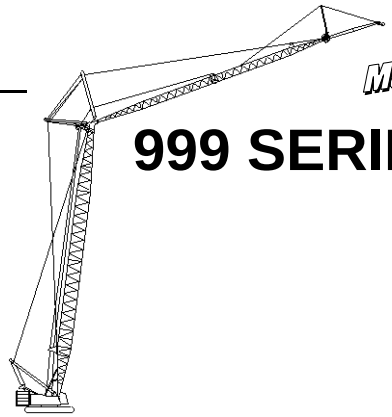
Manitowoc Cranes, Inc.
Manitowoc, Wisconsin 54220 U.S.A.

Liftcrane Luffing Jib Intermediate Fall Capacities



999 SERIES 2

New York City Code
Fixed Jib No. 134 At
5 Degree Offset Angle On
Luffing Jib No. 149 On
Boom No. 82
184,600 Lb. Crane Counterweight
44,000 Lb. Carbody Counterweight
360 Degree Rating

Designed And Tested With The Intent To Be In The Scope of ANSI B30.5

LIFTING CAPACITIES: Lifting capacities for various boom lengths, boom angles, luffing jib lengths, fixed jib lengths and intermediate fall operating radii are for freely suspended loads and do not exceed New York City criteria of 1.4 factor applied to total machine moment. Capacities based on structural competence are denoted by an asterisk (*).

Consult Luffing Jib Raising Procedure chart **No. 8422-B** for Maximum Number of Lower Boom Point Sheaves (Layout Jack-Knife Method table, column A).

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath intermediate fall is considered part of intermediate fall load. 3,900 Lbs. suspended beneath luffing jib point sheaves has been included in capacity determination. Fixed jib weight and 2,700 Lbs. suspended beneath fixed jib point also included in capacity determination. 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.

OPERATING CONDITIONS: Machine to operate on a firm uniformly supporting surface with gantry up and bearing turntable level within a tolerance of 1/2 in. in 10 Ft. and properly supported. During operation, boom must be maintained at one of the selected angles shown in chart. Refer to fixed jib assembly **No. 196404**, luffing jib assembly **No. A01031**, Wire Rope Specification chart **No. 8357-A** and Luffing Jib Raising Procedure chart **No. 8422-B**. 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. Refer to operators manual for operating guidelines.

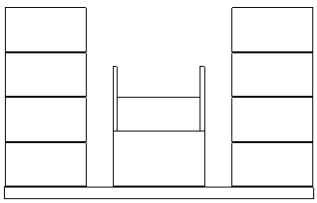
MACHINE TRAVEL: Machine to travel on a firm, level and uniformly supporting surface with boom and luffing jib within angle range shown in capacity chart. Refer to Maximum Allowable Travel Specification chart **No. 8360-B**.

OPERATING RADIUS: 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.

INTERMEDIATE FALL ELEVATION: Intermediate fall elevation is vertical distance from ground level to centerline of intermediate fall shaft.

MACHINE EQUIPMENT: Machine equipped with 28 Ft. 2 in. crawlers, 48 in. treads, 10 Ft. 3 in. retractable gantry, 30 Ft. live mast, 20 part boom hoist reeving, boom support straps, 9 part luffing jib hoist reeving, luffing jib straps, two 1-1/2 in. luffing jib backstay pendants, 184,600 Lb. crane counterweight and two 22,000 Lb. carbody counterweights.

Consult chart **No. 8417-A** for luffing jib capacities. Consult chart **No. 8352-A** for fixed jib on luffing jib capacities.



184,600 Lb. Crane Counterweight
8 Side Boxes - 1 Center Box

Manitowoc Cranes, Inc.
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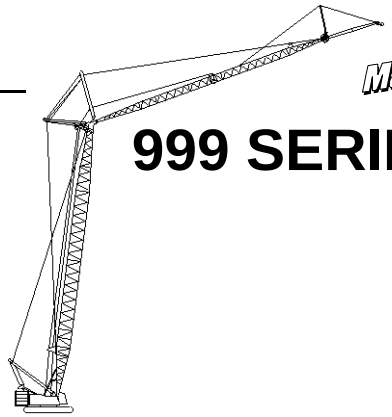


999 SERIES 2

Liftcrane Luffing Jib Intermediate Fall Capacities

New York City Code
Fixed Jib No. 134 At
5 Degree Offset Angle On
Luffing Jib No. 149 On
Boom No. 82
184,600 Lb. Crane Counterweight
44,000 Lb. Carbody Counterweight
360 Degree Rating

Designed And Tested With The Intent To Be In The Scope of ANSI B30.5

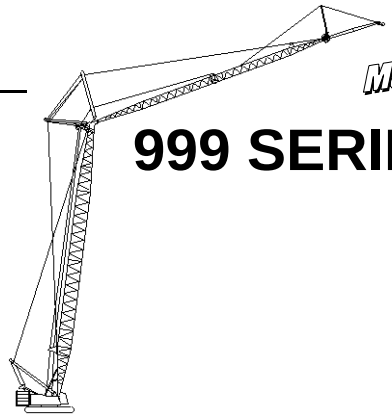
80 Ft. Boom, 170 Ft. Luffing Jib, 30 Ft. - 80 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			83 Degree Boom Angle			80 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
35	74.2	164.0	59,000*										35
40	70.3	162.3	49,800*	72.5	163.1	56,700*							40
45	66.4	160.1	40,600*	68.6	161.2	45,400*							45
50	62.4	157.6	33,800*	64.7	158.8	37,400*	68.0	160.3	43,900*				50
55	58.2	154.5	28,700*	60.5	156.1	31,500*	64.0	157.9	36,400*	67.3	159.2	42,500*	55
60	53.8	151.0	24,600*	56.2	152.8	26,900*	59.8	155.0	30,700*	63.3	156.7	35,300*	60
65	49.0	146.8	21,400*	51.7	149.0	23,200*	55.5	151.7	26,300*	59.1	153.8	29,900*	65
70	44.0	141.8	18,700*	46.8	144.4	20,200*	50.9	147.7	22,700*	54.7	150.3	25,700*	70
75	38.3	135.7	16,400*	41.5	139.0	17,700*	46.0	143.1	19,800*	50.1	146.2	22,300*	75
80	31.8	128.2	14,500*	35.6	132.4	15,600*	40.6	137.5	17,400*	45.1	141.4	19,500*	80
85	23.6	118.0	12,900*	28.5	123.9	13,800*	34.5	130.6	15,400*	39.6	135.6	15,300	85
90				18.9	111.6	10,800	27.1	121.6	10,800	33.3	128.5	10,600	90
95							16.8	108.2	6,500	25.6	119.0	6,500	95

80 Ft. Boom, 180 Ft. Luffing Jib, 30 Ft. - 80 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			83 Degree Boom Angle			80 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
35	76.0	174.5	59,000*										35
40	72.6	172.9	59,000*										40
45	69.2	171.1	51,500*	71.1	171.9	57,400*							45
50	65.7	168.8	43,100*	67.7	169.9	47,500*	70.5	171.1	55,500*				50
55	62.1	166.2	36,600*	64.1	167.5	40,100*	67.1	169.0	46,200*				55
60	58.4	163.2	31,600*	60.5	164.7	34,400*	63.5	166.6	39,100*	66.5	167.9	44,800*	60
65	54.5	159.7	27,500*	56.7	161.5	29,800*	59.9	163.7	33,700*	62.9	165.3	38,200*	65
70	50.4	155.7	24,200*	52.7	157.8	26,100*	56.0	160.4	29,200*	59.2	162.4	32,900*	70
75	46.0	151.0	21,300*	48.5	153.5	23,000*	52.0	156.6	25,600*	55.3	159.0	28,100	75
80	41.2	145.5	19,000*	43.9	148.5	20,300*	47.7	152.2	22,600*	51.3	155.1	22,300	80
85	36.0	138.9	16,900*	39.0	142.5	18,100*	43.1	147.0	17,700	47.0	150.6	17,200	85
90	29.8	130.8	13,800	33.4	135.3	13,600	38.1	140.9	13,100	42.3	145.3	12,700	90
95	22.2	119.9	9,600	26.7	126.2	9,400	32.3	133.4	9,100	37.1	139.0	8,700	95
100				17.7	113.1	5,600	25.4	123.8	5,400	31.2	131.2	5,000	100

Manitowoc Cranes, Inc.
Manitowoc, Wisconsin 54220 U.S.A.



999 SERIES 2

Liftcrane Luffing Jib Intermediate Fall Capacities

New York City Code
Fixed Jib No. 134 At
5 Degree Offset Angle On
Luffing Jib No. 149 On
Boom No. 82
184,600 Lb. Crane Counterweight
44,000 Lb. Carbody Counterweight
360 Degree Rating

Designed And Tested With The Intent To Be In The Scope of ANSI B30.5

80 Ft. Boom, 190 Ft. Luffing Jib, 30 Ft. - 80 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			83 Degree Boom Angle			80 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
35	74.2	164.0	58,700*										35
40	70.3	162.3	46,200*	72.5	163.1	52,500*							40
45	66.4	160.1	37,600*	68.6	161.2	42,100*							45
50	62.4	157.6	31,300*	64.7	158.8	34,600*	68.0	160.3	40,700*				50
55	58.2	154.5	26,500*	60.5	156.1	29,100*	64.0	157.9	33,700*	67.3	159.2	39,400*	55
60	53.8	151.0	22,800*	56.2	152.8	24,800*	59.8	155.0	28,400*	63.3	156.7	32,700*	60
65	49.0	146.8	19,700*	51.7	149.0	21,400*	55.5	151.7	24,300*	59.1	153.8	27,700*	65
70	44.0	141.8	17,200*	46.8	144.4	18,600*	50.9	147.7	21,000*	54.7	150.3	23,800*	70
75	38.3	135.7	15,100*	41.5	139.0	16,300*	46.0	143.1	18,300*	50.1	146.2	20,300	75
80	31.8	128.2	13,400*	35.6	132.4	14,200	40.6	137.5	14,200	45.1	141.4	14,300	80
85	23.6	118.0	8,500	28.5	123.9	8,700	34.5	130.6	8,900	39.6	135.6	9,000	85
90							27.1	121.6	4,100	33.3	128.5	4,200	90
95							16.8	108.2	8,800*				95

80 Ft. Boom, 200 Ft. Luffing Jib, 30 Ft. - 80 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			83 Degree Boom Angle			80 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
35	76.0	174.5	59,000*										35
40	72.6	172.9	58,000*										40
45	69.2	171.1	47,400*	71.1	171.9	52,900*							45
50	65.7	168.8	39,700*	67.7	169.9	43,800*	70.5	171.1	51,200*				50
55	62.1	166.2	33,700*	64.1	167.5	36,900*	67.1	169.0	42,600*				55
60	58.4	163.2	29,100*	60.5	164.7	31,600*	63.5	166.6	36,100*	66.5	167.9	41,400*	60
65	54.5	159.7	25,300*	56.7	161.5	27,400*	59.9	163.7	31,000*	62.9	165.3	35,200*	65
70	50.4	155.7	22,200*	52.7	157.8	23,900*	56.0	160.4	26,900*	59.2	162.4	29,500	70
75	46.0	151.0	19,600*	48.5	153.5	21,100*	52.0	156.6	22,900	55.3	159.0	22,500	75
80	41.2	145.5	17,300	43.9	148.5	17,100	47.7	152.2	16,900	51.3	155.1	16,600	80
85	36.0	138.9	12,000	39.0	142.5	11,800	43.1	147.0	11,600	47.0	150.6	11,400	85
90	29.8	130.8	7,200	33.4	135.3	7,200	38.1	140.9	7,000	42.3	145.3	6,800	90

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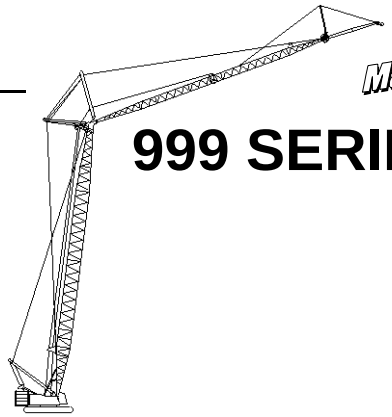

999 SERIES 2

Liftcrane Luffing Jib Intermediate Fall Capacities

New York City Code
Fixed Jib No. 134 At
5 Degree Offset Angle On
Luffing Jib No. 149 On
Boom No. 82
184,600 Lb. Crane Counterweight
44,000 Lb. Carbody Counterweight
360 Degree Rating

Designed And Tested With The Intent To Be In The Scope of ANSI B30.5

80 Ft. Boom, 210 Ft. Luffing Jib, 30 Ft. - 80 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			83 Degree Boom Angle			80 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
40	74.4	183.4	59,000*										40
45	71.4	181.8	53,400*	73.1	182.5	58,400*							45
50	68.3	179.8	46,000*	70.0	180.7	49,900*							50
55	65.2	177.5	39,500*	66.9	178.6	43,100*	69.5	179.9	48,700*				55
60	61.9	174.9	34,200*	63.7	176.2	37,100*	66.4	177.7	42,100*				60
65	58.5	171.9	29,800*	60.4	173.4	32,300*	63.2	175.2	36,300*	65.8	176.6	39,200	65
70	55.1	168.5	26,300*	57.0	170.2	28,300*	59.9	172.4	31,700*	62.6	174.0	31,200	70
75	51.4	164.6	23,300*	53.5	166.6	25,000*	56.4	169.1	24,900	59.3	171.1	24,300	75
80	47.6	160.1	19,800	49.7	162.4	19,400	52.9	165.4	19,000	55.8	167.8	18,400	80
85	43.4	155.0	14,500	45.8	157.7	14,200	49.1	161.2	13,800	52.2	164.0	13,300	85
90	39.0	149.0	9,900	41.5	152.2	9,600	45.1	156.3	9,200	48.4	159.6	8,800	90
95	34.0	141.9	5,800	36.8	145.8	5,600	40.8	150.7	5,200	44.3	154.7	4,800	95

Manitowoc Cranes, Inc.
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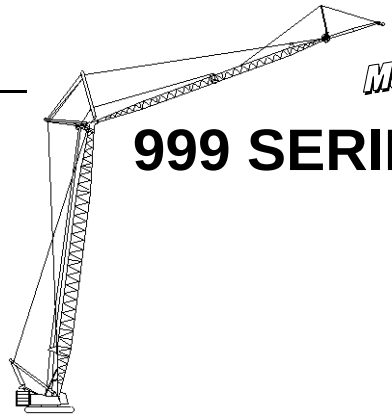

999 SERIES 2

Liftcrane Luffing Jib Intermediate Fall Capacities

New York City Code
Fixed Jib No. 134 At
5 Degree Offset Angle On
Luffing Jib No. 149 On
Boom No. 82
184,600 Lb. Crane Counterweight
44,000 Lb. Carbody Counterweight
360 Degree Rating

Designed And Tested With The Intent To Be In The Scope of ANSI B30.5

120 Ft. Boom, 170 Ft. Luffing Jib, 30 Ft. - 80 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			83 Degree Boom Angle			80 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
35	75.2	204.4	59,000*										35
40	71.4	202.8	53,800*										40
45	67.5	200.8	43,300*	70.8	202.2	51,900*							45
50	63.5	198.3	35,800*	66.9	200.1	42,000*							50
55	59.4	195.4	30,100*	62.9	197.6	34,900*	67.9	199.9	44,300*				55
60	55.0	192.0	25,700*	58.7	194.6	29,400*	63.9	197.5	36,600*				60
65	50.4	188.0	22,200*	54.3	191.1	25,200*	59.7	194.7	30,800*	64.8	197.1	38,400*	65
70	45.4	183.2	19,300*	49.6	187.0	21,800*	55.4	191.3	26,300*	60.7	194.4	32,200*	70
75	40.0	177.5	16,900*	44.6	182.1	19,000*	50.8	187.3	22,700*	56.4	191.1	25,900	75
80	33.7	170.4	14,900*	39.0	176.1	16,700*	45.9	182.6	19,800*	51.9	187.3	20,000	80
85	26.2	161.2	13,200*	32.6	168.8	14,700*	40.4	177.0	15,500	47.1	182.8	14,900	85
90	15.2	146.8	11,300	24.7	159.0	11,300	34.3	170.1	10,900	41.8	177.4	10,400	90
95				12.4	142.7	6,800	26.9	161.1	6,700	35.9	170.8	6,300	95

120 Ft. Boom, 180 Ft. Luffing Jib, 30 Ft. - 80 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			83 Degree Boom Angle			80 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
40	73.6	213.4	59,000*										40
45	70.2	211.6	55,000*	73.0	212.8	59,000*							45
50	66.7	209.5	45,600*	69.6	211.0	53,300*							50
55	63.1	207.0	38,500*	66.1	208.8	44,400*	70.5	210.7	56,100*				55
60	59.4	204.1	33,000*	62.5	206.2	37,700*	67.0	208.6	46,600*				60
65	55.6	200.7	28,600*	58.8	203.3	32,400*	63.4	206.2	39,400*	67.8	208.1	41,700	65
70	51.5	196.9	25,000*	54.9	199.8	28,100*	59.8	203.3	33,800*	64.3	205.8	33,800	70
75	47.2	192.4	22,000*	50.9	195.9	24,600*	55.9	200.0	28,400	60.7	203.0	27,100	75
80	42.6	187.1	19,400*	46.5	191.3	21,700*	51.9	196.2	22,500	56.9	199.8	21,400	80
85	37.5	180.9	17,300*	41.8	185.9	18,300	47.6	191.7	17,400	52.9	196.1	16,400	85
90	31.7	173.2	14,300	36.6	179.4	13,700	43.0	186.6	12,900	48.7	191.8	11,900	90
95	24.6	163.3	10,000	30.6	171.5	9,600	38.0	180.4	8,800	44.2	186.8	8,000	95
100	14.2	147.9	6,100	23.2	161.0	5,800	32.2	172.9	5,200	39.2	180.9	4,500	100

Manitowoc Cranes, Inc.
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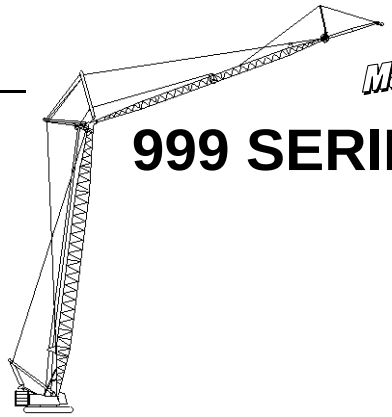


999 SERIES 2

Liftcrane Luffing Jib Intermediate Fall Capacities

New York City Code
Fixed Jib No. 134 At
5 Degree Offset Angle On
Luffing Jib No. 149 On
Boom No. 82
184,600 Lb. Crane Counterweight
44,000 Lb. Carbody Counterweight
360 Degree Rating

Designed And Tested With The Intent To Be In The Scope of ANSI B30.5

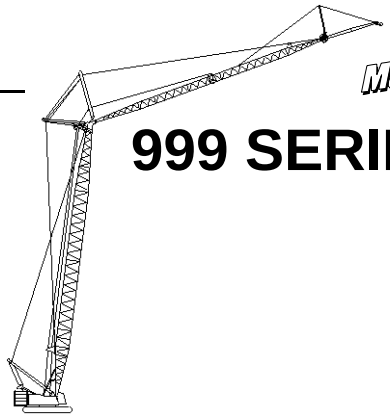
120 Ft. Boom, 190 Ft. Luffing Jib, 30 Ft. - 80 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			83 Degree Boom Angle			80 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
35	75.2	204.4	59,000*										35
40	71.4	202.8	49,800*										40
45	67.5	200.8	40,100*	70.8	202.2	48,100*							45
50	63.5	198.3	33,100*	66.9	200.1	38,900*							50
55	59.4	195.4	27,800*	62.9	197.6	32,300*	67.9	199.9	41,100*				55
60	55.0	192.0	23,700*	58.7	194.6	27,200*	63.9	197.5	33,900*				60
65	50.4	188.0	20,500*	54.3	191.1	23,300*	59.7	194.7	28,500*	64.8	197.1	35,600*	65
70	45.4	183.2	17,800*	49.6	187.0	20,100*	55.4	191.3	24,400*	60.7	194.4	27,400	70
75	40.0	177.5	15,600*	44.6	182.1	17,500*	50.8	187.3	20,700	56.4	191.1	20,400	75
80	33.7	170.4	13,700*	39.0	176.1	14,700	45.9	182.6	14,600	51.9	187.3	14,400	80
85	26.2	161.2	9,200	32.6	168.8	9,300	40.4	177.0	9,300	47.1	182.8	9,100	85
90	15.2	146.8	4,200	24.7	159.0	4,400	34.3	170.1	4,500	41.8	177.4	4,500	90

120 Ft. Boom, 200 Ft. Luffing Jib, 30 Ft. - 80 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			83 Degree Boom Angle			80 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
40	73.6	213.4	59,000*										40
45	70.2	211.6	50,600*	73.0	212.8	59,000*							45
50	66.7	209.5	41,900*	69.6	211.0	49,100*							50
55	63.1	207.0	35,400*	66.1	208.8	40,900*	70.5	210.7	51,700*				55
60	59.4	204.1	30,300*	62.5	206.2	34,700*	67.0	208.6	42,900*				60
65	55.6	200.7	26,200*	58.8	203.3	29,800*	63.4	206.2	36,300*	67.8	208.1	37,000	65
70	51.5	196.9	22,900*	54.9	199.8	25,800*	59.8	203.3	29,800	64.3	205.8	28,900	70
75	47.2	192.4	20,100*	50.9	195.9	22,600*	55.9	200.0	22,800	60.7	203.0	22,100	75
80	42.6	187.1	17,800*	46.5	191.3	17,500	51.9	196.2	16,800	56.9	199.8	16,200	80
85	37.5	180.9	12,500	41.8	185.9	12,200	47.6	191.7	11,600	52.9	196.1	11,100	85
90	31.7	173.2	7,800	36.6	179.4	7,500	43.0	186.6	7,100	48.7	191.8	6,500	90

Manitowoc Cranes, Inc.
Manitowoc, Wisconsin 54220 U.S.A.



999 SERIES 2

Liftcrane Luffing Jib Intermediate Fall Capacities

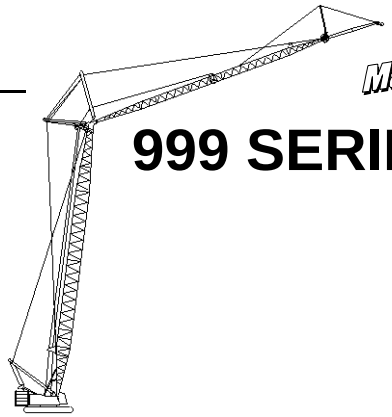
New York City Code
Fixed Jib No. 134 At
5 Degree Offset Angle On
Luffing Jib No. 149 On
Boom No. 82
184,600 Lb. Crane Counterweight
44,000 Lb. Carbody Counterweight
360 Degree Rating

Designed And Tested With The Intent To Be In The Scope of ANSI B30.5

120 Ft. Boom, 210 Ft. Luffing Jib, 30 Ft. - 80 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			83 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
40	75.3	223.8	59,000*							40
45	72.3	222.2	56,400*							45
50	69.2	220.4	48,400*	71.8	221.6	55,000*				50
55	66.0	218.2	41,500*	68.7	219.7	47,300*				55
60	62.8	215.6	35,600*	65.5	217.5	40,600*	69.4	219.5	49,100*	60
65	59.5	212.7	31,000*	62.3	214.9	35,000*	66.3	217.3	39,500	65
70	56.1	209.4	27,100*	58.9	211.9	30,500*	63.1	214.9	31,400	70
75	52.5	205.7	23,900*	55.5	208.6	25,600	59.8	212.0	24,600	75
80	48.7	201.4	20,200	51.8	204.7	19,600	56.3	208.7	18,700	80
85	44.6	196.5	15,000	48.0	200.3	14,400	52.8	205.0	13,500	85
90	40.3	190.8	10,300	43.9	195.3	9,800	49.0	200.8	9,000	90
95	35.4	184.0	6,200	39.5	189.4	5,700	45.0	195.9	5,000	95

Manitowoc Cranes, Inc.
Manitowoc, Wisconsin 54220 U.S.A.



999 SERIES 2

Liftcrane Luffing Jib Intermediate Fall Capacities

New York City Code
Fixed Jib No. 134 At
5 Degree Offset Angle On
Luffing Jib No. 149 On
Boom No. 82
184,600 Lb. Crane Counterweight
44,000 Lb. Carbody Counterweight
360 Degree Rating

Designed And Tested With The Intent To Be In The Scope of ANSI B30.5

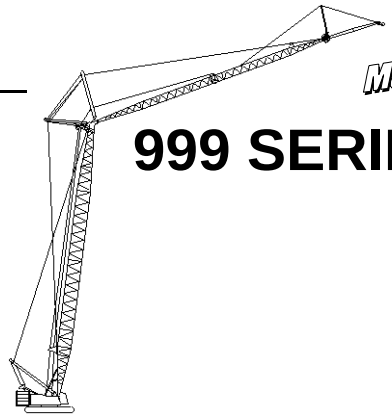
160 Ft. Boom, 170 Ft. Luffing Jib, 30 Ft. - 80 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			83 Degree Boom Angle			80 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
40	72.5	243.3	58,700*										40
45	68.6	241.3	46,600*	72.9	243.1	59,000*							45
50	64.7	239.0	38,100*	69.1	241.2	48,000*							50
55	60.5	236.3	31,800*	65.1	238.9	39,200*							55
60	56.3	233.0	27,000*	61.0	236.2	32,700*	67.8	239.6	45,100*				60
65	51.7	229.1	23,100*	56.8	233.0	27,700*	63.8	237.2	37,100*				65
70	46.9	224.6	20,100*	52.2	229.3	23,700*	59.6	234.3	31,200*	66.4	237.4	31,300	70
75	41.5	219.2	17,500*	47.4	224.8	20,600*	55.3	230.9	26,100	62.4	234.9	24,600	75
80	35.6	212.6	15,400*	42.2	219.5	17,900*	50.7	226.9	20,200	58.1	231.8	18,800	80
85	28.5	204.1	13,600*	36.3	213.0	15,700*	45.7	222.2	15,000	53.7	228.2	13,800	85
90	18.9	191.8	11,800	29.4	204.8	11,400	40.3	216.6	10,500	49.0	224.0	9,400	90
95				20.3	193.2	7,100	34.1	209.6	6,400	43.9	219.0	5,500	95

160 Ft. Boom, 180 Ft. Luffing Jib, 30 Ft. - 80 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			83 Degree Boom Angle			80 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
40	74.5	253.8	59,000*										40
45	71.1	252.1	59,000*										45
50	67.7	250.1	48,500*	71.5	251.9	59,000*							50
55	64.1	247.7	40,600*	68.1	249.9	49,900*							55
60	60.5	244.9	34,600*	64.6	247.6	41,800*	70.4	250.4	51,500				60
65	56.7	241.7	29,800*	60.9	244.9	35,500*	66.9	248.3	42,000				65
70	52.7	238.0	25,900*	57.1	241.7	30,600*	63.3	245.8	34,100				70
75	48.5	233.7	22,700*	53.2	238.1	26,600*	59.7	243.0	27,400	65.7	246.1	25,400	75
80	43.9	228.6	20,000*	49.0	233.8	23,300*	55.8	239.6	21,600	62.1	243.5	19,800	80
85	39.0	222.7	17,700*	44.5	228.9	18,200	51.8	235.8	16,600	58.4	240.5	14,900	85
90	33.4	215.5	14,500	39.6	223.1	13,600	47.5	231.3	12,100	54.5	237.0	10,600	90
95	26.7	206.4	10,300	34.1	216.0	9,500	42.9	226.1	8,200	50.3	233.0	6,800	95
100	17.7	193.3	6,400	27.6	207.2	5,800	37.8	219.9	4,700				100

Manitowoc Cranes, Inc.
Manitowoc, Wisconsin 54220 U.S.A.



999 SERIES 2

Liftcrane Luffing Jib Intermediate Fall Capacities

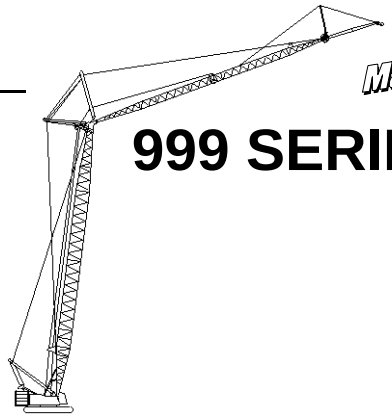
New York City Code
Fixed Jib No. 134 At
5 Degree Offset Angle On
Luffing Jib No. 149 On
Boom No. 82
184,600 Lb. Crane Counterweight
44,000 Lb. Carbody Counterweight
360 Degree Rating

Designed And Tested With The Intent To Be In The Scope of ANSI B30.5

160 Ft. Boom, 190 Ft. Luffing Jib, 30 Ft. - 80 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			83 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
40	72.5	243.3	54,300*							40
45	68.6	241.3	43,100*	72.9	243.1	56,200*				45
50	64.7	239.0	35,200*	69.1	241.2	44,500*				50
55	60.5	236.3	29,400*	65.1	238.9	36,300*				55
60	56.3	233.0	24,900*	61.0	236.2	30,200*	67.8	239.6	41,800*	60
65	51.7	229.1	21,300*	56.8	233.0	25,600*	63.8	237.2	34,400*	65
70	46.9	224.6	18,400*	52.2	229.3	21,900*	59.6	234.3	27,500	70
75	41.5	219.2	16,100*	47.4	224.8	18,900*	55.3	230.9	20,500	75
80	35.6	212.6	14,100*	42.2	219.5	15,000	50.7	226.9	14,400	80
85	28.5	204.1	9,700	36.3	213.0	9,600	45.7	222.2	9,200	85
90	18.9	191.8	4,700	29.4	204.8	4,800	40.3	216.6	4,500	90

Manitowoc Cranes, Inc.
Manitowoc, Wisconsin 54220 U.S.A.



999 SERIES 2

Liftcrane Luffing Jib Intermediate Fall Capacities

New York City Code
Fixed Jib No. 134 At
5 Degree Offset Angle On
Luffing Jib No. 149 On
Boom No. 82
184,600 Lb. Crane Counterweight
44,000 Lb. Carbody Counterweight
360 Degree Rating

Designed And Tested With The Intent To Be In The Scope of ANSI B30.5

160 Ft. Boom, 200 Ft. Luffing Jib
30 Ft. - 80 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
40	74.5	253.8	59,000*				40
45	71.1	252.1	54,300*				45
50	67.7	250.1	44,600*	71.5	251.9	55,900*	50
55	64.1	247.7	37,400*	68.1	249.9	45,900*	55
60	60.5	244.9	31,800*	64.6	247.6	38,400*	60
65	56.7	241.7	27,300*	60.9	244.9	32,600*	65
70	52.7	238.0	23,700*	57.1	241.7	28,100*	70
75	48.5	233.7	20,800*	53.2	238.1	23,500	75
80	43.9	228.6	18,200	49.0	233.8	17,500	80
85	39.0	222.7	12,800	44.5	228.9	12,200	85
90	33.4	215.5	8,100	39.6	223.1	7,600	90

160 Ft. Boom, 210 Ft. Luffing Jib
30 Ft. - 70 Ft. Fixed Jib

Int. Fall Oper. Rad. Feet	88 Degree Boom Angle			86 Degree Boom Angle			Int. Fall Oper. Rad. Feet
	Jib Angle Degrees	Intermediate Fall		Jib Angle Degrees	Intermediate Fall		
		Elev. Feet	Capacity Pounds		Elev. Feet	Capacity Pounds	
45	73.1	262.7	59,000*				45
50	70.0	260.9	51,100*	73.4	262.5	59,000*	50
55	66.9	258.8	43,700*	70.4	260.7	52,100*	55
60	63.7	256.4	37,300*	67.3	258.7	44,800*	60
65	60.4	253.6	32,200*	64.1	256.3	38,300*	65
70	57.0	250.4	28,100*	60.8	253.5	32,400	70
75	53.5	246.8	24,600*	57.4	250.4	25,500	75
80	49.7	242.6	20,500	53.9	246.8	19,500	80
85	45.8	237.9	15,200	50.2	242.8	14,300	85
90	41.5	232.4	10,600	46.2	238.1	9,700	90
95	36.8	226.0	6,400	42.0	232.7	5,700	95