HAS ÇELİK ve HALAT SAN. TİC. A.Ş.

Hacılar Yolu 8. km 38210 Hacılar - Kayseri / TÜRKİYE
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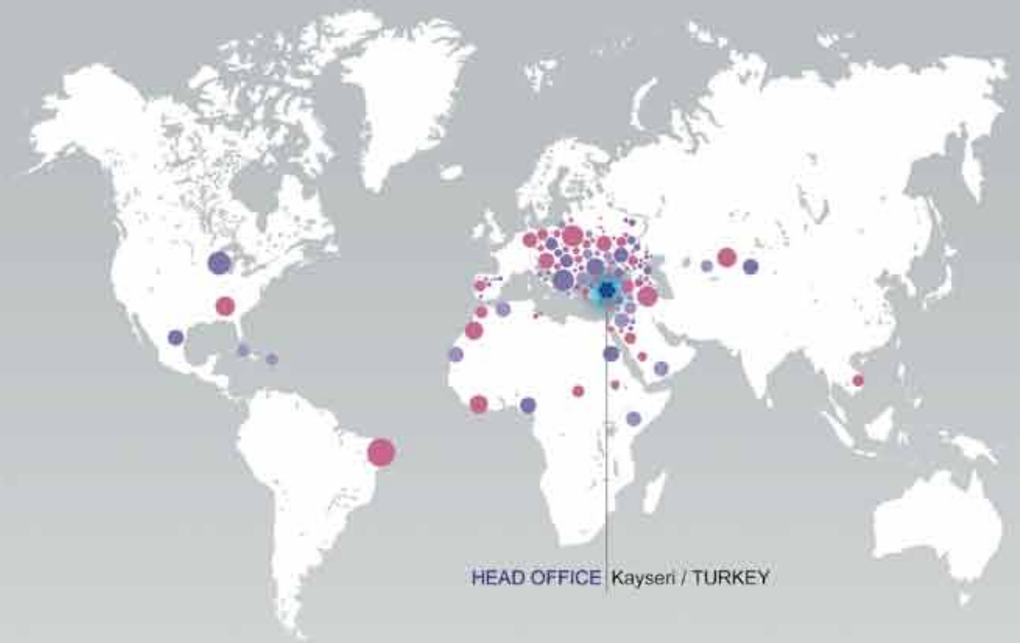
HASÇELİK®



- Çok Telli Halatlar
  - Galvanizli
  - Siyah
  - Kompakt
  - Özü Plastik Kaplı
  - Yüksek Galvanizli
  - Ezme
- Monotoron Halatlar
  - Aluminyum İletken Çelik Özleri
  - Topraklama Telleri
  - Taşıyıcı Halatlar
- Endüstriyel Amaçlı Yaylık Teller

- *Steel Wire Ropes*
  - *Galvanized*
  - *Ungalvanized*
  - *Compacted*
  - *Plastic Impegnated Core*
  - *Heavy Galvanized*
  - *Swaged*
- *Single Strands*
  - *For ACSR*
  - *Earth Wire*
  - *Messenger Wire*
- *Spring Wire for Industrial Applications*

GROUP COMPANIES

HASÇELİK®

WIRE ROPES

•Hacılar Plant with production capability of Steel Wire Ropes, Steel Wire, AAC-ACSR-AAAC Conductors, 0,6-1 kV Aluminium Cables

• Hacılar Fabrika Çelik Halat, Çelik Tel, AAC-ACSR-AAAC iletken, 0,6-1kV Alüminyum kablo üretim tesisi

HASÇELİK®

CABLES

•Kayseri Organize Plant with production capability of Aluminium rods, AAC-ACSR-AAAC conductors, 0,6-1kV Aluminium Cables

•Kayseri Organize Fabrika Alüminyum filmaşin, AAC-ACSR-AAAC iletken, 0,6-1kV Alüminyum kablo üretim tesisi

coreal

•Kayseri Free Zone Plant with production capability of Aluminium rods, AAC-ACSR-AAAC conductors, 0,6-1kV Aluminium Cables

•Kayseri serbest Bölge Fabrika Alüminyum filmaşin, AAC-ACSR-AAAC iletken, 0,6-1kV Alüminyum kablo üretim tesisi

Metal Matris

•Kayseri Hacılar Organize Plant with production capability of Steel Wire Springs, Steel Wire for spring production, Pocket system spring

•Kayseri Hacılar Organize Fabrika Çelik yay, yaylık kargas, yaylık çelik tel, Torbalı sistem yay üretim tesisi

ADRESLER / ADDRESSES

Hasçelik Halat / *Hasçelik Wire Rope*
Hacılar Yolu, 8. Km 38210
Hacılar / Kayseri / TÜRKİYE

Tel : 00 90 352 442 16 40 (8 hat)
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Kayseri / TÜRKİYE

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İstanbul İrtibat Bürosu / *Branch Office*
Halit Rifat Paşa Mah. Perpa Ticaret Merkezi
A Blok Kat: 11 No. 1349 Şişli / İSTANBUL

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1989 Yılında Kayseri de, Kablo sektörüne Monotoron Halat Üretmek İçin Kurulan HAS ÇELİK ve HALAT SAN. TİC. A.Ş, Sürekli Gelişen Teknolojilere ve Pazarlara Uyum Sağlamak İçin, Ürün Portföyünü Kısa Sürede Genişletmiştir. İlk Aşamada Çok Telli Halat ve Yaylık Çelik Tel Üretimiyle Büyümeye Başlamış; Sonrasında, Alüminyum İletken ve Kablo Üretimiyle Gelişmesini Sürdürmüştür. 23 Yıllık Süreçte Üretim Tesisi Sayısını 4'e Çıkararak; METAL MATRİS A.Ş ile Yaylık Çelik Tel, Alüminyum Kablo Üretimi İçin Coreal A.Ş yi Hizmete Açmış, Son Olarak ta Bakır ve Alüminyum Kablo Üretimi İçin HAS ÇELİK KABLO Tesisini Faaliyete Geçirmiştir. HAS ÇELİK ve HALAT San. Tic. A.Ş, Ana Üretimi Olan Çok Telli Halatın Yanı Sıra Monotoron Halat, Alüminyum Çelik Öz ve Endüstriyel Çelik Tel Üretimi ile Hem Yurtiçi Hem de Yurtdışında Müşterilerine Hizmet Vermektedir.

Büyüyen Fabrika Sahası ve Makine Parkuru Sayesinde Dünya Standartlarına (EN/ASTM/API vb.) Uygun Üretim Yaparak, Müşterilerinin İhtiyacı Olan ürünleri zamanın da Üreten HAS ÇELİK ve HALAT SAN. TİC. AŞ. Mevcut Üretimi Olan, Genel Amaçlı Halatlar, Asansör Halatları, Balıkçı Halatları, Dönmez Halatlar ve Bariyer Halatlarının Yanı Sıra, Kompakt, Swage, Özü Plastik Kaplamalı Yüksek Mukavemetli Halatlar, Yüksek Performanslı, Ağır Galvanizli Halatlar ve Enerji İletim Hatlarında Kullanılan Topraklama Halatları ve OPWG Gibi Özel Ürünlerle de Müşterilerine Hizmet Vermektedir.

Kaliteye Önem veren, Çevreye Duyarlı HAS ÇELİK ve HALAT SAN. TİC. AŞ, TSE, ISO 9000 Kalite Belgelerine, Asansör Halatları İçin TÜV-SÜD Kalite Belgesine, TSE-ISO-14000 Çevre Belgesine ve Ayrıca Yerli ve Yabancı Bağımsız Kuruluşlar Tarafından Ürünlere Özel Çok Sayıda Kalite-Proses Belgesine Sahiptir.

"Müşterilerine, Çalışanlarına ve Ülkesine En Yüksek Faydayı Sağlamak" Vizyonunu Benimsemiş Olan HAS ÇELİK ve HALAT SAN. TİC. AŞ Çevreye Duyarlı, Sosyal ve Toplumsal Sorumluluğunun Bilincinde Olan Yapısı İle Büyümeye Devam Edecek, Kalitelisi İle Sektörde Dünya Markası Olma Yolundaki Hedefini Sürdürecektir.

Saygılarımızla

HAS ÇELİK ve HALAT SAN. TİC. A.Ş.

HAS CELIK ve HALAT SAN. TIC. A.S. was established in Kayseri, TURKEY in 1989.

We have started production activity to produce steel strand for cable sector , and we enhanced expeditiously our product varieties day by day.

At the preliminary stage, we carried out producing steel wire ropes and spring wires, after than we started producing aluminium conductors and aluminium cables.

In the duration of 23 years, we established our first sister company Metal Matris producing spring systems and spring wires. Following we contributed to Turkish industry with our second sister company COREAL to produce aluminium cables and at the end of 2009 we established our third company Has Celik Cable to enlarge our aluminium capacity . Now as we are Has Celik , we have strongly concentrated on producing steel wire ropes , steel strands , aluminium steel cores and industrial spring wires.

We will continue to serve both our foreign and domestic customers with new products in accordance with our mission "to supply our goods by following the latest technology"

Along with the modernizing of our machines and thanks to new additional investments, we expanded our product range according to World Standarts EN, ASTM, API etc. In addition to general purposes ropes , elevator ropes, fishing ropes, non-rotating ropes and barrier ropes, we have added swaged, compacted and plastic impregnated core ropes with the high tensile strengths into our production range. Besides these special ropes, we produce heavy galvanized steel wire ropes with high performance, earth wire used for energy transmission lines and OPGW. Our high service quality has been proved by those certificates TSE ISO 9000 Quality Certificate, TUV SUD certificate for elevator ropes, TSE-ISO-14000 verifying our sensitivity to environment , and many international quality- process certificates special for some products showing our proved service quality by domestic and foreign foundations.

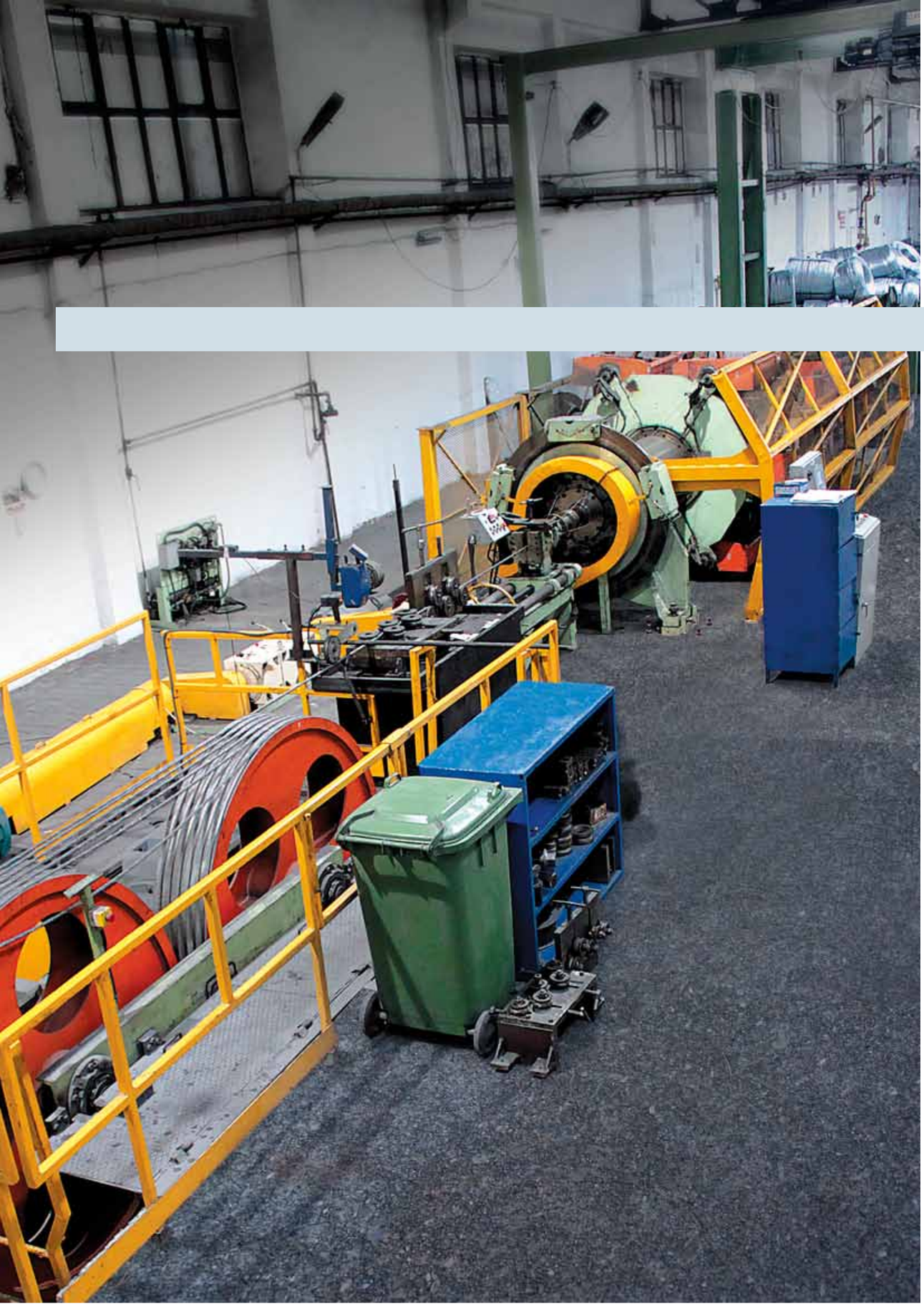
We are obviously willing to be a world brand in our sector and to carry on our planned growth.

We have been in acivites in the framework of our vision " To provide the highest benefit for our customers, employees and our country"

Best Regards

HAS ÇELİK ve HALAT SAN. TİC. A.Ş.

HASÇELİK



Çok Telli Çelik Halatlar
Steel Wire Ropes

EN 12385

6x7 = 6x(1+6)
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.221	37.6	41.6
9.00	0.279	47.6	52.7
10.00	0.345	58.8	65.1
11.00	0.417	71.1	78.7
12.00	0.497	84.6	93.7
13.00	0.583	99.3	110
14.00	0.676	115	128
15.00	0.776	132	146
16.00	0.883	150	167
17.00	0.997	170	188
18.00	1.118	190	211
19.00	1.245	212	235
20.00	1.380	235	260

EN 12385

6x7 = 6x(1+6)
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.246	40.7	45.0
9.00	0.311	51.5	57.0
10.00	0.384	63.5	70.4
11.00	0.465	76.9	85.1
12.00	0.553	91.5	101
13.00	0.649	107	119
14.00	0.753	125	138
15.00	0.864	143	158
16.00	0.983	163	180
17.00	1.110	184	203
18.00	1.244	206	228
19.00	1.386	229	254
20.00	1.536	254	281

EN 12385

6x19 Seale = 6x(1+9+9)
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.230	37.4	41.4
9.00	0.291	47.3	52.4
10.00	0.359	58.4	64.7
11.00	0.434	70.7	78.3
12.00	0.517	84.1	93.1
13.00	0.607	98.7	109.3
14.00	0.704	114	127
15.00	0.808	131	146
16.00	0.919	150	166
17.00	1.038	169	187
18.00	1.163	189	210
19.00	1.296	211	233
20.00	1.436	234	259
21.00	1.583	258	285
22.00	1.738	283	313
23.00	1.899	309	342
24.00	2.068	336	373
25.00	2.244	365	404
26.00	2.427	395	437
27.00	2.617	426	472
28.00	2.815	458	507
29.00	3.019	491	544
30.00	3.231	526	582
31.00	3.450	561	
32.00	3.676	598	
33.00	3.910	636	
34.00	4.150	675	
35.00	4.398	716	

Çok Telli Halatlar
Steel Wire Ropes

EN 12385

6x19 Seale = 6x(1+9+9)
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.256	40.3	44.7
9.00	0.324	51.0	56.5
10.00	0.400	63.0	69.8
11.00	0.484	76.2	84.4
12.00	0.576	90.7	100.5
13.00	0.676	106.5	117.9
14.00	0.784	124	137
15.00	0.900	142	157
16.00	1.024	161	179
17.00	1.156	182	202
18.00	1.296	204	226
19.00	1.444	227	252
20.00	1.600	252	279
21.00	1.764	278	308
22.00	1.936	305	338
23.00	2.116	333	369
24.00	2.304	363	402
25.00	2.500	394	436
26.00	2.704	426	472
27.00	2.916	459	509
28.00	3.136	494	547
29.00	3.364	530	587
30.00	3.600	567	628
31.00	3.844	606	671
32.00	4.096	645	715
33.00	4.356	686	760
34.00	4.624	728	807
35.00	4.900	772	855

EN 12385
6x19 W = 6x[1+6+(6+6)]
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.230	37.4	41.4
9.00	0.291	47.3	52.4
10.00	0.359	58.4	64.7
11.00	0.434	70.7	78.3
12.00	0.517	84.1	93.1
13.00	0.607	98.7	109.3
14.00	0.704	114	127
15.00	0.808	131	146
16.00	0.919	150	166
17.00	1.038	169	187
18.00	1.163	189	210
19.00	1.296	211	233
20.00	1.436	234	259
21.00	1.583	258	285
22.00	1.738	283	313
23.00	1.899	309	342
24.00	2.068	336	373
25.00	2.244	365	404
26.00	2.427	395	437
27.00	2.617	426	472
28.00	2.815	458	507
29.00	3.019	491	544
30.00	3.231	526	582
31.00	3.450	561	622
32.00	3.676	598	662
33.00	3.910	636	704
34.00	4.150	675	748
35.00	4.398	716	792
36.00	4.653	757	838
37.00	4.915	800	885
38.00	5.184	843	934
39.00	5.460	888	
40.00	5.744	935	
41.00	6.035	982	
42.00	6.333	1030	
43.00	6.638	1080	
44.00	6.950	1131	

EN 12385
6x19 W = 6x[1+6+(6+6)]
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.256	40.3	44.7
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10.00	0.400	63.0	69.8
11.00	0.484	76.2	84.4
12.00	0.576	90.7	100.5
13.00	0.676	106.5	117.9
14.00	0.784	124	137
15.00	0.900	142	157
16.00	1.024	161	179
17.00	1.156	182	202
18.00	1.296	204	226
19.00	1.444	227	252
20.00	1.600	252	279
21.00	1.764	278	308
22.00	1.936	305	338
23.00	2.116	333	369
24.00	2.304	363	402
25.00	2.500	394	436
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27.00	2.916	459	509
28.00	3.136	494	547
29.00	3.364	530	587
30.00	3.600	567	628
31.00	3.844	606	671
32.00	4.096	645	715
33.00	4.356	686	760
34.00	4.624	728	807
35.00	4.900	772	855
36.00	5.184	817	904
37.00	5.476	863	955
38.00	5.776	910	1008
39.00	6.084	958	
40.00	6.400	1008	
41.00	6.724	1059	
42.00	7.056	1112	
43.00	7.396	1165	
44.00	7.744	1220	

EN 12385

6x19 Filler = 6x(1+6+6F+12)
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
10.00	0.359	58.4	64.7
11.00	0.434	70.7	78.3
12.00	0.517	84.1	93.1
13.00	0.607	98.7	109.3
14.00	0.704	114	127
15.00	0.808	131	146
16.00	0.919	150	166
17.00	1.038	169	187
18.00	1.163	189	210
19.00	1.296	211	233
20.00	1.436	234	259
21.00	1.583	258	285
22.00	1.738	283	313
23.00	1.899	309	342
24.00	2.068	336	373
25.00	2.244	365	404
26.00	2.427	395	437
27.00	2.617	426	472
28.00	2.815	458	507
29.00	3.019	491	544
30.00	3.231	526	582
31.00	3.450	561	622
32.00	3.676	598	662
33.00	3.910	636	704
34.00	4.150	675	748
35.00	4.398	716	792
36.00	4.653	757	838
37.00	4.915	800	885
38.00	5.184	843	934
39.00	5.460	888	984
40.00	5.744	935	1035
41.00	6.035	982	1087
42.00	6.333	1030	
43.00	6.638	1080	
44.00	6.950	1131	
45.00	7.270	1183	
46.00	7.596	1236	

EN 12385

6x19 Filler = 6x(1+6+6F+12)
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
10.00	0.400	63.0	69.8
11.00	0.484	76.2	84.4
12.00	0.576	90.7	100.5
13.00	0.676	106.5	117.9
14.00	0.784	124	137
15.00	0.900	142	157
16.00	1.024	161	179
17.00	1.156	182	202
18.00	1.296	204	226
19.00	1.444	227	252
20.00	1.600	252	279
21.00	1.764	278	308
22.00	1.936	305	338
23.00	2.116	333	369
24.00	2.304	363	402
25.00	2.500	394	436
26.00	2.704	426	472
27.00	2.916	459	509
28.00	3.136	494	547
29.00	3.364	530	587
30.00	3.600	567	628
31.00	3.844	606	671
32.00	4.096	645	715
33.00	4.356	686	760
34.00	4.624	728	807
35.00	4.900	772	855
36.00	5.184	817	904
37.00	5.476	863	955
38.00	5.776	910	1008
39.00	6.084	958	1061
40.00	6.400	1008	1116
41.00	6.724	1059	1173
42.00	7.056	1112	
43.00	7.396	1165	
44.00	7.744	1220	
45.00	8.100	1276	
46.00	8.464	1333	

EN 12385

6x19M = 6x(1+6+12)
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.221	34.8	38.5
9.00	0.280	44.0	48.7
10.00	0.346	54.3	60.2
11.00	0.419	65.8	72.8
12.00	0.498	78.2	86.6
13.00	0.585	91.8	101.7
14.00	0.678	107	118
15.00	0.779	122	135
16.00	0.886	139	154
17.00	1.000	157	174
18.00	1.121	176	195
19.00	1.249	196	217
20.00	1.384	217	241
21.00	1.526	240	265
22.00	1.675	263	291
23.00	1.830	287	318
24.00	1.993	313	347
25.00	2.163	340	376
26.00	2.339	367	407
27.00	2.522	396	439
28.00	2.713	426	472
29.00	2.910	457	506
30.00	3.114	489	542
31.00	3.325	522	578
32.00	3.543	556	616
33.00	3.768	592	655
34.00	4.000	628	696
35.00	4.239	666	737
36.00	4.484	704	780
37.00	4.737	744	824
38.00	4.996	785	869
39.00	5.263	826	915
40.00	5.536	869	963
41.00	5.816	913	
42.00	6.103	959	
43.00	6.398	1005	
44.00	6.699	1052	

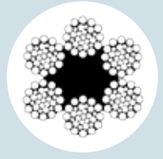
EN 12385

6x19M = 6x(1+6+12)
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.244	37.6	41.6
9.00	0.309	47.6	52.7
10.00	0.381	58.8	65.1
11.00	0.461	71.1	78.7
12.00	0.549	84.6	93.7
13.00	0.644	99.3	110.0
14.00	0.747	115	128
15.00	0.857	132	146
16.00	0.975	150	167
17.00	1.101	170	188
18.00	1.234	190	211
19.00	1.375	212	235
20.00	1.524	235	260
21.00	1.680	259	287
22.00	1.844	284	315
23.00	2.015	311	344
24.00	2.195	338	375
25.00	2.381	367	407
26.00	2.576	397	440
27.00	2.777	428	474
28.00	2.987	461	510
29.00	3.204	494	547
30.00	3.429	529	586
31.00	3.661	565	625
32.00	3.901	602	666
33.00	4.149	640	709
34.00	4.404	679	752
35.00	4.667	720	797
36.00	4.938	762	843
37.00	5.216	804	891
38.00	5.502	849	940
39.00	5.795	894	990
40.00	6.096	940	1041
41.00	6.405	988	
42.00	6.721	1037	
43.00	7.045	1087	
44.00	7.376	1138	

EN 12385

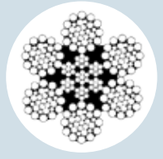
6x31WS = 6x[1+6+(6+6)+12]
FC / KÖ



Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.235	37.4	41.4
9.00	0.297	47.3	52.4
10.00	0.367	58.4	64.7
11.00	0.444	70.7	78.3
12.00	0.528	84.1	93.1
13.00	0.620	98.7	109.3
14.00	0.719	114	127
15.00	0.826	131	146
16.00	0.940	150	166
17.00	1.061	169	187
18.00	1.189	189	210
19.00	1.325	211	233
20.00	1.468	234	259
21.00	1.618	258	285
22.00	1.776	283	313
23.00	1.941	309	342
24.00	2.114	336	373
25.00	2.294	365	404
26.00	2.481	395	437
27.00	2.675	426	472
28.00	2.877	458	507
29.00	3.086	491	544
30.00	3.303	526	582
31.00	3.527	561	622
32.00	3.758	598	662
33.00	3.997	636	704
34.00	4.243	675	748
35.00	4.496	716	792
36.00	4.756	757	838
37.00	5.024	800	885
38.00	5.299	843	934
39.00	5.582	888	984
40.00	5.872	935	1035
41.00	6.169	982	1087
42.00	6.474	1030	1141
43.00	6.786	1080	1196
44.00	7.105	1131	1252
46.00	7.766	1236	1369
48.00	8.456	1346	
50.00	9.175	1460	
52.00	9.924	1579	

EN 12385

6x31WS = 6x[1+6+(6+6)+12]
IWRC / ÇÖ



Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.262	40.3	44.7
9.00	0.331	51.0	56.5
10.00	0.409	63.0	69.8
11.00	0.495	76.2	84.4
12.00	0.589	90.7	100.5
13.00	0.691	106.5	117.9
14.00	0.802	124	137
15.00	0.920	142	157
16.00	1.047	161	179
17.00	1.182	182	202
18.00	1.325	204	226
19.00	1.476	227	252
20.00	1.636	252	279
21.00	1.804	278	308
22.00	1.980	305	338
23.00	2.164	333	369
24.00	2.356	363	402
25.00	2.556	394	436
26.00	2.765	426	472
27.00	2.982	459	509
28.00	3.207	494	547
29.00	3.440	530	587
30.00	3.681	567	628
31.00	3.930	606	671
32.00	4.188	645	715
33.00	4.454	686	760
34.00	4.728	728	807
35.00	5.010	772	855
36.00	5.301	817	904
37.00	5.599	863	955
38.00	5.906	910	1008
39.00	6.221	958	1061
40.00	6.544	1008	1116
41.00	6.875	1059	1173
42.00	7.215	1112	1231
43.00	7.562	1165	1290
44.00	7.918	1220	1351
46.00	8.654	1333	1476
48.00	9.423	1452	
50.00	10.225	1575	
52.00	11.059	1704	

Çok Telli Halatlar

Steel Wire Ropes

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.235	37.4	41.4
9.00	0.297	47.3	52.4
10.00	0.367	58.4	64.7
11.00	0.444	70.7	78.3
12.00	0.528	84.1	93.1
13.00	0.620	98.7	109.3
14.00	0.719	114	127
15.00	0.826	131	146
16.00	0.940	150	166
17.00	1.061	169	187
18.00	1.189	189	210
19.00	1.325	211	233
20.00	1.468	234	259
21.00	1.618	258	285
22.00	1.776	283	313
23.00	1.941	309	342
24.00	2.114	336	373
25.00	2.294	365	404
26.00	2.481	395	437
27.00	2.675	426	472
28.00	2.877	458	507
29.00	3.086	491	544
30.00	3.303	526	582
31.00	3.527	561	622
32.00	3.758	598	662
33.00	3.997	636	704
34.00	4.243	675	748
35.00	4.496	716	792
36.00	4.756	757	838
37.00	5.024	800	885
38.00	5.299	843	934
39.00	5.582	888	984
40.00	5.872	935	1035
41.00	6.169	982	
42.00	6.474	1030	
43.00	6.786	1080	
44.00	7.105	1131	

EN 12385

6x26WS = 6x[1+5+(5+5)+10]
FC / KÖ

‘12

Çok Telli Halatlar

Steel Wire Ropes

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.262	40.3	44.7
9.00	0.331	51.0	56.5
10.00	0.409	63.0	69.8
11.00	0.495	76.2	84.4
12.00	0.589	90.7	100.5
13.00	0.691	106.5	117.9
14.00	0.802	124	137
15.00	0.920	142	157
16.00	1.047	161	179
17.00	1.182	182	202
18.00	1.325	204	226
19.00	1.476	227	252
20.00	1.636	252	279
21.00	1.804	278	308
22.00	1.980	305	338
23.00	2.164	333	369
24.00	2.356	363	402
25.00	2.556	394	436
26.00	2.765	426	472
27.00	2.982	459	509
28.00	3.207	494	547
29.00	3.440	530	587
30.00	3.681	567	628
31.00	3.930	606	671
32.00	4.188	645	715
33.00	4.454	686	760
34.00	4.728	728	807
35.00	5.010	772	855
36.00	5.301	817	904
37.00	5.599	863	955
38.00	5.906	910	1008
39.00	6.221	958	1061
40.00	6.544	1008	1116
41.00	6.875	1059	
42.00	7.215	1112	
43.00	7.562	1165	
44.00	7.918	1220	

EN 12385

6x26WS = 6x[1+5+(5+5)+10]
IWRC / ÇÖ

‘12

EN 12385

6x36WS = 6x[1+7+(7+7)+14]
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.235	37.4	41.4
9.00	0.297	47.3	52.4
10.00	0.367	58.4	64.7
11.00	0.444	70.7	78.3
12.00	0.528	84.1	93.1
13.00	0.620	98.7	109.3
14.00	0.719	114	127
15.00	0.826	131	146
16.00	0.940	150	166
17.00	1.061	169	187
18.00	1.189	189	210
19.00	1.325	211	233
20.00	1.468	234	259
21.00	1.618	258	285
22.00	1.776	283	313
23.00	1.941	309	342
24.00	2.114	336	373
25.00	2.294	365	404
26.00	2.481	395	437
27.00	2.675	426	472
28.00	2.877	458	507
29.00	3.086	491	544
30.00	3.303	526	582
31.00	3.527	561	622
32.00	3.758	598	662
33.00	3.997	636	704
34.00	4.243	675	748
35.00	4.496	716	792
36.00	4.756	757	838
37.00	5.024	800	885
38.00	5.299	843	934
39.00	5.582	888	984
40.00	5.872	935	1035
41.00	6.169	982	1087
42.00	6.474	1030	1141
43.00	6.786	1080	1196
44.00	7.105	1131	1252
46.00	7.766	1236	1369
48.00	8.456	1346	1490
50.00	9.175	1460	1617
52.00	9.924	1579	1749
54.00	10.702	1703	
56.00	11.509	1832	
58.00	12.346	1965	

EN 12385

6x36WS = 6x[1+7+(7+7)+14]
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.262	40.3	44.7
9.00	0.331	51.0	56.5
10.00	0.409	63.0	69.8
11.00	0.495	76.2	84.4
12.00	0.589	90.7	100.5
13.00	0.691	106.5	117.9
14.00	0.802	124	137
15.00	0.920	142	157
16.00	1.047	161	179
17.00	1.182	182	202
18.00	1.325	204	226
19.00	1.476	227	252
20.00	1.636	252	279
21.00	1.804	278	308
22.00	1.980	305	338
23.00	2.164	333	369
24.00	2.356	363	402
25.00	2.556	394	436
26.00	2.765	426	472
27.00	2.982	459	509
28.00	3.207	494	547
29.00	3.440	530	587
30.00	3.681	567	628
31.00	3.930	606	671
32.00	4.188	645	715
33.00	4.454	686	760
34.00	4.728	728	807
35.00	5.010	772	855
36.00	5.301	817	904
37.00	5.599	863	955
38.00	5.906	910	1008
39.00	6.221	958	1061
40.00	6.544	1008	1116
41.00	6.875	1059	1173
42.00	7.215	1112	1231
43.00	7.562	1165	1290
44.00	7.918	1220	1351
46.00	8.654	1333	1476
48.00	9.423	1452	1608
50.00	10.225	1575	1744
52.00	11.059	1704	1887
54.00	11.926	1837	
56.00	12.826	1976	
58.00	13.759	2120	

EN 12385

6x37M = 6x[(1+6+12)+18]
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.221	33.4	37.0
9.00	0.280	42.3	46.8
10.00	0.346	52.2	57.8
11.00	0.419	63.2	70.0
12.00	0.498	75.2	83.3
13.00	0.585	88.2	97.7
14.00	0.678	102.3	113.3
15.00	0.779	117	130
16.00	0.886	134	148
17.00	1.000	151	167
18.00	1.121	169	187
19.00	1.249	188	209
20.00	1.384	209	231
21.00	1.526	230	255
22.00	1.675	253	280
23.00	1.830	276	306
24.00	1.993	301	333
25.00	2.163	326	361
26.00	2.339	353	391
27.00	2.522	381	422
28.00	2.713	409	453
29.00	2.910	439	486
30.00	3.114	470	520
31.00	3.325	502	556
32.00	3.543	535	592
33.00	3.768	569	630
34.00	4.000	604	668
35.00	4.239	640	708
36.00	4.484	677	749
37.00	4.737	715	792
38.00	4.996	754	835
39.00	5.263	794	879
40.00	5.536	835	925
41.00	5.816	878	972
42.00	6.103	921	1020
43.00	6.398	965	1069
44.00	6.699	1011	1119
45.00	7.007	1057	1171
46.00	7.321	1105	1223
47.00	7.643	1153	1277
48.00	7.972	1203	1332
49.00	8.307	1254	1388
50.00	8.650	1305	1446
51.00	8.999	1358	1504
52.00	9.356	1412	1563
53.00	9.719	1467	1624
54.00	10.089	1523	1686
55.00	10.467	1580	1749
56.00	10.851	1637	1813
57.00	11.242	1696	1879
58.00	11.639	1757	1945
59.00	12.044	1818	2013
60.00	12.456	1880	2082
61.00	12.875	1943	
62.00	13.300	2007	
63.00	13.733	2072	
64.00	14.172	2139	
65.00	14.619	2206	
66.00	15.072	2274	

EN 12385

6x37M = 6x[(1+6+12)+18]
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.244	36.1	40.0
9.00	0.309	45.7	50.6
10.00	0.381	56.5	62.5
11.00	0.461	68.3	75.7
12.00	0.549	81.3	90.0
13.00	0.644	95.4	105.7
14.00	0.747	110.7	122.5
15.00	0.857	127.0	140.7
16.00	0.975	144.5	160.1
17.00	1.101	163.2	180.7
18.00	1.234	182.9	202.6
19.00	1.375	203.8	225.7
20.00	1.524	225.9	250.1
21.00	1.680	249.0	275.7
22.00	1.844	273.3	302.6
23.00	2.015	298.7	330.8
24.00	2.195	325.2	360.1
25.00	2.381	352.9	390.8
26.00	2.576	381.7	422.7
27.00	2.777	411.6	455.8
28.00	2.987	442.7	490.2
29.00	3.204	474.9	525.8
30.00	3.429	508.2	562.7
31.00	3.661	542.6	600.9
32.00	3.901	578.2	640.2
33.00	4.149	614.9	680.9
34.00	4.404	652.7	722.8
35.00	4.667	691.7	765.9
36.00	4.938	731.8	810.3
37.00	5.216	773.0	856.0
38.00	5.502	815.3	902.8
39.00	5.795	858.8	951.0
40.00	6.096	903.4	1000.4
41.00	6.405	949.1	1051.0
42.00	6.721	996.0	1102.9
43.00	7.045	1044.0	1156.1
44.00	7.376	1093.1	1210.5
45.00	7.715	1143.4	1266.1
46.00	8.062	1194.8	1323.0
47.00	8.416	1247.3	1381.2
48.00	8.778	1300.9	1440.6
49.00	9.148	1355.7	1501.2
50.00	9.525	1411.6	1563.1
51.00	9.910	1468.6	1626.2
52.00	10.302	1526.8	1690.6
53.00	10.702	1586.0	1756.3
54.00	11.110	1646.5	1823.2
55.00	11.525	1708.0	1891.4
56.00	11.948	1770.7	1960.8
57.00	12.379	1834.5	2031.4
58.00	12.817	1899.4	2103.3
59.00	13.263	1965.5	2176.5
60.00	13.716	2032.7	2250.9
61.00	14.177	2101.0	
62.00	14.646	2170.4	
63.00	15.122	2241.0	
64.00	15.606	2312.7	
65.00	16.097	2385.6	
66.00	16.596	2459.5	

EN 12385

6x41WS = 6x[1+8+(8+8)+16]
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
18.00	1.189	189	210
19.00	1.325	211	233
20.00	1.468	234	259
21.00	1.618	258	285
22.00	1.776	283	313
23.00	1.941	309	342
24.00	2.114	336	373
25.00	2.294	365	404
26.00	2.481	395	437
27.00	2.675	426	472
28.00	2.877	458	507
29.00	3.086	491	544
30.00	3.303	526	582
31.00	3.527	561	622
32.00	3.758	598	662
33.00	3.997	636	704
34.00	4.243	675	748
35.00	4.496	716	792
36.00	4.756	757	838
37.00	5.024	800	885
38.00	5.299	843	934
39.00	5.582	888	984
40.00	5.872	935	1035
41.00	6.169	982	1087
42.00	6.474	1030	1141
43.00	6.786	1080	1196
44.00	7.105	1131	1252
46.00	7.766	1236	1369
48.00	8.456	1346	1490
50.00	9.175	1460	1617
52.00	9.924	1579	1749
54.00	10.702	1703	1886
56.00	11.509	1832	2028
58.00	12.346	1965	
60.00	13.212	2103	
62.00	14.107	2245	

Çok Telli Halatlar
Steel Wire Ropes

EN 12385

6x41WS = 6x[1+8+(8+8)+16]
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
18.00	1.325	204	226
19.00	1.476	227	252
20.00	1.636	252	279
21.00	1.804	278	308
22.00	1.980	305	338
23.00	2.164	333	369
24.00	2.356	363	402
25.00	2.556	394	436
26.00	2.765	426	472
27.00	2.982	459	509
28.00	3.207	494	547
29.00	3.440	530	587
30.00	3.681	567	628
31.00	3.930	606	671
32.00	4.188	645	715
33.00	4.454	686	760
34.00	4.728	728	807
35.00	5.010	772	855
36.00	5.301	817	904
37.00	5.599	863	955
38.00	5.906	910	1008
39.00	6.221	958	1061
40.00	6.544	1008	1116
41.00	6.875	1059	1173
42.00	7.215	1112	1231
43.00	7.562	1165	1290
44.00	7.918	1220	1351
46.00	8.654	1333	1476
48.00	9.423	1452	1608
50.00	10.225	1575	1744
52.00	11.059	1704	1887
54.00	11.926	1837	2035
56.00	12.826	1976	2188
58.00	13.759	2120	
60.00	14.724	2268	
62.00	15.722	2422	

EN 12385

8x19 Seale = 8x(1+9+9)
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.218	33.2	36.8
9.00	0.275	42.0	46.5
10.00	0.340	51.9	57.4
11.00	0.411	62.8	69.5
12.00	0.490	74.7	82.7
13.00	0.575	87.6	97.1
14.00	0.666	101.6	112.6
15.00	0.765	117	129
16.00	0.870	133	147
17.00	0.983	150	166
18.00	1.102	168	186
19.00	1.227	187	207
20.00	1.360	207	230
21.00	1.499	229	253
22.00	1.646	251	278
23.00	1.799	274	304
24.00	1.958	299	331
25.00	2.125	324	359
26.00	2.298	351	388
27.00	2.479	378	419
28.00	2.666	407	450
29.00	2.859	436	483
30.00	3.060	467	517
31.00	3.267	498	552
32.00	3.482	531	588
33.00	3.703	565	625
34.00	3.930	600	664
35.00	4.165	635	703
36.00	4.406	672	744
37.00	4.655	710	786
38.00	4.910	749	829
39.00	5.171	789	873
40.00	5.440	830	919
41.00	5.715	872	965
42.00	5.998	915	1013
43.00	6.287	959	1062
44.00	6.582	1004	1112
45.00	6.885	1050	
46.00	7.194	1097	
47.00	7.511	1146	
48.00	7.834	1195	
49.00	8.163	1245	
50.00	8.500	1297	

EN 12385

8x19 Seale = 8x(1+9+9)
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.260	40.3	44.7
9.00	0.330	51.0	56.5
10.00	0.407	63.0	69.8
11.00	0.492	76.2	84.4
12.00	0.586	90.7	100.5
13.00	0.688	106	118
14.00	0.798	124	137
15.00	0.916	142	157
16.00	1.042	161	179
17.00	1.176	182	202
18.00	1.319	204	226
19.00	1.469	227	252
20.00	1.628	252	279
21.00	1.795	278	308
22.00	1.970	305	338
23.00	2.153	333	369
24.00	2.344	363	402
25.00	2.544	394	436
26.00	2.751	426	472
27.00	2.967	459	509
28.00	3.191	494	547
29.00	3.423	530	587
30.00	3.663	567	628
31.00	3.911	606	671
32.00	4.168	645	715
33.00	4.432	686	760
34.00	4.705	728	807
35.00	4.986	772	855
36.00	5.275	817	904
37.00	5.572	863	955
38.00	5.877	910	1008
39.00	6.190	958	1061
40.00	6.512	1008	1116
41.00	6.842	1059	1173
42.00	7.179	1112	1231
43.00	7.525	1165	1290
44.00	7.880	1220	1351
45.00	8.242	1276	
46.00	8.612	1333	
47.00	8.991	1392	
48.00	9.377	1452	
49.00	9.772	1513	
50.00	10.175	1575	

Çok Telli Halatlar

Steel Wire Ropes

EN 12385

8x19 W = 8x[1+6+(6+6)]
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.218	33.2	36.8
9.00	0.275	42.0	46.5
10.00	0.340	51.9	57.4
11.00	0.411	62.8	69.5
12.00	0.490	74.7	82.7
13.00	0.575	87.6	97.1
14.00	0.666	101.6	112.6
15.00	0.765	117	129
16.00	0.870	133	147
17.00	0.983	150	166
18.00	1.102	168	186
19.00	1.227	187	207
20.00	1.360	207	230
21.00	1.499	229	253
22.00	1.646	251	278
23.00	1.799	274	304
24.00	1.958	299	331
25.00	2.125	324	359
26.00	2.298	351	388
27.00	2.479	378	419
28.00	2.666	407	450
29.00	2.859	436	483
30.00	3.060	467	517
31.00	3.267	498	552
32.00	3.482	531	588
33.00	3.703	565	625
34.00	3.930	600	664
35.00	4.165	635	703
36.00	4.406	672	744
37.00	4.655	710	786
38.00	4.910	749	829
39.00	5.171	789	873
40.00	5.440	830	919
41.00	5.715	872	965
42.00	5.998	915	1013
43.00	6.287	959	1062
44.00	6.582	1004	1112
45.00	6.885	1050	1163
46.00	7.194	1097	1215
47.00	7.511	1146	
48.00	7.834	1195	
49.00	8.163	1245	
50.00	8.500	1297	
51.00	8.843	1349	
52.00	9.194	1402	

Çok Telli Halatlar

Steel Wire Ropes

EN 12385

8x19 W = 8x[1+6+(6+6)]
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.260	40.3	44.7
9.00	0.330	51.0	56.5
10.00	0.407	63.0	69.8
11.00	0.492	76.2	84.4
12.00	0.586	90.7	100.5
13.00	0.688	106	118
14.00	0.798	124	137
15.00	0.916	142	157
16.00	1.042	161	179
17.00	1.176	182	202
18.00	1.319	204	226
19.00	1.469	227	252
20.00	1.628	252	279
21.00	1.795	278	308
22.00	1.970	305	338
23.00	2.153	333	369
24.00	2.344	363	402
25.00	2.544	394	436
26.00	2.751	426	472
27.00	2.967	459	509
28.00	3.191	494	547
29.00	3.423	530	587
30.00	3.663	567	628
31.00	3.911	606	671
32.00	4.168	645	715
33.00	4.432	686	760
34.00	4.705	728	807
35.00	4.986	772	855
36.00	5.275	817	904
37.00	5.572	863	955
38.00	5.877	910	1008
39.00	6.190	958	1061
40.00	6.512	1008	1116
41.00	6.842	1059	1173
42.00	7.179	1112	1231
43.00	7.525	1165	1290
44.00	7.880	1220	1351
45.00	8.242	1276	1413
46.00	8.612	1333	1476
47.00	8.991	1392	
48.00	9.377	1452	
49.00	9.772	1513	
50.00	10.175	1575	
51.00	10.586	1639	
52.00	11.005	1704	

EN 12385

8x19 Filler = 8x(1+6+6F+12)
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.218	33.2	36.8
9.00	0.275	42.0	46.5
10.00	0.340	51.9	57.4
11.00	0.411	62.8	69.5
12.00	0.490	74.7	82.7
13.00	0.575	87.6	97.1
14.00	0.666	102	113
15.00	0.765	117	129
16.00	0.870	133	147
17.00	0.983	150	166
18.00	1.102	168	186
19.00	1.227	187	207
20.00	1.360	207	230
21.00	1.499	229	253
22.00	1.646	251	278
23.00	1.799	274	304
24.00	1.958	299	331
25.00	2.125	324	359
26.00	2.298	351	388
27.00	2.479	378	419
28.00	2.666	407	450
29.00	2.859	436	483
30.00	3.060	467	517
31.00	3.267	498	552
32.00	3.482	531	588
33.00	3.703	565	625
34.00	3.930	600	664
35.00	4.165	635	703
36.00	4.406	672	744
37.00	4.655	710	786
38.00	4.910	749	829
39.00	5.171	789	873
40.00	5.440	830	919
41.00	5.715	872	965
42.00	5.998	915	1013
43.00	6.287	959	1062
44.00	6.582	1004	1112
45.00	6.885	1050	1163
46.00	7.194	1097	1215
47.00	7.511	1146	1269
48.00	7.834	1195	1323

EN 12385

8x19 Filler = 8x(1+6+6F+12)
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
8.00	0.260	40.3	44.7
9.00	0.330	51.0	56.5
10.00	0.407	63.0	69.8
11.00	0.492	76.2	84.4
12.00	0.586	90.7	100.5
13.00	0.688	106.5	117.9
14.00	0.798	124	137
15.00	0.916	142	157
16.00	1.042	161	179
17.00	1.176	182	202
18.00	1.319	204	226
19.00	1.469	227	252
20.00	1.628	252	279
21.00	1.795	278	308
22.00	1.970	305	338
23.00	2.153	333	369
24.00	2.344	363	402
25.00	2.544	394	436
26.00	2.751	426	472
27.00	2.967	459	509
28.00	3.191	494	547
29.00	3.423	530	587
30.00	3.663	567	628
31.00	3.911	606	671
32.00	4.168	645	715
33.00	4.432	686	760
34.00	4.705	728	807
35.00	4.986	772	855
36.00	5.275	817	904
37.00	5.572	863	955
38.00	5.877	910	1008
39.00	6.190	958	1061
40.00	6.512	1008	1116
41.00	6.842	1059	1173
42.00	7.179	1112	1231
43.00	7.525	1165	1290
44.00	7.880	1220	1351
45.00	8.242	1276	1413
46.00	8.612	1333	1476
47.00	8.991	1392	1541
48.00	9.377	1452	1608

EN 12385

8x26 WS = 8x[1+5+(5+5)+10]
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
10.00	0.356	51.9	57.4
11.00	0.431	62.8	69.5
12.00	0.513	74.7	82.7
13.00	0.602	87.6	97.1
14.00	0.698	101.6	112.6
15.00	0.801	117	129
16.00	0.911	133	147
17.00	1.029	150	166
18.00	1.153	168	186
19.00	1.285	187	207
20.00	1.424	207	230
21.00	1.570	229	253
22.00	1.723	251	278
23.00	1.883	274	304
24.00	2.051	299	331
25.00	2.225	324	359
26.00	2.407	351	388
27.00	2.595	378	419
28.00	2.791	407	450
29.00	2.994	436	483
30.00	3.204	467	517
31.00	3.421	498	552
32.00	3.645	531	588
33.00	3.877	565	625
34.00	4.115	600	664
35.00	4.361	635	703
36.00	4.614	672	744
37.00	4.874	710	786
38.00	5.141	749	829
39.00	5.415	789	873
40.00	5.696	830	919
41.00	5.984	872	965
42.00	6.280	915	1013
43.00	6.582	959	1062
44.00	6.892	1004	1112
46.00	7.533	1097	1215
48.00	8.202	1195	1323
50.00	8.900	1297	1436
52.00	9.626	1402	1553
54.00	10.381	1512	1675
56.00	11.164	1626	1801
58.00	11.976	1745	1932
60.00	12.816	1867	2067

'12

Çok Telli Halatlar
Steel Wire Ropes

EN 12385

8x26 WS = 8x[1+5+(5+5)+10]
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
10.00	0.435	63.0	69.8
11.00	0.526	76.2	84.4
12.00	0.626	90.7	100.5
13.00	0.735	106.5	117.9
14.00	0.853	124	137
15.00	0.979	142	157
16.00	1.114	161	179
17.00	1.257	182	202
18.00	1.409	204	226
19.00	1.570	227	252
20.00	1.740	252	279
21.00	1.918	278	308
22.00	2.105	305	338
23.00	2.301	333	369
24.00	2.506	363	402
25.00	2.719	394	436
26.00	2.941	426	472
27.00	3.171	459	509
28.00	3.410	494	547
29.00	3.658	530	587
30.00	3.915	567	628
31.00	4.180	606	671
32.00	4.454	645	715
33.00	4.737	686	760
34.00	5.029	728	807
35.00	5.329	772	855
36.00	5.638	817	904
37.00	5.955	863	955
38.00	6.281	910	1008
39.00	6.616	958	1061
40.00	6.960	1008	1116
41.00	7.312	1059	1173
42.00	7.673	1112	1231
43.00	8.043	1165	1290
44.00	8.422	1220	1351
46.00	9.205	1333	1476
48.00	10.022	1452	1608
50.00	10.875	1575	1744
52.00	11.762	1704	1887
54.00	12.685	1837	2035
56.00	13.642	1976	2188
58.00	14.633	2120	2347
60.00	15.660	2268	2512

'12

EN 12385

8x36 WS = 8x[1+7+(7+7)+14]
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
10.00	0.356	51.9	57.4
11.00	0.431	62.8	69.5
12.00	0.513	74.7	82.7
13.00	0.602	87.6	97.1
14.00	0.698	101.6	112.6
15.00	0.801	117	129
16.00	0.911	133	147
17.00	1.029	150	166
18.00	1.153	168	186
19.00	1.285	187	207
20.00	1.424	207	230
21.00	1.570	229	253
22.00	1.723	251	278
23.00	1.883	274	304
24.00	2.051	299	331
25.00	2.225	324	359
26.00	2.407	351	388
27.00	2.595	378	419
28.00	2.791	407	450
29.00	2.994	436	483
30.00	3.204	467	517
31.00	3.421	498	552
32.00	3.645	531	588
33.00	3.877	565	625
34.00	4.115	600	664
35.00	4.361	635	703
36.00	4.614	672	744
37.00	4.874	710	786
38.00	5.141	749	829
39.00	5.415	789	873
40.00	5.696	830	919
41.00	5.984	872	965
42.00	6.280	915	1013
43.00	6.582	959	1062
44.00	6.892	1004	1112
46.00	7.533	1097	1215
48.00	8.202	1195	1323
50.00	8.900	1297	1436
52.00	9.626	1402	1553
54.00	10.381	1512	1675
56.00	11.164	1626	
58.00	11.976	1745	
60.00	12.816	1867	

EN 12385

8x36 WS = 8x[1+7+(7+7)+14]
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
10.00	0.435	63.0	69.8
11.00	0.526	76.2	84.4
12.00	0.626	90.7	100.5
13.00	0.735	106.5	117.9
14.00	0.853	124	137
15.00	0.979	142	157
16.00	1.114	161	179
17.00	1.257	182	202
18.00	1.409	204	226
19.00	1.570	227	252
20.00	1.740	252	279
21.00	1.918	278	308
22.00	2.105	305	338
23.00	2.301	333	369
24.00	2.506	363	402
25.00	2.719	394	436
26.00	2.941	426	472
27.00	3.171	459	509
28.00	3.410	494	547
29.00	3.658	530	587
30.00	3.915	567	628
31.00	4.180	606	671
32.00	4.454	645	715
33.00	4.737	686	760
34.00	5.029	728	807
35.00	5.329	772	855
36.00	5.638	817	904
37.00	5.955	863	955
38.00	6.281	910	1008
39.00	6.616	958	1061
40.00	6.960	1008	1116
41.00	7.312	1059	1173
42.00	7.673	1112	1231
43.00	8.043	1165	1290
44.00	8.422	1220	1351
46.00	9.205	1333	1476
48.00	10.022	1452	1608
50.00	10.875	1575	1744
52.00	11.762	1704	1887
54.00	12.685	1837	2035
56.00	13.642	1976	
58.00	14.633	2120	
60.00	15.660	2268	

EN 12385

18x7 = 6x(1+6)+12x(1+6)
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
10.00	0.382	58.1	64.3
11.00	0.462	70.2	77.8
12.00	0.550	83.6	92.6
13.00	0.646	98.1	108.6
14.00	0.749	113.8	126.0
15.00	0.860	131	145
16.00	0.978	149	165
17.00	1.104	168	186
18.00	1.238	188	208
19.00	1.379	210	232
20.00	1.528	232	257
21.00	1.685	256	284
22.00	1.849	281	311
23.00	2.021	307	340
24.00	2.200	334	370
25.00	2.388	363	402
26.00	2.582	392	435
27.00	2.785	423	469
28.00	2.995	455	504
29.00	3.213	488	541
30.00	3.438	523	579
31.00	3.671	558	618
32.00	3.912	594	658
33.00	4.160	632	700
34.00	4.416	671	743
35.00	4.680	711	788
36.00	4.951	752	833
37.00	5.230	795	880
38.00	5.516	838	928
39.00	5.810	883	
40.00	6.112	929	

EN 12385

18x7 = 6x(1+6)+12x(1+6)
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
10.00	0.401	58.1	64.3
11.00	0.485	70.2	77.8
12.00	0.577	83.6	92.6
13.00	0.678	98.1	108.6
14.00	0.786	113.8	126.0
15.00	0.902	131	145
16.00	1.027	149	165
17.00	1.159	168	186
18.00	1.299	188	208
19.00	1.448	210	232
20.00	1.604	232	257
21.00	1.768	256	284
22.00	1.941	281	311
23.00	2.121	307	340
24.00	2.310	334	370
25.00	2.506	363	402
26.00	2.711	392	435
27.00	2.923	423	469
28.00	3.144	455	504
29.00	3.372	488	541
30.00	3.609	523	579
31.00	3.854	558	618
32.00	4.106	594	658
33.00	4.367	632	700
34.00	4.636	671	743
35.00	4.912	711	788
36.00	5.197	752	833
37.00	5.490	795	880
38.00	5.790	838	928
39.00	6.099	883	
40.00	6.416	929	

EN 12385

24x7 [FC+4x(1+6)+4x (1+6)+4x(1+6)]+12x(1+6) FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile 1960 N/mm² Minimum Breaking Load (MBL) kN
10.00	0.425	48
11.00	0.512	81
12.00	0.602	114
13.00	0.712	147
14.00	0.821	170
15.00	0.942	195
16.00	1.061	218
18.00	1.373	276
19.00	1.505	335
20.00	1.650	400
22.00	2.030	489
24.00	2.430	578

EN 12385

7x19M = 6x(1+6+12)

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile 1770 N/mm² Minimum Breaking Load (MBL) kN	Wire Tensile 1960 N/mm² Minimum Breaking Load (MBL) kN
8.00	0.244	41.0	45.4
9.00	0.309	51.9	57.5
10.00	0.381	64.1	71.0
11.00	0.461	77.5	85.9
12.00	0.549	92.3	102.2
13.00	0.644	108	120
14.00	0.747	126	139
15.00	0.857	144	160
16.00	0.975	164	182
17.00	1.101	185	205
18.00	1.234	208	230
19.00	1.375	231	256
20.00	1.524	256	284
21.00	1.680	283	313
22.00	1.844	310	343
23.00	2.015	339	375
24.00	2.195	369	409
25.00	2.381	400	443
26.00	2.576	433	480
27.00	2.777	467	517
28.00	2.987	502	556
29.00	3.204	539	597
30.00	3.429	577	639
31.00	3.661	616	682
32.00	3.901	656	727
33.00	4.149	698	773
34.00	4.404	741	820
35.00	4.667	785	869
36.00	4.938	830	920
37.00	5.216	877	971
38.00	5.502	925	1025
39.00	5.795	975	1079
40.00	6.096	1025	1135
41.00	6.405	1077	1193
42.00	6.721	1130	1252
43.00	7.045	1185	1312
44.00	7.376	1240	1374
45.00	7.715	1297	1437
46.00	8.062	1356	1501
47.00	8.416	1415	1567
48.00	8.778	1476	1635

EN 12385

34(M)x7
6x(1+6)+11x(1+6)+17x(1+6)
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
14.00	0.749	110	122
16.00	0.978	144	160
18.00	1.238	182	202
20.00	1.528	225	249
22.00	1.849	272	302
24.00	2.200	324	359
26.00	2.582	380	421
28.00	2.995	441	489
30.00	3.438	507	561
32.00	3.912	576	638
34.00	4.416	651	721
36.00	4.951	729	808
38.00	5.516	813	900
40.00	6.112	901	997
42.00	6.738	993	1099
44.00	7.396	1090	1207
46.00	8.083	1191	1319
48.00	8.801	1297	1436
50.00	9.550	1407	1558
52.00	10.329	1522	1685

EN 12385

34(M)x7
6x(1+6)+11x(1+6)+17x(1+6)
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile	
		1770 N/mm²	1960 N/mm²
		Minimum Breaking Load (MBL) kN	
14.00	0.786	110	122
16.00	1.027	144	160
18.00	1.299	182	202
20.00	1.604	225	249
22.00	1.941	272	302
24.00	2.310	324	359
26.00	2.711	380	421
28.00	3.144	441	489
30.00	3.609	507	561
32.00	4.106	576	638
34.00	4.636	651	721
36.00	5.197	729	808
38.00	5.790	813	900
40.00	6.416	901	997
42.00	7.074	993	1099
44.00	7.763	1090	1207
46.00	8.485	1191	1319
48.00	9.239	1297	1436
50.00	10.025	1407	1558
52.00	10.843	1522	1685

EN 12385

6x24+7FC = 6x(FC+9+15)
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile 1770 N/mm² Minimum Breaking Load (MBL) kN
10.00	0.318	49.6
11.00	0.385	60.0
12.00	0.458	71.4
13.00	0.537	83.8
14.00	0.623	97.1
15.00	0.716	111.5
16.00	0.814	126.9
17.00	0.919	143.2
18.00	1.030	160.6
19.00	1.148	178.9
20.00	1.272	198.2
21.00	1.402	218.6
22.00	1.539	239.9
23.00	1.682	262.2
24.00	1.832	285.5
25.00	1.988	309.8
26.00	2.150	335.0
27.00	2.318	361.3
28.00	2.493	388.6
29.00	2.674	416.8
30.00	2.862	446.0

EN 12385

6x12+7FC = 6x(FC+12)
FC / KÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile 1570 N/mm²	Wire Tensile 1770 N/mm² Minimum Breaking Load (MBL) kN
10.00	0.251	32.7	36.8
11.00	0.304	39.5	44.5
12.00	0.361	47.0	53.0
13.00	0.424	55.2	62.2
14.00	0.492	64.0	72.2
15.00	0.565	73.5	82.8
16.00	0.643	83.6	94.2
17.00	0.725	94.4	106.4
18.00	0.813	105.8	119.3
19.00	0.906	117.9	132.9
20.00	1.004	130.6	147.3
21.00	1.107	144.0	162.4
22.00	1.215	158.1	178.2
23.00	1.328	172.8	194.8
24.00	1.446	188.1	212.1
25.00	1.569	204.1	230.1
26.00	1.697	220.8	248.9
27.00	1.830	238.1	268.4
28.00	1.968	256.0	288.6
29.00	2.111	274.6	309.6
30.00	2.259	293.9	331.3

COMPACTED STRAND

6x36WS = 6x[1+7+(7+7)+14]
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile 1960 N/mm² Minimum Breaking Load (MBL) kN
10.00	0.464	85.7
11.00	0.561	98.6
12.00	0.668	114
13.00	0.784	147
14.00	0.909	170
15.00	1.044	195
16.00	1.188	218
18.00	1.503	276
20.00	1.856	335
22.00	2.246	400
24.00	2.673	489
26.00	3.137	578
28.00	3.638	657
30.00	4.176	757
32.00	4.751	846

COMPACTED STRAND

8x26WS = 8x[1+5+(5+5)+10]
IWRC / ÇÖ

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile 1960 N/mm² Minimum Breaking Load (MBL) kN
10.00	0.460	87.8
11.00	0.557	106.0
12.00	0.662	126.0
13.00	0.777	148.0
14.00	0.902	172.0
15.00	1.04	198.0
16.00	1.18	225.0
18.00	1.49	284.0
20.00	1.84	351.0
22.00	2.23	425.0
24.00	2.65	506.0
26.00	3.11	594.0
28.00	3.61	688.0
30.00	4.14	790.0
32.00	4.71	899.0

Monotoron Halatlar
Single Stranded Ropes

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile		
		1180 N/mm²	1570 N/mm²	1770 N/mm²
		Minimum Breaking Load (MBL) kN		
2.00	0.020	2.5	3.3	3.8
2.50	0.031	3.9	5.2	5.9
3.00	0.045	5.7	7.5	8.5
3.50	0.061	7.7	10.3	11.6
4.00	0.080	10.1	13.4	15.1
4.50	0.101	12.7	16.9	19.1
5.00	0.125	15.7	20.9	23.6
5.50	0.151	19.0	25.3	28.5
6.00	0.180	22.6	30.1	34.0
6.50	0.211	26.6	35.4	39.9
7.00	0.245	30.8	41.0	46.2
7.50	0.281	35.4	47.1	53.1
8.00	0.320	40.3	53.6	60.4
8.50	0.361	45.4	60.5	68.2
9.00	0.405	50.9	67.8	76.4
9.50	0.451	56.8	75.5	85.1
10.00	0.500	62.9	83.7	94.3
10.50	0.551	69.3	92.3	104.0
11.00	0.605	76.1	101.3	114.2
11.50	0.661	83.2	110.7	124.8
12.00	0.720	90.6	120.5	135.9

1x7 = 1x(1+6)

1x19 = 1x(1+6+12)

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile		
		1180 N/mm²	1570 N/mm²	1770 N/mm²
		Minimum Breaking Load (MBL) kN		
2.00	0.020	2.5	3.3	3.7
2.50	0.031	3.9	5.2	5.8
3.00	0.045	5.6	7.5	8.4
3.50	0.061	7.6	10.2	11.4
4.00	0.080	10.0	13.3	15.0
4.50	0.101	12.6	16.8	18.9
5.00	0.125	15.6	20.7	23.4
5.50	0.151	18.8	25.1	28.3
6.00	0.180	22.4	29.8	33.6
6.50	0.211	26.3	35.0	39.5
7.00	0.245	30.5	40.6	45.8
7.50	0.281	35.0	46.6	52.6
8.00	0.320	39.9	53.1	59.8
8.50	0.361	45.0	59.9	67.5
9.00	0.405	50.5	67.1	75.7
9.50	0.451	56.2	74.8	84.3
10.00	0.500	62.3	82.9	93.5
10.50	0.551	68.7	91.4	103.0
11.00	0.605	75.4	100.3	113.1
11.50	0.661	82.4	109.6	123.6
12.00	0.720	89.7	119.4	134.6
12.50	0.781	97.4	129.5	146.0
13.00	0.845	105.3	140.1	157.9
13.50	0.911	113.5	151.1	170.3
14.00	0.980	122.1	162.5	183.2
14.50	1.051	131.0	174.3	196.5
15.00	1.125	140.2	186.5	210.3
15.50	1.201	149.7	199.2	224.5
16.00	1.280	159.5	212.2	239.2
16.50	1.361	169.6	225.7	254.4
17.00	1.445	180.1	239.6	270.1
17.50	1.531	190.8	253.9	286.2
18.00	1.620	201.9	268.6	302.8

Monotoron Halatlar
Single Stranded Ropes

1x37 = 1x(1+6+12+18)

Halat Çapı Rope Dia. mm	Birim Ağırlık Unit Weight kg/m	Wire Tensile		
		1180 N/mm²	1570 N/mm²	1770 N/mm²
		Minimum Breaking Load (MBL) kN		
3.00	0.044	5.4	7.2	8.2
3.50	0.061	7.4	9.9	11.1
4.00	0.080	9.7	12.9	14.5
4.50	0.101	12.3	16.3	18.4
5.00	0.125	15.1	20.1	22.7
5.50	0.151	18.3	24.4	27.5
6.00	0.180	21.8	29.0	32.7
6.50	0.211	25.6	34.0	38.4
7.00	0.245	29.7	39.5	44.5
7.50	0.281	34.1	45.3	51.1
8.00	0.320	38.7	51.5	58.1
8.50	0.361	43.7	58.2	65.6
9.00	0.405	49.0	65.2	73.5
9.50	0.451	54.6	72.7	81.9
10.00	0.500	60.5	80.5	90.8
11.00	0.605	73.2	97.5	109.9
12.00	0.720	87.2	116.0	130.8
13.00	0.845	102.3	136.1	153.5
14.00	0.980	118.6	157.9	178.0
15.00	1.125	136.2	181.2	204.3
16.00	1.280	155.0	206.2	232.5
17.00	1.445	174.9	232.8	262.4
18.00	1.620	196.1	261.0	294.2
19.00	1.805	218.5	290.8	327.8
20.00	2.000	242.1	322.2	363.2
21.00	2.205	267.0	355.2	400.4
22.00	2.420	293.0	389.8	439.5
23.00	2.645	320.2	426.1	480.3
24.00	2.880	348.7	463.9	523.0

..... ÜNİTESİ

Endüstriyel Yaylık Teller
Spring Wires

Endüstriyel Yaylık Teller
Spring Wires

TS 2500-1 / EN 10270-1

Çap (mm) Diameter	Çekme Dayanımı Kgf/mm² Tensile Strength				Burma Sayısı Twisting Number
	A	B	C	D	
0.30	175-209	210-250	251-281	275-315	25
0.35	173-207	208-247	248-278	270-310	
0.40	173-207	208-247	248-278	270-300	
0.45	171-205	206-246	248-276	270-300	
0.50	170-204	205-241	245-275	270-300	
0.55	169-203	204-242	243-273	260-290	
0.60	168-202	203-241	242-272	260-290	
0.65	167-201	202-240	241-271	260-290	
0.70	166-200	201-239	240-270	255-285	
0.80	164-198	199-236	237-261	255-285	
0.90	162-195	196-233	234-259	250-285	
1.00	160-193	194-230	231-256	250-280	
1.20	157-189	190-225	226-251	240-270	
1.40	153-185	186-219	220-245	240-270	
1.60	150-181	182-214	215-235	230-255	22
1.80	147-177	178-209	210-230	225-250	
2.00	145-174	175-205	206-226	215-240	
2.20	144-172	173-202	203-223	215-240	
2.40	141-168	169-196	197-217		
2.60	139-164	165-192	193-213		
2.80	137-162	163-188	189-209		
3.00	135-159	160-185	186-206		
3.20	134-157	158-182	183-203		20
3.40	132-155	154-180	181-201		
3.60	130-153	154-177	178-198		
3.80	129-151	152-174	175-195		
4.00	128-150	151-172	173-193		
4.20	127-149	150-171	171-191		
4.40	126-148	148-169	169-189		
4.60	125-147	148-168			17
4.80	124-146	147-166			
5.00	123-145	146-165			
5.20	122-144	145-164			
5.40	121-143	144-162			
5.60	120-142	142-160			
5.80	119-141	142-160			
6.00	118-140	141-158			
6.20	117-139	140-156			
6.40	116-138	139-155			
6.60	115-137	138-154			
6.80	114-136	137-152			
7.00	116-134	135-150			

Halat Siparişi
Order for Wire Rope

Verilen siparişlerinizde size daha iyi hizmet verebilmemiz ve her türlü yanlış anlaşılmayı önlemek için sipariş formunuzda aşağıdaki maddeleri lütfen tarafımıza bildiriniz.

1. Halat çapı (- / + tolerans)
2. Halat uzunluğu (- / + tolerans)
3. Halat yapısı (kompozisyonu)
4. Halatın teorik / minimum kopma yükü
5. Halat ve toron sarım yönü
6. Kaplama şekli (galvanizli veya siyah)
7. Yağlama şekli
8. Paketleme şekli
9. Termin süresi
10. Sevk adresi

When ardering steel wire ropes, please clarify following specifications.

1. Diameter of rape (- / + tolerances)
2. Wire rape length (- / + tolerances)
3. Construction of wire rape
4. Construction of wire rape
5. Additional breaking load / minimum breaking load
6. Type of laying
7. Kind of lubricant
8. Packing
9. Delivery Terms
10. Delivery address

Özel siparişleriniz ve istekleriniz için aşağıdaki telefon ve fax numaralarını arayabilirsiniz.

If you have any specific inquiry please contact us these information will enable us to clear you inquiry.

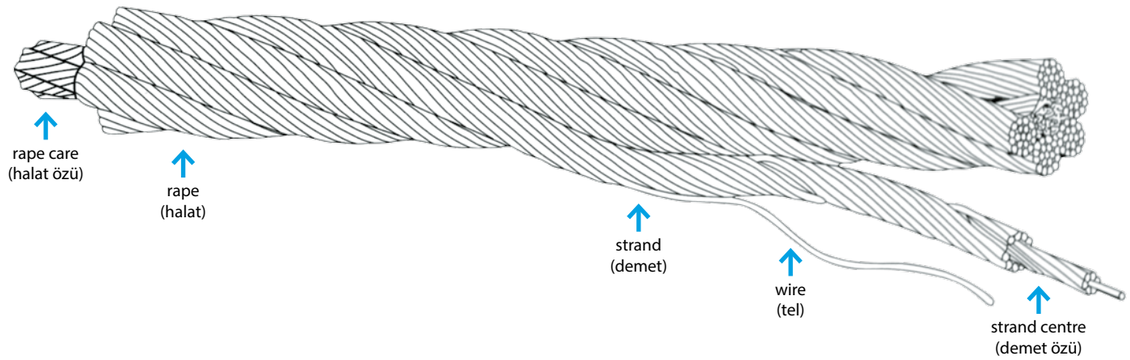
Tel : +90 352 442 16 40
hascelik@hascelik.com.tr

Fax : +90 352 442 16 44
export@hascelik.com.tr

Halat Tanımı
The Definition of The Wire Rope

Tellerin çeşitli kompozisyonlara göre örülmesiyle meydana gelmiş en az 4 adet damarın bir öz etrafına (p.p.c, sısal, çelik) helisel olarak sarılmasıyla imal edilen bi üründür.

The wire rope is made up of wrapping at least 4 strands araund core which is made p.p.c, steel, fiber. Every strands and steels wrapped like helix in a different composition.



HALAT YÖNÜ

Halat Sarım yönü olarak genel manada ikiye ayrılır. Çapraz halatlar ve düz halatlar olmak üzere.

ÇAPRAZ SARIMLI HALATLAR

Halat yönü ile damar yönü birbirinin tersi yönünde sarımlı halatlardır. Sağ çapraz ve sol çapraz olmak üzere ikiye ayrılırlar. Sağ çapraz halatlar “s/Z” , sol çapraz halatlar “z/S” olarak aşağıdaki şekildeki gibi yapılanırlar.

LAY OF WIRE ROPE

In general meaning: The wire rope laid in two manners, regular lay and langlay wire rope.

REGULAR LAY WIRE ROPE

The direction of the wire lay in the strand is opposite to the direction of the lay in the rope. It is two kind; right regular lay “s/Z”, and left regular lay “z/S” these are constructed like below shapes.

Halat Tanımı
The Definition of The Wire Rope

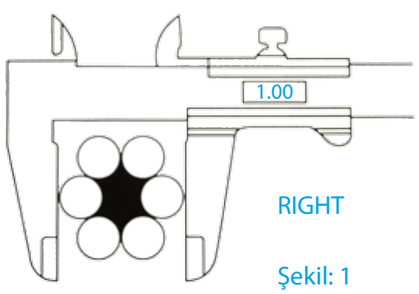
DÜZ SARIMLI HALATLAR
Damar ve halat yönü birbiririn aynı yönünde sarımlı halatlardır. Sağ düz ve sol düz sarımlı halatlar olmak üzere ikiye ayrılır. Sağ düz halatlar "z/Z" , sol düz halatlar "s/S" olarak aşağıdaki şekildeki gibi yapılanırlar.

LANG LAY WIRE ROPE
Both strand lay and rope lay are in the same direction. There are two types; right lang lay lay "z/Z" and left lang lay "s/S" these are constructed like bellow shapes.

HALAT ÇAPININ ÖLÇÜLMESİ
Halat çapı ölçümü yapılırken halat numunesi düz ve yüksüz olarak tutulur en az iki komşu damara değecek şekilde uçtan itibaren 1.5 mt. den başlamak üzere ve en az 1.5 mt. aralıklı iki noktadan ve her nokta birbirine dikey olarak ölçülür. Bu dört ölçümün ortalaması gerçek çap olarak tanımlanır.

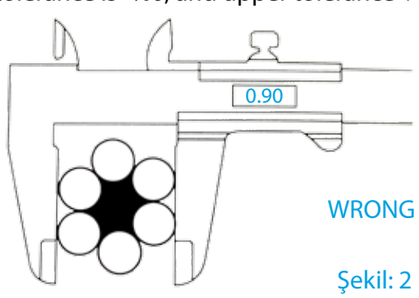
Aşağıdaki şekillerde görüldüğü gibi 1. Şekil doğru bir ölçüm 2. Şekil yanlış bir halat ölçümüdür. Standart bir halat çapında (-%0, + %5) tolerans payı vardır.

MEASURING THE WIRE ROPE
In order to measure the diameter of the steel wire rapes, the following certain instructions should be followed; First, a sample of wire rope is holded straight and without any load exerted on it second, it should be begin at least.
1.5 mt. from the end, while measuring the diameter of the rape. Third, two measurements are done 1.5 mt. intervals from the two points. Every measurements point should be vertical to each other. Last, real diameter of the steel wire ropes is defined as the average of these four measurements.
As seen below diagrams (1 st diagram is a correct measurement of the diameter and 2 nd. Diagram is an incorrect measurement of the diameter of the steel wire ropes). Diameter tolerances for the standard wire rope vary from -%0, + %5 (lower tolerance is -%0, and upper tolerance +%5)



RIGHT

Şekil: 1



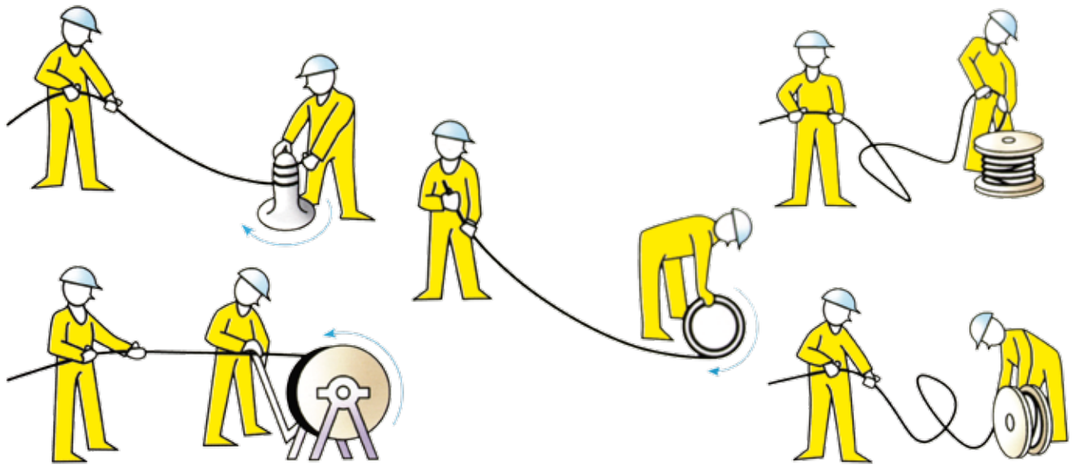
WRONG

Şekil: 2

Halat Tanımı
The Definition of The Wire Rope

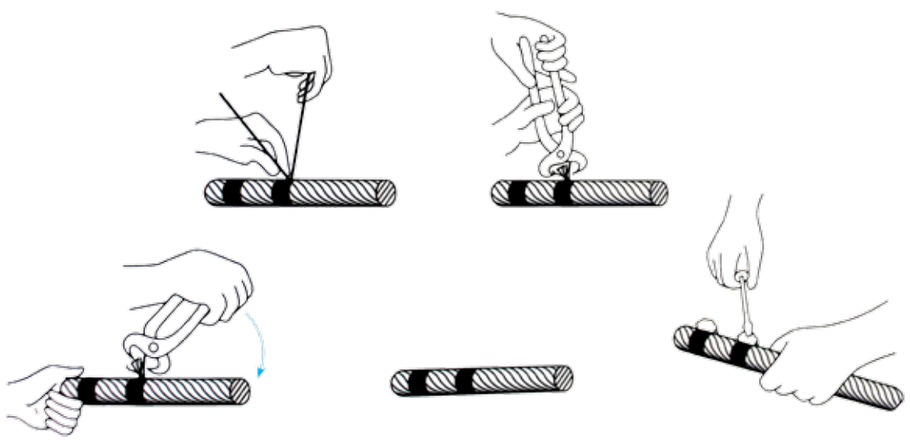
HALAT AÇIM ve SARIM ŞEKLİ
Halat açımı ve sarımı dikkat edilmesi gereken önemli
hususlardan biridir. Halatın dolaşıklığını ve hasar oluşmasını önlemek için aşağıdaki şekiller göz önüne alınmalıdır.

HOW TO UNCOIL AND REWIND THE WIRE ROPE
The uncoiling and rewinding is the most important thing finished wire rope.
If we want to avaid kinks and defects in to the rope it should be considered below illustration.



HALAT KESME
Halat kesilecek noktanın iki tarafının yumuşak bir telle veya kelepçe ile şekilde görüldüğü gibi sıkıca sarılarak kesim işlemi yapılır.

HOW TO CUT ROPE
When we cut the rope we have to wrap both side of rope with low carbon steel wire or pipe clip as shown at the following illustrations.



TAVSİYE EDİLEN KULLANIM ALANLARI

RECOMMENDED APPLICATIONS FOR WIRE ROPES

KONSTRÜKSİYON	MADENCİLİK	PETROL KUYULARI	VİNÇ	AĞIR YÜK	ASANSÖR	TRANVAY	DENİZCİLİK	BALIKÇILIK	ORMANCILIK	GEMİ ve YAT	GENEL MÜH.
Construction	Mining	Oil Industry	Crane	Haist	Elevators	Aerial Tramvay	Marina	Fishing	Logging	Ship and Yacht	General Enginering
6x7 Ç.Ö / S.C		X				X	X				
6x7 L.Ö / F.C	X				X	X	X				
6x15 SEALE L.Ö / F.C	X	X						X			X
6x17 SEALE L.Ö / F.C	X	X						X			X
6x19 SEALE Ç.Ö / S.C	X	X	X	X				X	X		X
6x19 SEALE L.Ö / F.C	X	X	X	X	X	X		X	X		X
6x19 WARRINGTION Ç.Ö / S.C		X	X	X					X		X
6x19 WARRINGTION L.Ö / F.C		X	X	X	X	X					X
6x19 FILLER Ç.Ö / S.C	X	X	X	X					X		X
6x19 FILLER L.Ö / F.C	X		X	X			X		X		X
6x19 STANDART Ç.Ö / S.C	X		X	X							X
6x19 STANDART L.Ö / F.C	X		X	X			X	X	X		X
6x26 WARRINGTION SEALE Ç.Ö / S.C	X	X									X
6x26 WARRINGTION SEALE L.Ö / F.C	X	X									X
6x31 WARRINGTION SEALE Ç.Ö / S.C	X	X	X	X							X
6x31 WARRINGTION SEALE L.Ö / F.C	X	X	X	X							X
6x36 WARRINGTION SEALE Ç.Ö / S.C	X	X	X	X							
6x36 WARRINGTION SEALE L.Ö / F.C	X	X	X	X			X				
6x37 STANDART Ç.Ö / S.C	X	X									X
6x37 STANDART L.Ö / F.C	X	X					X				X
6x41 WARRINGTION SEALE Ç.Ö / S.C		X	X	X							X
6x41 WARRINGTION SEALE L.Ö / F.C			X	X							X
8x19 SEALE Ç.Ö / S.C			X	X	X	X					X
8x19 SEALE L.Ö / F.C			X	X	X						X
8x19 WARRINGTION Ç.Ö / S.C			X	X	X	X					X
8x19 WARRINGTION L.Ö / F.C			X	X	X	X					X
8x19 FILLER Ç.Ö / S.C			X	X	X	X					X
8x19 FILLER L.Ö / F.C			X	X	X						X
8x36 WARRINGTION SEALE Ç.Ö / S.C			X	X							X
8x36 WARRINGTION SEALE L.Ö / F.C			X	X							X
6x24 STANDART +7 L.Ö / F.C							X	X		X	
18x7 DÖNMEYEN Ç.Ö / S.C			X	X							X
18x7 DÖNMEYEN L.Ö / F.C	X	X	X	X			X			X	

Belirtilen kullanım alanları firmamızın tavsiye ettiği alanlardır. Nihai kullanım için lütfen bizi arayınız.

These are our recommended constructions, for exact apliccation, please contact with us.

Sertifika ve Belgeler

Certification and Documentation