

MANITOWOC ENGINEERING CO.

Division of the Manitowoc Company, Inc. Manitowoc, Wisconsin 54220



WIRE ROPE SPECIFICATIONS

LIFT CRANE - BOOM NO. 22E WITH LIGHT TAPERED TOP

888 SERIES 1
888 SERIES 2

WIRE ROPE LENGTHS								
BOOM OR BOOM AND JIB LENGTH		WHIP LINE REAR DRUM				HOIST LINE FRONT DRUM		MAXIMUM REQUIRED PARTS OF LINE
		1 PART		2 PART				
		FT.	METERS	FT.	METERS	FT.	METERS	
110	33.5	260	79	380	116	1175	358	9
120	36.6	280	85	410	125	1275	389	9
130	39.6	300	91	440	134	1375	419	9
140	42.7	320	98	470	143	1475	450	9
150	45.7	340	104	500	152	1475	450	8
160	48.8	360	110	530	162	1500	457	8
170	51.8	380	116	560	171	1500	457	7
180	54.9	400	122	590	180	1500	457	7
190	57.9	420	128	620	189	1500	457	6
200	61.0	440	134	650	198	1500	457	6
210	64.0	460	140	680	207	1525	465	6
220	67.1	480	146	710	216	1525	465	5
230	70.1	500	152	740	226	1525	465	5
240	73.2	520	158	770	235	1525	465	5
250	76.2	540	165	800	244	1525	465	4
260	79.2	560	171	830	253	1525	465	4
270	82.3	580	177	860	262	1525	465	4
280	85.3	600	183	890	271	1525	465	3
290	88.4	620	189	920	280	1525	465	3
300	91.4	640	195	950	290	1525	465	3
310	94.5	660	201	980	299	1525	465	3
320	97.5	680	207	1010	308			
330	100.6	700	213	1040	317			
340	103.6	720	219	---	---			
350	106.7	740	226	---	---			

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.

HOIST REEVING FOR MAIN LOAD BLOCK									
NO. PARTS OF LINE	1	2	3	4	5	6	7	8	9
MAXIMUM LOAD-LBS.	29,500	59,000	88,500	118,000	147,500	177,000	206,500	236,000	265,500
MAXIMUM LOAD-kg	13 380	26 760	40 140	53 520	66 900	80 290	93 670	107 050	120 400

MAXIMUM SPOOLING CAPACITIES	
FRONT DRUM: (HOIST LINE)	26 mm WIRE ROPE - 7 LAYERS - 1,609' (490m) 7 LAYERS - 1,716' (523m) WITH 21-1/4" (540 mm) DIA. LAGGING 1" WIRE ROPE - 7 LAYERS - 1,623' (495m) 7 LAYERS - 1,731' (528m) WITH 21-1/4" (540 mm) DIA. LAGGING
REAR DRUM: (WHIP LINE)	26 mm WIRE ROPE - 7 LAYERS - 1,609' (490m) 7 LAYERS - 1,716' (523m) WITH 21-1/4" (540 mm) DIA. LAGGING 4 LAYERS - 1,061' (323m) WITH 27" (686 mm) DIA. LAGGING 1" WIRE ROPE - 7 LAYERS - 1,623' (495m) 7 LAYERS - 1,731' (528m) WITH 21-1/4" (540 mm) DIA. LAGGING 4 LAYERS - 1,074' (327m) WITH 27" (686 mm) DIA. LAGGING
17' (5m) (22' (7m) WITH 27" (686 mm) DIA. LAGGING) 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. 6119-A.



WIRE ROPE SPECIFICATIONS

LIFTCRANE - BOOM NO. 22E WITH LIGHT TAPERED TOP

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WIRE ROPE SPECIFICATIONS	
<u>ROTATION RESISTANT WIRE ROPE - 5 :1 SAFETY FACTOR</u>	
HOIST LINE:	26 mm - 2 160 N/mm ² WIRE ROPE (REF. MEC PART NO. 719379) MINIMUM BREAKING STRENGTH REQUIRED = 147,500 LBS. (656.1 KN) APPROX. WEIGHT = 2.13 LBS. PER FT. (3.17 kg/m)
WHIP LINE:	26 mm - 2 160 N/mm ² WIRE ROPE (REF. MEC PART NO. 719379) MINIMUM BREAKING STRENGTH REQUIRED = 147,500 LBS. (656.1 KN) MAXIMUM LOAD = 29,500 LBS. (13 380 kg) PER LINE APPROX. WEIGHT = 2.13 LBS. PER FT. (3.17 kg/m)
OR	
HOIST LINE:	1" - 2 160 N/mm ² WIRE ROPE (MEC PART NO. 719392) MINIMUM BREAKING STRENGTH = 153,800 LBS. (684.2 KN) APPROX. WEIGHT = 2.03 LBS. PER FT. (3.02 kg/m)
WHIP LINE:	1" - 2 160 N/mm ² WIRE ROPE (MEC PART NO. 719392) MINIMUM BREAKING STRENGTH = 153,800 LBS. (684.2 KN) MAXIMUM LOAD = 29,500 LBS. (13 380 kg) PER LINE APPROX. WEIGHT = 2.03 LBS. PER FT. (3.02 kg/m)
<u>OPTIONAL WIRE ROPE - 3.5 :1 SAFETY FACTOR</u>	
HOIST LINE:	26 mm - 6 X 25 FILLER WIRE, EXTRA IMPROVED PLOW STEEL, RIGHT REGULAR LAY, IWRC (MEC PART NO. 719387) MINIMUM BREAKING STRENGTH 108,600 LBS. (483.1 KN) APPROX. WEIGHT = 1.94 LBS. PER FT. (2.89 kg/m)
WHIP LINE:	26 mm - 6 X 25 FILLER WIRE, EXTRA IMPROVED PLOW STEEL, RIGHT REGULAR LAY, IWRC (MEC PART NO. 719387) MINIMUM BREAKING STRENGTH 108,600 LBS. (483.1 KN) MAXIMUM LOAD = 29,500 LBS. (13 380 kg) PER LINE APPROX. WEIGHT = 1.94 LBS. PER FT. (2.89 kg/m)
OR	
HOIST LINE:	1" - 6 X 25 FILLER WIRE, EXTRA IMPROVED PLOW STEEL, RIGHT REGULAR LAY, IWRC (MEC PART NO. 719060) MINIMUM BREAKING STRENGTH 103,400 LBS. (460 KN) APPROX. WEIGHT = 1.85 LBS. PER FT. (2.75 kg/m)
WHIP LINE:	1" - 6 X 25 FILLER WIRE, EXTRA IMPROVED PLOW STEEL, RIGHT REGULAR LAY, IWRC (MEC PART NO. 719060) MINIMUM BREAKING STRENGTH 103,400 LBS. (460 KN) MAXIMUM LOAD = 29,500 LBS. (13 380 kg) PER LINE 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.