

Wire Rope Specifications

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

777 SERIES 1

777 SERIES 2

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	700	213			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	---	---	925	282	700	213	470	143
230	70.1	---	---	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	---	---	---	---	1025	312	690	210
340	103.6	---	---	---	---	1050	320	710	216
350	106.7	---	---	---	---	---	---	730	223

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				
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



Wire Rope Specifications

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

777 SERIES 1
777 SERIES 2

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			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	1400	427	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	---	---	1225	373	950	290	630	192
310	94.5	---	---	---	---	975	297	650	198
320	97.5	---	---	---	---	1000	305	670	204
330	100.6	---	---	---	---	1025	312	690	210
340	103.6	---	---	---	---	1050	320	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.

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

Wire Rope Specifications

Rotation Resistant Wire Rope - 5:1 Safety Factor

Hoist Line: 26 mm - 2 160 N/mm² Wire Rope (Ref. MCC Part No. 719379)
Minimum Breaking Strength Required = 147,500 Lbs. (656.1 kN)
Approx. Weight = 2.13 Lbs. Per Ft. (3.17 kg/m)

Or

1 in. - 2 160 N/mm² Wire Rope (MCC Part No. 719392)
Minimum Breaking Strength Required = 153,800 Lbs. (684.2 kN)
Approx. Weight = 2.03 Lbs. Per Ft. (3.02 kg/m)

Optional Wire Rope - 3.5:1 Safety Factor

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)

Or

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)
Approx. Weight = 1.85 Lbs. Per Ft. (2.75 kg/m)

Note: Block spin may occur with 6 x 25 construction wire rope under certain operating conditions.



Wire Rope Specifications

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

777 SERIES 1**777 SERIES 2**

Maximum Spooling Capacities	
Front Drum: (Hoist Line)	26 mm Wire Rope - 6 Layers - 1,074 Ft. (327m) 5 Layers - 918 Ft. (280m) with 21-1/4 in. (540 mm) Dia. Lagging 1 in. Wire Rope - 6 Layers - 1,084 Ft. (330m) 5 Layers - 928 Ft. (283m) with 21-1/4 in. (540 mm) Dia. Lagging
Auxiliary Drum: (Hoist 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. 6123-A**