



SPECIAL MINING WIRE ROPES

Open-pit and underground mines



CONTENTS

About TEUFELBERGER	4
High performance steel wire ropes	8
Ropes for underground mining	8
Ropes for open-pit mines	10
Drive ropes for cable belt conveyors	11
Recommended mining steel wire ropes	12
Hoisting ropes	14
NOROTEC™ MT 83	14
Full-locked coil rope	15
SOLITEC®	16
SOLITEC® 6xK19S	17
SOLITEC® 6xK36WS	18
SOLITEC® 8xK19S	19
6x19 and 6x36 classes	20
NOROTEC™ MT 91	21
QS 816 V(G)	22
Guide ropes	24
Full-locked coil rope	24
Half-locked coil rope	25
Balance ropes	26
34x7 class	26

WARNING

Using these products may prove hazardous. Therefore, never use our products for purposes other than those they were designed for. Customers must ensure that all persons using these products are familiar with their correct use and the related necessary safety precautions. Please bear in mind that any of these products may inflict harm when used incorrectly or subjected to excessive loads.

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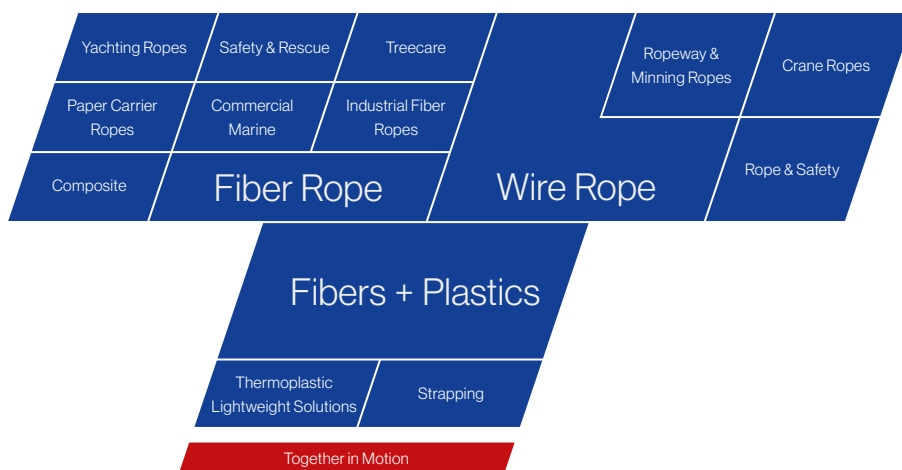


EXPERTISE FROM 225 YEARS OF EXPERIENCE

What started back in 1790 with simple hemp ropes has since evolved into a globally successful group of enterprises specializing in the development and production of fiber and steel wire ropes, strapping, and composites.

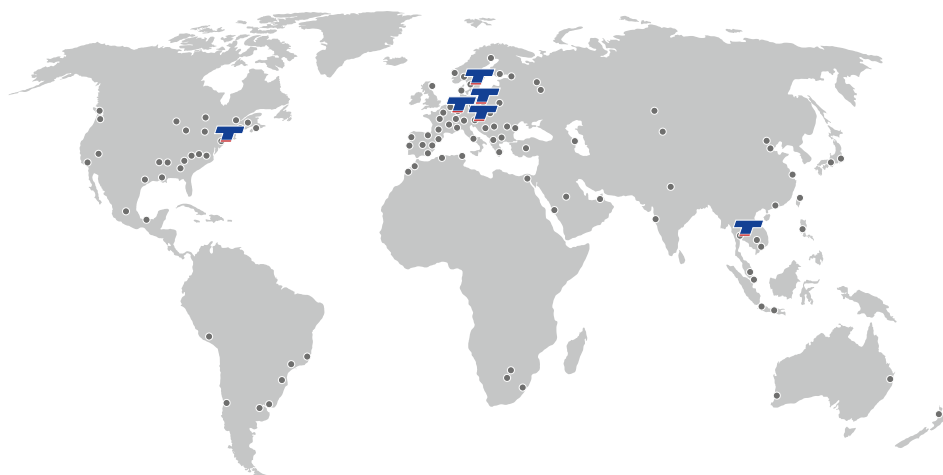
Vast diversity

Its products are designed for a wide variety of applications ranging from cranes and marine applications to packaging and through to the automotive sector. It is the continuity and stability of a family business that makes us the reliable partner who supports you, competently and effectively, in coping with your daily challenges.



Global presence ensures customer proximity

Manufacturing operations in various countries allow us to meet local quality and certification standards as well as customer requirements without difficulty. From our sites in Austria, the Czech Republic, the U.S., Sweden, and Thailand, and backed by a close-knit global network of distribution partners, we continue to satisfy the expectations of our customers.



Innovative solutions through synergies

TEUFELBERGER is a leading specialist for fiber and steel wire ropes, strapping, and fiber composite components. The spectrum of technologies in TEUFELBERGER's portfolio generates various synergies between the extrusion of thermoplastics, braiding of high performance fibers, and processing of wires into ropes, strapping, and lightweight composite components.

Especially fiber and steel wire products brought about valuable synergies with regard to both application and manufacturing technologies, which have benefited our customers tremendously. This makes TEUFELBERGER your ideal partner right from the project planning phase.

5% of TEUFELBERGER's employees are active in research and development and make sure that our customers have access to the latest, innovative rope technologies. 10% of the entire investment volume are committed to development and quality assurance.

WE OFFER MORE.

In manufacturing, research & development and marketing & sales, TEUFELBERGER focuses exclusively on high quality special purpose steel wire ropes. Breakthrough technologies and top quality products are the base of our success.

TEUFELBERGER Service

Expert advice

TEUFELBERGER's network of experts provides competent support close to you. This allows us to find the best possible solution for your needs.

24 h Hotline: +43 (0) 7242 615 388

Customized solutions and products

Joint development efforts with crane and equipment manufacturers and close cooperation with our suppliers ensure that our products satisfy all your requirements. Working together with you, the team from TEUFELBERGER will determine the best solution.

Quality and expertise

Top quality

TEUFELBERGER processes only high quality raw materials in its cutting-edge manufacturing facilities. The comprehensive quality testing of primary materials and final products as well as the certification to ISO 9001 guarantee the consistent high quality of our steel wire ropes.

Competence

Our special ropes are designed to fulfill the requirements of your application. Worldwide reference projects are a testament to the high quality of our work. We provide test certificates according to EN 10204-3.1. Other test certificates on request.

Research and development

Innovative products

As customer requirements change, our products must satisfy new, higher demands. Our R&D team drives innovation and continuous product improvement in terms of safety, reliability, and durability.

Successful partnerships

Intensive partnerships with a sizable number of key users in the spare part market are clear examples of our focus on our customers' needs. Also, the long-standing cooperation with universities and research institutions ensure the lively exchange of ideas toward the development of new and existing products.

PLASTFILL® INSERT

The lubricated steel core is covered in a tight synthetic coat. This provides the following advantages:

- Long service life due to the permanent lubrication and the reduction of friction between the rope's core and its outer strands
- Resistance to compression and lateral pressure as well as to environmental influences and the ingress of dirt
- Higher breaking forces due to reduced surface pressures in the rope
- Reduced internal abrasion thanks to the exact positioning of strands with consistent clearances between them

SUPERFILL® COMPACTION TECHNOLOGY

Each rope strand is compacted by a special process, which significantly improves the rope's properties:

- Up to 30% greater breaking forces than non-compacted ropes
- Prolonged service life due to lower specific loading
- Less abrasion on the rope and on reels and drums due to the rope's smooth surface
- Resistance against crushing in multilayer operations

GALVANIZED WIRES

Our steel wires are galvanized before they are drawn in order to achieve high wire precision. This ensures optimal stability and service life. In combination with the PLASTFILL® technology, this galvanization ensures exceptional corrosion resistance.

Our technology. Your benefit.

Flexibility, quality, perfect spooling, rotation resistance, breaking force, life time, safe and reliable in use.

SUPERFILL®

PLASTFILL®

GALVANIZED WIRES



ROPES FOR UNDERGROUND MINING

Safety and reliability are indispensable preconditions for steel wire ropes in mines. Constantly increasing requirements for carrying capacity and operational time impose extraordinarily high demands on the quality and the service life of the wire ropes. Our mining ropes are ready to meet these demands in the best way possible with the use of modern technologies and continuous quality control.

Ropes

■ ■ NOROTEC™ MT 83

- Multi-strand rotation resistant rope, lang's lay, perfectly suited as hoisting rope for friction systems.
- This rope's special structure makes it less prone to internal damage. Its lubricated core and lubricated fiber strands minimize internal fretting corrosion.
- High flexibility due to a very flexible core and supporting strands. The rope also absorbs high dynamic strain.
- Safe and efficient handling due to rotation resistance. The multi-strand construction provides low twist at high torsional stability. This rope provides increased safety during installation and replacement.
- Increased cost-effectiveness due to reduced rope abrasion, longer service life and prolonged maintenance intervals. The structure of this rope is intended for long-term use. By choosing NOROTEC™ MT 83, you will gain increased productivity, long-term cost reduction, and added competitiveness.

■ ■ ■ Full-locked coil rope

- A rope with an outer layer of Z-shaped wires arranged over a layer consisting of alternating round and I-shaped wires, which in turn is placed around a round wire core. Suitable as a hoisting and guide rope.
- Higher breaking force than stranded ropes of the same rope grade
 - Ideal running surface due to the rope's smooth surface without gaps or valleys
 - Individual broken Z-wires have no negative impact on the rope structure
 - Long service life due to the smooth rope surface

■ ■ SOLITEC®

- 6- or 8-strand ordinary and lang's lay wire rope with a plastic compound core and SUPERFILL® compaction technology. Particularly suitable as hoisting rope on friction systems and drums up to 2.5 layer spooling. A very good alternative to a rope with triangular strands.
- High breaking forces, achieved in particular through SUPERFILL® compaction technology, ensure utmost safety for your application
 - With its stranded-in vibration-dampening trapezoidal profile, the unique SOLITEC® technology ensures high dimensional accuracy and, in this way, helps avoid waviness in the rope
 - The permanently greased fiber core and the plastic compound core are breakproof, tearproof, and increase the rope's service life even further
 - High elasticity and flexibility thanks to the special design

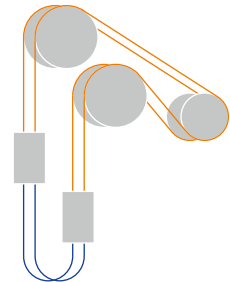
■ ■ ■ 6x19 and 6x36 classes

- 6-strand ordinary and lang's lay wire rope with SUPERFILL® compaction technology. Suited for use as a hoisting rope on friction systems and drums.
- As a result of the compacted outer strands, it is ideal for friction or single-layer drum systems – even in difficult conditions. This permits its long and faultless use in permanent operation and helps reduce downtime to a minimum.
 - Long service life – due to the permanently lubricated fiber core
 - High resistance against friction corrosion and wire breakage due to the use of special polypropylene profiles.

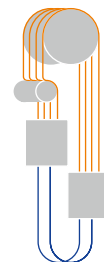
Applications

The colored square preceding the rope's designation refers to the ropes shown in the illustration below.

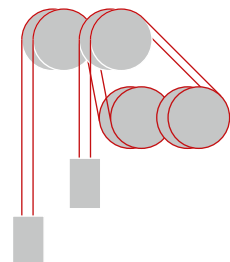
Ground mounted friction (Koepe) hoist



Tower mounted friction (Koepe) hoist with deflection sheaves (Koepe) hoist



Blair hoist





Ropes

■ NOROTEC™ MT 91

Featuring a revolutionary design, extremely high breaking forces, rotation resistance, and high flexibility, this rope is perfectly suited as a hoisting rope in multi or single-layer spooling or for shaft sinking.

- Excellent spooling results in multilayer spooling applications make this highly flexible rope suited for extremely challenging hoisting operations.
- Longer service life for optimum cost-effectiveness and extremely high breaking forces due to the rope's structure, combined with the innovative PLASTFILL® and SUPERFILL® technologies.
- High rotation resistance due to the rope's advanced balanced design makes it suitable for deep mining operations.

■ QS 816 V(G)

This extremely resistant 8-strand ordinary lay rope is particularly suited for use as a hoisting rope for drums.

- Reliability and safety in operation as a result of its extremely high breaking forces
- Extremely robust and resistant due to the PLASTFILL® and SUPERFILL® technology insert
- Very high dimensional stability under lateral pressures ensures excellent winding behavior, even in multilayer spooling use

■ Half-locked coil rope

A rope with an outer layer of alternating round and I-shaped wires arranged around a round wire core. Perfectly suited for use as a guide rope.

- High resistance to abrasion due to the form and size of strong outer wires
- Individual broken outer wires have no negative effects on the rope structure
- High resistance against corrosion due to galvanized wires

■ 34x7 class

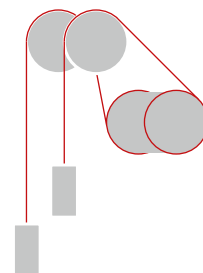
Non-rotating ordinary and lang's lay wire ropes, especially suited as balance ropes.

- Extremely high resistance against corrosion due to galvanized wires and protection through permanent lubrication provided by PLASTFILL® insert
- Rotation resistance and high flexibility due to the 34x7 strand construction and the high number of wires.
- The computer-optimized construction ensures that our balance ropes fully perform to customer requirements, both on existing hoisting and on new designed systems.

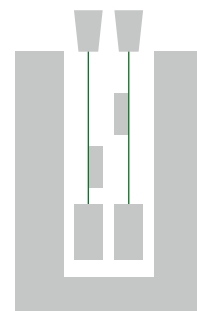
Applications

The colored square preceding the rope's designation refers to the ropes shown in the illustration below.

Double drum hoist



Guide ropes



ROPES FOR OPEN-PIT MINES

Surface mining applications require ropes that can be used permanently and in extreme working conditions. In order to make profitable use of pieces of equipment such as shovels and draglines it must be possible to use them safely and reliably 24 hours a day, 365 days a year.

Ropes

■ QS 816 V(G)

This extremely resistant ordinary lay or lang's lay 8-strand rope with PLASTFILL® is particularly suited for use as a hoisting, boom and pendant rope for draglines and shovels.

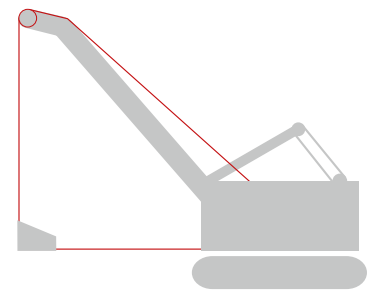
- Reliability and safety in operation as a result of its extremely high breaking forces
- Extremely robust and resistant due to the PLASTFILL® and SUPERFILL® technology insert
- Very high dimensional stability under lateral pressures ensures excellent winding behavior, even in multilayer spooling use

- Less fatigue on sheaves due to the better distribution of pressure ensured by the 8-strand construction
- Excellent bending fatigue performance and high flexibility due to the 8-strand construction

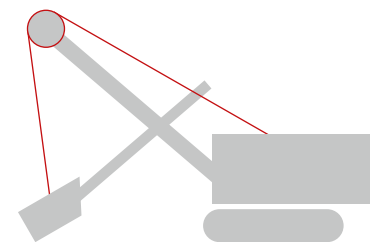
Applications

The colored square preceding the rope's designation refers to the ropes shown in the illustration below.

Dragline



Shovel



DRIVE ROPES FOR CABLE BELT CONVEYORS

The performance and quality of drive wire ropes that form a key element of cable belt conveyors can affect the reliability and maintenance costs of the whole system dramatically. TEUFELBERGER's generation of SOLITEC® ropes was developed in order to produce the most durable, long lasting, and flexible ropes in the industry.

Ropes

■ SOLITEC®

6-strand lang's lay wire rope with plastic compound core and SUPERFILL® compaction technology. Suited as drive wire rope for cable belt conveyors.

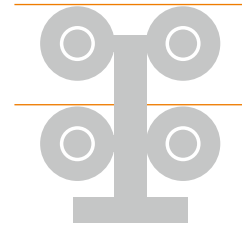
- High breaking forces, achieved in particular through SUPERFILL® compaction technology, ensure utmost safety for your application.
- With its stranded-in vibration-dampening trapezoidal profile tails, the unique SOLITEC® technology ensures accurate dimensioning and, in this way, helps avoid waviness in the rope.

- The permanently greased fiber core and the plastic compound core are breakproof, tearproof, and increase the rope's service life even further.
- High elasticity and flexibility thanks to the special design.

Applications

The colored square preceding the rope's designation refers to the ropes shown in the illustration below.

Wire rope for rope driven conveyors



RECOMMENDED MINING STEEL WIRE ROPES

TEUFELBERGER offers a wide range of premium quality steel wire ropes developed to fulfill the highest customer's requirements.

Rope	Diameter mm	Characteristics	Hoisting		Guide	Balance	Shaft sinking	Drive wire rope	Dragline	Shovel
			Friction	Drum						
NOROTEC™ MT 83	30-63	Rotation resistant multi-strand rope offering high flexibility and greater ease of handling	■	■						
Full-locked coil hoist rope	20-38	Smooth surface and high resistance to abrasion and aggressive environments	■	■			■			
Full-locked coil guide rope	19-60	Smooth surface and high resistance to abrasion and aggressive environments			■					
SOLITEC® (SUPERFILL®)	24-60	The top wire rope for longest service life, vibration reduced operation and controlled low elongation.	■	■			■			
6x19 & 6x36 classes	24-60	The well priced "classic" with full lubrication inside	■	■						
Half-locked coil rope	19-60	High resistance to wear and abrasion			■					
NOROTEC™ MT 91	20-70	High performance hoist rope with high breaking forces and excellent flexibility		■			■			
QS 816 V(G)	20-70	Extreme resistant to negative external influences		■					■	■
34x7 class	16-70	High resistant to the extreme environmental conditions encountered in mines				■				

⚠ NOTE

As a long-standing supplier of ropes, our rope recommendations are non-binding and experience-based. Please also take the specific characteristics of your system into account. Do not hesitate to contact us. We will help you find the ideal rope for your needs. Technical specifications are subject to change. Typesetting errors and misprints reserved. The dominating failure mode of wire ropes is internal degradation through fatigue, wear and corrosion. Magnetic rope testing (MRT) is a suitable method to detect these failures in addition to visual inspections. MRT may be also required by applicable standards, legislation and individual regulations.

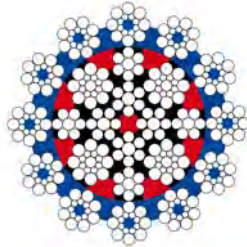


Customized solutions and products

Working together with you, the team from TEUFELBERGER will determine the best solution.

NOROTEC™ MT 83

Reliability, flexibility and resistance against wear is required for modern hoisting ropes. This high performance rope combines all these characteristics and is the first choice hoisting rope for friction systems.



Specifications

- Construction: 12 x 16S–PWRC
- Lang's lay, right or left lay, bright or galvanized wires
- Normative references: DIN 21254 and EN 12385 part 6. respectively

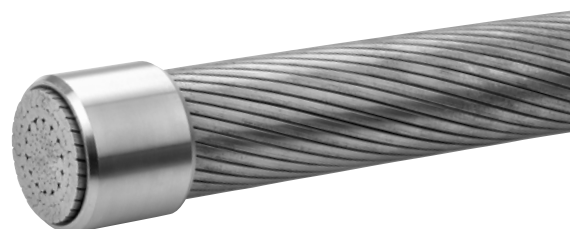
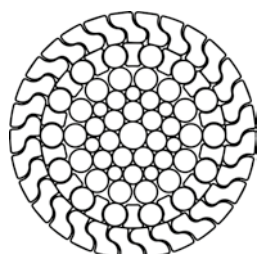
Technical data

Nominal Ø		Weight		Minimum breaking force at a tensile strength of					
				1770 N/mm ²		1860 N/mm ²		1960 N/mm ²	
mm	inch	kg/m	lbs/ft	kN	lbs	kN	lbs	kN	lbs
30		3.63	2.44	598	134,489	628	141,156	661	148,553
31		3.87	2.60	636	142,999	671	150,811	706	158,738
32	1 ¼	4.12	2.77	677	152,259	714	160,580	750	168,604
33		4.38	2.94	720	161,868	759	170,712	798	179,456
34		4.65	3.12	764	171,700	805	181,074	847	190,361
35	1 ⅜	4.92	3.31	809	181,908	853	191,854	897	201,687
36		5.21	3.50	856	192,349	902	202,865	949	213,255
37		5.5	3.70	904	203,254	953	214,344	1,002	225,338
38	1 ½	5.8	3.90	953	214,243	1,005	225,933	1,054	236,949
39		6.12	4.11	1,008	226,522	1,059	238,053	1,116	250,854
40		6.43	4.32	1,058	237,792	1,115	250,756	1,170	263,001
41		6.76	4.54	1,112	249,939	1,172	263,564	1,232	276,938
42	1 ⅝	7.1	4.77	1,169	262,888	1,230	276,578	1,294	290,903
43		7.44	5.00	1,224	275,278	1,288	289,621	1,356	304,834
44		7.79	5.23	1,281	287,980	1,349	303,184	1,418	318,706
45	1 ¾	8.14	5.47	1,340	301,336	1,410	317,072	1,483	333,308
46		8.52	5.73	1,401	315,041	1,478	332,266	1,550	348,431
47		8.89	5.97	1,462	328,755	1,540	346,288	1,619	363,960
48	1 ⅞	9.28	6.24	1,527	343,292	1,608	361,401	1,688	379,488
49		9.67	6.50	1,591	357,677	1,672	375,870	1,760	395,600
50		10.06	6.76	1,654	371,877	1,740	391,268	1,832	411,807
51	2	10.45	7.02	1,720	386,608	1,811	407,050	1,904	428,112
52		10.87	7.30	1,786	401,620	1,882	423,057	1,979	445,002
53		11.26	7.57	1,852	416,352	1,951	438,572	2,052	461,310
54	2 ⅛	11.7	7.86	1,925	432,743	2,028	455,856	2,130	478,915
55		12.14	8.16	1,997	448,881	2,104	473,068	2,211	497,005
56		12.57	8.45	2,068	464,799	2,180	489,975	2,291	515,011
57	2 ¼	13.01	8.74	2,140	481,033	2,255	507,017	2,371	532,983
60	2 ⅜	14.47	9.72	2,379	534,785	2,507	563,667	2,636	592,540
63		15.92	10.70	2,618	588,640	2,759	620,209	2,901	652,212

Other diameters are available on request. Technical specifications are subject to change.

FULL-LOCKED COIL ROPE

This rope is perfect where high breaking forces and a smooth surface are needed. The non-rotating construction and the TEUFELBERGER rope design make the rope high resistant against cork-screw type deformations. Our stressless technology, which is a unique production procedure, ensures that the rope is relieved from inner tension. For users of this rope, this means a longer service life and less maintenance.



Specifications

- Construction example: 35 mm = 1-7-(7+7)-14/14I-29Z
- Left and right lay, bright or galvanized wires
- Normative references: EN 12385 part 7

Technical data

Nominal Ø		Weight		Minimum breaking force standard grade	
mm	inch	kg/m	lbs/ft	kN	lbs
20		2.23	1.50	366	82,280
21		2.46	1.65	403	90,598
22	7/8	2.71	1.82	443	99,658
23		2.95	1.98	476	106,942
24		3.23	2.17	527	118,497
25	1	3.48	2.34	562	126,348
26		3.79	2.55	618	138,977
27		4.06	2.73	667	149,948
28		4.43	2.98	718	161,413
29		4.74	3.19	769	172,878
30		5.08	3.41	823	185,018
31		5.42	3.64	883	198,506
32	1 1/4	5.77	3.88	937	210,579
33		6.14	4.13	995	223,685
34		6.52	4.38	1,057	237,623
35	1 3/8	6.96	4.68	1,123	252,440
36		7.36	4.95	1,187	266,848
37		7.78	5.23	1,255	282,135
37.5		7.91	5.32	1,276	286,856
38	1 1/2	8.16	5.48	1,341	301,401

Other diameters are available on request. Technical specifications are subject to change.

SOLITEC®

TEUFELBERGER's SOLITEC® rope-generation was developed in order to produce the most durable, long lasting, and flexible ropes in the industry. As a direct result of TEUFELBERGER's refined rope construction and manufacturing process, engineers are able to pinpoint a rope's initial level of elongation in the earliest stages of production.

Plastic-compound-core

The braided and greased fiber insert of SOLITEC® ropes is equipped with a compact plastic cover. This helps achieve the perfect roundness of the insert and, at the same time, ensures extremely high resistance to tensile forces. There-

fore, a SOLITEC® core cannot tear or break. During the stranding process, the cold strands are pressed into the plastic-compound-core.

Support profiles

The support profiles create a perfectly even distribution between strands and do not allow strands to touch one another preventing friction corrosion and wire breakage.

In addition, the support profiles slide easily on top of the surface of the plastic-compound-core, during use, which helps to increase the overall lifespan of the rope.

Your benefit

The precise dimensioning of the trapezoidal support profiles helps achieve an extremely high level of product consistency. The profiles fully fill all available spaces between the strands. This ensures low vibration running characteristics and minimized noise.

Furthermore, the annoying "settling" of the rope while leaving it to hang or letting it run in the unloaded (empty) state is a thing of the past. Most of the initial elongation is already anticipated in the production process.

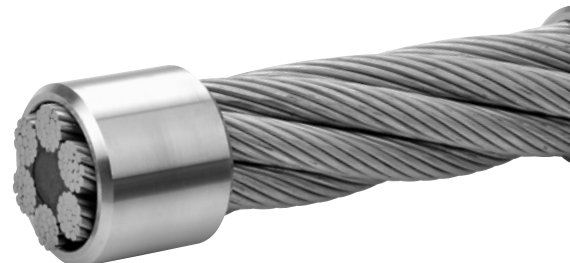
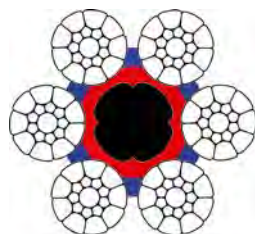
Advantages of the SOLITEC® technology:

- Extremely long service life
- Very low elongation
- Perfectly round rope geometry
- Symmetrical distribution of strands and permanent avoidance of contact between strands



SOLITEC® 6xK19S

TEUFELBERGER's generation of SOLITEC® ropes was developed in order to produce the most durable, long lasting and flexible ropes in the industry.



Specifications

- Construction class: SOLITEC® core + 6 (1–9–9) SUPERFILL®
- Ordinary and lang's lay, right or left lay, bright or galvanized
- Normative references: DIN 21254 and EN 12385 part 6, respectively

- ✓ MULTILAYER SPOOLING*
- ✓ SUPERFILL®
- ✓ PLASTFILL®

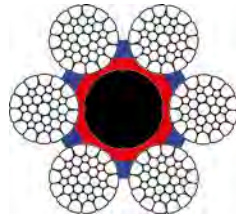
Technical data

Nominal Ø		Weight		Minimum breaking force at a tensile strength of					
				1770 N/mm ²		1860 N/mm ²		1960 N/mm ²	
mm	inch	kg/m	lbs/ft	kN	lbs	kN	lbs	kN	lbs
24		2.28	1.53	390	87,675	410	92,172	432	97,117
25	1	2.49	1.67	425	95,544	447	100,490	471	105,885
26		2.70	1.81	462	103,862	486	109,257	512	115,102
27		2.83	1.90	483	108,583	508	114,203	535	120,273
28		3.02	2.03	518	116,451	544	122,296	573	128,816
29	1 1/8	3.24	2.18	554	124,544	582	130,839	614	138,033
30		3.45	2.32	591	132,862	621	139,606	654	147,025
31		3.71	2.49	634	142,529	666	149,723	702	157,816
32	1 1/4	3.94	2.65	675	151,746	709	159,390	747	167,932
33		4.19	2.82	717	161,188	753	169,281	794	178,498
34		4.45	2.99	762	171,304	801	180,072	844	189,739
35	1 3/8	4.72	3.17	807	181,421	848	190,638	894	200,979
36		4.99	3.35	853	191,762	896	201,429	944	212,220
37		5.29	3.55	905	203,452	951	213,793	1,002	225,259
38	1 1/2	5.56	3.74	951	213,793	999	224,584	1,053	236,724
39		5.85	3.93	1,001	225,034	1,052	236,499	1,108	249,088
40		6.18	4.15	1,057	237,623	1,111	249,763	1,171	263,251
41		6.47	4.35	1,107	248,863	1,164	261,678	1,226	275,616
42	1 5/8	6.78	4.56	1,160	260,778	1,219	274,042	1,285	288,879
43		7.09	4.76	1,213	272,693	1,275	286,631	1,343	301,918
44		7.45	5.01	1,275	286,631	1,340	301,244	1,412	317,430
45	1 3/4	7.79	5.23	1,332	299,446	1,400	314,733	1,475	331,593

Other diameters are available on request. Technical specifications are subject to change. *On request

SOLITEC® 6xK36WS

The SOLITEC® rope is designed with a plastic compound core and special support strands. High flexibility and low elongation are remarkable characteristics of the SOLITEC® rope with the construction 6xK36WS.



Specifications

- Construction class: SOLITEC® core + 6 (1-7-7+7-14) SUPERFILL®
 - Ordinary and lang's lay, right or left lay, bright or galvanized
 - Normative references: DIN 21254 and EN 12385 part 6, respectively
- ✓ MULTILAYER SPOOLING*
 - ✓ SUPERFILL®
 - ✓ PLASTFILL®

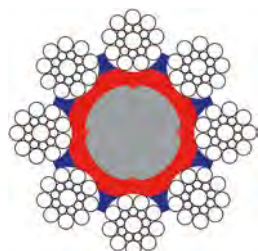
Technical data

Nominal Ø		Weight		Minimum breaking force at a tensile strength of					
				1770 N/mm ²		1860 N/mm ²		1960 N/mm ²	
mm	inch	kg/m	lbs/ft	kN	lbs	kN	lbs	kN	lbs
28		3.11	2.09	538	120,947	565	127,017	596	133,986
29	1 1/8	3.33	2.24	577	129,715	606	136,234	639	143,653
30		3.62	2.43	626	140,730	658	147,924	693	155,793
31		3.82	2.57	662	148,824	695	156,242	733	164,785
32	1 1/4	4.06	2.73	703	158,041	739	166,134	779	175,126
33		4.30	2.89	744	167,258	782	175,801	824	185,243
34		4.60	3.09	796	178,948	837	188,165	882	198,281
35	1 3/8	4.86	3.27	841	189,064	884	198,731	931	209,297
36		5.19	3.49	898	201,878	944	212,220	995	223,685
37		5.46	3.67	945	212,444	993	223,235	1,047	235,375
38	1 1/2	5.78	3.88	1,001	225,034	1,052	236,499	1,108	249,088
39		6.03	4.05	1,044	234,701	1,097	246,615	1,156	259,879
40		6.35	4.27	1,100	247,290	1,156	259,879	1,218	273,817
41		6.68	4.49	1,156	259,879	1,215	273,143	1,280	287,755
42	1 5/8	6.98	4.69	1,208	271,569	1,270	285,507	1,338	300,794
43		7.31	4.91	1,265	284,383	1,329	298,771	1,401	314,957
44		7.70	5.17	1,332	299,446	1,400	314,733	1,475	331,593
45	1 3/4	8.02	5.39	1,388	312,035	1,459	327,996	1,537	345,531
46		8.45	5.68	1,463	328,895	1,538	345,756	1,620	364,190
47		8.75	5.88	1,515	340,586	1,592	357,896	1,677	377,005
48		9.19	6.18	1,591	357,671	1,672	375,881	1,761	395,889
49		9.58	6.44	1,657	372,508	1,742	391,617	1,835	412,524
50		9.92	6.67	1,717	385,997	1,805	405,780	1,902	427,587
51	2	10.34	6.95	1,790	402,408	1,881	422,866	1,982	445,571
52		10.80	7.26	1,863	418,819	1,957	439,951	2,063	463,781
53		11.15	7.49	1,930	433,881	2,028	455,913	2,138	480,642
54	2 1/8	11.60	7.80	2,007	451,192	2,109	474,122	2,223	499,750

Other diameters are available on request. Technical specifications are subject to change. *On request

SOLITEC® 8xK19S

The construction 8xK19S increases flexibility and resistance to bending fatigue. This high-performance rope impresses with high bending cycle stability, fatigue life and low-noise operation.



Specifications

- Construction class: SOLITEC® core + 8 (1-9-9) SUPERFILL®
- Lang's lay, right or left lay, bright or galvanized wires
- Normative references: DIN 21254 and EN 12385 part 6, respectively

- ✓ MULTILAYER SPOOLING*
- ✓ SUPERFILL®
- ✓ PLASTFILL®

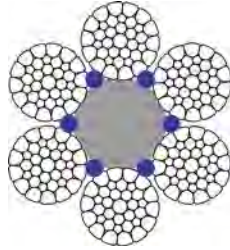
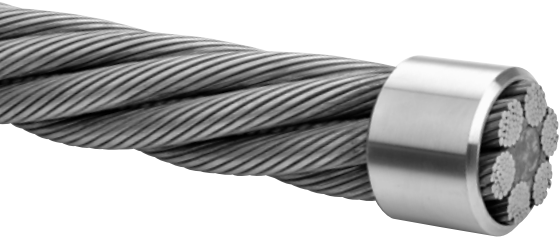
Technical data

Nominal Ø		Weight		Minimum breaking force at a tensile strength of					
				1770 N/mm ²		1860 N/mm ²		2060 N/mm ²	
mm	inch	kg/m	lbs/ft	kN	lbs	kN	lbs	kN	lbs
25	1	2.28	1.53	365	81,956	403	90,643	424	95,364
26		2.46	1.66	394	88,566	436	98,008	459	103,106
27		2.66	1.79	425	95,553	471	105,939	495	111,226
28		2.87	1.93	459	103,295	509	114,437	535	120,291
29	1 1/8	3.08	2.07	492	110,660	545	122,557	573	128,789
30		3.27	2.20	523	117,647	580	130,299	609	136,909
31		3.51	2.36	560	125,956	621	139,552	653	146,728
32	1 1/4	3.72	2.50	595	133,698	659	148,050	692	155,604
33		3.96	2.66	633	142,385	701	157,681	738	165,801
34		4.21	2.83	674	151,449	746	167,689	784	176,187
35	1 3/8	4.46	3.00	714	160,514	790	177,698	831	186,762
36		4.73	3.18	757	170,144	838	188,462	881	198,093
37		4.99	3.36	798	179,398	885	198,848	929	208,856
38	1 1/2	5.27	3.54	843	189,595	933	209,801	981	220,565
39		5.56	3.74	889	199,792	984	221,320	1,035	232,650
40		5.86	3.94	937	210,556	1,037	233,217	1,090	245,114

Other diameters are available on request. Technical specifications are subject to change. *On request

6x19 AND 6x36 CLASSES

The “classic” among wire ropes for mining is provided with a fully lubricated fiber or steel core in case of large diameters. This, combined with a 6-strand construction, makes this well-priced rope the flexible allrounder for mining applications.



Specifications

- Construction classes: 6 x K19S, 6 x K21F, 6 x K25F, 6 x K36WS
- Ordinary and lang's lay, right or left lay, bright or galvanized
- Normative references: DIN 21254 and EN 12385 part 6, respectively

- ✘ MULTILAYER SPOOLING*
- ✓ SUPERFILL®
- ✓ PLASTFILL®

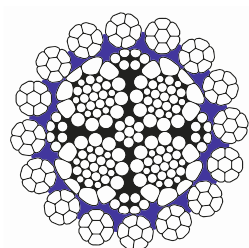
Technical data

Nominal Ø		Weight		Minimum breaking force at a tensile strength of					
				1670 N/mm ²		1770 N/mm ²		1860 N/mm ²	
mm	inch	kg/m	lbs/ft	kN	lbs	kN	lbs	kN	lbs
28		3.31	2.22	511	114,877	541	121,622	569	127,916
29	1 1/8	3.55	2.39	548	123,195	581	130,614	610	137,133
30		3.80	2.55	586	131,738	621	139,606	653	146,800
31		4.05	2.72	626	140,730	663	149,048	697	156,692
32	1 1/4	4.32	2.90	667	149,948	707	158,940	743	167,033
33		4.59	3.08	709	159,390	752	169,056	790	177,599
34		4.88	3.28	753	169,281	798	179,398	839	188,615
35	1 3/8	5.17	3.47	798	179,398	846	190,188	889	199,855
36		5.47	3.68	844	189,739	895	201,204	940	211,320
37		5.77	3.88	892	200,530	945	212,444	993	223,235
38	1 1/2	6.09	4.09	940	211,320	997	224,135	1,047	235,375
39		6.42	4.31	991	222,786	1,050	236,049	1,103	247,964
40		6.75	4.54	1,042	234,251	1,104	248,189	1,161	261,003
41		7.09	4.76	1,095	246,166	1,160	260,778	1,219	274,042
42	1 5/8	7.44	5.00	1,149	258,305	1,218	273,817	1,280	287,755
43		7.80	5.24	1,204	270,670	1,276	286,856	1,341	301,469
44		8.17	5.49	1,261	283,484	1,336	300,345	1,404	315,632
45	1 3/4	8.54	5.74	1,319	296,523	1,398	314,283	1,469	330,244
46		8.93	6.00	1,378	309,787	1,461	328,446	1,535	345,082
47		9.32	6.26	1,439	323,500	1,525	342,834	1,602	360,144
48		9.72	6.53	1,501	337,438	1,590	357,446	1,671	375,656
49		10.13	6.81	1,564	351,601	1,657	372,508	1,742	391,617
50		10.55	7.09	1,628	365,989	1,726	388,020	1,813	407,579
51	2	10.97	7.37	1,694	380,826	1,795	403,532	1,887	424,214
52		11.41	7.67	1,761	395,889	1,866	419,493	1,961	440,850
53		11.85	7.96	1,829	411,176	1,939	435,905	2,038	458,161
54	2 1/8	12.30	8.27	1,899	426,912	2,013	452,540	2,115	475,471
55		12.76	8.57	1,970	442,874	2,088	469,401	2,194	493,231
56		13.23	8.89	2,042	459,060	2,165	486,711	2,275	511,440

Other diameters are available on request. Technical specifications are subject to change. *On request

NOROTEC™ MT 91

Revolutionary design, high quality materials and perfectly coordinated production processes – the NOROTEC™ MT 91 combines all the characteristics your application requires: extremely high breaking forces and high flexibility.



Specifications

- 20–30 mm: 16 x K6–EPIWRC (K)
- 32–42 mm: 16 x K7–EPIWRC (K)
- 44–70 mm: 16 x K17F–EPIWRC (K)
- Ordinary and lang's lay, right or left lay, bright or galvanized
- Normative references: DIN 21254 and EN 12385 part 6, respectively
- ✓ MULTILAYER SPOOLING
- ✓ SUPERFILL®
- ✓ PLASTIFILL®

Technical data

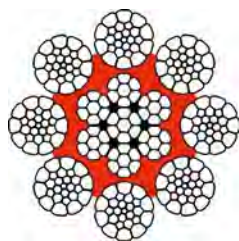
Nominal Ø		Length mass		Minimum breaking force at a tensile strength of			
mm	inch	kg/m	lbs/ft	1770 N/mm ²		1960 N/mm ²	
				kN	lbs	kN	lbs
20		2.03	1.37	335	75,226	370	83,238
21		2.22	1.49	369	83,015	409	91,918
22	7/8	2.46	1.65	404	90,805	447	100,598
24		2.88	1.93	478	107,497	530	119,070
25	1	3.09	2.07	532	119,515	589	132,424
26		3.41	2.29	561	126,192	621	139,546
27		3.67	2.46	603	135,540	667	150,006
28		3.96	2.66	648	145,777	718	161,357
28.57	1 1/8	4.06	2.73	661	148,671	737	165,585
29		4.18	2.81	694	156,015	769	172,930
30		4.52	3.04	742	166,698	822	184,726
32	1 1/4	5.14	3.45	844	189,844	935	210,097
34		5.78	3.88	948	213,213	1,050	236,137
36		6.51	4.37	1,061	238,585	1,175	264,180
38	1 1/2	7.20	4.83	1,225	275,308	1,355	304,686
40		7.97	5.35	1,304	293,113	1,443	324,494
42		8.79	5.90	1,437	323,158	1,592	357,878
44.45	1 3/4	9.29	6.23	1,625	365,222	1,799	404,393
46		10.04	6.73	1,740	391,262	1,940	436,219
48		10.90	7.31	1,895	425,981	2,098	471,606
50		12.15	8.15	2,055	462,036	2,276	511,667
50.8	2	12.72	8.54	2,122	476,948	2,350	528,359
52		13.34	8.95	2,224	499,872	2,462	553,509
54	2 1/8	14.19	9.52	2,398	539,042	2,655	596,908
56		14.97	10.05	2,579	579,771	2,855	641,866
58		16.46	11.05	2,766	621,835	3,063	688,603
60	2 3/8	17.56	11.78	2,960	665,457	3,278	736,899
62		18.52	12.43	3,161	710,637	3,501	786,975
64		20.02	13.43	3,368	757,152	3,729	838,387
66		20.71	13.90	3,582	805,225	3,966	891,579
68		21.99	14.75	3,803	854,856	4,210	946,551
70		23.43	15.72	4,029	905,823	4,462	1,003,082

Other diameters are available on request. Technical specifications are subject to change.



QS 816 V(G)

The extreme resistance of QS 816 V(G) to adverse external influences distinguishes this rope from others. SUPERFILL® compaction technology developed by TEUFELBERGER provides high breaking forces and a high level of safety in use. Compaction in the core and a PLASTIFILL® insert ensure stability against lateral pressure.



Specifications

- 16–42 mm: 8 x K26W S–EPIWRC (K)
- 44–50 mm: 8 x K31WS–EPIWRC (K)
- 52–70 mm: 8 x K42WS–EPIWRC (K)
- QS 816 V in ordinary lay configuration, QS 816 V(G) in lang's lay configuration, right or left lay
- Normative references: DIN 21254 and EN 12385 part 6, respectively
- ✓ MULTILAYER SPOOLING
- ✓ SUPERFILL®
- ✓ PLASTIFILL®

Technical data

Nominal Ø		Length mass		Minimum breaking force at a tensile strength of			
				1770 N/mm ²		1960 N/mm ²	
mm	inch	kg/m	lbs/ft	kN	lbs	kN	lbs
16	5/8	1.20	0.81	210	47,210	232	52,156
17		1.35	0.91	235	52,830	261	58,675
18		1.55	1.04	263	59,125	291	65,419
19	3/4	1.71	1.15	302	67,892	335	75,311
20		1.89	1.27	330	74,187	365	82,055
21		2.15	1.44	374	84,079	414	93,071
22	7/8	2.34	1.57	408	91,722	451	101,389
23		2.54	1.70	445	100,040	492	110,606
24		2.75	1.85	467	104,986	517	116,226
25	1	2.97	1.99	518	116,451	574	129,040
26		3.19	2.14	555	124,769	615	138,257
27		3.51	2.36	595	133,761	659	148,149
28		3.76	2.52	656	147,475	726	163,211
28.57	1 1/8	4.04	2.71	672	151,072	745	167,483
29		3.98	2.67	694	156,017	768	172,653
30		4.37	2.93	764	171,754	846	190,188
32	1 1/4	4.90	3.29	864	194,235	957	215,142
34		5.59	3.75	945	212,444	1,046	235,150
36		6.36	4.27	1,071	240,770	1,186	266,623
38	1 1/2	7.03	4.72	1,222	274,717	1,354	304,391
40		7.81	5.24	1,342	301,694	1,486	334,066
42		8.60	5.77	1,482	333,167	1,641	368,911
44		9.27	6.22	1,596	358,795	1,768	397,462
46		10.30	6.91	1,760	395,664	1,949	438,153
48		10.78	7.23	1,848	415,447	2,050	460,858
50	2	11.60	7.78	2,016	453,215	2,232	501,774
52		12.50	8.39	2,180	490,083	2,414	542,689
54	2 1/8	13.91	9.33	2,287	514,138	2,532	569,216
56		14.50	9.73	2,529	568,542	2,800	629,465
58		15.60	10.47	2,712	609,682	3,004	675,326
60	2 3/8	16.70	11.21	2,903	652,620	3,214	722,536
62		17.80	11.94	3,099	696,683	3,432	771,544
64		19.74	13.25	3,303	742,544	3,657	822,126
66		20.63	13.84	3,495	785,707	3,870	870,011
68		21.40	14.36	3,728	838,088	4,128	928,011
70		22.70	15.23	3,951	888,220	4,375	983,539

Other diameters are available on request. Technical specifications are subject to change.

FULL-LOCKED COIL ROPE

Full-locked coil ropes with a varying number of Z-shaped wires are ideally suited for applications that require a high resistance against abrasion and a smooth surface. Decades of experience and our commitment to high quality guarantee that our ropes resist abrasion and offer an exceptionally long service life.



Specifications

- Outer layer of Z-shaped wires, arranged over a layer consisting of alternating round and I-shaped wires, which in turn is placed around a round wire core.
- Construction example: 44 mm = 1-6-12-10/10-24Z
- Right or left lay, bright or galvanized
- Normative references: EN 12385 part 7

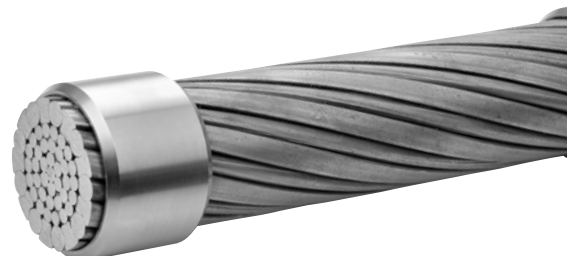
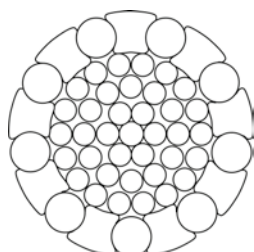
Technical data

Nominal Ø		Weight		Minimum breaking force at a tensile strength of					
				1080 N/mm ²		1180 N/mm ²		1270 N/mm ²	
mm	inch	kg/m	lbs/ft	kN	lbs	kN	lbs	kN	lbs
28		4.47	3.01	493	110,814	539	121,074	580	130,309
30		5.13	3.45	566	127,210	618	138,988	665	149,589
32	1 ¼	5.84	3.93	644	144,736	703	158,138	757	170,199
34		6.60	4.43	727	163,394	794	178,523	855	192,139
36		7.39	4.97	815	183,182	890	200,143	958	215,408
38	1 ½	8.24	5.54	908	204,101	992	222,999	1,068	240,007
40		9.13	6.13	1,006	226,151	1,099	247,090	1,183	265,936
42	1 ⅝	10.06	6.76	1,109	249,331	1,212	272,417	1,304	293,195
44		11.10	7.46	1,224	275,166	1,337	300,581	1,439	323,511
45	1 ¾	11.50	7.73	1,266	284,608	1,383	310,900	1,489	334,785
48		13.14	8.83	1,449	325,657	1,583	355,810	1,703	382,948
50		14.26	9.58	1,572	353,360	1,717	386,079	1,848	415,525
52		15.43	10.37	1,700	382,194	1,858	417,583	1,999	449,432
53		16.03	10.77	1,766	397,035	1,930	433,798	2,077	466,884
54	2 ⅛	16.64	11.18	1,833	412,159	2,003	450,322	2,156	484,669
56		17.89	12.02	1,972	443,255	2,154	484,297	2,319	521,235
58		19.19	12.90	2,115	475,481	2,311	519,507	2,487	559,131
60	2 ¾	20.54	13.80	2,263	508,839	2,473	555,953	2,662	598,357

Other diameters are available on request. Technical specifications are subject to change.

HALF-LOCKED COIL ROPE

High resistance to abrasion of half-locked coil rope meets special customer needs. The shape and size of the outer wires of half-locked coil ropes make them ideal for use as guide ropes.



Specifications

- Bright or galvanized
- Normative references: EN 12385 part 7

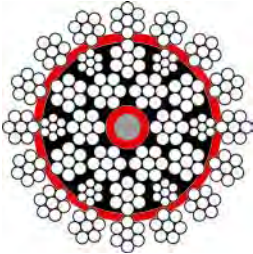
Technical data

Nominal Ø		Weight		Minimum breaking force at a tensile strength of					
mm	inch	kg/m	lbs/ft	1080 N/mm ²		1180 N/mm ²		1270 N/mm ²	
				kN	lbs	kN	lbs	kN	lbs
22	7/8	2.67	1.79	311	69,916	340	76,480	365	82,145
28		4.31	2.90	502	112,950	549	123,408	591	132,821
29	1 1/8	4.62	3.11	539	121,162	589	132,380	634	142,477
30		4.95	3.33	577	129,662	630	141,668	678	152,473
32	1 1/4	5.63	3.78	634	142,609	693	155,813	746	167,697
34		6.36	4.27	716	160,992	782	175,899	842	189,315
35	1 3/8	6.74	4.53	759	170,601	829	186,398	892	200,615
36		7.13	4.79	803	180,489	877	197,201	944	212,242
38	1 1/2	7.94	5.34	895	201,101	977	219,721	1,052	236,480
40		8.80	5.91	991	222,826	1,083	243,458	1,166	262,027
41		9.24	6.21	1,017	228,725	1,112	249,903	1,196	268,964
42	1 5/8	9.70	6.52	1,068	240,019	1,167	262,242	1,255	282,244
44		10.6	7.15	1,172	263,422	1,280	287,813	1,378	309,764
45	1 3/4	11.2	7.53	1,239	278,538	1,353	304,211	1,457	327,524
46		11.6	7.82	1,281	287,913	1,399	314,572	1,506	338,565
48	1 7/8	12.7	8.53	1,401	314,957	1,530	343,958	1,647	370,328
50		13.7	9.24	1,513	340,162	1,653	371,659	1,779	400,006
51	2	14.2	9.54	1,559	350,477	1,704	383,131	1,833	412,176
52		14.8	9.93	1,624	365,090	1,774	398,800	1,910	429,374
54	2 1/8	16.0	10.75	1,764	396,563	1,928	433,387	2,075	466,445
56		17.2	11.59	1,898	426,700	2,074	466,209	2,232	501,767
58		18.5	12.43	2,036	457,722	2,225	500,104	2,394	538,248
60	2 3/8	19.8	13.30	2,179	489,834	2,381	535,189	2,562	576,008

Other diameters are available on request. Technical specifications are subject to change.

34x7 CLASS

Non-rotating ropes offering high resistance to the extreme conditions encountered in mines. These ropes boast an exceptionally long service life and excellent flexibility. TEUFELBERGER ropes of this class are first choice balance ropes.



Specifications

- 16-17 mm: 34 x 7+FC
- Ordinary and lang's lay, right or left lay, bright or galvanized
- Normative references: DIN 21254 and EN 12385 part 6, respectively

- ✘ MULTILAYER SPOOLING
- ✔ SUPERFILL®
- ✔ PLASTFILL®

Technical data on request.

A low-angle, silhouette photograph of a massive industrial steel structure, likely a tower or part of a mine shaft, against a clear blue sky. The structure is composed of thick, dark steel beams forming a complex lattice of supports and platforms. The perspective is looking up, emphasizing the height and scale of the construction. The sky is a gradient of light blue, with a few wispy clouds near the horizon.

Highest Standards

Comprehensive quality testing of primary materials and final products as well as the certification to ISO 9001 guarantee the consistent high quality of our steel wire ropes.



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