



General Purpose Wire Ropes

Six Strand Ropes

6 x 19 Class

Strands: 6

Wires per strand: 19 to 26

Core: IWRC or fiber core

Standard Grade: EIPS

Lay: Regular or Lang

Finish: Bright or galvanized

The 6x19 Classification of wire rope is the most widely used. With its good combination of flexibility and wear resistance, rope in this class can be suited to the specific needs of diverse kinds of machinery and equipment.

The 6 x 19 Seale construction, with its large outer wires, provides great ruggedness and resistance to abrasion and crushing. However, its resistance to fatigue is somewhat less than that offered by a 6x25 construction. The 6x25 possesses the best combination of flexibility and wear resistance in the 6x19 Class due to the filler wires providing support and imparting stability to the strand. The 6x26 Warrington Seale construction has high resistance to crushing. This construction is a good choice where the end user needs the wear resistance of a 6x19 Class Rope and the flexibility midway between a 6x19 Class and 6x37 Class rope.



6x19 Warrington with fiber core



6x19 Seale with IWRC



6x25 Warrington Seale with IWRC



6x31 Warrington Seale with IWRC



6x25 Filler Wire with IWRC



6x49 Filler Wire Seale with IWRC

6 x 37 Class

Strands: 6

Wires per strand: 27 to 49

Core: IWRC or fiber core

Standard Grade: EIPS

Lay: Regular or Lang

Finish: Bright or galvanized

The 6x37 Class of wire rope is characterized by the relatively large number of wires used in each strand. Ropes of this class are among the most flexible available due to the greater number of wires per strand, however their resistance to abrasion is less than ropes in the 6x19 Class.

The designation 6x37 is only nominal, as in the case with the 6x19 Class. None of the ropes actually has 37 wires per strand. Improvements in wire rope design, as well as changing machine designs, have resulted in the use of strands with widely varying numbers of wires and a smaller number of available constructions. Typical 6x37 Class constructions include 6x33 for diameters under 1/2", 6x36 Warrington Seale (the most common 6x37 Class construction) offered in diameters 1/2" through 1-5/8", and 6x49 Filler Wire Seale over 1-3/4" diameter.



6x36 Warrington Seale IWRC



6x19 And 6x37 Classes

Technical Data

6x19 Class

- 6x19 Seale
- 6x19 Warrington
- 6x21 Filler Wire
- 6x21 Seale
- 6x25 Filler Wire
- 6x25 Seale
- 6x26 Warrington Seale



Rope Diameter		Approximate Weight (lbs./ft.)		Nominal Strength* tons (bright or drawn galvanized)			
				IPS	EIPS		EEIPS
inches	mm.	Fiber Core	IWRC	IWRC	Fiber Core	IWRC	IWRC
1/4	6.5	0.105	0.116	2.94	3.02	3.40	3.74
5/16	8.0	0.164	0.18	4.58	4.69	5.27	5.80
3/8	9.5	0.236	0.26	6.56	6.71	7.55	8.31
7/16	11.0	0.32	0.35	8.89	9.09	10.2	11.2
1/2	13.0	0.42	0.46	11.5	11.8	13.3	14.6
9/16	14.5	0.53	0.59	14.5	14.9	16.8	18.5
5/8	16.0	0.66	0.72	17.7	18.3	20.6	22.7
3/4	19.0	0.95	1.04	25.6	26.2	29.4	32.3
7/8	22.0	1.29	1.42	34.6	35.4	39.8	43.8
1	26.0	1.68	1.85	44.9	46.0	51.7	56.9
1-1/8	29.0	2.13	2.34	56.5	57.9	65.0	71.5
1-1/4	32.0	2.63	2.89	69.4	71.0	79.9	87.9
1-3/8	35.0	3.18	3.50	83.5	85.4	96.0	106.0
1-1/2	38.0	3.78	4.16	98.9	101.0	114.0	125.0
1-5/8	42.0	4.44	4.88	115	118.0	132.0	146.0
1-3/4	45.0	5.15	5.67	133	136.0	153.0	169.0
1-7/8	48.0	5.91	6.50	152	155.0	174.0	192.0
2	52.0	6.72	7.39	172	176.0	198.0	217.0
2-1/8	54.0	7.59	8.35	192	197.0	221.0	243.0
2-1/4	58.0	8.51	9.36	215	220.0	247.0	272.0
2-3/8	60.0	9.48	10.4	239	244.0	274.0	301.0
2-1/2	64.0	10.5	11.6	262	269.0	302.0	332.0
2-3/4	70.0	12.7	14.0	314	321.0	361.0	397.0

*Acceptance strength is not less than 2-1/2% below the nominal strengths listed. Tons of 2,000 lbs.

** Galvanizing: For class A galvanized wire rope (EIP grade only), deduct 10% from the nominal strength shown.

Technical data for the above listed constructions are the same and detailed in the table.

For further information on additional constructions and diameters, contact your ALP Sales Representative.

6x37 Class

- 6x31 Warrington Seale
- 6x33
- 6x36 Warrington Seale
- 6x41 Warrington Seale
- 6x43 Filler Wire Seale
- 6x49 Filler Wire Seale



Note: The picture at the top depicts a Right Lang Lay IWRC wire rope. The picture at the bottom depicts a Right Regular Lay IWRC wire rope.