



Liftcrane Boom Capacities

54,900 LB. Crane Counterweight
14,700 LB. Carbody Counterweight
Rating Over End of Blocked Crawler
Extended Position Crawlers
NO TRAVEL - LIMITED SWING

Meets
ANSI B30.5
Requirements

8500 SERIES 3

LIFTING CAPACITIES:

1. Rated loads included in the charts are the maximum allowable freely suspended loads at a given boom length, boom angle and load radius, and have been determined for the machine standing level on firm supporting surface under ideal operating conditions. The user must limit or de-rate rated loads to allow for adverse conditions (such as soft or uneven ground, out-of-level conditions, wind, side loads, pendulum action, jerking or sudden stopping of loads, inexperience of personnel, and multiple machine lifts).
2. Capacities do not exceed 75% of minimum tipping loads. Capacities based on factors other than machine stability such as structural competence are shown by asterisk * in the charts.
3. Attempting to lift more than rated loads may cause machine to tip or collapse. Do not tip machine to determine capacity.
4. Do not attempt to lift where no radius on load chart is listed as crane may tip or collapse.
5. Weight of hooks, hook blocks, slings and other lifting devices beneath boom point sheaves are part of the total load. Their total weight must be subtracted from the rated load to obtain the weight that can be lifted.
6. Load radius is horizontal distance from axis of rotation to center of gravity of the freely suspended load. Boom angle is angle between horizontal and centerline of boom butt and inserts, and is an indication of radius. In all cases, operating radius shall govern capacity.
7. Least stable position is over the side.
8. Boom point elevation is vertical distance from ground level to centerline of boom point shaft.
9. Auxiliary sheave (upper boom point) capacity for liftcrane service with single part line is 17,000 lbs. In all cases, auxiliary sheave (upper boom point) capacities cannot exceed those listed for Liftcrane Boom capacity reduced by 320 lbs.
10. When lifting over boom point with auxiliary sheave (upper point), rated loads for the boom must be reduced as shown below.
11. Lifting capacities listed apply only to the machine as originally manufactured and designed. Modifications to this machine or use of equipment other than that specified can reduce operating capacity.
12. Travel with load (pick and carry) is not permitted.
13. Jib installation is prohibited.

	Aux. Sheave
Deduct (lbs)	320



Liftcrane Boom Capacities

54,900 LB. Crane Counterweight
14,700 LB. Carbody Counterweight
Rating Over End of Blocked Crawler
Extended Position Crawlers
NO TRAVEL - LIMITED SWING

Meets
ANSI B30.5
Requirements



8500 SERIES 3

OPERATING CONDITION:

- The machine must be reeved and set-up as stated in the Operators Manual. If this manual is missing, obtain replacement.
 - Boom backstops are required for all boom lengths.
 - Gantry must be fully raised position for all operation.
 - Crawlers must be fully extended and be locked in position.
 - The crane must be leveled to within 1% on a firm supporting surface.
 - Refer to operators manual for operating guidelines.
 - Swing is limited to the angle shown on Fig. 1 (Working Areas).

Maximum Boom Lengths Lifted Unassisted	
Over End of Blocked Crawlers	
	200 ft. (a)
	190 ft.
Load block, hook and weight ball on ground at start.	
(a) Auxiliary sheave (upper point) cannot be attached on 200 ft. boom.	

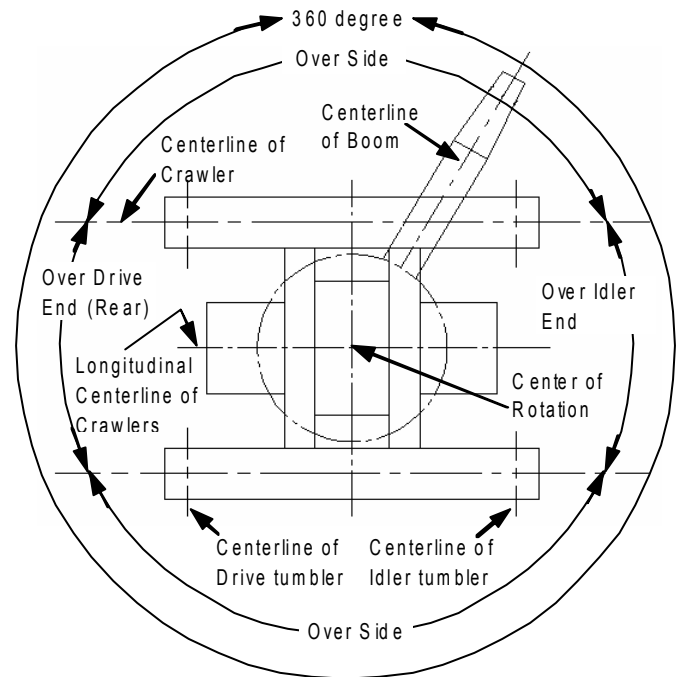
- Front and rear load hoist drum wire rope: 7/8 inch, 6 x 25, FI, IWRC C/O, Minimum breaking strength: 79,586 lbs.
Front Drum: 869 feet, Rear Drum: 673 feet.
- Boom hoist wire rope: 492 feet, 5/8 inch, 6 x 31, WS, IWRC O/O, Minimum breaking strength: 41,234 lbs.
- Machine equipped with 19 ft. 8 in. crawlers, 36 in. treads, 12 parts of boom hoist reeving. 54,900 lbs. crane counterweight and two 7,350 lbs. carbody counterweights.

Hoist Reeving for Main Boom Loads

No. of Parts of Line	1	2	3	4	5
Maximum Loads (lbs)	17,000	34,000	51,000	68,000	85,000

No. of Parts of Line	6	7	8	9	10
Maximum Loads (lbs)	102,000	119,000	136,000	153,000	170,000

Fig. 1 Working Areas



- These lines determine the limiting position of any load for operation within working areas indicated.
- Rated loads with Over End Blocked Crawlers only apply to the area of Over Idler End and Over Drive End, shown in Fig. 1.
- Lifting is approved only in those areas for which rated loads are shown on rating chart.

Operation of this equipment in excess of rated loads or disregard of instruction voids the warranty.



Liftcrane Boom Capacities

54,900 LB. Crane Counterweight
14,700 LB. Carbody Counterweight
Rating Over End of Blocked Crawler
Extended Position Crawlers
NO TRAVEL - LIMITED SWING

**Meets
ANSI B30.5
Requirements**



8500 SERIES 3

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	Rated Load (lbs)
40 Ft. Boom			
10	81.7	45.2	170,000 *
11	80.3	45.1	170,000 *
12	78.8	44.9	166,600 *
13	77.4	44.6	154,600 *
14	75.9	44.4	144,200 *
15	74.4	44.1	135,100 *
16	72.9	43.8	127,100 *
17	71.4	43.4	119,900 *
18	69.9	43.1	113,400 *
19	68.3	42.7	107,500 *
20	66.7	42.2	102,400 *
22	63.6	41.3	93,200 *
24	60.3	40.2	85,200 *
26	56.9	38.9	76,490 *
28	53.4	37.5	68,560 *
30	49.7	35.8	61,720 *
32	45.7	33.9	55,550 *
34	41.5	31.8	50,040 *
36	36.9	29.2	44,750 *
38	31.6	26.2	39,900 *
40	25.5	22.4	34,830 *
50 Ft. Boom			
12	81.1	55.0	166,400 *
13	79.9	54.9	154,400 *
14	78.8	54.7	144,000 *
15	77.6	54.4	134,900 *
16	76.4	54.2	126,900 *
17	75.2	53.9	119,700 *
18	74.0	53.6	113,200 *
19	72.8	53.3	107,500 *
20	71.6	53.0	102,000 *
22	69.2	52.2	93,000 *
24	66.7	51.4	85,300 *
26	64.2	50.5	78,700
28	61.6	49.4	70,540
30	58.9	48.2	63,710
32	56.2	46.9	58,200
34	53.3	45.5	53,350
36	50.4	43.8	49,380
38	47.3	42.0	45,850
40	44.1	40.0	42,760
45	34.9	33.8	35,050 *
50	22.7	24.4	26,890 *

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	Rated Load (lbs)
60 Ft. Boom			
13	81.6	65.0	154,200 *
14	80.7	64.8	143,800 *
15	79.7	64.7	134,700 *
16	78.7	64.5	126,700 *
17	77.7	64.2	119,500 *
18	76.8	64.0	113,000 *
19	75.8	63.7	107,000 *
20	74.8	63.5	101,800 *
22	72.8	62.9	92,600 *
24	70.8	62.2	85,000 *
26	68.7	61.4	78,480
28	66.6	60.6	70,320
30	64.5	59.6	63,490
32	62.4	58.6	57,760
34	60.2	57.5	53,130
36	58.0	56.3	48,940
38	55.7	54.9	45,410
40	53.3	53.5	42,540
45	47.0	49.2	36,150
50	40.0	43.8	31,520
55	31.7	36.7	27,330 *
60	20.6	26.2	21,600 *
70 Ft. Boom			
14	82.0	75.0	143,600 *
15	81.2	74.8	134,500 *
16	80.3	74.6	126,500 *
17	79.5	74.5	119,300 *
18	78.7	74.2	112,800 *
19	77.8	74.0	106,800 *
20	77.0	73.8	101,600 *
22	75.3	73.3	92,400 *
24	73.6	72.7	84,800 *
26	71.9	72.1	77,820 *
28	70.1	71.4	70,100
30	68.4	70.6	63,270
32	66.6	69.7	57,760
34	64.8	68.8	52,910
36	63.0	67.8	48,940
38	61.1	66.7	45,410
40	59.2	65.5	42,320
45	54.3	62.2	36,150
50	49.0	58.2	31,300
55	43.3	53.3	27,700
60	36.9	47.2	24,690
65	29.3	39.4	22,040 *

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	Rated Load (lbs)
80 Ft. Boom			
16	81.6	84.8	126,300 *
17	80.8	84.6	119,100 *
18	80.1	84.4	112,600 *
19	79.4	84.2	106,500 *
20	78.6	84.0	101,200 *
22	77.2	83.6	92,100 *
24	75.7	83.1	83,550 *
26	74.2	82.5	76,270 *
28	72.7	81.9	69,880 *
30	71.2	81.3	63,270
32	69.7	80.5	57,540
34	68.1	79.7	52,680
36	66.6	78.9	48,720
38	65.0	78.0	45,190
40	63.4	77.0	42,100
45	59.3	74.2	35,930
50	55.0	70.9	31,080
55	50.5	67.1	27,330
60	45.6	62.5	24,470
65	40.3	57.0	22,040
70	34.4	50.4	20,060
75	27.3	41.8	17,850 *



Liftcrane Boom Capacities

54,900 LB. Crane Counterweight
14,700 LB. Carbody Counterweight
Rating Over End of Blocked Crawler
Extended Position Crawlers
NO TRAVEL - LIMITED SWING

**Meets
ANSI B30.5
Requirements**



8500 SERIES 3

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	Rated Load (lbs)
90 Ft. Boom			
17	81.9	94.7	118,820 *
18	81.2	94.6	112,400 *
19	80.6	94.4	106,300 *
20	79.9	94.2	101,000 *
22	78.6	93.8	90,820 *
24	77.3	93.4	82,010 *
26	76.0	92.9	74,730 *
28	74.7	92.4	68,560 *
30	73.4	91.8	63,050
32	72.0	91.1	57,540
34	70.7	90.5	52,680
36	69.3	89.7	48,500
38	68.0	88.9	44,970
40	66.6	88.1	41,880
45	63.0	85.7	35,710
50	59.4	82.9	31,080
55	55.6	79.6	27,330
60	51.6	75.9	24,250
65	47.4	71.6	21,820
70	42.9	66.5	19,840
75	37.9	60.5	18,070
80	32.3	53.3	16,530
85	25.7	44.2	14,770 *
100 Ft. Boom			
19	81.5	104.6	101,850 *
20	80.9	104.4	100,080 *
22	79.8	104.0	89,280 *
24	78.6	103.6	80,460 *
26	77.4	103.2	73,410 *
28	76.3	102.7	67,240 *
30	75.1	102.2	62,160 *
32	73.9	101.6	57,310
34	72.7	101.0	52,460
36	71.5	100.4	48,500
38	70.3	99.6	44,970
40	69.0	98.9	41,880
45	65.9	96.8	35,490
50	62.7	94.3	30,860
55	59.5	91.5	27,110

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	Rated Load (lbs)
100 Ft. Boom			
60	56.1	88.3	24,030
65	52.5	84.7	21,600
70	48.8	80.5	19,620
75	44.8	75.8	17,850
80	40.6	70.3	16,310
85	35.9	63.8	14,990
90	30.6	56.1	13,880
95	24.3	46.3	12,340 *
110 Ft. Boom			
20	81.8	114.5	92,590 *
22	80.7	114.2	87,520 *
24	79.7	113.8	78,920 *
26	78.6	113.4	71,860 *
28	77.5	113.0	66,130 *
30	76.5	112.5	61,060 *
32	75.4	112.0	56,870 *
34	74.3	111.5	52,460
36	73.2	110.9	48,280
38	72.1	110.2	44,750
40	71.0	109.5	41,660
45	68.2	107.7	35,490
50	65.4	105.5	30,640
55	62.5	103.0	26,890
60	59.5	100.2	24,030
65	56.4	97.0	21,380
70	53.2	93.4	19,400
75	49.9	89.4	17,630
80	46.4	84.9	16,090
85	42.6	79.7	14,770
90	38.6	73.8	13,660
95	34.2	67.0	12,780
100	29.2	58.7	11,900
105	23.2	48.4	10,360 *

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	Rated Load (lbs)
120 Ft. Boom			
22	81.5	124.3	80,680 *
24	80.5	124.0	78,040 *
26	79.6	123.6	70,980 *
28	78.6	123.2	65,030 *
30	77.6	122.8	60,180 *
32	76.6	122.3	55,770 *
34	75.6	121.8	52,240 *
36	74.7	121.3	48,280
38	73.7	120.7	44,750
40	72.7	120.1	41,660
45	70.1	118.4	35,270
50	67.6	116.4	30,640
55	65.0	114.2	26,890
60	62.3	111.7	23,800
65	59.5	108.9	21,380
70	56.7	105.7	19,180
75	53.8	102.2	17,410
80	50.8	98.3	15,870
85	47.6	93.9	14,770
90	44.3	89.0	13,440
95	40.7	83.5	12,560
100	36.9	77.2	11,680
105	32.7	69.9	10,800
110	27.9	61.3	10,140
115	22.2	50.4	8,590 *



Liftcrane Boom Capacities

54,900 LB. Crane Counterweight
14,700 LB. Carbody Counterweight
Rating Over End of Blocked Crawler
Extended Position Crawlers
NO TRAVEL - LIMITED SWING

**Meets
ANSI B30.5
Requirements**



8500 SERIES 3

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	Rated Load (lbs)
130 Ft. Boom			
24	81.3	134.1	71,200 *
26	80.4	133.8	69,660 *
28	79.5	133.4	63,930 *
30	78.6	133.0	59,080 *
32	77.7	132.6	54,670 *
34	76.8	132.1	51,140 *
36	75.9	131.6	47,830 *
38	74.9	131.1	44,530 *
40	74.0	130.5	41,440 *
45	71.7	129.0	35,050 *
50	69.4	127.2	30,420 *
55	67.0	125.2	26,670 *
60	64.6	122.9	23,580 *
65	62.1	120.3	21,160 *
70	59.6	117.5	18,950 *
75	57.0	114.4	17,190 *
80	54.3	110.9	15,650 *
85	51.5	107.1	14,320 *
90	48.6	102.9	13,220 *
95	45.6	98.2	12,340 *
100	42.4	93.0	11,460 *
105	39.0	87.1	10,580 *
110	35.4	80.5	9,920 *
115	31.3	72.8	9,250 *
120	26.7	63.7	8,370 *
125	21.2	52.3	7,050 *
140 Ft. Boom			
24	81.9	144.3	61,720 *
26	81.1	143.9	60,840 *
28	80.2	143.6	59,960 *
30	79.4	143.2	58,420 *
32	78.6	142.8	54,010 *
34	77.7	142.4	50,480 *
36	76.9	141.9	47,170 *
38	76.0	141.5	44,310 *
40	75.2	140.9	41,220 *
45	73.1	139.5	35,050 *
50	70.9	137.8	30,200 *
55	68.7	136.0	26,450 *
60	66.5	133.9	23,360 *
65	64.3	131.6	20,940 *
70	62.0	129.0	18,950 *

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	Rated Load (lbs)
140 Ft. Boom			
75	59.6	126.2	17,190 *
80	57.2	123.1	15,650 *
85	54.7	119.7	14,320 *
90	52.2	115.9	13,000 *
95	49.5	111.8	12,120 *
100	46.8	107.3	11,240 *
105	43.9	102.3	10,360 *
110	40.8	96.7	9,700 *
115	37.5	90.5	9,030 *
120	34.0	83.5	8,370 *
125	30.1	75.5	7,710 *
130	25.7	66.0	6,830 *
135	20.5	54.1	5,730 *
150 Ft. Boom			
26	81.7	154.1	52,680 *
28	80.9	153.7	51,800 *
30	80.1	153.4	51,140 *
32	79.3	153.0	50,260 *
34	78.6	152.6	49,600 *
36	77.8	152.2	46,510 *
38	77.0	151.7	43,650 *
40	76.2	151.3	41,220 *
45	74.2	149.9	34,830 *
50	72.2	148.4	29,980 *
55	70.2	146.7	26,230 *
60	68.2	144.7	23,360 *
65	66.1	142.6	20,720 *
70	64.0	140.3	18,730 *
75	61.8	137.7	16,970 *
80	59.6	134.8	15,430 *
85	57.4	131.7	14,100 *
90	55.1	128.4	13,000 *
95	52.7	124.7	11,900 *
100	50.3	120.7	11,020 *
105	47.7	116.3	10,140 *
110	45.1	111.5	9,470 *
115	42.3	106.2	8,810 *
120	39.4	100.4	8,150 *
125	36.2	93.9	7,710 *
130	32.8	86.5	7,270 *
135	29.1	78.1	6,610 *
140	24.8	68.2	5,730 *

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	Rated Load (lbs)
160 Ft. Boom			
28	81.5	163.9	44,090 *
30	80.7	163.6	43,430 *
32	80.0	163.2	42,760 *
34	79.3	162.8	42,100 *
36	78.6	162.4	41,440 *
38	77.8	162.0	40,780 *
40	77.1	161.5	40,340 *
45	75.2	160.3	34,830 *
50	73.4	158.9	29,980 *
55	71.5	157.3	26,230 *
60	69.6	155.5	23,140 *
65	67.7	153.5	20,720 *
70	65.7	151.3	18,730 *
75	63.7	148.9	16,970 *
80	61.7	146.3	15,430 *
85	59.7	143.5	14,100 *
90	57.6	140.4	12,780 *
95	55.4	137.1	11,900 *
100	53.2	133.4	10,800 *
105	50.9	129.5	10,140 *
110	48.6	125.2	9,250 *
115	46.1	120.6	8,590 *
120	43.6	115.5	8,150 *
125	40.9	110.0	7,490 *
130	38.1	103.9	7,050 *
135	35.0	97.0	6,610 *
140	31.8	89.4	5,950 *
145	28.1	80.6	5,290 *
150	24.0	70.3	4,400 *



Liftcrane Boom Capacities

54,900 LB. Crane Counterweight
14,700 LB. Carbody Counterweight
Rating Over End of Blocked Crawler
Extended Position Crawlers
NO TRAVEL - LIMITED SWING

Meets
ANSI B30.5
Requirements



8500 SERIES 3

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	Rated Load (lbs)
170 Ft. Boom			
28	82.0	174.0	38,800 *
30	81.3	173.7	38,130 *
32	80.6	173.4	37,470 *
34	79.9	173.0	37,030 *
36	79.2	172.6	36,370 *
38	78.6	172.2	35,710 *
40	77.9	171.8	33,950 *
45	76.1	170.6	34,610
50	74.4	169.3	29,760
55	72.6	167.8	26,010
60	70.9	166.1	22,920
65	69.1	164.3	20,500
70	67.2	162.2	18,510
75	65.4	160.0	16,750
80	63.5	157.6	15,210
85	61.6	155.0	13,880
90	59.7	152.2	12,560
95	57.7	149.1	11,680
100	55.7	145.8	10,580
105	53.6	142.2	9,920
110	51.5	138.3	9,030
115	49.3	134.2	8,370
120	47.0	129.7	7,930
125	44.7	124.8	7,270
130	42.2	119.4	6,830
135	39.6	113.6	6,390
140	36.9	107.2	5,950
145	34.0	100.1	5,510
150	30.8	92.2	4,850 *
155	27.3	83.1	4,180 *
160	23.3	72.4	3,520 *
180 Ft. Boom			
30	81.8	183.8	33,730 *
32	81.1	183.5	33,060 *
34	80.5	183.2	32,620 *
36	79.8	182.8	31,960 *
38	79.2	182.4	31,520 *
40	78.5	182.0	31,080 *
45	76.9	180.9	29,760 *
50	75.3	179.7	28,650 *
55	73.6	178.3	25,790
60	72.0	176.7	22,700
65	70.3	175.0	20,280
70	68.6	173.1	18,070
75	66.8	171.0	16,310

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	Rated Load (lbs)
180 Ft. Boom			
80	65.1	168.7	14,770
85	63.3	166.3	13,440
90	61.5	163.7	12,340
95	59.7	160.8	11,240
100	57.8	157.8	10,360
105	55.9	154.5	9,700
110	54.0	150.9	8,810
115	52.0	147.1	8,150
120	49.9	143.0	7,490
125	47.8	138.6	7,050
130	45.6	133.9	6,610
135	43.3	128.8	6,170
140	40.9	123.2	5,510
145	38.4	117.1	5,290
150	35.8	110.5	4,850
155	33.0	103.1	4,180
160	29.9	94.9	3,520 *
165	26.5	85.4	3,080 *
190 Ft. Boom			
32	81.6	193.6	29,540 *
34	81.0	193.3	28,880 *
36	80.4	193.0	28,430 *
38	79.8	192.6	27,990 *
40	79.2	192.2	27,550 *
45	77.6	191.2	26,450 *
50	76.1	190.0	25,300 *
55	74.5	188.7	22,110 *
60	72.9	187.2	20,060
65	71.3	185.6	18,510
70	69.7	183.8	17,410
75	68.1	181.8	16,090
80	66.5	179.7	14,990
85	64.8	177.4	13,880
90	63.2	175.0	13,000
95	61.4	172.3	11,900
100	59.7	169.5	11,020
105	57.9	166.4	10,140
110	56.1	163.2	9,250
115	54.3	159.7	8,590

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	Rated Load (lbs)
190 Ft. Boom			
120	52.4	155.9	7,930
125	50.5	151.9	7,490
130	48.5	147.6	6,830
135	46.4	143.0	6,390
140	44.3	138.0	5,730 *
145	42.1	132.7	5,070 *
150	39.8	126.9	4,620 *
155	37.4	120.6	3,960 *
160	34.8	113.6	3,520 *
165	32.0	106.0	3,080 *
170	29.1	97.5	2,640 *
200 Ft. Boom			
34	81.4	203.4	25,790 *
36	80.9	203.1	25,350 *
38	80.3	202.8	24,910 *
40	79.7	202.4	24,470 *
45	78.2	201.4	23,360 *
50	76.8	200.3	22,480 *
55	75.3	199.0	21,380 *
60	73.8	197.6	19,840 *
65	72.3	196.1	18,510 *
70	70.8	194.4	17,410 *
75	69.3	192.6	16,090 *
80	67.7	190.6	14,770
85	66.2	188.4	13,440
90	64.6	186.1	12,120
95	63.0	183.6	11,240
100	61.4	181.0	10,140
105	59.7	178.1	9,470
110	58.1	175.1	8,590
115	56.3	171.9	7,930
120	54.6	168.4	7,270
125	52.8	164.7	6,610
130	51.0	160.7	5,950
135	49.1	156.5	5,290
140	47.2	152.0	4,620
145	45.2	147.2	4,180
150	43.1	142.0	3,520
155	41.0	136.4	3,080
160	38.7	130.4	2,730