

Classes of Wire Rope

6x19 Class Wire Rope

Strands: 6

Wires per strand: 19 to 26

Core: IWRC or fiber core

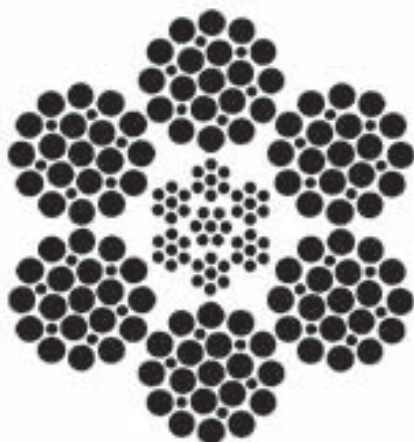
Standard Grade: Purple Plus

Lay: Regular or Lang

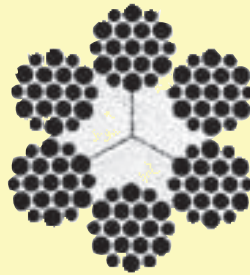
Finish: Bright or galvanized

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.

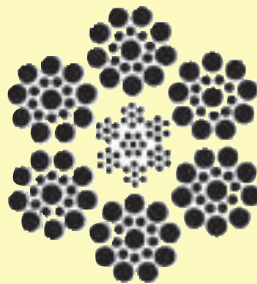
The 6x19 Seale construction, with its large outer wires, provides great ruggedness and resistance to abrasion and crushing. However, its resistance to fatigue is somewhat less than that offered by a 6x25 construction. The 6x25 possesses the best combination of flexibility and wear resistance in the 6x19 Class due to the filler wires providing support and imparting stability to the strand. The 6x26 Warrington Seale construction has a 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.



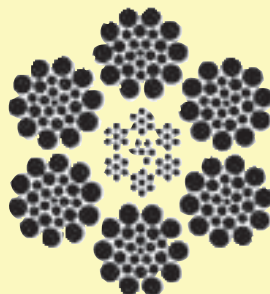
6x25 Filler Wire with IWRC



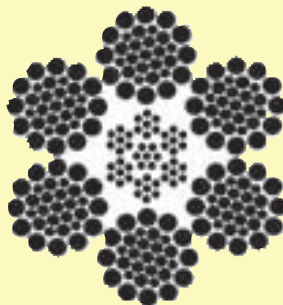
6x19 Warrington with fiber core



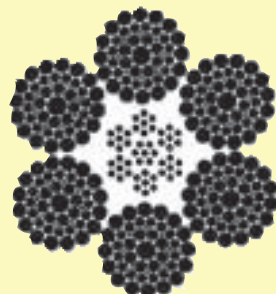
6x19 Seale with IWRC



6x26 Warrington Seale with IWRC



6x31 Warrington Seale with IWRC



6x49 Filler Wire Seale with IWRC

6x36 Class Wire Rope

Strands: 6

Wires per strand: 27 to 49

Core: IWRC or fiber core

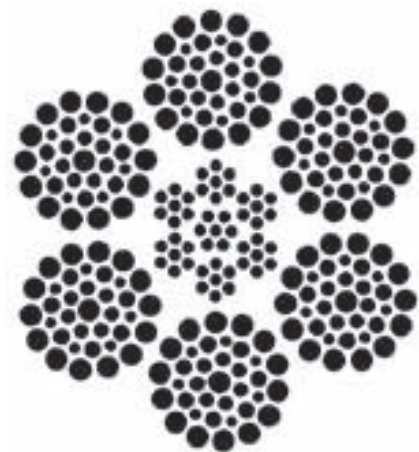
Standard Grade: Purple Plus

Lay: Regular or Lang

Finish: Bright or galvanized

The 6x36 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 6x36 is only nominal, as in the case with the 6x19 Class. None of the ropes actually has 36 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 6x36 Class constructions include 6x33 for diameters under 1/2", 6x36 Warrington Seale (the most common 6x36 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 IWRC Technical Data



6x19 Class

6x19 Seale
 6x19 Warrington
 6x21 Filler Wire
 Type U
 6x21 Seale
 6x25 Filler Wire
 Type W
 6x25 Seale
 6x26 Warrington
 Seale

Rope Diameter		Approx. Weight (lb./ft.)	Minimum Breaking Force*		
			IPS**	EIPS**	EEIPS**
Inches	mm.	IWRC	Tons	Tons	Tons
1/4	6.4	0.12	2.94	3.40	3.74
5/16	7.9	0.18	4.58	5.27	5.80
3/8	9.5	0.26	6.56	7.55	8.30
7/16	11.1	0.35	8.89	10.2	11.2
1/2	12.7	0.46	11.5	13.3	14.6
9/16	14.3	0.59	14.5	16.8	18.5
5/8	15.9	0.72	17.7	20.6	22.7
3/4	19.1	1.04	25.6	29.4	32.4
7/8	22.2	1.42	34.6	39.8	43.8
1	25.4	1.85	44.9	51.7	56.9
1-1/8	28.6	2.34	56.5	65.0	71.5
1-1/4	31.8	2.89	69.4	79.9	87.9
1-3/8	34.9	3.50	83.5	96.0	106
1-1/2	38.1	4.16	98.9	114	125
1-5/8	41.3	4.88	115	132	146
1-3/4	44.5	5.67	133	153	169
1-7/8	47.6	6.50	152	174	192
2	50.8	7.39	172	198	217
2-1/8	54.0	8.35	192	221	244
2-1/4	57.2	9.36	215	247	272
2-3/8	60.3	10.4	239	274	302
2-1/2	63.5	11.6	262	302	332
2-5/8	66.7	12.8	288	331	364
2-3/4	69.9	14.0	314	361	397
2-7/8	73.0	15.3	341	393	
3	76.2	16.6	370	425	
3-1/8	79.4	18.0	399	458	
3-1/4	82.6	19.5	429	492	
3-3/8	85.7	21.0	459	529	
3-1/2	88.9	22.6	491	564	

*To convert to Kilonewtons (kN), multiply tons (minimum breaking force) by 8.896;
1 lb = 4.448 newtons (N).

**Minimum breaking forces listed above apply to ropes with bright or drawn galvanized wires. Minimum breaking forces are 10% lower for ropes with wires galvanized at finish size.

For further information on additional constructions and diameters, contact DCL's customer service department.

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6x36 IWRC Technical Data



6x36 Class

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

Rope Diameter		Approx. Weight (lb./ft.)	Minimum Breaking Force*		
			IPS**	EIPS**	EEIPS**
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1/4	6.4	0.12	2.94	3.40	3.74
5/16	7.9	0.18	4.58	5.27	5.80
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9/16	14.3	0.59	14.5	16.8	18.5
5/8	15.9	0.72	17.9	20.6	22.7
3/4	19.1	1.04	25.6	29.4	32.4
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1	25.4	1.85	44.9	51.7	56.9
1-1/8	28.6	2.34	56.5	65.0	71.5
1-1/4	31.8	2.89	69.4	79.9	87.9
1-3/8	34.9	3.50	83.5	96.0	106
1-1/2	38.1	4.16	98.9	114	125
1-5/8	41.3	4.88	115	132	146
1-3/4	44.5	5.67	133	153	169
1-7/8	47.6	6.50	152	174	192
2	50.8	7.39	172	198	217
2-1/8	54.0	8.35	192	221	244
2-1/4	57.2	9.36	215	247	282
2-3/8	60.3	10.4	239	274	302
2-1/2	63.5	11.6	262	302	332
2-5/8	66.7	12.8	288	331	364
2-3/4	79.9	14.0	314	361	397
2-7/8	73.0	15.3	341	392	432
3	76.2	16.6	370	425	468
3-1/8	79.4	18.0	399	458	504
3-1/4	82.6	19.5	429	492	543
3-3/8	85.7	21.0	459	529	582
3-1/2	88.9	22.7	491	564	621
3-5/8	92.1	24.3	523	602	663
3-3/4	95.3	26.0	558	641	705

*To convert to Kilonewtons (kN), multiply tons (minimum breaking force) by 8.896;
 1 lb = 4.448 newtons (N).

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