



# Wire Rope Specifications

Liftcrane - Boom No. 79-44

# MAX-ER 2000 On 2250

Wire Rope Lengths												
Boom or Boom and Jib Length		Whip Line Drum 5								Hoist Line Drum 9		Maximum Required Parts of Line
		1 Part		2 Part		3 Part		4 Part				
Ft.	Meters	Ft.	Meters	Ft.	Meters	Ft.	Meters	Ft.	Meters	Ft.	Meters	
200	61.0	460	140	675	206					4100	1250	18
220	67.1	500	152	725	221					4200	1280	17
240	73.2	540	165	800	244			1300	396	4200	1280	15
260	79.2	580	177	850	259	1125	343	1400	427	4200	1280	13
280	85.3	620	189	925	282	1200	366	1500	457	4200	1280	11
300	91.4	660	201	975	297	1275	389	1600	488	4200	1280	10
320	97.5	700	213	1025	312	1350	411	1700	518	4200	1280	9
340	103.6	740	226	1100	335	1425	434	1800	549	4200	1280	7
360	109.7	780	238	1150	351	1500	457	—	—	4200	1280	6
380	115.8	820	250	1200	366	1600	488	—	—	4200	1280	6
400	121.9	860	262	1275	389	1675	511	—	—	4200	1280	5
420	128.0	900	274	1325	404	1750	533	—	—			
440	134.1	940	287	1375	419	1825	556	—	—			
460	140.2	960	293	1450	442	—	—	—	—			
480	146.3	1000	305	1500	457	—	—	—	—			
500	152.4	1040	317	1550	472	—	—	—	—			

**Note:** Hoist line and whip 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. Maximum hook travel for whip line application may be restricted when line length exceeds 1,575 Ft. (480m).

Hoist Reeving for Main Load Block					
No. Parts of Line	4	5	6	7	8
Maximum Load - Lbs.	138,800	173,500	208,200	242,900	277,600
Maximum Load - kg	62 960	78 700	94 440	110 180	125 920
No. Parts of Line	9	10	11	12	13
Maximum Load - Lbs.	312,300	347,000	381,700	416,400	451,100
Maximum Load - kg	141 660	157 400	173 140	188 880	204 620
No. Parts of Line	14	15	16	17	18
Maximum Load - Lbs.	485,800	520,500	555,200	589,900	600,000
Maximum Load - kg	220 360	236 090	251 830	267 570	272 100



# Wire Rope Specifications

Liftcrane - Boom No. 79-44

# MAX-ER 2000

## On 2250

Wire Rope Specifications	
<u>Rotation Resistant Wire Rope - 5:1 Safety Factor</u>	
Hoist Line:	1-1/8 in. (28.6 mm) Wire Rope Right Hand Regular Lay Minimum Breaking Strength = 176,800 Lbs. (80 190 kg) MCC Part No. 719416 Approx. Weight = 2.58 Lbs. Per Ft. (3.84 kg/m) Minimum Breaking Strength Required = 173,500 Lbs. (78 700 kg) No Load Dia. = 1.134 in. (28.80 mm) to 1.154 in. (29.31 mm)
OR	
	1-1/8 in. (28.6 mm) Wire Rope Right Hand Lang Lay Minimum Breaking Strength = 173,800 Lbs. (78 830 kg) MCC Part No. 719375 Approx. Weight = 2.73 Lbs. Per Ft. (4.06 kg/m) Minimum Breaking Strength Required = 173,500 Lbs. (78 700 kg) No Load Dia. = 1.131 in. (28.73 mm) to 1.166 in. (29.62 mm)
Whip Line:	1 in. (25.4 mm) Wire Rope Right Hand Regular Lay Minimum Breaking Strength = 139,600 Lbs. (63 320 kg) Maximum Load = 27,700 Lbs. (12 560 kg) per line MCC Part No. 719417 Approx. Weight = 2.03 Lbs. Per Ft. (3.02 kg/m) Minimum Breaking Strength Required = 138,500 Lbs. (62 820 kg) No Load Dia. = 1.012 in. (25.70 mm) to 1.028 in. (26.11 mm)
OR	
	1 in. (25.4 mm) Wire Rope Right Hand Lang Lay Minimum Breaking Strength = 153,800 Lbs. (69 760 kg) Maximum Load = 27,700 Lbs. (12 560 kg) per line MCC Part No. 719436 Approx. Weight = 2.26 Lbs. Per Ft. (3.36 kg/m) Minimum Breaking Strength Required = 138,500 Lbs. (62 820 kg) No Load Dia. = 1.020 in. (25.91 mm) to 1.036 in. (26.31 mm)



# Wire Rope Specifications

Liftcrane - Boom No. 79-44

**MAX-ER 2000**  
**On 2250**

Wire Rope Specifications	
<u>Conventional Wire Rope - 3.5:1 Safety Factor</u>	
Whip Line:	7/8 in. (22 mm) Dyform-6 Wire Rope Minimum Breaking Strength = 87,600 Lbs. (39 730 kg) Maximum Load = 20,000 Lbs. (9 070 kg) per line MCC Part No. 719335 Approx. Weight = 1.53 Lbs. Per Ft. (2.28 kg/m)
<u>Rotation Resistant Wire Rope - 5:1 Safety Factor</u>	
Whip Line:	7/8 in. (22 mm) 2160 N/mm <sup>2</sup> Wire Rope Right Hand Lang Lay Minimum Breaking Strength = 109,600 Lbs. (49 710 kg) Maximum Load = 20,000 Lbs. (9 070 kg) per line MCC Part No. 719414 Approx. Weight = 1.65 Lbs. Per Ft. (2.46 kg/m)
Other 7/8 in. luffing hoist wire ropes specified on 2250 luffing jib rigging are not allowed.	

Maximum Spooling Capacities	
Drum 9: (Hoist Line)	1-1/8 in. (28.6 mm) Wire Rope - 11 Layers - 4,334 Ft. (1 321m)
Drum 5: (Whip Line)	1 in. (25.4 mm) Wire Rope - 6 Layers - 1,104 Ft. (336m) with 19 in. (483 mm) Dia. Lagging  7/8 in. (22 mm) Wire Rope - 7 Layers - 1,157 Ft. (353m)
21 Ft. (6m) is deducted from maximum spooling capacities for 3 dead wraps on Drum 9, 16 Ft. (5m) on Drum 5. 7/8 in. wire rope cannot be used as luffing hoist on MAX-ER 2000.	

Refer to Drum and Lagging chart **No. 8195-A**.