

Liftcrane Boom Capacities

Meets
ANSI B30.5
Requirements

Boom No. 82 or 22EL
83 730 kg Crane Counterweight
19 960 kg Carbody Counterweight
Rating Over End of Blocked Crawlers
No Travel - Limited Swing

999 SERIES 2

LIFTING CAPACITIES: Lifting capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 75% of a static tipping load over end of machine with crawlers blocked. Capacities based on structural competence are denoted by an asterisk (*). Capacities indicated by (b) require 5 670 kg minimum weight.

Upper boom point capacity for liftcrane service with single part whip line is 13 380 kg or 26 760 kg with two part whip line. When boom butt mounted auxiliary drum is used, capacity with single part whip line is 9 070 kg or 18 140 kg with two part whip line. In all cases, upper boom point capacities cannot exceed those listed for main boom capacity.

76.2m thru 88.4m boom lengths require only the middle two sheaves in lower boom point. All other sheaves must be removed from lower boom point.

Note: 22L boom top **No. 196142** or **No. 417403** required for capacities greater than or equal to 213 200 kg.

Weight of jib, all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib 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.

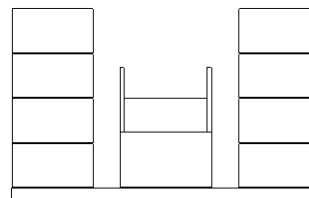
OPERATING CONDITIONS: Machine to operate in a level position on a firm uniformly supporting surface with gantry up. Drive and idler tumbler must be properly blocked so that centerline of tumbler becomes tipping fulcrum. Swing is limited to that sector shown on Operating Range Diagram **No. 8224-A**. Refer to boom rigging **No. 195459** (No. 82) or **No. 195890** (No. 22EL) and Wire Rope Specification chart **No. 8223-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. Refer to operators manual for operating guidelines.

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, and is an indication of operating radius. In all cases, operating radius shall govern capacity.

BOOM POINT ELEVATION: Boom point elevation is vertical distance from ground level to centerline of boom point shaft.

MACHINE EQUIPMENT: Machine equipped with 8 585 mm crawlers, 1 219 mm treads, 3 124 mm retractable gantry, 9 144 mm live mast, 20 part boom hoist reeving, boom support straps or four 35 mm boom pendants, 83 730 kg crane counterweight and two 9 980 kg carbody counterweights.

Maximum Boom and Jib Lengths Lifted Unassisted Over End of Blocked Crawlers	
WITHOUT BOOM CATWALKS	
Boom Length	Jib No. 134
(a) 88.4m	—
85.3m	—
82.3m	—
79.2m	15.2m
76.2m	24.4m
WITH BOOM CATWALKS	
Boom Length	Jib No. 134
(a) 85.3m	—
82.3m	—
79.2m	12.2m
76.2m	21.3m
73.2m	24.4m
Load block, hook and weight ball on ground at start. (a) Upper boom point cannot be used.	



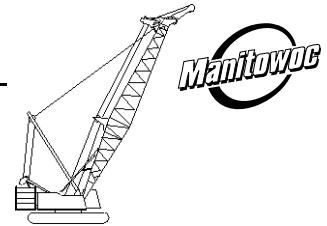
83 730 kg Crane Counterweight
8 Side Boxes - 1 Center Box

Deduct From Capacities When Jib Is Attached	
Jib Length	Jib No. 134
9.1m	1 220 kg
12.2m	1 590 kg
15.2m	1 950 kg
18.3m	2 310 kg
21.3m	2 770 kg
24.4m	3 220 kg

Boom Catwalks Deduct

Deduct 300 kg from capacities when boom catwalks are attached.

Consult jib chart for jib capacities.
Upper boom point cannot be used when jib is attached.



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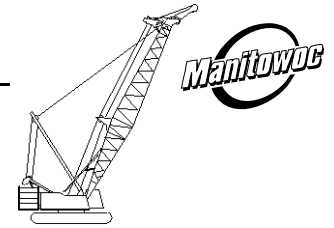
999 SERIES 2

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
21.3m (70 Ft.) BOOM			
4.9	82.8	23.5	213 200 * ^{b 1}
5.0	82.5	23.5	208 500 * ^b
5.5	81.1	23.4	190 700 * ^b
6.0	79.7	23.3	175 800 * ^b
7.0	77.0	23.1	151 900 * ^b
8.0	74.2	22.8	133 500 *
9.0	71.3	22.5	118 900 *
10.0	68.4	22.1	107 100 *
12.0	62.5	21.1	89 100 *
14.0	56.1	19.8	73 000 *
16.0	49.1	18.1	59 900 *
18.0	41.3	16.0	50 500 *
20.0	31.9	13.2	42 700 *
24.4m (80 Ft.) BOOM			
5.2	83.0	26.6	201 300 * ^b
5.5	82.2	26.5	190 500 * ^b
6.0	81.0	26.4	175 500 * ^b
7.0	78.6	26.2	151 600 * ^b
8.0	76.2	26.0	133 200 *
9.0	73.8	25.7	118 600 *
10.0	71.3	25.3	106 800 *
12.0	66.2	24.5	88 800 *
14.0	60.9	23.4	73 100 *
16.0	55.2	22.1	60 000 *
18.0	49.1	20.4	50 600 *
20.0	42.4	18.4	43 500 *
22.0	34.5	15.7	37 900 *
24.0	24.5	11.9	31 500 *
27.4m (90 Ft.) BOOM			
5.8	82.5	29.6	181 300 * ^b
6.0	82.0	29.5	175 400 * ^b
7.0	79.9	29.3	151 400 * ^b
8.0	77.8	29.1	133 000 *
9.0	75.6	28.9	118 500 *
10.0	73.4	28.6	106 700 *
12.0	69.0	27.8	88 700 *
14.0	64.4	26.9	73 100 *
16.0	59.6	25.8	60 000 *
18.0	54.5	24.4	50 600 *
20.0	49.1	22.7	43 500 *
22.0	43.2	20.7	37 900 *
24.0	36.4	18.2	33 500 *
26.0	28.3	14.9	29 700 *

¹ See note on page 1.

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
30.5m (100 Ft.) BOOM			
6.1	82.7	32.6	172 600 * ^b
7.0	80.9	32.5	151 300 * ^b
8.0	79.0	32.3	132 900 * ^b
9.0	77.1	32.0	118 400 *
10.0	75.1	31.7	106 600 *
12.0	71.2	31.1	88 600 *
14.0	67.1	30.3	73 200 *
16.0	62.9	29.3	60 100 *
18.0	58.6	28.1	50 600 *
20.0	54.0	26.7	43 600 *
22.0	49.1	25.0	38 000 *
24.0	43.8	23.1	33 500 *
26.0	37.9	20.6	29 800 *
28.0	31.0	17.6	26 700 *
30.0	22.2	13.4	23 200 *
33.5m (110 Ft.) BOOM			
6.7	82.3	35.6	157 400 *
7.0	81.8	35.5	151 300 *
8.0	80.0	35.4	132 700 *
9.0	78.3	35.2	118 100 *
10.0	76.5	34.9	106 300 *
12.0	73.0	34.3	88 300 *
14.0	69.3	33.6	73 200 *
16.0	65.6	32.7	60 000 *
18.0	61.7	31.7	50 600 *
20.0	57.7	30.4	43 500 *
22.0	53.5	29.0	37 900 *
24.0	49.1	27.3	33 400 *
26.0	44.3	25.4	29 800 *
28.0	39.0	23.0	26 700 *
30.0	33.1	20.2	24 000 *
36.6m (120 Ft.) BOOM			
6.7	82.9	38.7	147 100 *
7.0	82.5	38.6	145 900 *
8.0	80.9	38.5	132 500 *
9.0	79.3	38.3	118 000 *
10.0	77.7	38.0	106 200 *
12.0	74.4	37.5	88 200 *
14.0	71.1	36.8	73 200 *
16.0	67.8	36.1	60 000 *
18.0	64.3	35.1	50 600 *
20.0	60.7	34.0	43 400 *
22.0	57.0	32.8	37 900 *
24.0	53.2	31.3	33 400 *
26.0	49.1	29.6	29 700 *
28.0	44.7	27.7	26 700 *
30.0	40.0	25.4	24 000 *
34.0	28.5	19.3	19 700 *

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
39.6m (130 Ft.) BOOM			
7.3	82.6	41.7	133 800 *
8.0	81.6	41.6	133 000 *
9.0	80.1	41.4	117 900 *
10.0	78.6	41.2	106 100 *
12.0	75.7	40.7	88 100 *
14.0	72.6	40.1	73 200 *
16.0	69.6	39.4	60 000 *
18.0	66.4	38.5	50 500 *
20.0	63.2	37.5	43 400 *
22.0	59.9	36.4	37 800 *
24.0	56.4	35.1	33 400 *
26.0	52.8	33.6	29 700 *
28.0	49.1	31.9	26 600 *
30.0	45.1	30.0	24 000 *
34.0	36.0	25.2	19 800 *
38.0	24.0	18.0	16 200 *
42.7m (140 Ft.) BOOM			
7.9	82.3	44.7	133 500 *
8.0	82.2	44.6	132 300 *
9.0	80.8	44.5	117 700 *
10.0	79.5	44.3	105 900 *
12.0	76.7	43.8	87 900 *
14.0	73.9	43.3	73 100 *
16.0	71.1	42.6	59 900 *
18.0	68.2	41.8	50 500 *
20.0	65.3	40.9	43 300 *
22.0	62.2	39.9	37 800 *
24.0	59.1	38.7	33 300 *
26.0	55.9	37.4	29 600 *
28.0	52.6	35.9	26 500 *
30.0	49.1	34.2	23 900 *
34.0	41.4	30.1	19 700 *
38.0	32.2	24.6	16 500 *
42.0	19.4	16.0	12 800 *



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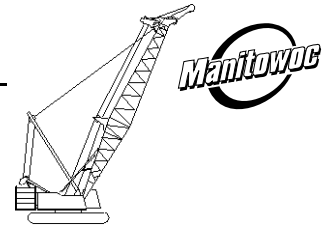
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999 SERIES 2

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
45.7m (150 Ft.) BOOM			
7.9	82.8	47.7	120 400 *
8.0	82.7	47.7	120 100 *
9.0	81.4	47.6	116 400 *
10.0	80.2	47.4	105 600 *
12.0	77.6	47.0	87 700 *
14.0	75.0	46.4	73 000
16.0	72.4	45.8	59 800
18.0	69.7	45.1	50 300
20.0	67.0	44.3	43 200
22.0	64.3	43.3	37 600
24.0	61.4	42.3	33 100
26.0	58.5	41.1	29 500
28.0	55.5	39.7	26 300
30.0	52.3	38.2	23 800
34.0	45.6	34.6	19 600
38.0	37.9	30.0	16 300
42.0	28.6	23.7	13 700
48.8m (160 Ft.) BOOM			
8.5	82.5	50.7	107 000 *
9.0	82.0	50.7	107 000 *
10.0	80.8	50.5	104 900 *
12.0	78.4	50.1	87 500 *
14.0	76.0	49.6	72 900
16.0	73.5	49.0	59 700
18.0	71.1	48.4	50 200
20.0	68.5	47.6	43 100
22.0	66.0	46.7	37 500
24.0	63.4	45.7	33 000
26.0	60.7	44.6	29 300
28.0	57.9	43.4	26 200
30.0	55.1	42.1	23 600
34.0	49.1	38.8	19 400
38.0	42.4	34.8	16 200
42.0	34.7	29.7	13 600
46.0	25.0	22.5	11 100 *
51.8m (170 Ft.) BOOM			
8.5	83.0	53.8	105 500 *
9.0	82.5	53.7	104 000 *
10.0	81.3	53.6	100 800 *
12.0	79.1	53.2	87 300 *
14.0	76.8	52.8	72 900
16.0	74.5	52.2	59 600
18.0	72.2	51.6	50 200
20.0	69.9	50.9	43 000
22.0	67.5	50.1	37 400
24.0	65.1	49.2	32 900

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
51.8m (170 Ft.) BOOM			
26.0	62.6	48.1	29 200
28.0	60.0	47.0	26 100
30.0	57.4	45.8	23 500
34.0	52.0	42.8	19 300
38.0	46.0	39.3	16 100
42.0	39.4	34.8	13 500
46.0	31.6	29.1	11 400
50.0	21.5	20.8	8 700 *
54.9m (180 Ft.) BOOM			
9.1	82.7	56.8	93 600 *
10.0	81.8	56.7	93 600 *
12.0	79.7	56.3	87 400 *
14.0	77.6	55.9	72 800
16.0	75.4	55.4	59 500
18.0	73.2	54.8	50 000
20.0	71.0	54.1	42 800
22.0	68.8	53.4	37 300
24.0	66.5	52.5	32 800
26.0	64.2	51.6	29 100
28.0	61.9	50.5	26 000
30.0	59.5	49.4	23 400
34.0	54.4	46.7	19 100
38.0	49.0	43.4	15 900
42.0	43.2	39.5	13 400
46.0	36.6	34.6	11 300
50.0	28.6	28.2	9 400
57.9m (190 Ft.) BOOM			
9.8	82.5	59.8	89 200 *
10.0	82.3	59.8	88 600 *
12.0	80.3	59.4	81 400 *
14.0	78.2	59.0	72 000 *
16.0	76.2	58.5	59 400
18.0	74.2	58.0	49 900
20.0	72.1	57.3	42 700
22.0	70.0	56.6	37 100
24.0	67.8	55.8	32 600
26.0	65.7	54.9	28 900
28.0	63.5	54.0	25 800
30.0	61.2	52.9	23 200
34.0	56.6	50.4	19 000
38.0	51.6	47.4	15 800
42.0	46.3	43.9	13 200
46.0	40.5	39.6	11 100
50.0	33.9	34.2	9 400
54.0	25.7	27.0	7 300 *

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
61.0m (200 Ft.) BOOM			
9.8	82.9	62.9	80 200 *
10.0	82.7	62.8	80 200 *
12.0	80.7	62.5	78 800 *
14.0	78.8	62.1	69 900 *
16.0	76.9	61.7	59 400
18.0	75.0	61.2	49 800
20.0	73.0	60.6	42 600
22.0	71.0	59.9	37 000
24.0	69.0	59.1	32 400
26.0	67.0	58.3	28 700
28.0	64.9	57.4	25 700
30.0	62.8	56.4	23 000
34.0	58.5	54.1	18 800
38.0	53.9	51.3	15 600
42.0	49.0	48.0	13 000
46.0	43.8	44.2	10 900
50.0	38.0	39.4	9 200
54.0	31.2	33.5	7 600
58.0	22.8	25.4	5 400 *
64.0m (210 Ft.) BOOM			
10.4	82.7	65.9	77 700 *
12.0	81.2	65.6	74 900 *
14.0	79.4	65.2	67 900 *
16.0	77.5	64.8	60 000
18.0	75.7	64.3	49 600
20.0	73.8	63.7	42 400
22.0	72.0	63.1	36 800
24.0	70.1	62.4	32 300
26.0	68.1	61.6	28 600
28.0	66.2	60.7	25 500
30.0	64.2	59.8	22 900
34.0	60.1	57.6	18 700
38.0	55.9	55.1	15 400
42.0	51.4	52.0	12 900
46.0	46.6	48.5	10 800
50.0	41.4	44.3	9 100
54.0	35.6	39.1	7 600
58.0	28.7	32.6	5 800 *
62.0	19.7	23.4	3 800 *



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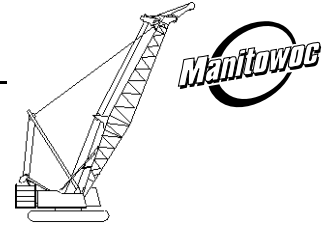
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67.1m (220 Ft.) BOOM			
10.4	83.0	68.9	70 300 *
12.0	81.6	68.7	69 800 *
14.0	79.9	68.3	66 000 *
16.0	78.1	67.9	58 700
18.0	76.4	67.5	49 600
20.0	74.6	66.9	42 300
22.0	72.8	66.3	36 700
24.0	71.0	65.6	32 100
26.0	69.2	64.9	28 400
28.0	67.3	64.1	25 300
30.0	65.5	63.2	22 700
34.0	61.6	61.1	18 500
38.0	57.6	58.7	15 300
42.0	53.5	55.9	12 700
46.0	49.0	52.6	10 600
50.0	44.3	48.8	8 900
54.0	39.1	44.2	7 400
58.0	33.2	38.6	6 000 *
62.0	26.2	31.4	4 100 *
70.1m (230 Ft.) BOOM			
11.0	82.8	71.9	63 100 *
12.0	82.0	71.8	62 800 *
14.0	80.3	71.4	62 100 *
16.0	78.6	71.1	57 700
18.0	77.0	70.6	49 600
20.0	75.3	70.1	42 100
22.0	73.6	69.5	36 500
24.0	71.9	68.9	32 000
26.0	70.1	68.2	28 200
28.0	68.4	67.4	25 100
30.0	66.6	66.5	22 500
34.0	63.0	64.6	18 300
38.0	59.2	62.3	15 000
42.0	55.3	59.7	12 500
46.0	51.2	56.7	10 400
50.0	46.8	53.1	8 600
54.0	42.1	48.9	7 200
58.0	36.9	44.0	5 900
62.0	30.9	37.9	4 200 *
66.0	23.7	30.0	2 600 *

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
73.2m (240 Ft.) BOOM			
11.6	82.6	74.9	57 200 *
12.0	82.3	74.9	57 100 *
14.0	80.7	74.5	56 500 *
16.0	79.1	74.2	55 300 *
18.0	77.5	73.7	49 500
20.0	75.9	73.2	42 000
22.0	74.3	72.7	36 300
24.0	72.6	72.1	31 800
26.0	71.0	71.4	28 100
28.0	69.3	70.7	25 000
30.0	67.6	69.8	22 300
34.0	64.2	68.0	18 100
38.0	60.6	65.9	14 900
42.0	56.9	63.4	12 300
46.0	53.1	60.5	10 200
50.0	49.0	57.2	8 500
54.0	44.7	53.4	7 000
58.0	40.0	49.0	5 700
62.0	34.8	43.6	4 400 *
66.0	28.7	37.0	2 800 *
76.2m (250 Ft.) BOOM			
11.6	82.9	78.0	51 900 *
12.0	82.6	77.9	51 800 *
14.0	81.1	77.6	51 200 *
16.0	79.6	77.3	50 600 *
18.0	78.0	76.9	48 700
20.0	76.5	76.4	42 200
22.0	74.9	75.9	36 500
24.0	73.4	75.3	32 000
26.0	71.8	74.6	28 200
28.0	70.2	73.9	25 100
30.0	68.6	73.1	22 500
34.0	65.3	71.4	18 200
38.0	61.9	69.4	15 000
42.0	58.4	67.0	12 400
46.0	54.8	64.3	10 300
50.0	51.0	61.3	8 600
54.0	47.0	57.7	7 200
58.0	42.7	53.6	5 900
62.0	38.0	48.8	4 800
66.0	32.7	43.1	3 300 *
70.0	26.5	35.9	1 800 *

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
79.2m (260 Ft.) BOOM			
12.2	82.8	81.0	47 300 *
14.0	81.4	80.7	46 800 *
16.0	80.0	80.4	46 200 *
18.0	78.5	80.0	45 500 *
20.0	77.0	79.5	42 100
22.0	75.5	79.0	36 300
24.0	74.0	78.5	31 800
26.0	72.5	77.8	28 100
28.0	71.0	77.2	24 900
30.0	69.4	76.4	22 300
34.0	66.3	74.8	18 100
38.0	63.1	72.8	14 800
42.0	59.8	70.6	12 200
46.0	56.4	68.1	10 200
50.0	52.8	65.2	8 400
54.0	49.0	61.8	7 000
58.0	45.0	58.1	5 700
62.0	40.8	53.7	4 600
66.0	36.0	48.5	3 300 *
70.0	30.7	42.4	1 900 *
82.3m (270 Ft.) BOOM			
12.2	83.0	84.1	43 100 *
14.0	81.8	83.8	42 600 *
16.0	80.3	83.5	42 100 *
18.0	78.9	83.1	41 500 *
20.0	77.5	82.7	40 700
22.0	76.1	82.2	36 300
24.0	74.6	81.6	31 600
26.0	73.2	81.0	27 900
28.0	71.7	80.4	24 700
30.0	70.2	79.7	22 100
34.0	67.2	78.1	17 800
38.0	64.2	76.2	14 600
42.0	61.0	74.1	12 000
46.0	57.8	71.7	9 900
50.0	54.4	69.0	8 200
54.0	50.9	65.9	6 700
58.0	47.1	62.3	5 500
62.0	43.2	58.3	4 400
66.0	38.9	53.6	3 200 *
70.0	34.2	48.1	1 900 *



Liftcrane Boom Capacities

Meets
ANSI B30.5
 Requirements

Boom No. 82 or 22EL
83 730 kg Crane Counterweight
19 960 kg Carbody Counterweight
Rating Over End of Blocked Crawlers
No Travel - Limited Swing

999 SERIES 2

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
85.3m (280 Ft.) BOOM			
12.8	82.9	87.1	38 900 *
14.0	82.1	86.9	38 600 *
16.0	80.7	86.6	38 100 *
18.0	79.3	86.2	37 500 *
20.0	78.0	85.8	37 000 *
22.0	76.6	85.3	35 700
24.0	75.2	84.8	31 500
26.0	73.8	84.2	27 700
28.0	72.4	83.6	24 600
30.0	71.0	82.9	21 900
34.0	68.1	81.4	17 700
38.0	65.2	79.6	14 400
42.0	62.1	77.6	11 800
46.0	59.1	75.3	9 700
50.0	55.9	72.7	8 000
54.0	52.5	69.8	6 500
58.0	49.0	66.4	5 300
62.0	45.3	62.7	4 200
66.0	41.4	58.4	3 200 *
70.0	37.1	53.4	1 800 *

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
88.4m (290 Ft.) BOOM			
13.4	82.7	90.1	35 400 *
14.0	82.3	90.0	35 300 *
16.0	81.0	89.7	34 800 *
18.0	79.7	89.3	34 300 *
20.0	78.4	88.9	33 700 *
22.0	77.1	88.4	33 200 *
24.0	75.7	87.9	31 300
26.0	74.4	87.4	27 500
28.0	73.0	86.8	24 400
30.0	71.7	86.1	21 700
34.0	68.9	84.7	17 500
38.0	66.1	83.0	14 200
42.0	63.2	81.0	11 600
46.0	60.2	78.8	9 500
50.0	57.2	76.4	7 800
54.0	54.0	73.6	6 400
58.0	50.7	70.5	5 100
62.0	47.3	66.9	4 000
66.0	43.6	62.9	3 000
70.0	39.7	58.4	1 800 *

RENTAL ONLY