MANITOWOC ENGINEERING CO.
Division of the Manitowoc Company, Inc. Manitowoc, Wisconsin 54220

LIFTCRANE LUFFING JIB CONTAINER HANDLING CAPACITIES

DESIGNED AND TESTED WITH THE INTENT TO BE IN THE SCOPE OF ANSI B30.5

M-250 SERIES 2 SPECIAL

6 800 kg MINIMUM WEIGHT REQUIRED ON CAPACITIES INDICATED BY (b)

LUFFING JIB NO. 136
BOOM NO. 44 WITH HEAVY LIFT TOP
93 890 kg CRANE COUNTERWEIGHT
68 040 kg CARBODY COUNTERWEIGHT
360 DEGREE RATING

CAPACITIES FOR BOOM AND LUFFING JIB LENGTH, VARIOUS BOOM ANGLES AND LUFFING JIB OPERATING RADII ARE FOR FREELY SUSPENDED LOADS AND DO NOT EXCEED 75% OF A STATIC TIPPING LOAD. CAPACITIES BASED ON STRUCTURAL COMPETENCE ARE DENOTED BY AN ASTERISK (*). CAPACITIES INDICATED BY (b) REQUIRE 6 800 kg MINIMUM WEIGHT (BLOCK PLUS LOAD RIGGING) SUSPENDED FROM LUFFING JIB.

CAPACITIES ARE BASED ON USING TWO - 2 PART HOIST LINES WITH A MAXIMUM LOAD OF 27 220 kg ON EITHER BLOCK. TOTAL MAXIMUM ALLOWABLE LOAD IS 45 300 kg AND LIMITED TO TWO LAYERS OF ROPE.

WEIGHT OF ALL LOAD BLOCKS, HOOKS, WEIGHT BALL, SLINGS, CONTAINER HANDLING DEVICES, HOIST LINES, ETC., BENEATH BOOM AND LUFFING JIB POINT SHEAVES, IS CONSIDERED PART OF LUFFING JIB LOAD. BOOM AND LUFFING JIB ARE NOT TO BE LOWERED BEYOND RADII WHERE COMBINED WEIGHTS ARE GREATER THAN RATED CAPACITY. WHERE NO CAPACITY IS SHOWN, OPERATION IS NOT INTENDED OR APPROVED.

MACHINE TO OPERATE IN A LEVEL POSITION ON A FIRM UNIFORMLY SUPPORTING SURFACE WITH GANTRY UP. REFER TO LUFFING JIB ASSEMBLY NO. 177438, WIRE ROPE SPECIFICATION CHART NO. 7881-A, LUFFING JIB RAISING PROCEDURE CHART NO. 7878-A AND COUNTERWEIGHT ARRANGEMENT CHART NO. 7692-A. CRANE OPERATOR JUDGMENT MUST BE USED TO ALLOW FOR DYNAMIC LOAD EFFECTS OF SWINGING, HOISTING OR LOWERING, TRAVEL, WIND CONDITIONS, AS WELL AS ADVERSE OPERATING CONDITIONS AND PHYSICAL MACHINE DEPRECIATION.

MACHINE MAY BE OPERATED IN WINDS UP TO 13 m/s PROVIDED CRANE OPERATOR JUDGMENT IS USED TO ALLOW FOR WIND EFFECT ON LIFTED LOAD AND OTHER CONSIDERATIONS NOTED ON CAPACITY CHART ARE FOLLOWED. WIND WILL HAVE A CONSIDERABLE EFFECT ON A LOAD WITH A LARGE 'SAIL AREA' AND MUST BE COMPENSATED FOR ACCORDINGLY BY REDUCING LOAD RATINGS, REDUCING OPERATING SPEEDS OR BY A COMBINATION OF BOTH. RECOMMEND STOPPING OPERATION WHEN WIND IS ABOVE 13 m/s. LOWER BOOM AND LUFFING JIB TO GROUND WHEN WIND IS ABOVE 22 m/s.

MACHINE TO TRAVEL ON A FIRM, LEVEL AND UNIFORMLY SUPPORTING SURFACE WITH BOOM AND LUFFING JIB WITHIN ANGLE RANGE SHOWN IN CAPACITY CHART.

OPERATING RADIUS IS HORIZONTAL DISTANCE FROM AXIS OF ROTATION TO CENTER OF VERTICAL HOIST LINE OR LOAD BLOCK. BOOM ANGLE IS ANGLE BETWEEN HORIZONTAL AND CENTERLINE OF BOOM BUTT AND INSERTS. LUFFING JIB ANGLE IS ANGLE BETWEEN HORIZONTAL AND CENTERLINE OF LUFFING JIB BUTT AND INSERTS, AND IS AN INDICATION OF OPERATING RADIUS. IN ALL CASES, OPERATING RADIUS SHALL GOVERN CAPACITY. LUFFING JIB POINT ELEVATION IS VERTICAL DISTANCE FROM GROUND LEVEL TO CENTERLINE OF LUFFING JIB POINT SHAFT.

MACHINE EQUIPPED WITH 9 373 mm CRAWLERS, 1 219 mm TREADS, 8 534 mm RETRACTABLE GANTRY, 12 PART BOOM HOIST REEVING, FOUR 38 mm BOOM PENDANTS, 10 PART LUFFING JIB HOIST REEVING, TWO 45 mm LUFFING JIB PENDANTS AND BACKSTAYS, 93 890 kg CRANE COUNTERWEIGHT, TWO 13 610 kg AND FOUR 10 205 kg CARBODY COUNTERWEIGHTS.

LIFTCRANE LUFFING JIB CONTAINER HANDLING CAPACITIES

DESIGNED AND TESTED WITH THE INTENT TO BE IN THE SCOPE OF ANSI B30.5

M-250 SERIES 2 SPECIAL

6 800 kg MINIMUM WEIGHT REQUIRED ON CAPACITIES INDICATED BY (b)

LUFFING JIB NO. 136
BOOM NO. 44 WITH HEAVY LIFT TOP
93 890 kg CRANE COUNTERWEIGHT
68 040 kg CARBODY COUNTERWEIGHT
360 DEGREE RATING

24.4m (80 FT.) BOOM, 21.3m (70 FT.) LUFFING JIB

JIB OPER. RAD. m	88 DEGREE BOOM ANGLE			83 DEGREE BOOM ANGLE			80 DEGREE BOOM ANGLE			75 DEGREE BOOM ANGLE			70 DEGREE BOOM ANGLE			65 DEGREE BOOM ANGLE			60 DEGREE BOOM ANGLE			JIB OPER. RAD. m
	JIB ANG. DEG.	JIB POINT ELEV. m	LUFFING JIB CAPACITY kg	JIB ANG. DEG.	JIB POINT ELEV. m	LUFFING JIB CAPACITY kg	JIB ANG. DEG.	JIB POINT ELEV. m	LUFFING JIB CAPACITY kg	JIB ANG. DEG.	JIB POINT ELEV. m	LUFFING JIB CAPACITY kg	JIB ANG. DEG.	JIB POINT ELEV. m	LUFFING JIB CAPACITY kg	JIB ANG. DEG.	JIB POINT ELEV. m	LUFFING JIB CAPACITY kg	JIB ANG. DEG.	JIB POINT ELEV. m	LUFFING JIB CAPACITY kg	
8.5	75.8	48.2	45 300*b																			8.5
9.0	74.4	48.0	45 300*b																			9.0
10.0	71.6	47.7	45 300*b																			10.0
11.0	68.7	47.4	45 300*b																			11.0
12.0	65.8	46.9	45 300*b																			12.0
14.0	59.8	45.9	45 300*b	66.3	46.8	45 300*b																14.0
16.0	53.3	44.6	45 300*b	60.3	45.8	45 300*b	64.3	46.3	45 300*b													16.0
18.0	46.3	42.9	45 300*	53.9	44.5	45 300*b	58.1	45.2	45 300*b													18.0
20.0	38.3	40.7	42 900*	47.0	42.9	45 200*b	51.6	43.8	45 300*b	58.5	44.7	45 300*b										20.0
22.0	28.6	37.7	39 100*	39.1	40.7	43 600*	44.3	42.0	44 800*b	52.0	43.4	45 300*b										22.0
24.0	13.6	32.5	30 800*	29.6	37.8	39 600*	36.0	39.6	42 100*	44.8	41.6	45 300*	52.2	42.7	45 300*b							24.0
26.0							25.5	36.2	38 400*	36.6	39.3	42 200*	45.1	41.0	45 200	52.3	41.9	45 100b				26.0
28.0										26.2	36.0	38 700*	36.9	38.7	42 600	45.1	40.1	41 400				28.0
30.0													26.7	35.4	38 900	36.9	37.8	38 000				30.0
32.0													9.2	29.3	35 700*	26.7	34.6	35 100	36.6	36.7	34 200	32.0
34.0																			26.3	33.4	31 700	34.0