

# Wire Rope Specifications

Liftcrane - Fixed Jib No. 138 On Luffing Jib No. 139 On  
Boom No. 78T With Heavy Lift Top

Wire Rope Lengths Front Drum Or Auxiliary Drum			
Boom, Luffing Jib And Fixed Jib Length		Fixed Jib Whip Line	
		1 Part	
Ft.	Meters	Ft.	Meters
310	94.5	660	201
320	97.5	680	207
330	100.6	700	213
340	103.6	720	219
350	106.7	740	226
360	109.7	760	232
370	112.8	780	238
380	115.8	800	244
390	118.9	820	250
400	121.9	840	256
410	125.0	860	262

**Note:** Whip line lengths given in table will allow hook to touch ground. When hook travel below ground is required, add additional rope times added travel distance. Hoisting distance or line pull may be limited when hook travel below ground is required.

Maximum load on 1 in. wire rope is 27,000 Lbs. (12 250 kg) per line  
(20,000 Lbs. [9 070 kg] on 1 in. or 26 mm wire rope when auxiliary drum is used).

Wire Rope Specifications	
<u>Rotation Resistant Wire Rope - 5:1 Safety Factor</u>	
Whip Line: (Front Drum)	1 in. - 1 960 N/mm <sup>2</sup> Wire Rope (MCC Part No. 719393) Minimum Breaking Strength =139,600 Lbs. (620.9 kN) Maximum Load= 27,000 Lbs. (12 250 kg) per line Approx. Weight = 2.03 Lbs. Per Ft. (3.02 kg/m)
Whip Line: (Auxiliary Drum)	1 in. - 1 960 N/mm <sup>2</sup> Wire Rope (MCC Part No. 719393) Minimum Breaking Strength =139,600 Lbs. (620.9 kN) Maximum Load= 20,000 Lbs. (9 070 kg) per line Approx. Weight = 2.03 Lbs. Per Ft. (3.02 kg/m)
Or	
	26 mm - 1 960 N/mm <sup>2</sup> Wire Rope (MCC Part No. 719378) Minimum Breaking Strength = 146,200 Lbs. (650.6 kN) Maximum Load = 20,000 Lbs. (9 070 kg) Per Line. Approx. Weight = 2.13 Lbs. Per Ft. (3.17 kg/m)

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<b>Wire Rope Specifications</b>	
<u>Optional Wire Rope - 3.5 : 1 Safety Factor</u>	
Whip Line: (Front Drum)	1 in. - 6 X 25 Filler Wire, Extra Improved Plow Steel, Right Regular Lay, IWRC (MCC Part No. 719060) Minimum Breaking Strength 103,400 Lbs. (460 kN) Maximum Load = 27,000 Lbs. (12 250 kg) Per Line Approx. Weight = 1.85 Lbs. Per. Ft. (2.75 kg/m)
Whip Line: (Auxiliary Drum)	1 in. - 6 X 25 Filler Wire, Improved Plow Steel, Right Regular Lay, IWRC (MCC Part No. 719073) Minimum Breaking Strength= 89,800 Lbs. (40 730 kg) Maximum Load = 20,000 Lbs. (9 070 kg) Per Line Approx. Weight = 1.85 Lbs. Per. Ft. (2.75 kg/m)
	Or
	26 mm - 6 X 25 Filler Wire, Extra Improved Plow Steel, Right Regular Lay, IWRC (MCC Part No. 719387) Minimum Breaking Strength 108,600 Lbs. (483.1 kN) Maximum Load = 20,000 Lbs. (9 070 kg) Per Line Approx. Weight = 1.94 Lbs. Per. Ft. (2.89 kg/m)
<b>Note:</b> Block Spin May Occur With 6 X 25 Construction Wire Rope Under Certain Operating Conditions.	

<b>Maximum Spooling Capacities</b>	
Front Drum: (Whip Line)	1 in. Wire Rope - 5 Layers - 928 Ft. (283m)
Auxiliary Drum: (Whip Line)	26 mm Wire Rope - 6 Layers - 1,323 Ft. (403m) 6 Layers - 1,415 Ft. (431m) with 21-1/4 in. (540 mm) Dia. Lagging
	1 in. Wire Rope - 6 Layers - 1,335 Ft. (407m) 6 Layers - 1,428 Ft. (435m) with 21-1/4 in. (540 mm) Dia. Lagging
17 Ft. (5m) is deducted from maximum spooling capacities for 3 dead wraps per drum or lagging.	

**Note:** When optional laggings are used, the recommended lagging for specific wire rope Dia. must be used.

Refer to drum and lagging chart **No. 8093-A**.