

MANITOWOC ENGINEERING CO.

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



WIRE ROPE SPECIFICATIONS

3950W

LIFTCRANE - BOOM NO. 39 WITH OPEN THROAT TOP
INLINE OR OFFSET 4-1/2 DEGREES

WIRE ROPE LENGTHS									
BOOM OR BOOM AND JIB LENGTH		WHIP LINE				HOIST LINE		MAXIMUM REQUIRED PARTS OF LINE	
		LEFT FRONT OR REAR DRUM				RIGHT FRONT			
		1 PART		2 PART		OR FRONT DRUM			
FT.	METERS	FT.	METERS	FT.	METERS	FT.	METERS	TOP IN LINE	TOP OFFSET
70	21.3	165	50	235	72	970	296	12	10
80	24.4	185	56	265	81	1100	335	12	9
90	27.4	205	62	295	90	1100	335	10	9
100	30.5	225	69	325	99	1155	352	10	8
110	33.5	245	75	355	108	1155	352	8	6
120	36.6	265	81	385	117	1155	352	7	6
130	39.6	285	87	415	126	1155	352	7	6
140	42.7	305	93	445	136	1155	352	7	5
150	45.7	325	99	475	145	1155	352	6	5
160	48.8	345	105	505	154	1155	352	6	5
170	51.8	365	111	535	163	1155	352	5	5
180	54.9	385	117	565	172	1155	352	5	4
190	57.9	405	123	595	181	1155	352	4	4
200	61.0	425	130	625	191	1155	352	4	4
210	64.0	445	136	655	200	1155	352	4	4
220	67.1	465	142	685	209	1155	352	4	4
230	70.1	485	148	715	218	1155	352	3	3
240	73.2	505	154	745	227	1155	352	3	3
250	76.2	525	160	775	236	1155	352	3	3
260	79.2	545	166	805	245	1155	352	3	3
270	82.3	565	172	835	255				
280	85.3	585	178	---	---				
290	88.4	605	184	---	---				

NOTE: HOIST LINE AND WHIP LINE LENGTHS GIVEN IN TABLE WILL ALLOW BLOCK TRAVEL DOWN TO LEVEL OF ROLLER PATH. WHEN BLOCK TRAVEL BELOW ROLLER PATH 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 ROLLER PATH IS REQUIRED.

HOIST REEVING FOR MAIN LOAD BLOCK						
NO. PARTS OF LINE	1	2	3	4	5	6
MAXIMUM LOAD-LBS.	25,800	51,600	77,400	103,200	129,000	154,800
MAXIMUM LOAD-kg	11 700	23 410	35 110	46 810	58 510	70 220
NO. PARTS OF LINE	7	8	9	10	11	12
MAXIMUM LOAD-LBS.	180,600	206,400	232,200	258,000	283,800	300,000
MAXIMUM LOAD-kg	81 920	93 620	105 320	117 030	128 730	136 080
HOIST LINE: 1" (26 mm) - 6 X 25 FILLER WIRE, EXTRA IMPROVED PLOW STEEL, REGULAR LAY, IWRC. MINIMUM BREAKING STRENGTH 103,400 LBS. (46 900 kg) APPROX. WEIGHT = 1.85 LBS. PER FT. (2.75 kg/m)						
WHIP LINE: 1" (26 mm) - 6 X 25 FILLER WIRE, IMPROVED PLOW STEEL, REGULAR LAY, IWRC. MINIMUM BREAKING STRENGTH 89,800 LBS. (40 730 kg) MAXIMUM LOAD = 22,500 LBS. (10 210 kg) PER LINE APPROX. WEIGHT = 1.85 LBS. PER FT. (2.75 kg/m)						

MAXIMUM SPOOLING CAPACITIES	
RIGHT FRONT DRUM: (HOIST LINE)	1" (26 mm) WIRE ROPE - 8 LAYERS - 1,034' (315m)
LEFT FRONT DRUM: (WHIP LINE)	1" (26 mm) WIRE ROPE - 7 LAYERS - 656' (200m) WITH 21" (533 mm) DIA. LAGGING
FRONT DRUM: (HOIST LINE)	1" (26 mm) WIRE ROPE - 8 LAYERS - 1,905' (581m)
REAR DRUM: (WHIP LINE)	1" (26 mm) WIRE ROPE - 4 LAYERS - 1,103' (336m) WITH 27-5/8" (702 mm) DIA. LAGGING
17' (5m) (23' (7m) WITH 27-5/8" (702 mm) DIA. LAGGING) IS DEDUCTED FROM MAXIMUM SPOOLING CAPACITIES FOR 3 DEAD WRAPS PER DRUM OR LAGGING.	

REFER TO DRUM AND LAGGING CHART NO. 6109-A.

CHART NO. 6668-A, 8-28-91/GA