# WIRE ROPES for Cableway



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#### INSTITUTIONAL

14 Latin America's most leading edge industrial logistics system



# WIRE ROPES for Cableway

In these facilities, where a long service life in top safety conditions is required, specially designed and manufactured ropes must be used. For such conditions IPH has created the CW line, which takes into account the special requirements of this segment meeting the needs for assembly, maintenance, comfort and safety.

IPH products meet the international highest demands because the company manufactures and certifies according to ISO2408, IRAM 547 and NBR ISO 2408 assuring constructive features suitable for each operation or market segment.

For special applications in special operations, or for ropes not displayed in this brochure, please contact our Technical Sales Department.

## **IPH QUALITY**

The quality certificate issued by IPH guarantees the traceability and conformity with national and international standards that can be applied to the controls carried out throughout the entire manufacturing process, from the production of wires to the final product.

#### MANAGEMENT SYSTEM CERTIFICATIONS:

American Petroleum Institute, API Monogram Spec Q1, Spec 9A. TÜV Rheinland, ISO 9001:2008. Fundacao Vanzolini NBR. ISO 9001:2008.

SPECIFIC CERTIFICATIONS FOR WIRE ROPES:

Naval ships: Lloyd's Register plant certification.

General purposes: ABNT NBR and ISO 2408 product certification.

**Elevators:** IRAM-INTI and IRAM 840 product certification. **Offshore containers lifting slings:** DNV 2.7-1 product certification.

For further information regarding those certificates mentioned above, please visit our web-site.

# WIRE ROPES FOR TELESKI AND CANOPY

This wire ropes family is the most traditional and widely used in the field of dragging and canopy. The construction is 6x7 with synthetic fiber core in its two versions: standard and compacted.



## Advantages and features

- Diameter uniformity.
- Lang torsion, which increases bending fatigue and abrasion, extending its life service.
- Core manufactured by IPH. Made of high density polypropylene.



#### Minimum breaking load

				-	
Diameter	Weight factor	Grade 1770 N/mm²	Grade 1960 N/mm²	Grade 1770 N/mm²	Grade 1960 N/mm²
[mm]	[kg/m]	[kN]	[kN]	[tn]	[tn]
10,00	0,345	58,8	65,1	6,0	6,6
11,00	0,417	71,1	78,7	7,3	8,0
12,00	0,583	84,6	93,7	8,6	9,6
13,00	0,676	99,3	110	10,1	11,2
14,00	0,883	115	128	11,7	13,1
16,00	1,120	150	167	15,3	17,0
18,00	1,380	190	211	19,4	21,5
20,00	1,380	235	260	24,0	26,5
22,00	1,670	284	315	29,0	32,1
24,00	1,990	338	375	34,5	38,3
26,00	2,330	397	440	40,5	44,9
28,00	2,700	461	510	47,0	52,0
30,00	3,090	529	585	54,0	59,7

Construction: 6x7 standard.

Coating: galvanized (bright on demand).

# WIRE ROPES FOR TELESKI AND CANOPY



## Advantages and features

- Compacted strands with higher metallic cross area and higher breaking load.
- Excellent diameter uniformity.
- Lang torsion, which increases bending fatigue and abrasion, extending its service life.
- Core manufactured by IPH. Made of high density polypropylene.
- Minimum elongation.

		Minimum breaking load			
Diameter	Weight factor	Grade 1770 N/mm²	Grade 1960 N/mm²	Grade 1770 N/mm²	Grade 1960 N/mm²
[mm]	[kg/m]	[kN]	[kN]	[tn]	[tn]
10,00	0,376	65,9	72,9	6,7	7,4
11,00	0,455	79,7	88,2	8,1	9,0
12,00	0,542	94,8	105	9,7	10,7
13,00	0,636	111,0	123	11,3	12,5
14,00	0,737	129	143	13,2	14,6
16,00	0,962	168	187	17,1	19,1
18,00	1,220	213	236	21,7	24,1

Construction: 6x7 standard compacted.

Coating: galvanized (bright on demand).



# WIRE ROPES FOR CHAIRLIFT AND CABLECAR



## Advantages and features

- Best quality in the most traditional design for any kind of Cablecar.
- Excellent balance between flexibility and resistance to abrasion.
- Lang torsion.
- Core manufactured by IPH. Made of high density polypropylene.
- Also recommended for canopy.

		Minimum breaking load			
Diameter	Weight factor	Grade 1770 N/mm²	Grade 1960 N/mm²	Grade 1770 N/mm²	Grade 1960 N/mm²
[mm]	[kg/m]	[kN]	[kN]	[tn]	[tn]
16,00	0,92	158	174	16,1	17,8
17,00	1,04	177	196	18,1	20,0
18,00	1,16	198	221	20,2	22,5
19,00	1,30	222	245	22,6	25,0
20,00	1,44	246	272	25,1	27,7
22,00	1,74	297	329	30,3	33,5
24,00	2,07	353	392	36,0	39,9
26,00	2,43	415	459	42,3	46,8
28,00	2,81	481	532	49,1	54,3
30,00	3,23	552	611	56,3	62,3
32,00	3,68	628	695	64,0	70,9
34,00	4,15	709	784	72,3	80,0
36,00	4,65	795	880	81,1	89,7

Construction: 6x17S, 6x19S, 6x26WS o 6x25F, depending on diameter. Coating: galvanized (bright on demand).



# WIRE ROPES FOR CHAIRLIFT AND CABLECAR



## Advantages and features

- Excellent price/performance ratio.
- Maximum flexibility.
- Lang torsion.
- Core manufactured by IPH. Made of high density polypropylene.



#### Minimum breaking load

				-	
Diameter	Weight factor	Grade 1770 N/mm²	Grade 1960 N/mm²	Grade 1770 N/mm²	Grade 1960 N/mm²
[mm]	[kg/m]	[kN]	[kN]	[tn]	[tn]
26,00	2,48	415	459	42,3	46,8
28,00	2,88	481	532	49,1	54,3
30,00	3,30	552	611	56,3	62,3
32,00	3,76	628	695	64,0	70,9
34,00	4,24	709	784	72,3	80,0
36,00	4,76	795	880	81,1	89,7
38,00	5,30	885	981	90,3	100
40,00	5,87	982	1090	100	111
42,00	6,48	1080	1200	110	122
44,00	7,11	1190	1310	121	134
48,00	8,46	1420	1570	145	160
52,00	9,92	1660	1840	169	187
56,00	11,50	1920	2130	196	217
60,00	13,20	2210	2450	225	250

Construction: 6x31 WS, 6x36WS or 6x41WS, depending on diameter.

Coating: galvanized (bright on demand).

# WIRE ROPES FOR CHAIRLIFT AND CABLECAR



## Advantages and features

- Compacted strands which increase the equipment and rope service life.
- Maximizes flexibility and resistance to abrasion and minimizes elongation.
- Lang torsion.
- Core manufactured by IPH. Made of high density polypropylene.



#### Minimum breaking load

				•	
Diameter	Weight factor	Grade 1770 N/mm²	Grade 1960 N/mm²	Grade 1770 N/mm²	Grade 1960 N/mm²
[mm]	[kg/m]	[kN]	[kN]	[tn]	[tn]
20,00	1,58	276	306	28,2	31,2
22,00	1,91	334	370	34,1	37,7
24,00	2,27	397	440	40,5	44,9
26,00	2,67	466	517	47,6	52,7
28,00	3,09	541	599	55,2	61,0
30,00	3,55	621	688	63,3	70,2
32,00	4,04	707	782	72,1	79,8
34,00	4,56	798	883	81,4	90,1
36,00	5,11	895	990	91,2	101
38,00	5,70	996	1100	102	112
40,00	6,31	1100	1220	112	124
42,00	6,96	1220	1340	124	137
44,00	7,64	1330	1480	136	151
48,00	9,09	1590	1760	162	180
52,00	10,67	1870	2070	191	211
56,00	12,37	2160	2390	220	244
60,00	14,20	2490	2750	254	281

Construction: 6x19S, 6x26WS, 6x31WS, 6x36WS, depending on diameter.

Coating: galvanized (bright on demand).



## Advantages and features

- Solid polymer core.
- Maximum diameter stability.
- Minimizes amount of splices during its service life.
- Minimizes permanent elongation, compared with traditional fiber core.
- Elongation below 5‰, depending on working conditions.
- Lang torsion.

		Minimum breaking load			
Diameter	Weight factor	Grade 1770 N/mm²	Grade 1960 N/mm²	Grade 1770 N/mm²	Grade 1960 N/mm²
[mm]	[kg/m]	[kN]	[kN]	[tn]	[tn]
26,00	2,43	427	473	44	48
28,00	2,81	496	549	51	56
30,00	3,22	568	629	58	64
32,00	3,68	647	716	66	73
33,00	3,91	688	762	70	78
34,00	4,15	731	809	75	83
36,00	4,65	819	907	84	93
38,00	5,18	912	1010	93	103
40,00	5,74	1010	1120	103	114
42,00	6,33	1140	1260	116	129
44,00	6,95	1260	1390	129	142
46,00	7,60	1360	1510	139	154
48,00	8,20	1490	1650	152	168

Construction: 6x19S, 6x25SF, 6X31WS, 6X36WS, depending on diameter.

Coating: galvanized (bright on demand).





## Advantages and features

- Maximum diameter stability.
- Excellent resistance to abrasion and bending fatigue.
- Compacted strands with higher metallic cross area and higher braking load.
- Due to its geometrically distributed space between strands and its surface, vibration and noise while riding are minimized.
- Elongation below 5‰, depending on working conditions.
- Lang torsion.

		Minimum breaking load			
Diameter	Weight factor	Grade 1770 N/mm²	Grade 1960 N/mm²	Grade 1770 N/mm²	Grade 1960 N/mm²
[mm]	[kg/m]	[kN]	[kN]	[tn]	[tn]
26,00	2,67	466	517	47,6	52,7
28,00	3,09	541	599	55,2	61,0
30,00	3,55	621	688	63,3	70,2
32,00	4,04	707	782	72,1	79,8
33,00	4,30	752	832	76,7	84,9
34,00	4,56	798	883	81,4	90,1
36,00	5,11	895	990	91,2	101
38,00	5,70	996	1100	102	112
40,00	6,31	1100	1220	112	124
42,00	6,96	1220	1340	124	137
44,00	7,64	1330	1480	136	151
46,00	8,35	1460	1620	149	165
48,00	9,09	1590	1760	162	180

Construction: 6x19S, 6x25SF, 6X31WS, 6X36WS, depending on diameter.

Coating: galvanized (bright on demand).





#### Advantages and features

This rope offers several advantages against a conventional 6 strands:

- Improved surface contact on sheaves and rolls, which results in lower surface pressure on the components (wheels, sheaves, etc) and wear reduction.
- Higher resistance to bending fatigue.
- Lower vibrations generated by the rope passing through the wheels, causing a more comfortable ride.
- Its solid polymer core results in great diameter stability and a good distribution between strands with very low elongation.
- Lang torsion.

		Minimum breaking load			
Diameter	Weight factor	Grade 1770 N/mm²	Grade 1960 N/mm²	Grade 1770 N/mm²	Grade 1960 N/mm²
[mm]	[kg/m]	[kN]	[kN]	[tn]	[tn]
42,00	6,33	1140	1260	116	129
44,00	6,95	1260	1390	129	142
46,00	7,60	1360	1510	139	154
48,00	8,20	1490	1650	152	168
50,00	9,00	1620	1790	165	183
52,00	9,73	1750	1940	179	198
54,00	10,50	1890	2090	193	213
56,00	11,29	2030	2240	207	229
58,00	12,11	2180	2400	222	245
60,00	12,96	2330	2570	238	262

Construction: 8x25F, 8x26WS, 8x31WS, 8x36WS, depending on diameter. Coating: galvanized (bright on demand).





## Advantages and features

By having compacted strands, this rope adds new advantages to the 8SP CW ones:

- Excellent diameter stability, with very low elongation and a good distribution between strands.
- Better support surface, larger metallic cross area and higher breaking load.
- Holds higher loads than conventional use ropes, specially designed for facilities with long duty shifts.
- Higher resistance to bending fatigue, which results in longer service life.
- Lower vibration levels.
- Lang torsion.



#### Minimum breaking load

Diameter	Weight factor	Grade 1770 N/mm²	Grade 1960 N/mm²	Grade 1770 N/mm²	Grade 1960 N/mm²
[mm]	[kg/m]	[kN]	[kN]	[tn]	[tn]
42,00	6,96	1220	1340	124	137
44,00	7,64	1330	1480	136	151
46,00	8,35	1460	1620	149	165
48,00	9,10	1590	1760	162	180
50,00	9,90	1720	1910	175	195
52,00	10,70	1860	2060	190	210
54,00	11,50	2000	2220	204	226
56,00	12,40	2150	2390	219	244
58,00	13,30	2310	2560	236	261
60,00	14,20	2470	2740	252	279

Construction: 8x25F, 8x26WS, 8x31WS, 8x36WS, depending on diameter.

Coating: galvanized (bright on demand).

# WINCH ROPES FOR SNOWCATS



## Advantages and features

- Very high breaking load
- Maximum flexibility
- High performance when working under bending fatigue.

The IPH GP88 rope, developed in first place for highly demanding operations, also has an excellent application for snowcats winches.

#### Minimum breaking load

Diameter	Weight factor	Grade 2160 N/mm <sup>2</sup>	Grade 2160 N/mm²
[mm]	[kg/m]	[kN]	[tn]
10,00	0,48	101	10,3
11,00	0,58	123	12,5

Construction: 8x19 Seale double parallel compacted.

Coating: galvanized (bright on demand).



# Latin America's most leading edge industrial logistics system

Founded in 1949 in Buenos Aires, Argentina, IPH has became one of the major players in the manufacturing of wire ropes in Latin America, placing itself in a position of leadership through the specialization in achieving solutions for the highest demands in the market.

Since its beginnings, IPH developed a business model based in innovation and high tech investment. Its high quality and customer service standards allowed the company to place itself among the most competitive markets in the five continents.

Located in the city of San Miguel, Buenos Aires, its 45.000 covered square meters with the capacity to produce up to 1500 Tons per month, combines cutting edge technology, highly capable manpower and a Quality System certified by the leading international standards.

The planning of the vertically integrated productive process involves every component of the steel wire rope, from the manufacturing of its own wires and steel or fiber cores, until the wooden or steel reels, and packaging, according to customers specifications. This integration model is the key to the optimization of the designs, productive versatility and sustainability and quality assurance of its final products.

In its two state-of-the-art sales and service centers, located in Buenos Aires and San Pablo, IPH keeps the widest stock of finished products; along with facilities to manufacture slings for various purposes, cut to length, final conditioning of products, certifications and lab testing; offering the most comprehensive response in solutions for lifting and hosting.

The factory, combined with the two sales and service centers, gives to IPH a highly efficient operation, shaping the most modern industrial and logistic complex in Latin America.



San Miguel Plant Buenos Aires, Argentina

Service and Sales Center Itapevi, Brazil

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Service and Sales Center Bella Vista, Argentina

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