

Wire Rope Specifications

Liftcrane - Luffing Jib No. 139 on Boom No. 78

777 SERIES 1

777 SERIES 2

European Standards

Wire Rope Lengths - Front Drum									
Boom and Luffing Jib Length		Luffing Jib Hoist Line Front Drum							
		4 Part		3 Part		2 Part		1 Part	
Ft.	Meters	Ft.	Meters	Ft.	Meters	Ft.	Meters	Ft.	Meters
140	42.7	750	229					310	95
150	45.7	800	244					330	101
160	48.8	850	259					350	107
170	51.8	900	274	725	221			370	113
180	54.9	950	290	775	236			390	119
190	57.9	1000	305	800	244			410	125
200	61.0	1050	320	850	259	650	198	430	131
210	64.0	1100	335	900	274	675	206	450	137
220	67.1	1150	351	925	282	700	213	470	143
230	70.1	1200	366	975	297	750	229	490	149
240	73.2	---	---	1000	305	775	236	510	155
250	76.2	---	---	1050	320	800	244	530	162
260	79.2	---	---	1100	335	825	251	550	168
270	82.3	---	---	1125	343	850	259	570	174
280	85.3	---	---	---	---	875	267	590	180
290	88.4	---	---	---	---	925	282	610	186
300	91.4	---	---	---	---	950	290	630	192
310	94.5	---	---	---	---	975	297	650	198
320	97.5	---	---	---	---	1000	305	670	204
330	100.6	---	---	---	---	---	---	690	210
340	103.6	---	---	---	---	---	---	710	216

Note: Hoist line lengths given in table will allow hook to touch ground. When block travel below ground is required, add additional rope equal to parts of line times added travel distance. Hoisting distance or line pull may be limited when block travel below ground is required. See tables on page 2 for auxiliary drum application.

Hoist Reeving for Main Load Block - Front Drum Rotation Resistant Wire Rope				
No. Parts of Line	1	2	3	4
Maximum Load - Lbs.	29,500	59,000	88,500	104,600
Maximum Load - kg	13 380	26 760	40 140	47 400

Hoist Reeving for Main Load Block - Front Drum Not Non-Twisting Wire Rope				
No. Parts of Line	1	2	3	4
Maximum Load - Lbs.	27,600	54,700	81,300	104,600
Maximum Load - kg	12 520	24 810	36 880	47 400

Wire Rope Specifications

Liftcrane - Luffing Jib No. 139 on Boom No. 78

777 SERIES 1

777 SERIES 2

European Standards

Wire Rope Lengths - Auxiliary Drum									
Boom and Luffing Jib Length		Luffing Jib Hoist Line Auxiliary Drum							
		4 Part		3 Part		2 Part		1 Part	
Ft.	Meters	Ft.	Meters	Ft.	Meters	Ft.	Meters	Ft.	Meters
140	42.7	750	229					310	95
150	45.7	800	244					330	101
160	48.8	850	259					350	107
170	51.8	900	274					370	113
180	54.9	950	290					390	119
190	57.9	1000	305					410	125
200	61.0	1050	320	850	259			430	131
210	64.0	1100	335	900	274			450	137
220	67.1	1150	351	925	282	700	213	470	143
230	70.1	1200	366	975	297	750	229	490	149
240	73.2	1250	381	1000	305	775	236	510	155
250	76.2	1300	396	1050	320	800	244	530	162
260	79.2	1350	411	1100	335	825	251	550	168
270	82.3	---	---	1125	343	850	259	570	174
280	85.3	---	---	1175	358	875	267	590	180
290	88.4	---	---	1200	366	925	282	610	186
300	91.4	---	---	---	---	950	290	630	192
310	94.5	---	---	---	---	975	297	650	198
320	97.5	---	---	---	---	1000	305	670	204
330	100.6	---	---	---	---	---	---	690	210

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

Capacity chart restrictions will occur when auxiliary drum is used. Maximum capacity is 80,000 Lbs. (36 290 kg) with four parts line.

Hoist Reeving for Main Load Block - Auxiliary Drum				
No. Parts of Line	1	2	3	4
Maximum Load - Lbs.	20,000	40,000	60,000	80,000
Maximum Load - kg	9 070	18 140	27 220	36 290

Wire Rope Specifications

Liftcrane - Luffing Jib No. 139 on Boom No. 78

777 SERIES 1

777 SERIES 2

European Standards

Wire Rope Specifications	
<u>Rotation Resistant Wire Rope - 4.5:1 Safety Factor</u>	
Hoist Line:	26 mm - 2 160 N/mm ² Wire Rope (Ref. MCC Part No. 719379) Minimum Breaking Strength Required = 161,070 Lbs. (716.5 kN) Approx. Weight = 2.13 Lbs. Per Ft. (3.17 kg/m)
<u>Optional Wire Rope - 3.55:1 Safety Factor</u>	
Hoist Line	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) Approx. Weight = 1.94 Lbs. Per Ft. (2.89 kg/m)
Note: Block spin may occur with 6 x 25 construction wire rope under certain operating conditions.	

Maximum Spooling Capacities	
Front Drum:	26 mm Wire Rope - 6 Layers - 1,074 Ft. (327m)
(Hoist Line)	5 Layers - 918 Ft. (280m) with 21-1/4 in. (540 mm) Dia. Lagging
Auxiliary Drum:	26 mm Wire Rope - 6 Layers - 1,323 Ft. (403m)
(Hoist Line)	6 Layers - 1,415 Ft. (431m) 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.	

Refer to drum and lagging chart **No. 6123-A**