

MANITOWOC ENGINEERING CO.

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



WIRE ROPE SPECIFICATIONS_____M-250 SERIES 2

LIFT CRANE - LUFFING JIB NO. 133 OR NO. 133A ON
BOOM NO. 44 WITH HEAVY LIFT TOP

WIRE ROPE LENGTHS							
BOOM AND LUFFING JIB LENGTH		LUFFING JIB WHIP LINE LEFT REAR DRUM		LUFFING JIB HOIST LINE RIGHT REAR DRUM WHEN EQUIPPED WITH SPLIT REAR DRUMS FRONT DRUM WHEN EQUIPPED WITH TANDEM DRUMS			
				1 PART		2 PART	
		FT.	METERS	FT.	METERS	FT.	METERS
320	97.5	680	207	1325	404		
330	100.6	700	213	1375	419		
340	103.6	720	219	1400	427		
350	106.7	740	226	1450	442	1100	335
360	109.7	760	232	1475	450	1125	343
370	112.8	780	238	---	---	1150	351
380	115.8	800	244	---	---	1175	358
390	118.9	820	250	---	---	1200	366
400	121.9	840	256	---	---	1225	373
410	125.0	860	262	---	---	1250	381
420	128.0	880	268	---	---	1275	389
430	131.1	900	274	---	---	1300	396
440	134.1	920	280	---	---	1325	404
450	137.2	940	287	---	---	1350	411

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 LUFFING JIB APPLICATION MAY BE RESTRICTED WHEN WIRE ROPE LENGTH EXCEEDS 1,350' (411m) USING LEFT REAR DRUM WITHOUT LAGGING OR WHEN WIRE ROPE LENGTH EXCEEDS 1,250' (381m) USING 24-1/2" (622 mm) DIA. LAGGING ON LEFT REAR DRUM.

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HOIST REEVING FOR MAIN LOAD BLOCK			
NO. PARTS OF LINE	1	2	3
MAXIMUM LOAD-LBS.	30,000	60,000	90,000
MAXIMUM LOAD-kg	13 610	27 220	40 800
HOIST LINE:	1-1/8" (29 mm) - 6 X 31 WARRINGTON-SEALE, EXTRA IMPROVED PLOW STEEL, REGULAR LAY, IWRC. MINIMUM BREAKING STRENGTH 130,000 LBS. (58 970 kg) APPROX. WEIGHT = 2.34 LBS. PER FT. (3.48 kg/m)		
28 mm (1-1/8") (OPTIONAL)	BRIDON DYFORM - 34LR WIRE ROPE, RIGHT HAND REG LAY MINIMUM BREAKING STRENGTH 152,040 LBS. (68 960 kg) APPROX. WEIGHT = 2.53 LBS. PER FT. (3.76 kg/m) MEC DEAD END LOCKING SWIVEL NO. 175518 REQUIRED.		
28 mm (1-1/8") (OPTIONAL)	CASAR EUROLIFT - 1 960 N/mm ² WIRE ROPE MINIMUM BREAKING STRENGTH 158,260 LBS. (71 790 kg) APPROX. WEIGHT = 2.67 LBS. PER FT. (3.97 kg/m) MEC DEAD END LOCKING SWIVEL NO. 175518 REQUIRED.		
WHIP LINE:	1-1/8" (29 mm) - 6 X 31 WARRINGTON-SEALE, EXTRA IMPROVED PLOW STEEL, REGULAR LAY, IWRC. MINIMUM BREAKING STRENGTH 130,000 LBS. (58 970 kg) MAXIMUM LOAD = 30,000 LBS. (13 610 kg) PER LINE APPROX. WEIGHT = 2.34 LBS. PER FT. (3.48 kg/m)		
28 mm (1-1/8") (OPTIONAL)	BRIDON DYFORM - 34LR WIRE ROPE, RIGHT HAND REG LAY MINIMUM BREAKING STRENGTH 152,040 LBS. (68 960 kg) MAXIMUM LOAD = 30,000 LBS. (13 610 kg) PER LINE APPROX. WEIGHT = 2.53 LBS. PER FT. (3.76 kg/m) MEC DEAD END LOCKING SWIVEL NO. 175518 REQUIRED.		
28 mm (1-1/8") (OPTIONAL)	CASAR EUROLIFT - 1 960 N/mm ² WIRE ROPE MINIMUM BREAKING STRENGTH 158,260 LBS. (71 790 kg) MAXIMUM LOAD = 30,000 LBS. (13 610 kg) PER LINE APPROX. WEIGHT = 2.67 LBS. PER FT. (3.97 kg/m) MEC DEAD END LOCKING SWIVEL NO. 175518 REQUIRED.		
RIGGING WINCH LINE:	3/8" (9.5 mm) - 6 X 19 FILLER WIRE, IMPROVED PLOW STEEL, REGULAR LAY, IWRC. MINIMUM BREAKING STRENGTH 13,100 LBS. (5 940 kg) RECOMMENDED LENGTH = 800' (244m)		

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MAXIMUM SPOOLING CAPACITIES		
RIGHT REAR DRUM: (HOIST LINE)	1-1/8" (29 mm) WIRE ROPE - 8 LAYERS -	2,411' (735m) 2,566' (782m) WITH 24-1/2" (622 mm) DIA. LAGGING
	28 mm (1-1/8") WIRE ROPE - 8 LAYERS -	2,459' (750m) 2,618' (798m) WITH 24-1/2" (622 mm) DIA. LAGGING
LEFT REAR DRUM: (WHIP LINE)	1-1/8" (29 mm) WIRE ROPE - 9 LAYERS -	1,173' (358m) 8 LAYERS - 1,068' (326m) WITH 24-1/2" (622 mm) DIA. LAGGING
	28 mm (1-1/8") WIRE ROPE - 9 LAYERS -	1,196' (365m) 8 LAYERS - 1,090' (332m) WITH 24-1/2" (622 mm) DIA. LAGGING
FRONT DRUM: (WHIP LINE)	1-1/8" (29 mm) WIRE ROPE - 8 LAYERS -	2,411' (735m) 2,566' (782m) WITH 24-1/2" (622 mm) DIA. LAGGING
	28 mm (1-1/8") WIRE ROPE - 8 LAYERS -	2,459' (750m) 2,618' (798m) WITH 24-1/2" (622 mm) DIA. LAGGING
20' (6m) IS DEDUCTED FROM MAXIMUM SPOOLING CAPACITIES FOR 3 DEAD WRAPS PER DRUM OR LAGGING.		

REFER TO DRUM AND LAGGING CHART NO. 6118-A.