

Wire rope weights and minimum breaking force for cranes.

STANDARD 6 X 19 CLASS AND 6 X 36 CLASS CRANE ROPES.

The 6 x 19 classification of wire ropes includes standard 6-strand round strand ropes with 16 through 26 wires per strand. The 6 x 36 classification of wire ropes includes standard 6-strand round strand ropes with 27 through 49 wires per strand. Although their operating characteristics vary, all have the same weight per foot and the same minimum breaking force, size for size.

The Flex-X® process compacts each strand, which improves the rope's strength, stability, abrasion resistance, fatigue resistance and crushing resistance.

These characteristics make Flex-X 6 an excellent choice for the main hoist rope for mobile cranes and the hoist rope on most overhead cranes. Flex-X 9, specifically designed for boom hoist applications, features compacted strands and swaging for extra drum crushing resistance

6 X 19 & 6 X 36 CLASS SPECIFICATIONS IWRC / FLEX-X 6 AND FLEX-X 9 / FLATTENED STRAND ROPES MINIMUM BREAKING FORCES IN TONS OF 2,000 POUNDS.

Diameter Inches	6 X 19 AND 6 X 36 CLASS IWRC			COMPACTED STRAND				FLATTENED STRAND	
	Approx. Weight lbs. / ft.	XIP® Minimum Breaking Force	XXIP®	Approx. Weight lbs. / ft.	Minimum Breaking Force	Approx. Weight lbs. / ft.	Minimum Breaking Force	Approx. Weight lbs. / ft.	Minimum Breaking Force
3/16									
1/4	0.116	3.40							
5/16	0.18	5.27							
3/8	0.26	7.55	8.30	0.32	8.8				
7/16	0.35	10.2	11.2	0.41	11.9				
1/2	0.46	13.3	14.6	0.55	15.3				
9/16	0.59	16.8	18.5	0.70	19.3				
5/8	0.72	20.6	22.7	0.86	22.7	0.95	26.2	0.74	21.7
3/4	1.04	29.4	32.4	1.25	32.4	1.35	37.4	1.06	31.0
7/8	1.42	39.8	43.8	1.67	43.8	1.85	50.6	1.46	41.9
1	1.85	51.7	56.9	2.18	56.9	2.40	65.7	1.89	54.4
1 1/8	2.34	65.0	71.5	2.71	71.5	3.05	82.7	2.39	68.5
1 1/4	2.89	79.9	87.9	3.43	87.9			2.95	84.0
1 3/8	3.50	96.0	106	4.25	106			3.57	101
1 1/2	4.16	114	125	5.01	125			4.25	119
1 5/8	4.88	132	146					4.99	140
1 3/4	5.67	153	169					5.79	161
1 7/8	6.50	174	192						
2	7.39	198	217						
2 1/8	8.35	221	244						
2 1/4	9.36	247	272						

NOTE: Many wire ropes are also available in PFV, a plastic impregnated rope design from Union.