

## Non-Rotating Multi-strand Rope

Most of usual wire ropes have a certain tendency of untwisting under the action of hanging loads on account of their own helically wound strands.

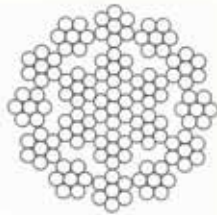
In order to minimize such a tendency of rotation and/or torque in the ropes, ropes would be usually layed with cross lay construction where direction of lay of the wires is opposite to that of the strands. This concept can be enlarged in the Non-Rotating multi-strand ropes consisting of two or more layers of strands layed in opposite directions. However, although known as “Non-Rotating” or “Non-Spin”, it must be understood that some slight rotation may occur in the early stages of working particularly on a long vertical lift.

### “Compacted” Non-Rotating multi-strand rope

This “Compacted” multi-strand ropes create the maximum Breaking Load from the minimum rope diameter, which enables original equipment manufacturers to use smaller drums as well as to satisfy mandatory requirements for minimum factors of safety and minimum steel area.

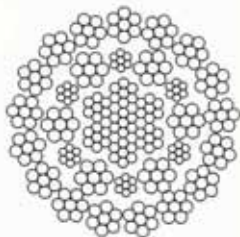
Ultimately, this “Compacted” multi-strand ropes achieve Min. B/Loads approx 20% higher and smoother external surface than conventional multi-strand ones having the same diameter.

(2) 19 × 7



Diameter of Rope (mm)	Min B/LOAD						Approx. Weight per meter (kg/100m)
	180kg/mm <sup>2</sup>		200kg/mm <sup>2</sup>		220kg/mm <sup>2</sup>		
	kN	Tonnef	kN	Tonnef	kN	Tonnef	
7	32.5	3.31	36.0	3.68	39.7	4.0	20.6
8	42.4	4.32	47.10	4.80	51.8	5.3	26.9
9	53.6	5.47	59.6	6.08	65.6	6.7	34.1
10	66.2	6.75	73.5	7.50	80.9	8.3	42.1
12	95.3	9.72	105.9	10.80	116.5	11.9	60.8
14	129.4	13.20	143.8	14.70	158.2	16.1	81.9
16	169.7	17.30	188.5	19.20	207.4	21.1	107.0
18	214.8	21.90	238.6	24.30	262.5	26.8	137.0
20	264.8	27.00	294.2	30.00	323.6	33.0	170.0
22	319.7	32.60	355.2	36.20	390.7	39.8	195.0
24	380.5	38.80	422.8	43.10	465.1	47.4	237.0
26	446.2	45.0	495.8	50.60	545.4	55.6	276.0

(3) 35 × 7 (WA)



Diameter of Rope (mm)	Min B/LOAD						Approx. Weight per meter (kg/100m)
	180kg/mm <sup>2</sup>		200kg/mm <sup>2</sup>		220kg/mm <sup>2</sup>		
	kN	Tonnef	kN	Tonnef	kN	Tonnef	
10	63.6	6.5	78.4	7.99	85.8	8.75	45.0
12	91.6	9.3	112.8	11.50	123.6	12.60	64.0
14	124.6	12.7	160.1	16.33	175.5	17.90	87.0
16	162.8	16.6	202.5	20.65	221.6	22.60	113.0
18	205.9	21.0	263.1	36.83	288.3	29.40	143.0
20	254.0	25.9	319.2	32.55	350.1	35.70	175.0
22	307.9	31.4	387.9	39.55	424.6	43.30	211.0
24	365.8	37.3	457.7	46.67	501.1	51.10	251.0
26	429.5	43.8	545.7	55.65	598.2	61.00	301.0
28	499.2	50.9	617.8	63.00	676.7	69.00	339.0
30	572.7	58.4	724.2	73.85	793.4	80.90	392.0
32	651.2	66.4	811.2	82.72	888.5	90.60	441.0
34	735.5	75.0	918.7	93.68			501.0
36	823.8	84.0	1029.7	105.00			563.0