

MANITOWOC ENGINEERING CO.

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



LIFTCRANE BOOM CAPACITIES

3950W VICON

BOOM NO. 39 WITH OPEN THROAT TOP
102,400 LB. COUNTERWEIGHT
24' CRAWLERS EXTENDED
CRAWLER MACHINE ON A BARGE
0 DEGREE THRU 3 DEGREE MACHINE LIST

CAPACITIES ARE FOR A CRAWLER MACHINE WHEN OPERATING ON A BARGE. MACHINE SHALL BE POSITIVELY SECURED TO PREVENT SHIFTING. CAPACITIES FOR VARIOUS BOOM LENGTHS AND 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 (*).

UPPER BOOM POINT CAPACITY FOR LIFTCRANE SERVICE WITH SINGLE PART WHIP LINE OR COMBINATION OF TWO SINGLE PART LINES IS 22,500 LBS. IN ALL CASES, UPPER BOOM POINT CAPACITIES CANNOT EXCEED THOSE LISTED FOR MAIN BOOM CAPACITY.

WEIGHT OF ALL LOAD BLOCKS, HOOKS, WEIGHT BALL, SLINGS, HOIST LINES, ETC., BENEATH BOOM POINT SHEAVES, IS CONSIDERED PART OF MAIN BOOM LOAD. BOOM IS 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 ON A FIRM UNIFORMLY SUPPORTING SURFACE WITH CRAWLERS FULLY EXTENDED, GANTRY UP AND MACHINE LIST NOT TO EXCEED DEGREES NOTED. REFER TO BOOM RIGGING NO. 160926 AND WIRE ROPE SPECIFICATION CHART NO. 6668-A. CRANE OPERATOR JUDGMENT MUST BE USED TO ALLOW FOR DYNAMIC LOAD EFFECTS OF SWINGING, HOISTING OR LOWERING, WIND CONDITIONS, AS WELL AS ADVERSE OPERATING CONDITIONS AND PHYSICAL MACHINE DEPRECIATION.

OPERATING RADIUS IS HORIZONTAL DISTANCE FROM AXIS OF ROTATION AT BARGE DECK TO CENTER OF GRAVITY OF FREELY SUSPENDED LOAD. BOOM ANGLE IS ANGLE ABOVE TRUE HORIZONTAL OF A LINE DRAWN THROUGH BOOM HINGE PIN AND BOOM POINT SHAFT CENTERLINE AND IS AN INDICATION OF OPERATING RADIUS. IN ALL CASES, OPERATING RADIUS SHALL GOVERN CAPACITY. BOOM POINT ELEVATION IS VERTICAL DISTANCE FROM BARGE DECK TO CENTERLINE OF BOOM POINT SHAFT.

MACHINE EQUIPPED WITH 24' EXTENDIBLE CRAWLERS, 48" TREADS, 16'6" RETRACTABLE GANTRY, 12 PART BOOM HOIST REEVING, FOUR 1-1/4" BOOM PENDANTS, 1ST COUNTERWEIGHT = 43,000 LBS., 2ND COUNTERWEIGHT = 30,000 LBS., AND 3RD COUNTERWEIGHT = 29,400 LBS.

MAXIMUM BOOM LENGTHS LIFTED UNASSISTED		
LIST	OVER FRONT OF BLOCKED CRAWLERS	OVER SIDE OF EXTENDED CRAWLERS
	BOOM LENGTH	BOOM LENGTH
0 DEGREE	260'	240'
1 DEGREE	250'	240'
2 DEGREE	250'	240'
3 DEGREE	250'	240'
LOAD BLOCK, HOOK AND WEIGHT BALL ON BARGE AT START. JIB IS NOT TO BE USED ON CRAWLER MACHINE WHILE OPERATING ON A BARGE.		

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	BOOM CAPACITY 0 DEGREE LIST POUNDS	BOOM CAPACITY 1 DEGREE LIST POUNDS	BOOM CAPACITY 2 DEGREE LIST POUNDS	BOOM CAPACITY 3 DEGREE LIST POUNDS	OPER. RAD. FEET
70	16	80.1	76.0	300,000*	270,300*			16
	17	79.3	75.8	287,800*	258,100*	203,900*		17
	18	78.5	75.6	274,200*	247,000*	203,700*	160,500*	18
	19	77.6	75.4	261,800*	236,900*	203,400*	160,400*	19
	20	76.8	75.2	250,400*	227,500*	202,700*	160,200*	20
	22	75.1	74.7	230,200*	210,700*	185,600*	159,900*	22
	24	73.4	74.1	202,700	185,000	169,900	151,800*	24
	26	71.7	73.5	178,300	164,300	152,200	141,500	26
	28	69.9	72.8	159,000	147,700	137,700	128,800	28
	30	68.2	72.0	143,300	134,000	125,700	118,200	30
	32	66.4	71.2	130,400	122,600	115,500	109,100	32
	34	64.6	70.3	119,500	112,900	106,800	101,300	34
	36	62.8	69.3	110,200	104,500	99,300	94,500	36
	38	60.9	68.2	102,200	97,300	92,700	88,500	38
	40	59.1	67.0	95,200	90,900	86,900	83,100	40
	45	54.1	63.7	81,200	78,000	75,000	72,200	45
	50	48.9	59.8	70,500	68,100	65,800	63,700	50
	55	43.2	55.0	62,200	60,300	58,600	56,900	55
	60	36.9	49.0	55,400	54,000	52,700	51,300	60
	65	29.4	41.3	49,900	48,800	47,800	46,800	65
	70	19.5	30.3	45,300	44,500	43,800	43,000	70



LIFT CRANE BOOM CAPACITIES

3950W VICON

BOOM NO. 39 WITH OPEN THROAT TOP

102,400 LB. COUNTERWEIGHT

24' CRAWLERS EXTENDED

CRAWLER MACHINE ON A BARGE

0 DEGREE THRU 3 DEGREE MACHINE LIST

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	BOOM CAPACITY 0 DEGREE LIST POUNDS	BOOM CAPACITY 1 DEGREE LIST POUNDS	BOOM CAPACITY 2 DEGREE LIST POUNDS	BOOM CAPACITY 3 DEGREE LIST POUNDS	OPER. RAD. FEET
80	16	81.4	86.1	288,900*				16
	17	80.6	85.9	283,500*				17
	18	79.9	85.8	273,300*	242,800*			18
	19	79.2	85.6	260,900*	232,900*	194,000*		19
	20	78.5	85.4	249,500*	223,700*	193,800*	153,900*	20
	22	77.0	85.0	229,400*	207,400*	178,100*	153,600*	22
	24	75.5	84.5	202,400	182,600	154,500*	144,000*	24
	26	74.0	83.9	178,000	162,400	149,000	134,900*	26
	28	72.5	83.3	158,700	146,000	135,000	125,300	28
	30	71.0	82.7	143,000	132,600	123,300	115,100	30
	32	69.5	81.9	130,100	121,300	113,400	106,400	32
	34	68.0	81.2	119,200	111,700	105,000	98,900	34
	36	66.4	80.3	109,900	103,400	97,600	92,300	36
	38	64.8	79.4	101,900	96,300	91,100	86,400	38
	40	63.3	78.4	94,900	90,000	85,500	81,300	40
	45	59.2	75.7	80,800	77,200	73,800	70,600	45
	50	54.9	72.5	70,100	67,400	64,700	62,300	50
	55	50.4	68.6	61,800	59,600	57,500	55,600	55
	60	45.6	64.1	55,100	53,300	51,700	50,100	60
	65	40.3	58.8	49,500	48,200	46,800	45,600	65
90	70	34.4	52.2	44,900	43,800	42,800	41,700	70
	75	27.4	43.9	41,000	40,100	39,300	38,500	75
	80	16.2	32.0	37,600	37,000	36,400	35,700	80
	18	81.1	85.9	256,800*				18
	19	80.4	85.7	252,300*	215,400*			19
	20	79.6	85.6	248,000*	212,300*			20
	22	78.5	85.2	228,500*	204,100*	171,000*	146,500*	22
	24	77.2	84.8	202,200	180,300	158,300*	136,900*	24
	26	75.9	84.3	177,700	160,400	145,900	128,500*	26
	28	74.5	83.7	158,400	144,400	132,400	121,000*	28
	30	73.2	83.2	142,700	131,100	121,000	112,200	30
	32	71.9	82.5	129,800	120,000	111,400	103,800	32
	34	70.5	81.9	118,900	110,500	103,100	96,500	34
	36	69.2	81.1	109,600	102,400	95,900	90,100	36
	38	67.8	80.3	101,500	95,300	89,600	84,500	38
	40	66.4	89.5	94,500	89,000	84,000	79,500	40
	45	62.9	87.1	80,400	76,300	72,600	69,100	45
	50	58.3	84.4	69,800	66,600	63,700	60,900	50
	55	55.5	81.2	61,400	58,900	56,600	54,300	55
	60	51.5	77.5	54,700	52,700	50,800	49,000	60
100	65	47.3	73.2	49,100	47,500	46,000	44,500	65
	70	42.8	68.2	44,500	43,200	41,900	40,700	70
	75	37.9	62.3	40,600	39,500	38,400	37,400	75
	80	32.4	55.2	37,200	36,300	35,500	34,600	80
	85	25.8	46.2	34,300	33,600	32,900	32,200	85
	90	17.1	33.5	31,700	31,200	30,600	30,100	90
	19	81.4	105.9	244,100*				19
	20	80.8	105.7	240,100*				20
	22	79.6	105.4	227,100*	196,200*			22
	24	78.5	105.0	201,800	178,000	152,300*	130,300*	24
	26	77.3	104.6	177,400	158,500	141,900*	122,500*	26
	28	76.1	104.1	158,000	142,700	129,800	115,500*	28
	30	74.9	103.6	142,400	129,600	118,700	109,300*	30
	32	73.7	103.0	129,400	118,600	109,400	101,200	32
	34	72.5	102.4	118,500	109,300	101,300	94,200	34
	36	71.3	101.7	109,100	101,200	94,200	88,000	36
	38	70.1	101.0	101,100	94,200	88,100	82,500	38
	40	68.9	100.3	94,100	88,000	82,600	77,700	40
	45	65.8	98.2	80,000	75,500	71,300	67,500	45
	50	62.6	95.8	69,300	65,800	62,600	59,500	50
	55	59.3	93.0	60,900	58,100	55,500	53,100	55
	60	55.9	89.9	54,200	51,900	49,800	47,800	60
	65	52.4	86.2	48,600	46,800	45,100	43,400	65
	70	48.7	82.1	44,000	42,500	41,000	39,600	70
	75	44.8	77.4	40,100	38,800	37,600	36,400	75
	80	40.5	72.0	36,700	35,600	34,600	33,600	80
	85	35.9	65.6	33,800	32,900	32,000	31,200	85
	90	30.7	58.0	31,200	30,500	29,700	29,000	90
	95	24.5	48.5	28,900	28,300	27,700	27,200	95
	100	16.3	35.0	26,900	26,400	26,000	25,500	100

MANITOWOC ENGINEERING CO.

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



LIFTCRANE BOOM CAPACITIES

3950W VICON

BOOM NO. 39 WITH OPEN THROAT TOP

102,400 LB. COUNTERWEIGHT

24' CRAWLERS EXTENDED

CRAWLER MACHINE ON A BARGE

0 DEGREE THRU 3 DEGREE MACHINE LIST

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	BOOM CAPACITY 0 DEGREE LIST POUNDS	BOOM CAPACITY 1 DEGREE LIST POUNDS	BOOM CAPACITY 2 DEGREE LIST POUNDS	BOOM CAPACITY 3 DEGREE LIST POUNDS	OPER. RAD. FEET
1 1 0	22	80.6	115.5	185,800*				22
	24	79.5	115.2	180,200*	151,300*	131,100*		24
	26	78.5	114.8	174,900*	147,500*	128,100*	113,600*	26
	28	77.4	114.4	157,700	141,000	125,300*	110,400*	28
	30	75.3	113.9	142,000	128,200	116,500	104,600*	30
	32	75.3	113.4	129,000	117,300	107,400	98,800	32
	34	74.2	112.8	118,100	108,100	99,500	92,000	34
	36	73.1	112.2	108,700	100,100	92,600	86,000	36
	38	72.0	111.6	100,700	93,200	86,600	80,700	38
	40	70.9	110.9	93,700	87,100	81,200	75,900	40
	45	68.1	109.1	79,600	74,600	70,100	66,000	45
	50	65.3	106.9	68,900	65,000	61,500	58,200	50
	55	62.4	104.5	60,500	57,400	54,600	51,900	55
	60	59.4	101.7	53,700	51,200	48,900	46,800	60
	65	56.3	98.5	48,200	46,100	44,200	42,400	65
	70	53.1	95.0	43,500	41,800	40,200	38,700	70
	75	49.8	91.0	39,600	38,200	36,800	35,500	75
	80	46.3	86.5	36,200	35,000	33,800	32,700	80
	85	42.6	81.4	33,300	32,300	31,300	30,300	85
	90	38.6	75.6	30,700	29,800	29,000	28,200	90
1 2 0	95	34.2	68.8	28,400	27,700	27,000	26,300	95
	100	29.2	60.7	26,400	25,800	25,200	24,600	100
	105	23.3	50.6	24,600	24,100	23,600	23,100	105
	110	15.5	36.4	23,000	22,600	22,200	21,800	110
	22	81.4	125.6	178,400*				22
	24	80.4	125.3	173,000*	145,200*			24
	26	79.4	125.0	167,900*	141,500*	123,100*		26
	28	78.5	124.6	157,400	138,100*	120,400*	105,800*	28
	30	77.5	124.2	141,700	126,800	114,400	100,300*	30
	32	76.5	123.7	128,700	116,100	105,500	95,300*	32
	34	75.5	123.2	117,700	107,000	97,800	89,900	34
	36	74.5	122.7	108,400	99,100	91,100	84,100	36
	38	73.5	122.1	100,400	92,300	85,200	79,000	38
	40	72.5	121.5	93,400	86,200	79,900	74,300	40
	45	70.0	119.8	79,200	73,900	69,100	64,700	45
	50	67.5	117.8	68,500	64,300	60,600	57,100	50
	55	64.8	115.6	60,100	56,800	53,700	50,900	55
	60	62.2	113.1	53,400	50,700	48,200	45,800	60
	65	59.4	110.3	47,800	45,600	43,500	41,500	65
	70	56.6	107.2	43,200	41,300	39,500	37,900	70
	75	53.7	103.7	39,300	37,700	36,200	34,700	75
	80	50.7	99.9	35,900	34,500	33,200	32,000	80
	85	47.5	95.5	32,900	31,800	30,700	29,600	85
	90	44.2	90.7	30,400	29,400	28,400	27,500	90
	95	40.7	85.2	28,100	27,200	26,400	25,600	95
	100	36.9	79.0	26,000	25,300	24,600	23,900	100
	105	32.7	71.8	24,200	23,600	23,000	22,400	105
	110	28.0	63.3	22,600	22,000	21,500	21,000	110
	115	22.3	52.6	21,100	20,700	20,200	19,800	115

LIFTCRANE BOOM CAPACITIES

3950W VICON

BOOM NO. 39 WITH OPEN THROAT TOP

102,400 LB. COUNTERWEIGHT

24' CRAWLERS EXTENDED

CRAWLER MACHINE ON A BARGE

0 DEGREE THRU 3 DEGREE MACHINE LIST

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	BOOM CAPACITY 0 DEGREE LIST POUNDS	BOOM CAPACITY 1 DEGREE LIST POUNDS	BOOM CAPACITY 2 DEGREE LIST POUNDS	BOOM CAPACITY 3 DEGREE LIST POUNDS	OPER. RAD. FEET
130	24	81.2	135.5	167,900*				24
	26	80.3	135.1	163,000*	137,100*			26
	28	79.4	134.8	157,200	133,700*	116,600*		28
	30	78.5	134.4	141,500	125,600	112,500	96,400*	30
	32	77.6	134.0	128,500	115,000	103,800	91,700*	32
	34	76.7	133.5	117,500	106,000	96,300	87,400*	34
	36	75.7	133.0	108,200	98,200	89,700	82,400	36
	38	74.8	132.5	100,100	91,400	83,900	77,400	38
	40	73.9	131.9	93,100	85,500	78,800	72,900	40
	45	71.6	130.4	79,000	73,200	68,100	63,500	45
	50	69.3	128.6	68,300	63,800	59,700	56,100	50
	55	66.9	126.6	59,900	56,300	53,000	50,000	55
	60	64.5	124.3	53,100	50,200	47,500	45,000	60
	65	62.0	121.8	47,600	45,100	42,900	40,800	65
	70	59.5	119.0	42,900	40,900	39,000	37,200	70
	75	56.9	115.9	39,000	37,200	35,600	34,100	75
	80	54.2	112.5	35,600	34,100	32,700	31,400	80
	85	51.5	108.7	32,700	31,400	30,100	29,000	85
	90	48.6	104.5	30,100	29,000	27,900	26,900	90
	95	45.6	99.8	27,800	26,800	25,900	25,000	95
	100	42.4	94.7	25,800	24,900	24,100	23,300	100
	105	39.0	88.9	23,900	23,200	22,500	21,800	105
	110	35.4	82.3	22,300	21,700	21,000	20,400	110
	115	31.4	74.7	20,800	20,300	19,700	19,200	115
	120	26.8	65.7	19,500	19,000	18,500	18,100	120
	125	21.4	54.5	18,200	17,800	17,400	17,000	125
140	26	81.0	145.3	156,200*				26
	28	80.1	144.9	151,800*	129,300*			28
	30	79.3	144.6	141,200	124,200	109,900*		30
	32	78.5	144.2	128,200	113,800	102,100	88,200*	32
	34	77.6	143.8	117,200	105,000	94,700	84,100*	34
	36	76.8	143.3	107,900	97,300	88,300	80,400*	36
	38	75.9	142.8	99,800	90,500	82,600	75,800	38
	40	75.1	142.3	92,800	84,600	77,600	71,400	40
	45	73.0	140.9	78,600	72,500	67,000	62,200	45
	50	70.8	139.2	67,900	63,100	58,800	54,900	50
	55	68.6	137.4	59,500	55,700	52,200	49,000	55
	60	66.4	135.3	52,800	49,600	46,700	44,100	60
	65	64.2	133.0	47,200	44,600	42,200	39,900	65
	70	61.9	130.5	42,600	40,400	38,300	36,400	70
	75	59.5	127.7	38,600	36,700	35,000	33,300	75
	80	57.1	124.6	35,200	33,600	32,100	30,700	80
	85	54.6	121.2	32,300	30,900	29,600	28,300	85
	90	52.1	117.5	29,700	28,500	27,300	26,200	90
	95	49.5	113.4	27,400	26,400	25,300	24,400	95
	100	46.7	108.9	25,400	24,500	23,600	22,700	100
	105	43.8	104.0	23,600	22,700	21,900	21,200	105
	110	40.8	98.5	21,900	21,200	20,500	19,800	110
	115	37.5	92.3	20,400	19,800	19,200	18,600	115
	120	34.0	85.4	19,100	18,500	18,000	17,400	120
	125	30.2	77.4	17,900	17,400	16,900	16,400	125
	130	25.8	68.0	16,700	16,300	15,900	15,500	130
	135	20.7	56.4	15,700	15,300	15,000	14,600	135

MANITOWOC ENGINEERING CO.

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



LIFTCRANE BOOM CAPACITIES

3950W VICON

BOOM NO. 39 WITH OPEN THROAT TOP

102,400 LB. COUNTERWEIGHT

24' CRAWLERS EXTENDED

CRAWLER MACHINE ON A BARGE

0 DEGREE THRU 3 DEGREE MACHINE LIST

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	BOOM CAPACITY 0 DEGREE LIST POUNDS	BOOM CAPACITY 1 DEGREE LIST POUNDS	BOOM CAPACITY 2 DEGREE LIST POUNDS	BOOM CAPACITY 3 DEGREE LIST POUNDS	OPER. RAD. FEET
150	28	80.8	155.1	136,200*				28
	30	80.0	154.7	132,900*	108,400*			30
	32	79.2	154.4	127,800	106,200*	89,800*		32
	34	78.5	154.0	116,800	103,800	88,200*	76,700*	34
	36	77.7	153.6	107,500	96,200	86,700*	75,400*	36
	38	76.9	153.1	99,400	89,600	81,200	74,000*	38
	40	76.1	152.6	92,400	83,700	76,300	69,800	40
	45	74.1	151.3	78,200	71,700	65,900	60,900	45
	50	72.1	149.8	67,500	62,400	57,800	53,800	50
	55	70.1	148.1	59,100	55,000	51,300	48,000	55
	60	68.1	146.2	52,300	49,000	45,900	43,100	60
	65	66.0	144.0	46,800	44,000	41,400	39,000	65
	70	63.9	141.7	42,100	39,800	37,600	35,500	70
	75	61.7	139.1	38,200	36,200	34,300	32,500	75
	80	59.6	136.3	34,800	33,000	31,400	29,900	80
	85	57.3	133.3	31,800	30,300	28,900	27,600	85
	90	55.0	129.9	29,200	27,900	26,700	25,500	90
	95	52.7	126.2	27,000	25,800	24,700	23,600	95
	100	50.2	122.3	24,900	23,900	22,900	22,000	100
	105	47.7	117.9	23,100	22,200	21,300	20,500	105
160	110	45.0	113.1	21,500	20,700	19,900	19,100	110
	115	42.3	107.9	20,000	19,300	18,600	17,900	115
	120	39.3	102.1	18,600	18,000	17,400	16,800	120
	125	36.2	95.7	17,400	16,800	16,300	15,700	125
	130	32.9	88.4	16,300	15,800	15,300	14,800	130
	135	29.2	80.1	15,200	14,800	14,300	13,900	135
	140	25.0	70.3	14,200	13,900	13,500	13,100	140
	145	19.9	58.2	13,400	13,000	12,700	12,400	145
	28	81.4	165.2	131,600*				28
	30	80.6	164.9	128,500*				30
	32	79.9	164.5	125,500*	101,900*			32
	34	79.2	164.2	116,500	99,800*	84,500*		34
	36	78.5	163.8	107,100	95,200	83,100*	72,400*	36
	38	77.7	163.4	99,100	88,700	79,900	71,200*	38
	40	77.0	162.9	92,000	82,800	75,100	68,400*	40
	45	75.2	161.7	77,900	70,900	64,900	59,700	45
	50	73.3	160.3	67,100	61,700	56,900	52,700	50
	55	71.4	158.7	58,700	54,400	50,500	47,000	55
	60	69.5	156.9	52,000	48,400	45,200	42,200	60
	65	67.6	154.9	46,400	43,400	40,700	38,200	65
	70	65.6	152.8	41,700	39,200	36,900	34,800	70
	75	63.7	150.4	37,800	35,600	33,700	31,800	75
	80	61.6	147.8	34,400	32,500	30,800	29,200	80
	85	59.6	145.0	31,500	29,800	28,300	26,900	85
	90	57.5	141.9	28,900	27,400	26,100	24,800	90
	95	55.3	138.6	26,600	25,300	24,100	23,000	95
	100	53.1	135.0	24,500	23,400	22,400	21,400	100
	105	50.9	131.1	22,700	21,700	20,800	19,900	105
	110	48.5	126.9	21,100	20,200	19,400	18,500	110
	115	46.1	122.2	19,600	18,800	18,000	17,300	115
	120	43.5	117.2	18,200	17,500	16,900	16,200	120
	125	40.9	111.7	17,000	16,400	15,800	15,200	125
	130	38.0	105.6	15,900	15,300	14,700	14,200	130
	135	35.0	98.9	14,800	14,300	13,800	13,300	135
	140	31.8	91.3	13,900	13,400	13,000	12,500	140
	145	28.2	82.6	13,000	12,600	12,200	11,800	145
	150	24.1	72.5	12,100	11,800	11,400	11,100	150
	155	19.3	59.9	11,400	11,100	10,800	10,500	155



LIFT CRANE BOOM CAPACITIES

3950W VICON

BOOM NO. 39 WITH OPEN THROAT TOP

102,400 LB. COUNTERWEIGHT

24' CRAWLERS EXTENDED

CRAWLER MACHINE ON A BARGE

0 DEGREE THRU 3 DEGREE MACHINE LIST

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	BOOM CAPACITY 0 DEGREE LIST POUNDS	BOOM CAPACITY 1 DEGREE LIST POUNDS	BOOM CAPACITY 2 DEGREE LIST POUNDS	BOOM CAPACITY 3 DEGREE LIST POUNDS	OPER. RAD. FEET
170	30	61.2	175.0	122,700*				30
	32	60.5	174.7	119,800*	96,900*			32
	34	79.8	174.3	116,300	95,000*			34
	36	79.2	174.0	106,900	93,100*	79,200*		36
	38	78.5	173.6	98,900	87,900	77,800*	68,000*	38
	40	77.8	173.1	91,800	82,100	74,000	65,100*	40
	45	76.0	172.0	77,600	70,300	64,100	58,600	45
	50	74.3	170.7	66,900	61,200	56,200	51,800	50
	55	72.5	169.2	58,500	53,900	49,800	46,200	55
	60	70.8	167.5	51,700	48,000	44,600	41,500	60
	65	69.0	165.7	46,200	43,000	40,200	37,600	65
	70	67.2	163.7	41,500	38,800	36,400	34,200	70
	75	65.3	161.5	37,600	35,300	33,200	31,200	75
	80	63.4	159.1	34,200	32,200	30,400	28,700	80
	85	61.5	156.5	31,200	29,500	27,900	26,400	85
	90	59.6	153.6	28,600	27,100	25,700	24,400	90
	95	57.6	150.6	26,300	25,000	23,700	22,600	95
	100	55.6	147.3	24,300	23,100	22,000	20,900	100
	105	53.6	143.7	22,500	21,400	20,400	19,500	105
	110	51.4	139.9	20,800	19,900	19,000	18,100	110
180	115	49.2	135.8	19,300	18,500	17,700	16,900	115
	120	47.0	131.3	18,000	17,200	16,500	15,800	120
	125	44.6	126.4	16,800	16,100	15,400	14,800	125
	130	42.2	121.1	15,600	15,000	14,400	13,800	130
	135	39.6	115.4	14,600	14,000	13,500	12,900	135
	140	36.9	109.0	13,600	13,100	12,600	12,100	140
	145	34.0	102.0	12,700	12,300	11,800	11,400	145
	150	30.8	94.1	11,900	11,500	11,100	10,700	150
	155	27.3	85.1	11,100	10,700	10,400	10,000	155
	160	23.4	74.6	10,400	10,100	9,800	9,400	160
	165	18.7	61.6	9,700	9,400	9,200	8,900	165
	32	81.1	184.8	112,900*	91,100*			32
	34	80.4	184.5	110,400*	89,300*			34
	36	79.8	184.1	106,700	87,100	74,600*		36
	38	79.1	183.8	98,600	81,400	72,900	64,200*	38
	40	78.5	183.4	91,500	77,400	69,700	63,100	40
	45	76.8	182.3	77,400	66,600	60,600	55,400	45
	50	75.2	181.0	66,600	58,200	53,400	50,800	50
	55	73.5	179.6	58,200	51,400	47,500	45,300	55
	60	71.9	178.1	51,400	45,900	43,900	40,700	60
	65	70.2	176.4	45,900	41,200	39,500	36,800	65
	70	68.5	174.5	41,200	38,400	35,800	33,500	70
	75	66.8	172.4	37,200	34,800	32,600	30,600	75
	80	65.0	170.2	33,800	31,800	29,800	28,000	80
	85	63.3	167.8	30,900	29,100	27,400	25,800	85
	90	61.5	165.1	28,300	26,700	25,200	23,800	90
170	95	59.6	162.3	26,000	24,600	23,300	22,000	95
	100	57.8	159.3	24,000	22,700	21,500	20,400	100
	105	55.9	156.0	22,200	21,000	20,000	18,900	105
	110	53.9	152.5	20,500	19,500	18,500	17,600	110
	115	51.9	148.7	19,000	18,100	17,200	16,400	115
	120	49.9	144.5	17,700	16,800	16,100	15,300	120
	125	47.8	140.3	16,400	15,700	15,000	14,300	125
	130	45.6	135.6	15,300	14,600	14,000	13,300	130
	135	43.3	130.5	14,200	13,600	13,000	12,500	135
	140	40.9	124.9	13,300	12,700	12,200	11,700	140
	145	38.4	118.9	12,400	11,900	11,400	10,900	145
	150	35.8	112.3	11,600	11,100	10,700	10,200	150
	155	33.0	105.0	10,800	10,400	10,000	9,600	155
	160	29.9	96.8	10,100	9,700	9,300	9,000	160
	165	26.6	87.5	9,400	9,000	8,700	8,400	165
170	22.7	76.6	8,700	8,400	8,200	7,900	7,700	170
175	18.2	63.2	8,100	7,900	7,600	7,400	7,200	175

MANITOWOC ENGINEERING CO.

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



LIFTCRANE BOOM CAPACITIES

3950W VICON

BOOM NO. 39 WITH OPEN THROAT TOP

102,400 LB. COUNTERWEIGHT

24' CRAWLERS EXTENDED

CRAWLER MACHINE ON A BARGE

0 DEGREE THRU 3 DEGREE MACHINE LIST

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	BOOM CAPACITY 0 DEGREE LIST POUNDS	BOOM CAPACITY 1 DEGREE LIST POUNDS	BOOM CAPACITY 2 DEGREE LIST POUNDS	BOOM CAPACITY 3 DEGREE LIST POUNDS	OPER. RAD. FEET
190	34	80.9	194.6	102,700*				34
	36	80.3	194.3	100,600*	79,200*			36
	38	79.7	193.9	98,200	77,900*			38
	40	79.1	193.6	91,200	76,600*	63,600*		40
	45	77.5	192.5	77,000	68,900	61,300*	52,500*	45
	50	76.0	191.4	66,200	59,900	54,400	49,700	50
	55	74.4	190.0	57,800	52,700	48,300	44,300	55
	60	72.9	188.6	51,000	46,800	43,100	39,800	60
	65	71.3	186.9	45,400	41,900	38,800	36,000	65
	70	69.7	185.2	40,800	37,800	35,100	32,700	70
	75	68.1	183.2	36,800	34,300	32,000	29,800	75
	80	66.4	181.1	33,400	31,200	29,200	27,300	80
	85	64.8	178.9	30,500	28,500	26,800	25,100	85
	90	63.1	176.4	27,900	26,200	24,600	23,100	90
	95	61.4	173.8	25,600	24,100	22,700	21,400	95
	100	59.7	171.0	23,500	22,200	20,900	19,800	100
	105	57.9	167.9	21,700	20,500	19,400	18,300	105
	110	56.1	164.7	20,100	19,000	18,000	17,000	110
	115	54.3	161.2	18,600	17,600	16,700	15,800	115
	120	52.4	157.5	17,200	16,300	15,500	14,700	120
	125	50.4	153.5	16,000	15,200	14,400	13,700	125
	130	48.5	149.2	14,800	14,100	13,400	12,700	130
	135	46.4	144.6	13,800	13,100	12,500	11,900	135
	140	44.3	139.7	12,800	12,200	11,600	11,100	140
	145	42.1	134.4	11,900	11,400	10,800	10,300	145
200	150	39.8	128.6	11,100	10,600	10,100	9,600	150
	155	37.4	122.3	10,300	9,900	9,400	9,000	155
	160	34.8	115.5	9,600	9,200	8,800	8,400	160
	165	32.1	107.9	8,900	8,500	8,200	7,800	165
	170	29.1	99.4	8,300	7,900	7,600	7,300	170
	175	25.8	89.8	7,700	7,400	7,100	6,800	175
	180	22.1	78.6	7,100	6,800	6,600	6,300	180
	185	17.7	64.8	6,600	6,400	6,100	5,900	185
	34	81.4	204.7	97,600*				34
	36	80.8	204.4	95,700*				36
	38	80.2	204.1	93,800*	73,900*			38
	40	79.6	203.7	90,800	72,700*			40
	45	78.2	202.8	76,600	68,200	58,100*	48,900*	45
	50	76.7	201.6	65,600	59,200	53,600	48,100*	50
	55	75.2	200.4	57,400	52,100	47,500	43,400	55
	60	73.7	199.0	50,600	46,200	42,400	39,000	60
	65	72.2	197.5	45,000	41,400	38,100	35,200	65
	70	70.7	195.8	40,400	37,300	34,500	32,000	70
	75	69.2	194.0	36,400	33,800	31,300	29,100	75
	80	67.7	192.0	33,000	30,700	28,600	26,700	80
	85	66.1	189.9	30,100	28,000	26,200	24,500	85
	90	64.5	187.6	27,500	25,700	24,000	22,500	90
	95	62.9	185.1	25,200	23,600	22,100	20,800	95
	100	61.3	182.5	23,100	21,700	20,400	19,200	100
	105	59.7	179.6	21,300	20,100	18,900	17,700	105
	110	58.0	176.6	19,700	18,500	17,500	16,400	110
	115	56.3	173.4	18,200	17,100	16,200	15,200	115
	120	54.5	169.9	16,800	15,900	15,000	14,200	120
	125	52.8	166.3	15,600	14,700	13,900	13,100	125
	130	50.9	162.3	14,400	13,700	12,900	12,200	130
	135	49.1	158.1	13,400	12,700	12,000	11,400	135
	140	47.2	153.6	12,400	11,800	11,200	10,600	140
	145	45.2	148.8	11,500	10,900	10,400	9,800	145
	150	43.1	143.7	10,700	10,200	9,600	9,100	150
	155	41.0	138.2	9,900	9,400	8,900	8,500	155
	160	38.7	132.2	9,200	8,700	8,300	7,900	160
	165	36.4	125.7	8,500	8,100	7,700	7,300	165
	170	33.9	118.6	7,900	7,500	7,100	6,800	170
	175	31.2	110.7	7,300	6,900	6,600	6,300	175
	180	28.4	102.0	6,700	6,400	6,100	5,800	180
	185	25.2	92.1	6,200	5,900	5,600	5,300	185
	190	21.6	80.5	5,700	5,400	5,200	4,900	190
	195	17.3	66.3	5,200	5,000	4,800	4,600	195



LIFT CRANE BOOM CAPACITIES

3950W VICON

BOOM NO. 39 WITH OPEN THROAT TOP

102,400 LB. COUNTERWEIGHT

24' CRAWLERS EXTENDED

CRAWLER MACHINE ON A BARGE

0 DEGREE THRU 3 DEGREE MACHINE LIST

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	BOOM CAPACITY 0 DEGREE LIST POUNDS	BOOM CAPACITY 1 DEGREE LIST POUNDS	BOOM CAPACITY 2 DEGREE LIST POUNDS	BOOM CAPACITY 3 DEGREE LIST POUNDS	OPER. RAD. FEET
36	81.2	214.6	91,000*					36
38	80.7	214.2	89,200*					38
40	80.1	213.9	87,500*		69,100*			40
45	78.7	213.0	76,300		66,200*	55,300*		45
50	77.3	211.9	65,600		58,700	52,800	43,300*	50
55	75.9	210.7	57,100		51,600	46,800	42,600	55
60	74.5	209.4	50,400		45,800	41,800	38,300	60
65	73.1	208.0	44,800		41,000	37,600	34,500	65
70	71.7	206.4	40,100		36,900	34,000	31,400	70
75	70.2	204.6	36,200		33,400	30,800	28,600	75
80	68.8	202.8	32,700		30,300	28,100	26,100	80
85	67.3	200.8	29,800		27,700	25,700	23,900	85
90	65.8	198.6	27,200		25,300	23,600	22,000	90
95	64.3	196.3	24,900		23,200	21,700	20,300	95
100	62.8	193.8	22,900		21,400	20,000	18,700	100
105	61.3	191.1	21,000		19,700	18,500	17,300	105
110	59.7	188.3	19,400		18,200	17,100	16,000	110
115	58.1	185.3	17,900		16,800	15,800	14,800	115
120	56.5	182.1	16,500		15,600	14,600	13,700	120
125	54.8	178.6	15,300		14,400	13,500	12,700	125
130	53.1	175.0	14,200		13,300	12,600	11,800	130
135	51.4	171.1	13,100		12,400	11,600	11,000	135
140	49.6	167.0	12,100		11,500	10,800	10,200	140
145	47.8	162.6	11,200		10,600	10,000	9,400	145
150	46.0	157.9	10,400		9,800	9,300	8,700	150
155	44.0	152.9	9,600		9,100	8,600	8,100	155
160	42.0	147.6	8,900		8,400	7,900	7,500	160
165	39.9	141.8	8,200		7,800	7,300	6,900	165
170	37.8	135.6	7,600		7,200	6,800	6,400	170
175	35.5	128.9	7,000		6,600	6,200	5,900	175
180	33.1	121.6	6,400		6,100	5,700	5,400	180
185	30.5	113.5	5,900		5,600	5,300	5,000	185
190	27.7	104.5	5,400		5,100	4,800	4,500	190
195	24.6	94.3	4,900		4,700	4,400	4,100	195
200	21.0	82.4	4,500		4,200	4,000		200
205	16.8	67.8	4,000					205
38	81.1	224.4	82,600*					38
40	80.6	224.0	81,100*					40
45	79.3	223.2	76,000		62,700*	49,700*		45
50	77.9	222.1	65,200		58,000	49,300*	38,500*	50
55	76.6	221.0	56,800		51,000	46,000	38,200*	55
60	75.3	219.8	50,000		45,200	41,100	37,400	60
65	73.9	218.4	44,400		40,400	36,900	33,800	65
70	72.5	216.9	39,700		36,400	33,300	30,600	70
75	71.2	215.2	35,800		32,900	30,300	27,900	75
80	69.8	213.5	32,400		29,800	27,600	25,500	80
85	68.4	211.6	29,400		27,200	25,200	23,300	85
90	67.0	209.5	26,800		24,900	23,100	21,400	90
95	65.6	207.3	24,500		22,800	21,200	19,700	95
100	64.1	205.0	22,500		20,900	19,500	18,100	100
105	62.7	202.5	20,700		19,300	18,000	16,700	105
110	61.2	199.8	19,000		17,700	16,600	15,500	110
115	59.7	196.9	17,500		16,400	15,300	14,300	115
120	58.2	193.9	16,200		15,100	14,100	13,200	120
125	56.6	190.7	14,900		14,000	13,100	12,200	125
130	55.1	187.3	13,800		12,900	12,100	11,300	130
135	53.5	183.8	12,700		11,900	11,200	10,500	135
140	51.8	179.9	11,800		11,000	10,300	9,700	140
145	50.1	175.9	10,900		10,200	9,500	8,900	145
150	48.4	171.6	10,000		9,400	8,800	8,200	150
155	46.7	167.0	9,200		8,700	8,100	7,600	155
160	44.8	162.1	8,500		8,000	7,500	7,000	160
165	43.0	156.9	7,800		7,400	6,900	6,400	165
170	41.0	151.4	7,200		6,800	6,300	5,900	170
175	39.0	145.4	6,600		6,200	5,800	5,400	175
180	36.9	139.0	6,000		5,700	5,300	4,900	180
185	34.6	132.1	5,500		5,200	4,800	4,500	185
190	32.3	124.5	5,000		4,700	4,400	4,100	190
195	29.8	116.2	4,500		4,200			195
200	27.0	106.9	4,100					200

MANITOWOC ENGINEERING CO.

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



LIFTCRANE BOOM CAPACITIES

3950W VICON

BOOM NO. 39 WITH OPEN THROAT TOP

102,400 LB. COUNTERWEIGHT

24' CRAWLERS EXTENDED

CRAWLER MACHINE ON A BARGE

0 DEGREE THRU 3 DEGREE MACHINE LIST

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	BOOM CAPACITY 0 DEGREE LIST POUNDS	BOOM CAPACITY 1 DEGREE LIST POUNDS	BOOM CAPACITY 2 DEGREE LIST POUNDS	BOOM CAPACITY 3 DEGREE LIST POUNDS	OPER. RAD. FEET
230	40	81.0	234.2	75,800*				40
	45	79.7	233.3	72,400*	56,900*			45
	50	78.5	232.4	64,900	54,800*	41,800*	32,200*	50
	55	77.2	231.3	56,500	50,400	41,400*	31,900*	55
	60	75.9	230.1	49,700	44,700	40,400	31,700*	60
	65	74.6	228.8	44,100	39,900	36,300	31,400*	65
	70	73.3	227.3	39,400	35,900	32,800	30,000	70
	75	72.0	225.8	35,400	32,400	29,700	27,300	75
	80	70.7	224.1	32,000	29,400	27,000	24,900	80
	85	69.4	222.3	29,100	26,800	24,700	22,700	85
	90	68.0	220.3	26,500	24,400	22,600	20,900	90
	95	66.7	218.2	24,200	22,400	20,700	19,200	95
	100	65.3	216.0	22,100	20,500	19,000	17,600	100
	105	64.0	213.6	20,300	18,800	17,500	16,200	105
	110	62.6	211.1	18,700	17,300	16,100	15,000	110
	115	61.1	208.4	17,200	16,000	14,800	13,800	115
	120	59.7	205.6	15,800	14,700	13,700	12,700	120
	125	58.3	202.6	14,600	13,600	12,600	11,700	125
	130	56.8	199.4	13,400	12,500	11,600	10,800	130
	135	55.3	196.1	12,400	11,500	10,700	10,000	135
240	140	53.8	192.5	11,400	10,600	9,900	9,200	140
	145	52.2	188.7	10,500	9,800	9,100	8,500	145
	150	50.6	184.7	9,700	9,000	8,400	7,800	150
	155	49.0	180.5	8,900	8,300	7,700	7,100	155
	160	47.3	176.0	8,200	7,600	7,100	6,500	160
	165	45.6	171.3	7,500	7,000	6,500	6,000	165
	170	43.8	166.2	6,800	6,400	5,900	5,400	170
	175	42.0	160.8	6,200	5,800	5,400	4,900	175
	180	40.1	155.1	5,700	5,300	4,900	4,500	180
	185	38.1	148.9	5,100	4,800	4,400	4,000	185
	190	36.0	142.3	4,600	4,300			190
	195	33.9	135.1	4,200				195
	45	80.2	243.5	68,300*	51,500*			45
	50	78.9	242.6	64,500	50,900*	37,500*		50
	55	77.7	241.5	56,100	49,400*	37,100*	28,300*	55
	60	76.5	240.4	49,300	44,100	36,700*	28,100*	60
	65	75.3	239.1	43,700	39,400	35,600	27,800*	65
	70	74.0	237.8	39,000	35,400	32,100	27,600*	70
	75	72.8	236.3	35,100	31,900	29,100	26,600	75
	80	71.5	234.7	31,600	28,900	26,400	24,200	80
	85	70.3	232.9	28,700	26,300	24,100	22,100	85
	90	69.0	231.1	26,100	24,000	22,000	20,300	90
	95	67.7	229.1	23,800	21,900	20,200	18,600	95
	100	66.4	227.0	21,700	20,000	18,500	17,000	100
	105	65.1	224.7	19,900	18,400	17,000	15,700	105
	110	63.8	222.3	18,300	16,900	15,600	14,400	110
	115	62.5	219.8	16,800	15,500	14,300	13,300	115
	120	61.1	217.1	15,400	14,300	13,200	12,200	120
	125	59.7	214.3	14,200	13,100	12,100	11,200	125
	130	58.3	211.3	13,000	12,100	11,200	10,300	130
	135	56.9	208.1	12,000	11,100	10,300	9,500	135
	140	55.5	204.8	11,000	10,200	9,400	8,700	140
	145	54.0	201.2	10,100	9,300	8,600	8,000	145
	150	52.5	197.5	9,300	8,600	7,900	7,300	150
	155	51.0	193.6	8,500	7,800	7,200	6,600	155
	160	49.5	189.4	7,800	7,200	6,600	6,000	160
	165	47.9	185.0	7,100	6,500	6,000	5,500	165
	170	46.2	180.3	6,400	5,900	5,400	5,000	170
	175	44.6	175.4	5,800	5,400	4,900	4,500	175
	180	42.8	170.2	5,300	4,800	4,400	4,000	180
	185	41.0	164.6	4,700	4,300			185
	190	39.2	158.7	4,200				190

MANITOWOC ENGINEERING CO.

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



LIFTCRANE BOOM CAPACITIES

3950W VICON

BOOM NO. 39 WITH OPEN THROAT TOP

102,400 LB. COUNTERWEIGHT

24' CRAWLERS EXTENDED

CRAWLER MACHINE ON A BARGE

0 DEGREE THRU 3 DEGREE MACHINE LIST

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	BOOM CAPACITY 0 DEGREE LIST POUNDS	BOOM CAPACITY 1 DEGREE LIST POUNDS	BOOM CAPACITY 2 DEGREE LIST POUNDS	BOOM CAPACITY 3 DEGREE LIST POUNDS	OPER. RAD. FEET
250	45	60.6	253.6	62,000*				45
	50	79.4	252.7	59,200*	46,100*	33,600*		50
	55	78.2	251.7	55,800	45,500*	33,300*	25,100*	55
	60	77.1	250.7	49,000	43,700	32,900*	24,900*	60
	65	75.9	249.4	43,400	38,900	32,600*	24,700*	65
	70	74.7	248.1	38,700	34,900	31,600	24,400*	70
	75	73.5	246.7	34,800	31,500	28,600	24,200*	75
	80	72.3	245.2	31,300	28,500	26,000	23,700	80
	85	71.1	243.5	28,400	25,900	23,600	21,600	85
	90	69.9	241.7	25,800	23,600	21,600	19,800	90
	95	68.7	239.9	23,500	21,500	19,700	18,100	95
	100	67.4	237.8	21,400	19,700	18,100	16,600	100
	105	66.2	235.7	19,600	18,000	16,600	15,200	105
	110	64.9	233.4	18,000	16,500	15,200	14,000	110
	115	63.6	231.0	16,500	15,200	13,900	12,800	115
	120	62.4	228.5	15,100	13,900	12,800	11,800	120
	125	61.1	225.8	13,900	12,800	11,800	10,800	125
	130	59.7	222.9	12,700	11,700	10,800	9,900	130
	135	58.4	219.9	11,700	10,700	9,900	9,100	135
	140	57.0	216.8	10,700	9,800	9,000	8,300	140
260	145	55.7	213.4	9,800	9,000	8,300	7,600	145
	150	54.3	209.9	9,000	8,200	7,500	6,900	150
	155	52.8	206.3	8,200	7,500	6,900	6,300	155
	160	51.4	202.4	7,500	6,800	6,200	5,700	160
	165	49.9	198.3	6,800	6,200	5,600	5,100	165
	170	48.4	193.9	6,100	5,600	5,100	4,600	170
	175	46.8	189.4	5,500	5,000	4,500	4,100	175
	180	45.3	184.6	5,000	4,500	4,000		180
	185	43.6	179.5	4,400	4,000			185
	60	79.8	262.9	55,700*				
	55	78.7	262.0	53,100*				
	60	77.6	260.9	48,600				
	65	76.4	259.7	43,000				
	70	75.3	258.5	38,300				
	75	74.2	257.1	34,400				
	80	73.0	255.6	31,000				
	85	71.8	254.1	28,000				
	90	70.7	252.4	25,400				
	95	69.5	250.6	23,100				
	100	68.3	248.6	21,100				
	105	67.1	246.6	19,200				
	110	65.9	244.4	17,600				
	115	64.7	242.1	16,100				
	120	63.5	239.7	14,700				
	125	62.3	237.1	13,500				
	130	61.0	234.4	12,300				
	135	59.7	231.6	11,300				
	140	58.5	228.6	10,300				
	145	57.2	225.5	9,400				
	150	55.8	222.1	8,600				
	155	54.5	218.7	7,800				
	160	53.1	215.0	7,100				
	165	51.7	211.2	6,400				
	170	50.3	207.1	5,700				
	175	48.9	202.9	5,100				
	180	47.4	198.4	4,600				
	185	45.9	193.7	4,000				