

 **usha martin**[®]

*Specialty Wire Rope and
Solutions Provider*

June 2023

A photograph showing a cable logging operation in a dense forest. A white and red cable car is suspended from a cable, carrying a large log. The forest is filled with tall, green evergreen trees. In the foreground, there is a large pile of cut logs. The text "Forestry line Capability" is overlaid on the left side of the image.

Forestry line Capability

Swaged ropes specialization

OUR VISION

- **Expanding to Forestry - logging customers in ALL continents**
- **Catering to OEMs and Distributor - Service Dealers**
- **On time delivery. Wide logistics infrastructure**

OUR COLLABORATIONS AND CUSTOMER COMMITMENT

- **Swaged, heavily compacted wire ropes, developed with OEMs and fully field proof**
- **Available stocks in all continents**
- **Continuous endeavor to design special swaged ropes with special wire metallurgy and specific constructions**
- **R&D-specific Developments, GDC**

Dedicated and fully integrated plants



Dedicated and fully integrated plants

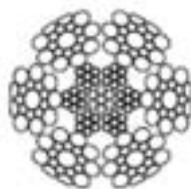


- Swaging machines capable of diameter sizes upto ≤ 48 mm

Our complete forestry range (I)

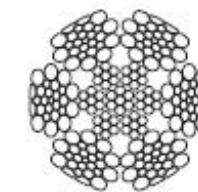
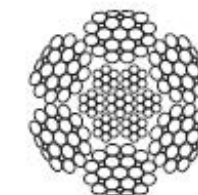
SWAGED 6

Nominal Rope Diameter		Approx. Mass		Minimum Breaking Strength
				1560 Grade
mm	Inch	kg/m	lbs/ft	kN
8	5/16	0.360	0.242	66
9		0.441	0.296	81
10	3/8	0.487	0.327	89
11		0.529	0.355	97
11	7/16	0.636	0.427	117
12		0.742	0.499	136
13	1/2	0.821	0.552	151
13		0.868	0.583	160
14		0.990	0.665	182
15	9/16	1.03	0.692	189
16	5/8	1.24	0.833	229
16		1.26	0.847	232
18		1.56	1.05	288
18	3/4	1.73	1.16	318
20		1.90	1.28	349
22		2.29	1.54	420
22	7/8	2.33	1.57	428
24		2.69	1.81	494
25		2.90	1.95	534
26	1.0	2.99	2.01	550
26		3.13	2.10	574
28		3.59	2.41	660
28	1 1/4	3.74	2.51	687



SWAGED PRO 6

Nominal Rope Diameter		Approx. Mass		Minimum Breaking Strength
				1560 Grade
mm	Inch	kg/m	lbs/ft	kN
8	5/16	0.383	0.26	72
9		0.466	0.31	87
10	3/8	0.514	0.35	95
10		0.558	0.37	103
11	7/16	0.667	0.45	125
12		0.776	0.52	145
13	1/2	0.856	0.58	160
13		0.904	0.61	169
14		1.03	0.69	193
15	9/16	1.07	0.72	198
16	5/8	1.29	0.87	239
16		1.31	0.88	242
18		1.61	1.08	299
18	3/4	1.78	1.20	330
20		1.95	1.31	362
22		2.36	1.58	435
22	7/8	2.39	1.61	443
24		2.75	1.85	511
25		2.97	2.00	531
26	1.0	3.06	2.06	567
26		3.19	2.14	592
28		3.67	2.47	680
28	1 1/4	3.81	2.56	708



Note:

1. Recommended Construction: 6x19S, 6x19P, 6x26WS with IWRC
2. Rope Sizes, Breaking load and Construction not shown in the standard table may request & prior confirmation.

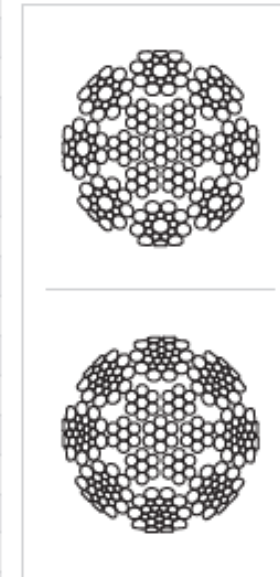
Note:

1. Recommended Construction: 6x19S, 6x19P, 6x26WS with IWRC
2. Rope Sizes, Breaking load and Construction not shown in the standard table may request & prior confirmation.

Our complete forestry range (II)

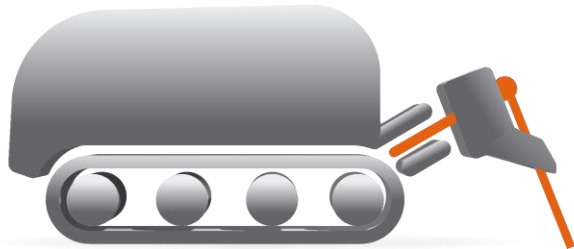
SWAGED 8

Nominal Rope Diameter		Appox. Mass		Minimum Breaking Strength 1960 Grade
mm	Inch	kg/m	lbs/ft	kN
12		0.670	0.450	132
	1/2	0.750	0.504	146
13		0.780	0.524	153
14		0.930	0.625	182
	9/16	0.970	0.652	189
	5/8	1.18	0.793	230
16		1.19	0.800	233
18		1.52	1.02	296
19	3/4	1.67	1.12	327
20		1.88	1.26	367
22		2.28	1.53	445
	7/8	2.31	1.55	452
24		2.69	1.81	527
25		2.93	1.97	572
	1	3.01	2.02	589
26		3.15	2.12	615
28		3.66	2.46	715
	1 1/4	3.80	2.55	744



Support winch, moderate slopes

Assisting harvesters and forwarders



SWAGED 6

Nominal Rope Diameter		Approx. Mass		Minimum Breaking Strength
mm	Inch	kg/m	lbs/ft	1960 Grade
8	5/16	0.360	0.242	66
9	3/8	0.440	0.296	81
		0.487	0.327	89
10		0.529	0.355	97
11	7/16	0.636	0.427	117
12	1/2	0.742	0.499	136
		0.821	0.552	153
13		0.868	0.583	160
14	9/16	0.990	0.665	182
		1.03	0.690	189
	5/8	1.24	0.833	229
16		1.26	0.847	232
18		1.56	1.05	288
19	3/4	1.73	1.16	318
20		1.90	1.28	349
22		2.29	1.54	420



- * Swaged rope with highest MBL and increased contact area rope/sheave and rope/winch
- * High strength steel wires according to ISO 2232
- * Swaged rope: wear-resistant and low tendency for wire spike generation
- * High radial stiffness, crushing resistant
- * Great resistance to fleet angle deformation (waviness and rope lay length variations)

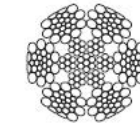
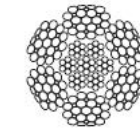
Support winch, steep slopes

Assisting harvesters and forwarders



SWAGED PRO 6

Nominal Rope Diameter		Appox. Mass		Minimum Breaking Strength 1560 Grade
mm	inch	kg/m	lbs/ft	kN
19	3/4	1.78	1.20	330
20		1.95	1.31	362
22		2.35	1.58	435
	7/8	2.39	1.61	443
24		2.75	1.85	511
25		2.97	2.00	551
	1.0	3.06	2.06	567
26		3.19	2.14	592

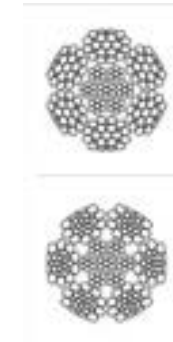


Harvest tower yarder, steep slopes



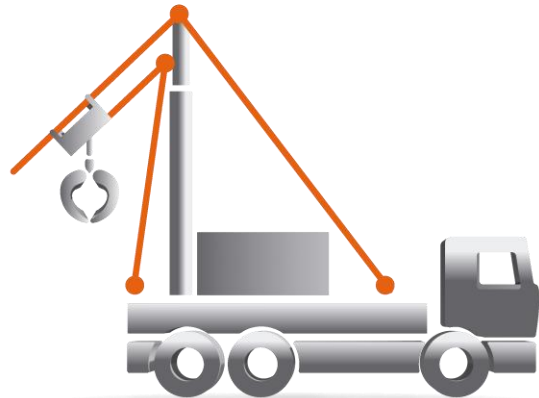
SWAGED PRO 6

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12		0.776	0.52	145
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13		0.904	0.61	169
14		1.03	0.69	193
	9/16	1.07	0.72	198
	5/8	1.29	0.87	239
16		1.31	0.88	242
18		1.61	1.08	299
19	3/4	1.78	1.20	330
20		1.95	1.31	362
22		2.35	1.58	435



- * Swaged rope with highest MBL and increased contact area rope/sheave and rope/winch
- * High strength steel wires according to ISO 2232
- * Swaged rope: wear resistant and low tendency for wire spike generation
- * High radial stiffness, crushing resistant
- * Great resistance to fleet angle deformation (waviness and rope lay length variations)

Mobile tower yarder, steep slopes



SWAGED PRO 6

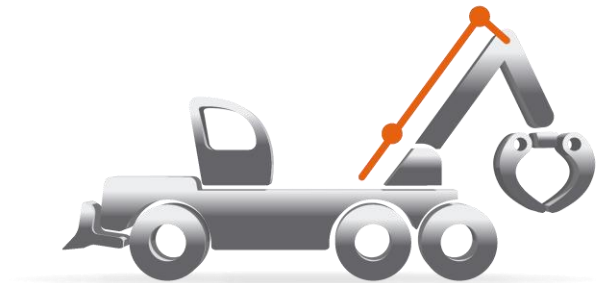
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10		0.558	0.37	103
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	5/8	1.29	0.87	239
16		1.31	0.88	242
18		1.61	1.08	299
19	3/4	1.78	1.20	330
20		1.95	1.31	362
22		2.35	1.58	435



AUTO ASSIST, LOW AND MODERATE SLOPE Harvester & Forwarder

8 STRAND SWAGED

- * Swaged and compacted wire rope, highest MBL
- * High strength steel wires, according to ISO 2232
- * High radial stiffness, crushing resistant
- * Swaged rope: wear-resistant and low tendency for wire spike generation
- * Easy rope handling cutting



SWAGED 8

Nominal Rope Diameter		Approx. Mass		Minimum Breaking Strength 1960 Grade
mm	Inch	kg/m	lbm/ft	kN
12		0.670	0.450	132
	1/2	0.750	0.504	146
13		0.760	0.524	153
14		0.930	0.625	182
	9/16	0.970	0.652	189
	5/8	1.18	0.793	230
16		1.19	0.800	233
18		1.52	1.02	296

