- Available with Fiber or IWRC core

Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance/Tail	Guide
	•	•	•		

Specifications	
Non-Rotating	
Rotation Resistant	
Rotating	•
Compact Outer Strands	•
IWRC Core*	o
Plastic Outer Cover	o
Shaped Wires	
o = Optional	

Finish Options
Bright
Galvanized
Zinc Aluminum Alloy

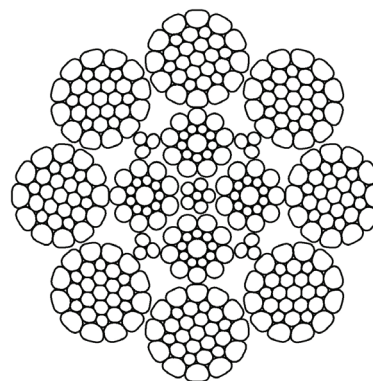
Grade Options
1770
1960
2160
Contact for more options

Wire Rope Options	
*Independent Wire Rope Core (IWRC)	

Other features, such as MBF, mass, diameter, lay type and plastic fill can be designed on request.

Specifications					
Diameter		Mass		*MBS	
mm	in	kg/m	lb/ft	KN	lbs
19	3/4	1.69	1.14	318	71,400
20	-	1.88	1.26	352	79,100
22	-	2.27	1.53	426	95,800
-	7/8	2.32	1.56	435	97,700
24	-	2.70	1.82	507	114,000
25	-	2.93	1.97	550	124,000
-	1	3.03	2.03	568	128,000
26	-	3.17	2.13	595	134,000
28	-	3.68	2.47	690	155,000
-	1 1/8	3.83	2.57	719	162,000
30	-	4.22	2.84	792	178,000
-	1 1/4	4.73	3.18	887	199,000
32	-	4.80	3.23	901	203,000
34	-	5.42	3.64	1,020	229,000
35	1 3/8	5.72	3.84	1,070	241,000
36	-	6.08	4.08	1,140	256,000
38	1 1/2	6.77	4.55	1,270	286,000
40	-	7.50	5.04	1,410	317,000
41	1 5/8	7.99	5.37	1,500	337,000
42	-	8.27	5.56	1,550	349,000
44	-	9.08	6.10	1,700	383,000
-	1 3/4	9.27	6.23	1,740	391,000
46	-	9.92	6.67	1,860	419,000
48	1 7/8	10.80	7.26	2,030	456,000
50	-	11.70	7.88	2,200	495,000
-	2	12.10	8.13	2,270	511,000
52	-	12.70	8.52	2,380	535,000
54	2 1/8	13.70	9.19	2,570	577,000
56	-	14.70	9.88	2,760	620,000
58	2 1/4	15.80	10.60	2,960	666,000
60	2 3/8	17.10	11.50	3,200	720,000
64	2 1/2	19.20	12.90	3,600	810,000
65	-	19.80	13.30	3,720	836,000
67	2 5/8	21.10	14.10	3,950	888,000
70	2 3/4	23.00	15.40	4,310	969,000

*MBS are for 1960 Grade. These figures are for guidance only



Features:

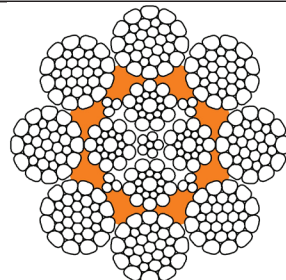
- For use on friction, Drum and Blair Hoist
- High resistance to wear
- High resistance to corrosion

Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance/Tail	Guide
	•	•	•		

Specifications	
Non-Rotating	
Rotation Resistant	
Rotating	•
Compact Outer Strands	•
Plastic Encased Core	o
Plastic Outer Cover	o
Shaped Wires	
o = Optional	

Finish Options
Bright
Galvanized
Zinc Aluminum Alloy

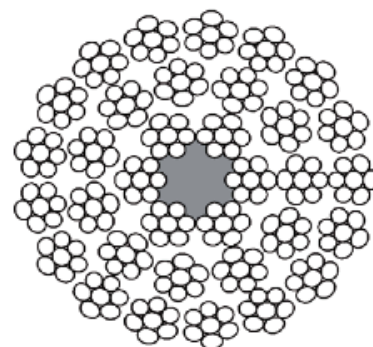
Grade Options
1770
1960
2160
Contact for more options

Wire Rope Options	
Plastic Encased Independent Wire Rope Core (IWRC)	

Other features, such as MBF, mass, diameter, lay type and plastic fill can be designed on request.

Specifications					
Diameter		Mass		*MBS	
mm	in	kg/m	lb/ft	KN	lbs
16	-	1.03	0.693	159	35,900
17	-	1.16	0.78	180	40,500
18	3/4	1.31	0.88	202	45,400
19	-	1.45	0.98	225	50,600
20		1.61	1.08	249	56,000
22	-	1.95	1.31	302	67,800
-	7/8	1.99	1.34	308	69,200
24	-	2.32	1.56	359	80,700
25	-	2.52	1.69	389	87,500
-	1	2.60	1.75	402	90,400
26	-	2.72	1.83	421	94,700
28		3.16	2.12	488	110,000
-	1 1/8	3.29	2.21	509	114,000
30	-	3.63	2.44	561	126,000
-	1 1/4	4.06	2.73	628	141,000
32	-	4.13	2.77	638	143,000
34	-	4.66	3.13	720	162,000
35	1 3/8	4.92	3.30	760	171,000
36	-	5.22	3.51	807	182,000
38	1 1/2	5.82	3.91	900	202,000
40	-	6.45	4.33	1,000	224,000
41	1 5/8	6.87	4.61	1,060	239,000
42	-	7.11	4.78	1,100	247,000
44	-	7.80	5.24	1,210	271,000
-	1 3/4	7.96	5.35	1,230	277,000
46		8.53	5.73	1,320	296,000
48	1 7/8	9.29	6.24	1,440	323,000
50	-	10.10	6.77	1,560	350,000
-	2	10.40	6.99	1,610	361,000
52	-	10.90	7.32	1,680	379,000
54	2 1/8	11.80	7.90	1,820	408,000
56	-	12.60	8.49	1,950	439,000
58	2 1/4	13.60	9.11	2,100	471,000
60	2 3/8	14.70	9.86	2,270	510,000
64	2 1/2	16.50	11.10	2,550	574,000
65	-	17.00	11.40	2,630	592,000
67	2 5/8	18.10	12.20	2,800	629,000
70	2 3/4	19.70	13.30	3,050	686,000

*MBS are for 1960 Grade. These figures are for guidance only



Features:

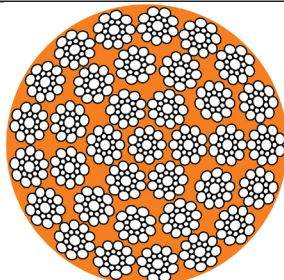
- High Flexibility
- High torsional stability
- Customizable Mass

Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance/Tail	Guide
	•	•	•		

Specifications	
Non-Rotating	•
Rotation Resistant	
Rotating	
Compact Outer Strands	
Plastic Encased Core	o
Plastic Outer Cover	o
Shaped Wires	
o = Optional	

Finish Options
Bright
Galvanized
Zinc Aluminum Alloy

Grade Options
1770
1960
2160
Contact for more options

Wire Rope Options	
Plastic Encased Core	

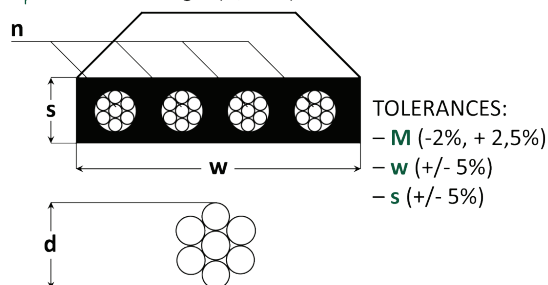
Other features, such as MBF, mass, diameter, lay type and plastic fill can be designed on request.

Available in 34×7, 34×17 and 34×19

Specifications	MBS	
	1570 N/mm ²	1670 N/mm ²
	kN	kN
Parameters of rope with cable diameter 12mm		
min. 2.5-60 × 22/2 × 12 max. 4.0-105 × 22/2 × 12	183	193
Parameters of rope with cable diameter 14mm		
min. 3,2 – 60 × 29/2 × 14 max. 13,5 – 212 × 35/8 × 14	250 1,000	274 1,000
Parameters of rope with cable diameter 16mm		
min. 4,1 – 60 × 29/2 × 16 max. 17,3 – 212 × 35/8 × 16	344 1,376	365 1,460
Parameters of rope with cable diameter 18mm		
min. 4,5 – 60 × 29/2 × 18 max. 19,0 – 212 × 35/8 × 18	419 1,679	446 1,784
Parameters of rope with cable diameter 20mm		
min. 13,2 – 170 × 35/4 × 20 max. 17,8 – 212 × 35/6 × 20	984 1,476	1,046 1,569
Parameters of rope with cable diameter 22mm		
min. 14,8 - 170 × 35/4 × 22 max. 20,5 - 212 × 35/6 × 22	1,494 2,242	1,387 2,080
Parameters of rope with cable diameter 24mm		
min. 15,5 - 140 × 35/4 × 24 max. 22,3 - 212 × 35/6 × 24	1,494 2,242	1,643 2,460
These figures are for guidance only		

M - w × s / n × d - R_r, where:

- M** – nominal mass of 1 rope meter (kg/m)
w – rope width (mm)
s – rope thickness (mm)
n – number of vulcanized steel ropes inside the rope
d – nominal diameter of steel ropes inside of the rope (mm)
R_r – wire strength (N/mm²)



Features:

- Guaranteed Service Life
- NDT Suitable
- Very High Cycle Life
- <18:1 D:d ratio
- Strands separated by rubber

Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance/Tail	Guide
				•	

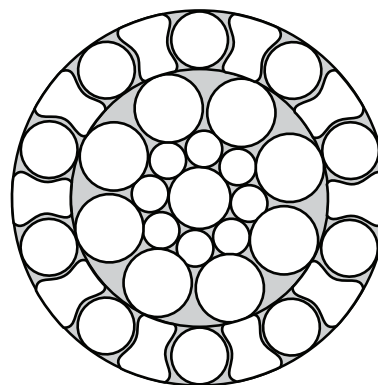
Specifications	
Non-Rotating	•
Rotation Resistant	
Rotating	
Compact Outer Strands	
Plastic Encased Core	
Plastic Outer Cover	
Shaped Wires	
o = Optional	

Finish Options
Galvanized

Grade Options
1370
1570
1670
Contact for more options

Other features, such as MBF, mass, diameter, lay type and plastic fill can be designed on request.

Specifications			MBS	
Diameter	Mass		700-900 N/mm ²	800-950 N/mm ²
mm	kg/m	lb/ft	kN	kN
29	4.56	3.06	319	386
32	5.58	3.75	387	473
35	7.11	4.78	473	580
38	8.40	5.64	560	686
41	9.77	6.57	666	811
44	11.3	7.56	772	937
48	13.4	9.00	879	1,081
50	14.5	9.76	1,004	1,229
54	17.0	11.4	1,159	1,419
These figures are for guidance only				



Features:

- Smooth outer surface minimizes vibration and conveyance slipper wear
- Customized to your specification
- Low residual torque
- Different number of outer wires depending on diameter

Shaft Sinking	Drum Hoist	Friction Hoist	Surface Mining	Balance/Tail	Guide
					•

Specifications	
Non-Rotating	
Rotation Resistant	
Rotating	
Compact Outer Strands	
Plastic Encased Core	
Plastic Outer Cover	
Shaped Wires	•
o = Optional	

Finish Options
Bright
Galvanized

Grade Options
1770
1960
2160
Contact for more options

Other features, such as MBF, mass, diameter, lay type and plastic fill can be designed on request.

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