GROVE CRANE®

A GROVE WORLDWIDE COMPANY

TMS870
TTS870
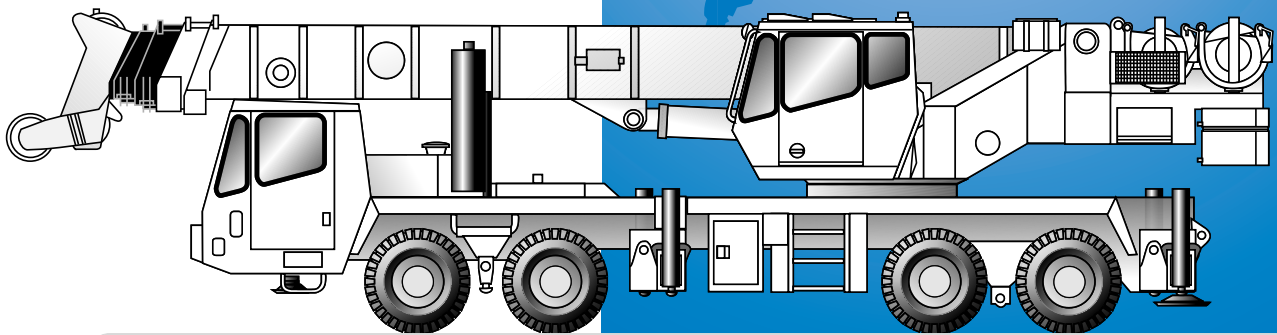
Truck Mounted Hydraulic Cranes

Dimensions

14' 1/2"
(4.28)
TAILSWING

7' 7"
(2.77)
O/R RET.

8' 6"
(2.59)

15' 5"
(5.64)
O/R PART.
EXTENDED

24'
(7.31)

43'
(13.07)

35' 6" (425.5) RETRACTED
137' 9" (1653.62) EXTENDED

1' 8"
(0.53)

11' 8-1/4"
(3.56)

6' 11-3/4"
(2.13)

19.6°

11' 3-1/2"
(3.44)

4' 9-5/8"
(1.46)

19.8°

5'
(1.52)

5'
(1.52)

18' 4"
(5.59)

18' 6"
(5.64)

1' 8"
(0.51)

8"
(0.20)

4' 2-3/4"
(1.29)

36' 6"
(11.15)

13' 9"
(4.2)

2' 2"
(0.64)

℄ ROTATION
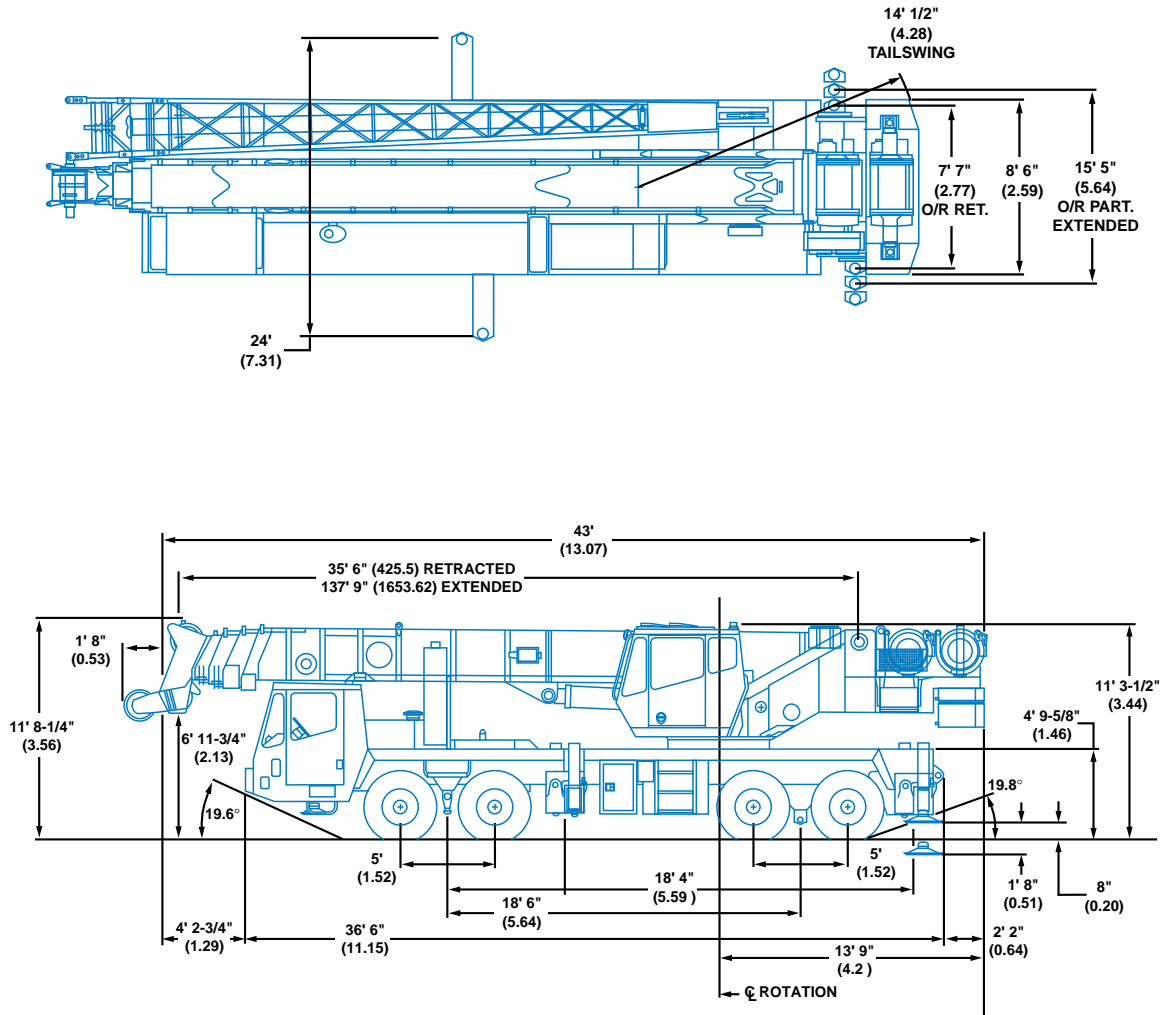
Turning Radius: TMS870 - 45' 1" (13.7 m)
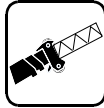TTS870 - 29' 8" (9.04 m) (8 wheel)

Curb Clearance: TMS870 45' 9-9/16" (13.9 m)
TTS870 29' 8" (9.04 m)

Note: ( ) Reference in meters.
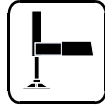
Working Range
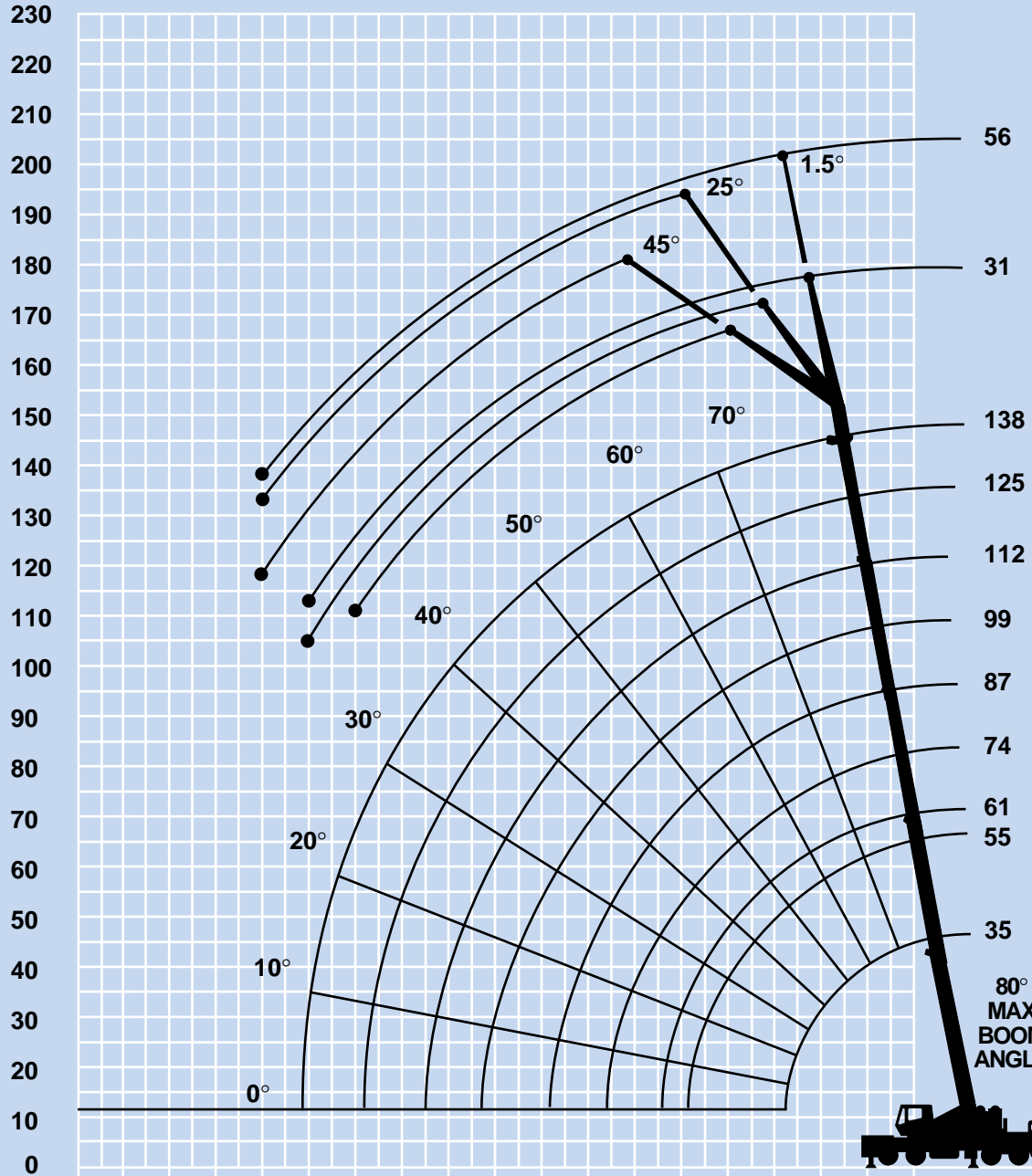
35-138 ft. (10.8-42.0 m) **31-56 ft. (9.4-17 m)** **8,500 lbs. (3856 kg)** **360°**

FEET

230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0

56
1.5°
25°
45°
31
70°
60°
50°
138
125
112
99
87
74
61
55
35

40°
30°
20°
10°
0°

80°
MAX
BOOM
ANGLE

180 160 140 120 100 80 60 40 20 FEET
170 150 130 110 90 70 50 30 10

AXIS OF
ROTATION

Weight Reductions for Load Handling Devices

5 Section Boom
31 ft. - 56 ft. (9.4 m - 17 m) Folding Boom Extension

*31 ft. (9.4 m) extension (erected)	4,048 lbs.	(1836 kg)
*56 ft. (17 m) extension (erected)	8,941 lbs.	(4056 kg)

*Reduction of main boom capacities:

When lifting over swingaway and/or jib combinations, deduct total weight of all load handling devices reeved over main boom nose directly from swingaway or jib capacity.

NOTE: All load handling devices and boom attachments are considered part of the load and suitable allowances MUST BE MADE for their combined weights. Weights are for Grove furnished equipment.

Auxiliary Boom Nose	116 lbs.	(53 kg)
+ 70 ton, 6 sheave hookblock w/o cheekplates	1,674 lbs.	(759 kg)
+ 70 ton, 6 sheave hookblock w/cheekplates	2,010 lbs.	(912 kg)
+ 45 ton, 3 sheave hookblock w/o cheekplates	876 lbs.	(397 kg)
+ 45 ton, 3 sheave hookblock w/cheekplates	1,066 lbs.	(484 kg)
+ 15 ton, 1 sheave hookblock	380 lbs.	(173 kg)
+ 10 ton headache ball	560 lbs.	(254 kg)

+ Refer to rating plate for actual weight.

35 - 138 ft. (10.8 - 42.0 m)   **18,000 lbs. (8165 kg)**   **100%**   **360°**

85% Domestic (Pounds)

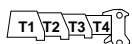| (Feet)	35	55	61	74	87	99	112	125	138
10	+140,000 (65.5)	79,100 (76)	78,450 (77.5)	*57,050 (80)					
12	110,000 (62)	79,100 (73.5)	77,500 (75.5)	57,050 (78.5)	*43,300 (80)				
15	95,800 (56)	79,100 (70)	69,850 (72.5)	51,650 (76)	43,300 (78.5)	*32,100 (80)			
20	77,250 (44.5)	70,850 (64.5)	59,850 (67.5)	44,350 (71.5)	39,550 (75)	32,100 (77.5)	30,050 (79.5)	*20,150 (80)	
25	58,500 (29.5)	58,200 (58)	52,200 (62)	38,750 (67.5)	33,800 (71.5)	32,100 (74.5)	30,050 (77)	20,150 (79)	*19,000 (80)
30		45,850 (51)	46,200 (56.5)	34,200 (63)	29,200 (68)	30,200 (71.5)	27,350 (74.5)	19,100 (76.5)	18,300 (78.5)
35		37,100 (43.5)	37,500 (50)	29,050 (58.5)	25,800 (64)	26,600 (68.5)	24,300 (71.5)	18,100 (74)	17,650 (76.5)
40		27,050 (34.5)	27,500 (43)	25,150 (53.5)	22,900 (60)	23,450 (65)	21,600 (69)	17,250 (72)	17,000 (74)
45		22,000 (21.5)	22,450 (35)	21,800 (48.5)	20,000 (56)	20,450 (61.5)	19,250 (66)	16,450 (69)	16,350 (72)
50			18,500 (24.5)	18,550 (42.5)	17,500 (52)	17,900 (58.5)	16,900 (63)	15,750 (66.5)	15,700 (69.5)
60				12,800 (28)	12,800 (42.5)	14,000 (51)	13,250 (57)	13,100 (61.5)	13,300 (65)
70					8,830 (30)	10,150 (42.5)	10,700 (50)	10,700 (56)	11,050 (60)
80						7,160 (32)	8,240 (42.5)	8,660 (49.5)	9,120 (55)
90						4,800 (15.5)	5,870 (33.5)	6,700 (43)	7,380 (49.5)
100							4,010 (21)	4,840 (35)	5,500 (43)
110								3,340 (24.5)	4,000 (36)
120									2,760 (27)
130									1,720 (9.5)
Minimum boom angle (deg.) for indicated length (no load)									9
Maximum boom length (ft.) at 0 degree boom angle (no load)									125

NOTE: ( ) Boom angles are in degrees.

*This capacity is based on maximum boom angle.

+ 12 parts line required to lift this capacity (using aux. boom nose).

Boom Angle	35	55	61	74	87	99	112	125
0	26,400 (28.2)	12,500 (47.4)	10,150 (53.8)	6,240 (66.6)	3,420 (79.4)	2,440 (92.2)	1,680 (105)	1,070 (117.8)

NOTE: ( ) Reference radii are in feet.

A6-829-014914

%   MODE B

	%	35	55	61	74	87	99	112	125	138
T1	0		50	50	75	100	100	100	100	100
T2	0		25	50	75	100	100	100	100	100
T3	0		0	0	0	0	25	50	75	100
T4	0		0	0	0	0	25	50	75	100

Regardless of counterweight and outrigger spread configuration, no deduct is required from the main boom charts for a stowed boom extension. However, the LMI system still monitors the effect of the stowed boom extension and will display a load value which will vary with changes in boom length and boom angle. To achieve maximum boom capacities, the boom extension must be removed from this crane.

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| 35 - 138 ft. (10.8 - 42.0 m) | 12,500 lbs. (5670 kg) | 100% | 360° |

| | 85% Domestic (Pounds) |

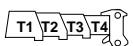| (Feet)	35	55	61	74	87	99	112	125	138
10	+140,000 (65.5)	79,100 (76)	78,450 (77.5)	*57,050 (80)					
12	110,000 (62)	79,100 (73.5)	77,500 (75.5)	57,050 (78.5)	*43,300 (80)				
15	95,800 (56)	79,100 (70)	69,850 (72.5)	51,650 (76)	43,300 (78.5)	*32,100 (80)			
20	70,700 (44.5)	70,300 (64.5)	59,850 (67.5)	44,350 (71.5)	39,550 (75)	32,100 (77.5)	30,050 (79.5)	*20,150 (80)	
25	53,150 (29.5)	52,850 (58)	52,200 (62)	38,750 (67.5)	33,800 (71.5)	32,100 (74.5)	30,050 (77)	20,150 (79)	*19,000 (80)
30		41,400 (51)	41,800 (56.5)	34,200 (63)	29,200 (68)	30,200 (71.5)	27,350 (74.5)	19,100 (76.5)	18,300 (78.5)
35		33,350 (43.5)	33,700 (50)	29,050 (58.5)	25,800 (64)	26,600 (68.5)	24,300 (71.5)	18,100 (74)	17,650 (76.5)
40		27,050 (34.5)	27,500 (43)	25,150 (53.5)	22,900 (60)	23,450 (65)	21,600 (69)	17,250 (72)	17,000 (74)
45		21,750 (21.5)	22,050 (35)	21,800 (48.5)	20,000 (56)	20,450 (61.5)	19,250 (66)	16,450 (69)	16,350 (72)
50			17,900 (24.5)	17,600 (42.5)	17,500 (52)	17,900 (58.5)	16,900 (63)	15,750 (66.5)	15,700 (69.5)
60				11,200 (28)	11,450 (42.5)	12,500 (51)	13,250 (57)	13,100 (61.5)	13,300 (65)
70					7,460 (30)	8,480 (42.5)	9,520 (50)	10,550 (56)	11,050 (60)
80						5,610 (32)	6,610 (42.5)	7,630 (49.5)	8,650 (55)
90						3,480 (15.5)	4,450 (33.5)	5,440 (43)	6,430 (49.5)
100							2,790 (21)	3,750 (35)	4,720 (43)
110								2,400 (24.5)	3,360 (36)
120									2,250 (27)
130									1,330 (9.5)
Minimum boom angle (deg.) for indicated length (no load)									9
Maximum boom length (ft.) at 0 degree boom angle (no load)									125

NOTE: ( ) Boom angles are in degrees.

*This capacity is based on maximum boom angle.

+ 12 parts line required to lift this capacity (using aux. boom nose).

Boom Angle	35	55	61	74	87	99	112	125
0	26,400 (28.2)	12,500 (47.4)	10,150 (53.8)	6,240 (66.6)	3,420 (79.4)	2,440 (92.2)	1,680 (105)	1,070 (117.8)

NOTE: ( ) Reference radii are in feet.

A6-829-014915

 % **MODE B**

		35	55	61	74	87	99	112	125	138
T1		0	50	50	75	100	100	100	100	100
T2		0	25	50	75	100	100	100	100	100
T3		0	0	0	0	0	25	50	75	100
T4		0	0	0	0	0	25	50	75	100

Regardless of counterweight and outrigger spread configuration, no deduct is required from the main boom charts for a stowed boom extension. However, the LMI system still monitors the effect of the stowed boom extension and will display a load value which will vary with changes in boom length and boom angle. To achieve maximum boom capacities, the boom extension must be removed from this crane.

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TMS870/TTS870

35 - 138 ft. (10.8 - 42.0 m) | **8,500 lbs. (3856 kg)** | **100%** | **360°**

85% Domestic (Pounds)

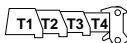| (Feet)	35	55	61	74	87	99	112	125	138
10	+140,000 (65.5)	79,100 (76)	78,450 (77.5)	*57,050 (80)					
12	110,000 (62)	79,100 (73.5)	77,500 (75.5)	57,050 (78.5)	*43,300 (80)				
15	95,800 (56)	79,100 (70)	69,850 (72.5)	51,650 (76)	43,300 (78.5)	*32,100 (80)			
20	70,700 (44.5)	70,300 (64.5)	59,850 (67.5)	44,350 (71.5)	39,550 (75)	32,100 (77.5)	30,050 (79.5)	*20,150 (80)	
25	53,150 (29.5)	52,850 (58)	52,200 (62)	38,750 (67.5)	33,800 (71.5)	32,100 (74.5)	30,050 (79.5)	20,150 (79)	*19,000 (80)
30		41,400 (51)	41,800 (56.5)	34,200 (63)	29,200 (68)	30,200 (71.5)	27,350 (74.5)	19,100 (76.5)	18,300 (78.5)
35		31,850 (43.5)	31,950 (50)	29,050 (58.5)	25,800 (64)	26,600 (68.5)	24,300 (71.5)	18,100 (74)	17,650 (76.5)
40		24,700 (34.5)	24,750 (43)	24,800 (53.5)	22,900 (60)	23,450 (65)	21,600 (69)	17,250 (72)	17,000 (74)
45		19,550 (21.5)	19,550 (35)	19,750 (48.5)	19,500 (56)	20,450 (61.5)	19,250 (66)	16,450 (69)	16,350 (72)
50			15,700 (24.5)	15,400 (42.5)	15,350 (52)	16,550 (58.5)	16,900 (63)	15,750 (66.5)	15,700 (69.5)
60				9,490 (28)	9,730 (42.5)	10,800 (51)	11,900 (57)	13,000 (61.5)	13,300 (65)
70					6,020 (30)	7,040 (42.5)	8,080 (50)	9,130 (56)	10,200 (60)
80						4,390 (32)	5,390 (42.5)	6,400 (49.5)	7,430 (55)
90						2,420 (15.5)	3,390 (33.5)	4,370 (43)	5,370 (49.5)
100							1,840 (21)	2,800 (35)	3,770 (43)
110								1,550 (24.5)	2,510 (36)
120									1,480 (27)
Minimum boom angle (deg.) for indicated length (no load)								5	10
Maximum boom length (ft.) at 0 degree boom angle (no load)							112		

NOTE: ( ) Boom angles are in degrees.

*This capacity is based on maximum boom angle.

+ 12 parts line required to lift this capacity (using aux. boom nose).

Boom Angle	35	55	61	74	87	99	112
0	26,400 (28.2)	12,500 (47.4)	10,150 (53.8)	6,240 (66.6)	3,420 (79.4)	2,060 (92.2)	1,200 (105)

NOTE: ( ) Reference radii are in feet.

A6-829-014530A

% MODE B

	35	55	61	74	87	99	112	125	138
T1	0	50	50	75	100	100	100	100	100
T2	0	25	50	75	100	100	100	100	100
T3	0	0	0	0	0	25	50	75	100
T4	0	0	0	0	0	25	50	75	100

Regardless of counterweight and outrigger spread configuration, no deduct is required from the main boom charts for a stowed boom extension. However, the LMI system still monitors the effect of the stowed boom extension and will display a load value which will vary with changes in boom length and boom angle. To achieve maximum boom capacities, the boom extension must be removed from this crane.

	35 - 138 ft. (10.8 - 42.0 m)	5,500 lbs. (2495 kg)	100%	360°

	85% Domestic (Pounds)

(Feet)	35	55	61	74	87	99	112	125	138
10	+140,000 (65.5)	79,100 (76)	78,450 (77.5)	*57,050 (80)					
12	110,000 (62)	79,100 (73.5)	77,500 (75.5)	57,050 (78.5)	*43,300 (80)				
15	95,800 (56)	79,100 (70)	69,850 (72.5)	51,650 (76)	43,300 (78.5)	*32,100 (80)			
20	68,550 (44.5)	68,150 (64.5)	59,850 (67.5)	44,350 (71.5)	39,550 (75)	32,100 (77.5)	30,050 (77)	*20,150 (80)	
25	51,450 (29.5)	51,150 (58)	51,550 (62)	38,750 (67.5)	33,800 (71.5)	32,100 (74.5)	30,050 (77)	20,150 (79)	*19,000 (80)
30		39,750 (51)	39,600 (56.5)	34,200 (63)	29,200 (68)	30,200 (71.5)	27,350 (74.5)	19,100 (76.5)	18,300 (78.5)
35		29,550 (43.5)	29,500 (50)	29,050 (58.5)	25,800 (64)	26,600 (68.5)	24,300 (71.5)	18,100 (74)	17,650 (76.5)
40		22,750 (34.5)	22,500 (43)	22,850 (53.5)	22,750 (60)	23,450 (65)	21,600 (69)	17,250 (72)	17,000 (74)
45		17,650 (21.5)	17,650 (35)	17,850 (48.5)	17,600 (56)	18,800 (61.5)	19,250 (66)	16,450 (69)	16,350 (72)
50			14,050 (24.5)	13,800 (42.5)	13,750 (52)	14,900 (58.5)	16,050 (63)	15,750 (66.5)	15,700 (69.5)
60				8,190 (28)	8,430 (42.5)	9,500 (51)	10,550 (57)	11,700 (61.5)	12,800 (65)
70					4,950 (30)	5,970 (42.5)	7,000 (50)	8,060 (56)	9,120 (60)
80						3,470 (32)	4,470 (42.5)	5,480 (49.5)	6,510 (55)
90						1,610 (15.5)	2,580 (33.5)	3,570 (43)	4,560 (49.5)
100							1,130 (21)	2,090 (35)	3,060 (43)
110									1,870 (36)
Minimum boom angle (deg.) for indicated length (no load)							20	27	33
Maximum boom length (ft.) at 0 degree boom angle (no load)							99		

NOTE: ( ) Boom angles are in degrees.

*This capacity is based on maximum boom angle.

+ 12 parts line required to lift this capacity (using aux. boom nose).

Boom Angle	35	55	61	74	87	99
0	26,400 (28.2)	12,500 (47.4)	10,150 (53.8)	5,640 (66.6)	2,630 (79.4)	1,280 (92.2)

NOTE: ( ) Reference radii are in feet.

A6-829-014533A

	%	MODE B							
T1	0	50	50	75	100	100	100	100	100
T2	0	25	50	75	100	100	100	100	100
T3	0	0	0	0	0	25	50	75	100
T4	0	0	0	0	0	25	50	75	100

Regardless of counterweight and outrigger spread configuration, no deduct is required from the main boom charts for a stowed boom extension. However, the LMI system still monitors the effect of the stowed boom extension and will display a load value which will vary with changes in boom length and boom angle. To achieve maximum boom capacities, the boom extension must be removed from this crane.

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	35 - 138 ft. (10.8 - 42.0 m)	3,000 lbs. (1361 kg)	100%	360°

85% Domestic (Pounds)

(Feet)	35	55	61	74	87	99	112	125	138
10	+140,000 (65.5)	79,100 (76)	78,450 (77.5)	*57,050 (80)					
12	110,000 (62)	79,100 (73.5)	77,500 (75.5)	57,050 (78.5)	*43,300 (80)				
15	95,350 (56)	79,100 (70)	69,850 (72.5)	51,650 (76)	43,300 (78.5)	*32,100 (80)			
20	66,750 (44.5)	66,400 (64.5)	59,850 (67.5)	44,350 (71.5)	39,550 (75)	32,100 (77.5)	30,050 (79.5)	*20,150 (80)	
25	50,050 (29.5)	49,750 (58)	50,150 (62)	38,750 (67.5)	33,800 (71.5)	32,100 (74.5)	30,050 (77)	20,150 (79)	*19,000 (80)
30		37,300 (51)	37,200 (56.5)	34,200 (63)	29,200 (68)	30,200 (71.5)	27,350 (74.5)	19,100 (76.5)	18,300 (78.5)
35		27,600 (43.5)	27,250 (50)	27,500 (58.5)	25,800 (64)	26,600 (68.5)	24,300 (71.5)	18,100 (74)	17,650 (76.5)
40		20,900 (34.5)	20,650 (43)	21,250 (53.5)	21,000 (60)	22,300 (65)	21,600 (69)	17,250 (72)	17,000 (74)
45		16,050 (21.5)	16,050 (35)	16,300 (48.5)	16,000 (56)	17,250 (61.5)	18,450 (66)	16,450 (69)	16,350 (72)
50			12,650 (24.5)	12,400 (42.5)	12,350 (52)	13,500 (58.5)	14,700 (63)	15,750 (66.5)	15,700 (69.5)
60				7,110 (28)	7,340 (42.5)	8,420 (51)	9,510 (57)	10,600 (61.5)	11,700 (65)
70					4,050 (30)	5,070 (42.5)	6,110 (50)	7,160 (56)	8,220 (60)
80						2,700 (32)	3,700 (42.5)	4,720 (49.5)	5,740 (55)
90							1,920 (33.5)	2,900 (43)	3,900 (49.5)
100								1,500 (35)	2,470 (43)
110									1,340 (36)
Minimum boom angle (deg.) for indicated length (no load)						20	27	32	35

Maximum boom length (ft.) at 0 degree boom angle (no load)   87

NOTE: ( ) Boom angles are in degrees.
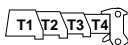
*This capacity is based on maximum boom angle.

+ 12 parts line required to lift this capacity (using aux. boom nose).

Boom Angle	35	55	61	74	87
0	26,400 (28.2)	12,500 (47.4)	10,150 (53.8)	4,680 (66.6)	1,860 (79.4)

NOTE: ( ) Reference radii are in feet.

A6-829-014536A

% MODE B

	35	55	61	74	87	99	112	125	138
T1	0	50	50	75	100	100	100	100	100
T2	0	25	50	75	100	100	100	100	100
T3	0	0	0	0	0	25	50	75	100
T4	0	0	0	0	0	25	50	75	100

Regardless of counterweight and outrigger spread configuration, no deduct is required from the main boom charts for a stowed boom extension. However, the LMI system still monitors the effect of the stowed boom extension and will display a load value which will vary with changes in boom length and boom angle. To achieve maximum boom capacities, the boom extension must be removed from this crane.

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85% Domestic (Pounds)

(Feet)	35	55	61	74	87	99	112	125	138
10	139,500 (65.5)	79,100 (76)	78,450 (77.5)	*57,050 (80)					
12	110,000 (62)	79,100 (73.5)	77,500 (75.5)	57,050 (78.5)	*43,300 (80)				
15	92,450 (56)	79,100 (70)	69,850 (72.5)	51,650 (76)	43,300 (78.5)	*32,100 (80)			
20	64,600 (44.5)	64,250 (64.5)	59,850 (67.5)	44,350 (71.5)	39,550 (75)	32,100 (77.5)	30,050 (79.5)	*20,150 (80)	
25	48,350 (29.5)	48,050 (58)	48,450 (62)	38,750 (67.5)	33,800 (71.5)	32,100 (74.5)	30,050 (77)	20,150 (79)	*19,000 (80)
30		34,400 (51)	34,050 (56.5)	34,050 (63)	29,200 (68)	30,200 (71.5)	27,350 (74.5)	19,100 (76.5)	18,300 (78.5)
35		25,150 (43.5)	24,500 (50)	25,200 (58.5)	25,250 (64)	26,600 (68.5)	24,300 (71.5)	18,100 (74)	17,650 (76.5)
40		18,650 (34.5)	18,400 (43)	19,300 (53.5)	18,750 (60)	20,050 (65)	21,350 (69)	17,250 (72)	17,000 (74)
45		14,150 (21.5)	14,150 (35)	14,400 (48.5)	14,100 (56)	15,350 (61.5)	16,550 (66)	16,450 (69)	16,350 (72)
50			11,050 (24.5)	10,750 (42.5)	10,700 (52)	11,850 (58.5)	13,050 (63)	14,250 (66.5)	15,450 (69.5)
60				5,810 (28)	6,040 (42.5)	7,110 (51)	8,210 (57)	9,310 (61.5)	10,400 (65)
70					2,970 (30)	3,990 (42.5)	5,030 (50)	6,080 (56)	7,140 (60)
80						1,780 (32)	2,780 (42.5)	3,800 (49.5)	4,820 (55)
90							1,120 (33.5)	2,100 (43)	3,100 (49.5)
100									1,760 (43)

Minimum boom angle (deg.) for indicated length (no load)	20	25	33	37	40

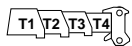|		
Maximum boom length (ft.) at 0 degree boom angle (no load)	74

NOTE: ( ) Boom angles are in degrees.

*This capacity is based on maximum boom angle.

Boom Angle	35	55	61	74
0	26,400 (28.2)	12,500 (47.4)	9,190 (53.8)	3,540 (66.6)

NOTE: ( ) Reference radii are in feet.

A6-829-014539

% **MODE B**

	%								
T1	0	50	50	75	100	100	100	100	100
T2	0	25	50	75	100	100	100	100	100
T3	0	0	0	0	0	25	50	75	100
T4	0	0	0	0	0	25	50	75	100

Regardless of counterweight and outrigger spread configuration, no deduct is required from the main boom charts for a stowed boom extension. However, the LMI system still monitors the effect of the stowed boom extension and will display a load value which will vary with changes in boom length and boom angle. To achieve maximum boom capacities, the boom extension must be removed from this crane.

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35 - 138 ft. (10.8 - 42.0 m) | **31 - 56 ft.** (9.4 - 17 m) **FOLDING** | **18,000 lbs.** (8165 kg) | **100%** | **360°**

| | 85% Domestic (Pounds) |

(Feet)	**31 FT. LENGTH (SWINGAWAY BASE)**			**56 FT. LENGTH (SWINGAWAY BASE & FLY)**		
	1.5°	25°	45°	1.5°	25°	45°
35	9,500 (79.5)					
40	9,500 (78)			*5,500 (80)		
45	9,500 (76.5)	*8,750 (80)		5,400 (79.5)		
50	9,500 (75)	7,490 (78.5)	*7,800 (80)	5,300 (78)		
60	9,110 (71.5)	7,060 (75)	6,740 (77)	5,100 (75.5)	*4,640 (80)	
70	8,450 (68.5)	6,720 (71.5)	6,460 (73.5)	4,900 (72.5)	4,430 (78)	*3,600 (80)
80	7,550 (64.5)	6,330 (68)	6,350 (69.5)	4,700 (69.5)	4,220 (74.5)	3,500 (77.5)
90	6,990 (60.5)	6,060 (64)	6,280 (65.5)	4,500 (66.5)	4,120 (71)	3,400 (74)
100	6,330 (56.5)	5,820 (60)	6,220 (61)	4,300 (63.5)	3,810 (67.5)	3,300 (70.5)
110	4,820 (52)	5,400 (55.5)	5,670 (56.5)	4,100 (59.5)	3,600 (64)	3,200 (67)
120	3,580 (47)	4,050 (50.5)	4,050 (52)	3,900 (56)	3,400 (60.5)	3,100 (63)
130	2,550 (41.5)	2,910 (45)		3,190 (52)	3,190 (56)	3,000 (58.5)
140	1,680 (35.5)	1,940 (38.5)		2,300 (47.5)	2,980 (51.5)	2,900 (53.5)
150				1,540 (42.5)	2,100 (46.5)	
160					1,300 (41)	
Minimum boom angle (deg.) for indicated length	32	32	45	40	40	45
Maximum boom length (ft.) at 0 deg. boom angle	112			99		

NOTE: ( ) Boom angles are in degrees.

*This capacity is based on maximum boom angle.

MODE B

A6-829-014929

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

85% Domestic (Pounds)

(Feet)	31 FT. LENGTH (SWINGAWAY BASE)			56 FT. LENGTH (SWINGAWAY BASE & FLY)		
	1.5°	25°	45°	1.5°	25°	45°
35	9,500 (79.5)					
40	9,500 (78)			*5,500 (80)		
45	9,500 (76.5)	*8,750 (80)		5,400 (79.5)		
50	9,500 (75)	7,490 (78.5)	*7,800 (80)	5,300 (78)		
60	9,110 (71.5)	7,060 (75)	6,740 (77)	5,100 (75.5)	*4,640 (80)	
70	8,450 (68.5)	6,720 (71.5)	6,460 (73.5)	4,900 (72.5)	4,430 (78)	*3,600 (80)
80	7,550 (64.5)	6,330 (68)	6,350 (69.5)	4,700 (69.5)	4,220 (74.5)	3,500 (77.5)
90	6,990 (60.5)	6,060 (64)	6,280 (65.5)	4,500 (66.5)	4,120 (71)	3,400 (74)
100	5,480 (56.5)	5,820 (60)	6,220 (61)	4,300 (63.5)	3,810 (67.5)	3,300 (70.5)
110	4,050 (52)	4,710 (55.5)	4,820 (56.5)	4,100 (59.5)	3,600 (64)	3,200 (67)
120	2,890 (47)	3,430 (50.5)	3,430 (52)	3,890 (56)	3,400 (60.5)	3,100 (63)
130	1,920 (41.5)	2,370 (45)		2,850 (52)	3,190 (56)	3,000 (58.5)
140	1,110 (35.5)	1,470 (38.5)		1,970 (47.5)	2,290 (51.5)	2,570 (53.5)
150				1,220 (42.5)	1,390 (46.5)	
Minimum boom angle (deg.) for indicated length	34	38	45	42	45	47
Maximum boom length (ft.) at 0 deg. boom angle	99			74		

NOTE: ( ) Boom angles are in degrees.

* This capacity is based on maximum boom angle.

A6-829-014931

MODE B

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

30   TMS870/TTS870

| | 35 - 138 ft. (10.8 - 42.0 m) | 31 - 56 ft. (9.4 - 17 m) FOLDING | 8,500 lbs. (3855 kg) | 100% | 360° |

85% Domestic (Pounds)

(Feet)	31 FT. LENGTH (SWINGAWAY BASE)			56 FT. LENGTH (SWINGAWAY BASE & FLY)		
	1.5°	25°	45°	1.5°	25°	45°
35	9,500 (79.5)					
40	9,500 (78)			*5,500 (80)		
45	9,500 (76.5)	*8,750 (80)		5,400 (79.5)		
50	9,500 (75)	7,490 (78.5)	*7,800 (80)	5,300 (78)		
60	9,110 (71.5)	7,060 (75)	6,740 (77)	5,100 (75.5)	*4,640 (80)	
70	8,450 (68.5)	6,720 (71.5)	6,460 (73.5)	4,900 (72.5)	4,430 (78)	*3,600 (80)
80	7,550 (64.5)	6,330 (68)	6,350 (69.5)	4,700 (69.5)	4,220 (74.5)	3,500 (77.5)
90	6,200 (60.5)	6,060 (64)	6,280 (65.5)	4,500 (66.5)	4,120 (71)	3,400 (74)
100	4,530 (56.5)	5,330 (60)	5,580 (61)	4,300 (63.5)	3,810 (67.5)	3,300 (70.5)
110	3,200 (52)	3,860 (55.5)	3,970 (56.5)	4,100 (59.5)	3,600 (64)	3,200 (67)
120	2,120 (47)	2,660 (50.5)	2,660 (52)	3,120 (56)	3,400 (60.5)	3,100 (63)
130	1,220 (41.5)	1,660 (45)		2,150 (52)	2,640 (56)	3,000 (58.5)
140				1,320 (47.5)	1,640 (51.5)	1,920 (53.5)
Minimum boom angle (deg.) for indicated length	39	44	45	47	49	50
Maximum boom length (ft.) at 0 deg. boom angle	99			87		

NOTE: ( ) Boom angles are in degrees.

*This capacity is based on maximum boom angle.

MODE B

A6-829-014543A

| 35 - 138 ft.
(10.8 - 42.0 m) | 31 - 56 ft.
(9.4 - 17 m)
FOLDING | 5,500 lbs.
(2495 kg) | 100% | 360° |

	85% Domestic (Pounds)

	31 FT. LENGTH (SWINGAWAY BASE)			56 FT. LENGTH (SWINGAWAY BASE & FLY)		
(Feet)	1.5°	25°	45°	1.5°	25°	45°
35	9,500 (79.5)					
40	9,500 (78)			*5,500 (80)		
45	9,500 (76.5)	*8,750 (80)		5,400 (79.5)		
50	9,500 (75)	7,490 (78.5)	*7,800 (80)	5,300 (78)		
60	9,110 (71.5)	7,060 (75)	6,740 (77)	5,100 (75.5)	*4,640 (80)	
70	8,450 (68.5)	6,720 (71.5)	6,460 (73.5)	4,900 (72.5)	4,430 (78)	*3,600 (80)
80	7,450 (64.5)	6,330 (68)	6,350 (69.5)	4,700 (69.5)	4,220 (74.5)	3,500 (77.5)
90	5,400 (60.5)	6,060 (64)	6,280 (65.5)	4,500 (66.5)	4,120 (71)	3,400 (74)
100	3,820 (56.5)	4,390 (60)	4,870 (61)	4,300 (63.5)	3,810 (67.5)	3,300 (70.5)
110	2,560 (52)	2,980 (55.5)	3,330 (56.5)	3,660 (59.5)	3,600 (64)	3,200 (67)
120	1,540 (47)	1,830 (50.5)	2,080 (52)	2,540 (56)	3,250 (60.5)	3,100 (63)
130				1,620 (52)	2,110 (56)	2,540 (58.5)
140					1,150 (51.5)	1,430 (53.5)
Minimum boom angle (deg.) for indicated length	44	44	45	50	51	52
Maximum boom length (ft.) at 0 deg. boom angle	74			74		

NOTE: ( ) Boom angles are in degrees.

* This capacity is based on maximum boom angle.

MODE B

A6-829-014545

TMS870/TTS870

	35 - 138 ft. (10.8 - 42.0 m)	31 - 56 ft. (9.4 - 17 m) FOLDING	3,000 lbs. (1361 kg)	100%	360°

		85% Domestic (Pounds)

	31 FT. LENGTH (SWINGAWAY BASE)			56 FT. LENGTH (SWINGAWAY BASE & FLY)		
(Feet)	1.5°	25°	45°	1.5°	25°	45°
35	9,500 (79.5)					
40	9,500 (78)			*5,500 (80)		
45	9,500 (76.5)	*8,750 (80)		5,400 (79.5)		
50	9,500 (75)	7,490 (78.5)	*7,800 (80)	5,300 (78)		
60	9,110 (71.5)	7,060 (75)	6,740 (77)	5,100 (75.5)	*4,640 (80)	
70	8,450 (68.5)	6,720 (71.5)	6,460 (73.5)	4,900 (72.5)	4,430 (78)	*3,600 (80)
80	6,680 (64.5)	6,330 (68)	6,350 (69.5)	4,700 (69.5)	4,220 (74.5)	3,500 (77.5)
90	4,730 (60.5)	5,490 (64)	6,140 (65.5)	4,500 (66.5)	4,120 (71)	3,400 (74)
100	3,230 (56.5)	3,790 (60)	4,280 (61)	4,300 (63.5)	3,810 (67.5)	3,300 (70.5)
110	2,030 (52)	2,450 (55.5)	2,800 (56.5)	3,130 (59.5)	3,600 (64)	3,200 (67)
120	1,060 (47)	1,350 (50.5)	1,600 (52)	2,060 (56)	2,770 (60.5)	3,100 (63)
130				1,170 (52)	1,670 (56)	2,100 (58.5)
140						1,020 (53.5)
Minimum boom angle (deg.) for indicated length	47	47	48	52	53	54
Maximum boom length (ft.) at 0 deg. boom angle	74			61		

NOTE: ( ) Boom angles are in degrees.

* This capacity is based on maximum boom angle.

MODE B

A6-829-014547A

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

35 - 138 ft.
(10.8 - 42.0 m)

31 - 56 ft.
(9.4 - 17 m)
FOLDING

0 lbs.
(0 kg)

100%

360°

85% Domestic (Pounds)

(Feet)	31 FT. LENGTH (SWINGAWAY BASE)			56 FT. LENGTH (SWINGAWAY BASE & FLY)		
	1.5°	25°	45°	1.5°	25°	45°
35	9,500 (79.5)					
40	9,500 (78)			*5,500 (80)		
45	9,500 (76.5)	*8,750 (80)		5,400 (79.5)		
50	9,500 (75)	7,490 (78.5)	*7,800 (80)	5,300 (78)		
60	9,110 (71.5)	7,060 (75)	6,740 (77)	5,100 (75.5)	*4,640 (80)	
70	8,220 (68.5)	6,720 (71.5)	6,460 (73.5)	4,900 (72.5)	4,430 (78)	*3,600 (80)
80	5,760 (64.5)	6,330 (68)	6,350 (69.5)	4,700 (69.5)	4,220 (74.5)	3,500 (77.5)
90	3,930 (60.5)	4,690 (64)	5,330 (65.5)	4,500 (66.5)	4,120 (71)	3,400 (74)
100	2,520 (56.5)	3,080 (60)	3,570 (61)	3,730 (63.5)	3,810 (67.5)	3,300 (70.5)
110	1,390 (52)	1,810 (55.5)	2,160 (56.5)	2,490 (59.5)	3,450 (64)	3,200 (67)
120			1,020 (52)	1,480 (56)	2,190 (60.5)	2,790 (63)
130					1,140 (56)	1,570 (58.5)
Minimum boom angle (deg.) for indicated length	50	51	52	55	55	56
Maximum boom length (ft.) at 0 deg. boom angle	74			61		

NOTE: ( ) Boom angles are in degrees.

*This capacity is based on maximum boom angle.

MODE B

A6-829-014549A

35 - 125 ft.
(10.8 - 38.1 m)

31 - 56 ft.
(9.4 - 17 m)
FOLDING

18,000 lbs.
(8165 kg)

100%

360°

85% Domestic (Pounds)

(Feet)	31 FT. LENGTH (SWINGAWAY BASE)			56 FT. LENGTH (SWINGAWAY BASE & FLY)		
	1.5°	25°	45°	1.5°	25°	45°
30	*11,500 (80)					
35	11,500 (78.5)					
40	11,500 (77)	*10,000 (80)		6,950 (79.5)		
45	11,500 (75)	9,300 (78.5)	*8,000 (80)	6,780 (78.5)		
50	11,000 (73.5)	8,790 (76.5)	6,810 (78.5)	6,620 (77)		
60	10,050 (70)	7,960 (72.5)	6,490 (74.5)	6,290 (74)	*4,900 (80)	
70	9,220 (66)	7,360 (68.5)	6,400 (70.5)	5,960 (71)	4,560 (76.5)	*3,700 (80)
80	8,440 (62)	6,900 (64.5)	6,350 (66)	5,640 (67.5)	4,230 (73)	3,520 (76.5)
90	7,340 (57.5)	6,590 (60)	6,340 (61.5)	5,260 (64.5)	3,870 (69.5)	3,400 (72.5)
100	6,020 (53)	6,250 (55)	6,320 (56.5)	4,980 (60.5)	3,700 (65.5)	3,290 (68.5)
110	4,510 (47.5)	5,050 (50)	5,260 (51)	4,650 (56.5)	3,480 (61.5)	3,190 (64)
120	3,280 (41.5)	3,690 (44)		4,070 (52)	3,290 (57.5)	3,110 (59.5)
130	2,250 (34.5)	2,540 (36.5)		3,020 (47.5)	3,120 (52.5)	3,040 (54)
140	1,380 (26)			2,140 (42.5)	2,750 (47.5)	
150				1,380 (36.5)	1,840 (41)	
Minimum boom angle (deg.) for indicated length	24	25	45	35	37	45
Maximum boom length (ft.) at 0 deg. boom angle	112			99		

NOTE: ( ) Boom angles are in degrees.

*This capacity is based on maximum boom angle.

MODE B

A6-829-014930

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

35 - 125 ft.
(10.8 - 38.1 m)

31 - 56 ft.
(9.4 - 17 m)
FOLDING

12,500 lbs.
(5670 kg)

100%

360°

| | 85% Domestic (Pounds) | | | | | |

(Feet)	31 FT. LENGTH (SWINGAWAY BASE)			56 FT. LENGTH (SWINGAWAY BASE & FLY)		
	1.5°	25°	45°	1.5°	25°	45°
30	*11,500 (80)					
35	11,500 (78.5)					
40	11,500 (77)	*10,000 (80)		6,950 (79.5)		
45	11,500 (75)	9,300 (78.5)	*8,000 (80)	6,780 (78.5)		
50	11,000 (73.5)	8,790 (76.5)	6,810 (78.5)	6,620 (77)		
60	10,050 (70)	7,960 (72.5)	6,490 (74.5)	6,290 (74)	*4,900 (80)	
70	9,220 (66)	7,360 (68.5)	6,400 (70.5)	5,960 (71)	4,560 (76.5)	*3,700 (80)
80	8,440 (62)	6,900 (64.5)	6,350 (66)	5,640 (67.5)	4,230 (73)	3,520 (76.5)
90	6,850 (57.5)	6,590 (60)	6,340 (61.5)	5,260 (64.5)	3,870 (69.5)	3,400 (72.5)
100	5,090 (53)	5,490 (55)	6,060 (56.5)	4,980 (60.5)	3,700 (65.5)	3,290 (68.5)
110	3,690 (47.5)	3,940 (50)	4,310 (51)	4,650 (56.5)	3,480 (61.5)	3,190 (64)
120	2,540 (41.5)	2,670 (44)		3,620 (52)	3,290 (57.5)	3,110 (59.5)
130	1,600 (34.5)	1,620 (36.5)		2,620 (47.5)	3,110 (52.5)	3,040 (54)
140				1,770 (42.5)	2,130 (47.5)	
150				1,050 (36.5)	1,290 (41)	
Minimum boom angle (deg.) for indicated length	33	33	45	36	40	46
Maximum boom length (ft.) at 0 deg. boom angle	99			74		

NOTE: ( ) Boom angles are in degrees.

*This capacity is based on maximum boom angle.

MODE B

A6-829-014932

| | 35 - 125 ft. (10.8 - 38.1 m) | 31 - 56 ft. (9.4 - 17 m) FOLDING | 8,500 lbs. (3855 kg) | 100% | 360° |

| | 85% Domestic (Pounds) |

(Feet)	31 FT. LENGTH (SWINGAWAY BASE)			56 FT. LENGTH (SWINGAWAY BASE & FLY)		
	1.5°	25°	45°	1.5°	25°	45°
30	*11,500 (80)					
35	11,500 (78.5)					
40	11,500 (77)	*10,000 (80)		6,950 (79.5)		
45	11,500 (75)	9,300 (78.5)	*8,000 (80)	6,780 (78.5)		
50	11,000 (73.5)	8,790 (76.5)	6,810 (78.5)	6,620 (77)		
60	10,050 (70)	7,960 (72.5)	6,490 (74.5)	6,290 (74)	*4,900 (80)	
70	9,220 (66)	7,360 (68.5)	6,400 (70.5)	5,960 (71)	4,560 (76.5)	*3,700 (80)
80	7,910 (62)	6,900 (64.5)	6,350 (66)	5,640 (67.5)	4,230 (73)	3,520 (76.5)
90	5,790 (57.5)	6,380 (60)	6,340 (61.5)	5,260 (64.5)	3,870 (69.5)	3,400 (72.5)
100	4,140 (53)	4,550 (55)	5,110 (56.5)	4,980 (60.5)	3,700 (65.5)	3,290 (68.5)
110	2,840 (47.5)	3,090 (50)	3,460 (51)	4,060 (56.5)	3,480 (61.5)	3,190 (64)
120	1,770 (41.5)	1,900 (44)		2,860 (52)	3,290 (57.5)	3,110 (59.5)
130				1,860 (47.5)	2,380 (52.5)	2,830 (54)
140				1,020 (42.5)	1,430 (47.5)	
Minimum boom angle (deg.) for indicated length	37	39	46	42	46	47
Maximum boom length (ft.) at 0 deg. boom angle	99			87		

NOTE: ( ) Boom angles are in degrees.

*This capacity is based on maximum boom angle.

MODE B

A6-829-014542

35 - 138 ft.
(10.8 - 42.0 m)

8,500 lbs.
(3855 kg)

100%

360°

(Feet)	35	61	74	87	99	112	138
				85% Domestic (Pounds)			
10	+140,000 (65.5)	42,900 (77.5)	*32,100 (80)				
12	110,000 (62)	42,000 (75.5)	32,100 (78.5)	*31,850 (80)			
15	95,800 (56)	36,550 (72.5)	32,100 (76)	31,850 (78.5)	*21,350 (80)		
20	70,700 (44.5)	29,400 (67.5)	31,350 (71.5)	28,850 (75)	21,350 (77.5)	19,000 (79.5)	
25	53,150 (29.5)	24,350 (62)	26,450 (67.5)	25,050 (71.5)	20,850 (74.5)	18,150 (77)	*19,000 (80)
30		20,500 (56.5)	22,300 (63)	21,550 (68)	18,650 (71.5)	17,300 (74.5)	18,300 (78.5)
35		17,450 (50)	19,100 (58.5)	18,500 (64)	16,900 (68.5)	16,450 (71.5)	17,650 (76.5)
40		15,050 (43)	16,500 (53.5)	16,000 (60)	15,300 (65)	15,650 (69)	17,000 (74)
45		13,100 (35)	14,450 (48.5)	14,000 (56)	13,650 (61.5)	14,150 (66)	16,350 (72)
50		11,450 (24.5)	12,750 (42.5)	12,350 (52)	12,100 (58.5)	12,700 (63)	15,700 (69.5)
60			10,050 (28)	9,780 (42.5)	9,580 (51)	10,150 (57)	13,300 (65)
70				7,860 (30)	7,710 (42.5)	8,220 (50)	10,200 (60)
80					6,270 (32)	6,730 (42.5)	7,430 (55)
90					4,800 (15.5)	5,550 (33.5)	5,370 (49.5)
100						4,010 (21)	3,770 (43)
110							2,510 (36)
120							1,480 (27)
Minimum boom angle (deg.) for indicated length (no load)						0	10
Maximum boom length (ft.) at 0 degree boom angle (no load)					112		

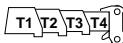**NOTE: ( ) Boom angles are in degrees.**

*This capacity is based on maximum boom angle.

+ 12 parts line required to lift this capacity (using aux. boom nose).

Boom Angle	35	61	74	87	99	112
0	26,400 (28.2)	10,150 (53.8)	6,240 (66.6)	3,420 (79.4)	2,440 (92.2)	1,680 (105)

NOTE: ( ) Reference radii are in feet.

A6-829-014468A

%		MODE A					
T1	0	0	0	0	0	0	100
T2	0	100	100	100	100	100	100
T3	0	0	25	50	75	100	100
T4	0	0	25	50	75	100	100

Regardless of counterweight and outrigger spread configuration, no deduct is required from the main boom charts for a stowed boom extension. However, the LMI system still monitors the effect of the stowed boom extension and will display a load value which will vary with changes in boom length and boom angle. To achieve maximum boom capacities, the boom extension must be removed from this crane.

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85% Domestic (Pounds)

(Feet)	35	61	74	87	99	112	138
10	+140,000 (65.5)	42,900 (77.5)	*32,100 (80)				
12	110,000 (62)	42,000 (75.5)	32,100 (78.5)	*31,850 (80)			
15	95,800 (56)	36,550 (72.5)	32,100 (76)	31,850 (78.5)	*21,350 (80)		
20	68,550 (44.5)	29,400 (67.5)	31,350 (71.5)	28,850 (75)	21,350 (77.5)	19,000 (79.5)	
25	51,450 (29.5)	24,350 (62)	26,450 (67.5)	25,050 (71.5)	20,850 (74.5)	18,150 (77)	*19,000 (80)
30		20,500 (56.5)	22,300 (63)	21,550 (68)	18,650 (71.5)	17,300 (74.5)	18,300 (78.5)
35		17,450 (50)	19,100 (58.5)	18,500 (64)	16,900 (68.5)	16,450 (71.5)	17,650 (76.5)
40		15,050 (43)	16,500 (53.5)	16,000 (60)	15,300 (65)	15,650 (69)	17,000 (74)
45		13,100 (35)	14,450 (48.5)	14,000 (56)	13,650 (61.5)	14,150 (66)	16,350 (72)
50		11,450 (24.5)	12,750 (42.5)	12,350 (52)	12,100 (58.5)	12,700 (63)	15,700 (69.5)
60			10,050 (28)	9,780 (42.5)	9,580 (51)	10,150 (57)	12,800 (65)
70				7,830 (30)	7,710 (42.5)	8,220 (50)	9,120 (60)
80					6,270 (32)	6,730 (42.5)	6,510 (55)
90					4,040 (15.5)	5,110 (33.5)	4,560 (49.5)
100						3,340 (21)	3,060 (43)
110							1,870 (36)
Minimum boom angle (deg.) for indicated length (no load)						0	33
Maximum boom length (ft.) at 0 degree boom angle (no load)						112	

NOTE: ( ) Boom angles are in degrees.

*This capacity is based on maximum boom angle.

+ 12 parts line required to lift this capacity (using aux. boom nose).

Boom Angle	35	61	74	87	99	112
0	26,400 (28.2)	10,150 (53.8)	6,240 (66.6)	3,420 (79.4)	2,440 (92.2)	1,680 (105)

NOTE: ( ) Reference radii are in feet.

A6-829-014469A

% **MODE A**

	35	61	74	87	99	112	138
T1	0	0	0	0	0	0	100
T2	0	100	100	100	100	100	100
T3	0	0	25	50	75	100	100
T4	0	0	25	50	75	100	100

Regardless of counterweight and outrigger spread configuration, no deduct is required from the main boom charts for a stowed boom extension. However, the LMI system still monitors the effect of the stowed boom extension and will display a load value which will vary with changes in boom length and boom angle. To achieve maximum boom capacities, the boom extension must be removed from this crane.

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| | 35 - 138 ft. (10.8 - 42.0 m) | 3,000 lbs. (1361 kg) | 100% | 360° |

85% Domestic (Pounds)

(Feet)	35	61	74	87	99	112	138
10	+140,000 (65.5)	42,900 (77.5)	*32,100 (80)				
12	110,000 (62)	42,000 (75.5)	32,100 (78.5)	*31,850 (80)			
15	95,350 (56)	36,550 (72.5)	32,100 (76)	31,850 (78.5)	*21,350 (80)		
20	66,750 (44.5)	29,400 (67.5)	31,350 (71.5)	28,850 (75)	21,350 (77.5)	19,000 (79.5)	
25	50,050 (29.5)	24,350 (62)	26,450 (67.5)	25,050 (71.5)	20,850 (74.5)	18,150 (77)	*19,000 (80)
30		20,500 (56.5)	22,300 (63)	21,550 (68)	18,650 (71.5)	17,300 (74.5)	18,300 (78.5)
35		17,450 (50)	19,100 (58.5)	18,500 (64)	16,900 (68.5)	16,450 (71.5)	17,650 (76.5)
40		15,050 (43)	16,500 (53.5)	16,000 (60)	15,300 (65)	15,650 (69)	17,000 (74)
45		13,100 (35)	14,450 (48.5)	14,000 (56)	13,650 (61.5)	14,150 (66)	16,350 (72)
50		11,450 (24.5)	12,750 (42.5)	12,350 (52)	12,100 (58.5)	12,700 (63)	15,700 (69.5)
60			10,050 (28)	9,780 (42.5)	9,580 (51)	10,150 (57)	11,700 (65)
70				6,990 (30)	7,710 (42.5)	8,220 (50)	8,220 (60)
80					5,580 (32)	6,660 (42.5)	5,740 (55)
90					3,410 (15.5)	4,480 (33.5)	3,900 (49.5)
100						2,770 (21)	2,470 (43)
110							1,340 (36)
Minimum boom angle (deg.) for indicated length (no load)						0	35
Maximum boom length (ft.) at 0 degree boom angle (no load)						112	

NOTE: ( ) Boom angles are in degrees.

*This capacity is based on maximum boom angle.

+ 12 parts line required to lift this capacity (using aux. boom nose).

Boom Angle	35	61	74	87	99	112
0	26,400 (28.2)	10,150 (53.8)	6,240 (66.6)	3,420 (79.4)	2,440 (92.2)	1,680 (105)

NOTE: ( ) Reference radii are in feet.

A6-829-014470A

T1 T2 T3 T4	%	MODE A					
T1	0	0	0	0	0	0	100
T2	0	100	100	100	100	100	100
T3	0	0	25	50	75	100	100
T4	0	0	25	50	75	100	100

Regardless of counterweight and outrigger spread configuration, no deduct is required from the main boom charts for a stowed boom extension. However, the LMI system still monitors the effect of the stowed boom extension and will display a load value which will vary with changes in boom length and boom angle. To achieve maximum boom capacities, the boom extension must be removed from this crane.

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85% Domestic (Pounds)

(Feet)	35	61	74	87	99	112	138
10	139,500 (65.5)	42,900 (77.5)	*32,100 (80)				
12	110,000 (62)	42,000 (75.5)	32,100 (78.5)	*31,850 (80)			
15	92,450 (56)	36,550 (72.5)	32,100 (76)	31,850 (78.5)	*21,350 (80)		
20	64,600 (44.5)	29,400 (67.5)	31,350 (71.5)	28,850 (75)	21,350 (77.5)	19,000 (79.5)	
25	48,350 (29.5)	24,350 (62)	26,450 (67.5)	25,050 (71.5)	20,850 (74.5)	18,150 (77)	*19,000 (80)
30		20,500 (56.5)	22,300 (63)	21,550 (68)	18,650 (71.5)	17,300 (74.5)	18,300 (78.5)
35		17,450 (50)	19,100 (58.5)	18,500 (64)	16,900 (68.5)	16,450 (71.5)	17,650 (76.5)
40		15,050 (43)	16,500 (53.5)	16,000 (60)	15,300 (65)	15,650 (69)	17,000 (74)
45		13,100 (35)	14,450 (48.5)	14,000 (56)	13,650 (61.5)	14,150 (66)	16,350 (72)
50		11,450 (24.5)	12,750 (42.5)	12,350 (52)	12,100 (58.5)	12,700 (63)	15,450 (69.5)
60			9,160 (28)	9,710 (42.5)	9,580 (51)	10,150 (57)	10,400 (65)
70				5,990 (30)	7,430 (42.5)	8,220 (50)	7,140 (60)
80					4,720 (32)	5,790 (42.5)	4,820 (55)
90					2,550 (15.5)	3,700 (33.5)	3,100 (49.5)
100						1,990 (21)	1,760 (43)
Minimum boom angle (deg.) for indicated length (no load)						0	40
Maximum boom length (ft.) at 0 degree boom angle (no load)						112	

NOTE: ( ) Boom angles are in degrees.

*This capacity is based on maximum boom angle.

Boom Angle	35	61	74	87	99	112
0	26,400 (28.2)	10,150 (53.8)	6,240 (66.6)	3,330 (79.4)	2,130 (92.2)	1,260 (105)

NOTE: ( ) Reference radii are in feet.

A6-829-014471

% MODE A

T1\T2\T3\T4 %	35	61	74	87	99	112	138
T1	0	0	0	0	0	0	100
T2	0	100	100	100	100	100	100
T3	0	0	25	50	75	100	100
T4	0	0	25	50	75	100	100

Regardless of counterweight and outrigger spread configuration, no deduct is required from the main boom charts for a stowed boom extension. However, the LMI system still monitors the effect of the stowed boom extension and will display a load value which will vary with changes in boom length and boom angle. To achieve maximum boom capacities, the boom extension must be removed from this crane.

TMS870 5 SECTION BOOM . . . .

Machine equipped as follows:
138 ft. full power 5 section boom
31 - 56 ft. (9.4 - 17 m) folding swingaway
Main and auxiliary hoist w/rope
Auxiliary boom nose
Full fuel and hydraulics
445/65R22.5 front tires
315/80R22.5 rear tires
45 ton hook block (on carrier deck)
10 ton ball (on carrier deck)
Counterweight configuration-see chart

AXLE/TIRE CAPACITY	FRONT 49,200 lbs. (22 317 kg)	REAR 60,000 lbs. (27 216 kg)	GVW 109,200 lbs. (49 533 kg)
Counterweight placement effects:			
8,500 lbs. (3856 kg) cwt. on superstructure	37,739 lbs. (17 118 kg)	58,701 lbs. (26 627 kg)	96,440 lbs. (43 745 kg)
8,500 lbs. (3856 kg) cwt. on carrier	49,234 lbs. (22 333 kg)	47,206 lbs. (21 413 kg)	96,440 lbs. (43 745 kg)
3,000 lbs. (1361 kg) on S/S 5,500 lbs. (2495 kg) on carrier	45,177 lbs. (20 492 kg)	51,263 lbs. (23 253 kg)	96,440 lbs. (43 745 kg)
5,500 lbs. (2495 kg) on S/S 3,000 lbs. (1361 kg) on carrier	41,796 lbs. (18 959 kg)	54,644 lbs. (24 787 kg)	96,440 lbs. (43 745 kg)
5,500 lbs. (2495 kg) ONLY on superstructure	39,092 lbs. (17 732 kg)	54,348 lbs. (24 652 kg)	93,440 lbs. (42 384 kg)
5,500 lbs. (2495 kg) ONLY on carrier	46,530 lbs. (21 106 kg)	46,910 lbs. (21 278 kg)	93,440 lbs. (42 384 kg)
No cwt. on carrier or superstructure	41,572 lbs. (18 857 kg)	46,368 lbs. (21 033 kg)	87,940 lbs. (39 890 kg)

TTS870 5 SECTION BOOM . . . .

Machine equipped as follows:
138 ft. full power 5 section boom
31 - 56 ft. (9.4 - 17 m) folding swingaway
Main and auxiliary hoist w/rope
Auxiliary boom nose
Full fuel and hydraulics
445/65R22.5 front and single rear tires
45 ton hook block (on carrier deck)
10 ton ball (on carrier deck)
Counterweight configuration-see chart

AXLE/TIRE CAPACITY	FRONT 49,200 lbs. (22 317 kg)	REAR 49,200 lbs. (22 317 kg)	GVW 98,400 lbs. (44 634 kg)
Counterweight placement effects:			
8,500 lbs. (3856 kg) cwt. on carrier	49,031 lbs. (22 240 kg)	47,665 lbs. (21 621 kg)	96,696 lbs. (43 861 kg)
5,500 lbs. (2495 kg) ONLY on carrier	46,327 lbs. (21 014 kg)	47,369 lbs. (21 487 kg)	93,696 lbs. (42 501 kg)
No cwt. on carrier or superstructure	41,369 lbs. (18 765 kg)	46,827 lbs. (21 241 kg)	88,196 lbs. (40 006 kg)

Note: Weights will vary due to manufacturing tolerances.

Rated Lifting Capacities

IMPORTANT NOTES:

WARNING: THIS CHART IS ONLY A GUIDE. The notes below are for illustration only and should not be relied upon to operate the crane. The individual crane's load chart, operating instructions and other instruction plates must be read and understood prior to operating the crane.

1. All rated loads have been tested to and meet minimum requirements of SAEJ1063 NOV93 - Cantilevered Boom Crane Structures - Method of Test, and do not exceed 85% of the tipping load on outriggers fully extended as determined by SAEJ765 OCT90 Crane Stability Test Code.

2. Capacities given do not include the weight of hook blocks, slings, auxiliary lifting equipment and load handling devices. Their weights MUST be added to the load to be lifted. When more than minimum required reeving is used, the additional rope weight shall be considered part of the load.

3. Capacities appearing above the bold line are based on structural strength. Tipping should never be relied upon as a capacity limitation.

4. All capacities are for crane on firm, level surface. It may be necessary to have structural supports under the outrigger floats to spread the load to a larger bearing surface.

5. When either boom length or radius or both are between values listed, the smallest load shown at either the next larger radius or boom length shall be used.

6. For outrigger operation, ALL outriggers shall be properly extended with tires raised free of ground before raising the boom or lifting loads.

Symbols Glossary

Symbol	Name	Symbol	Name
	Frame		Steering
	Outriggers		Transmission
	Outrigger Controls		Axles
	Engine		Brakes
	Fuel Tank Capacity		Tires
	Electrical System		Suspension
	Drive		Rotation
	Lights		Boom Elevation
	Cab		Swing
	Boom		Counterweight
	Fixed Swingaway		Oil
	Tele-Swingaway		Hydraulic System
	Jib		Hoist
	Boom Nose		Radius
	Boom Extension		Boom Length
	Speed		Hookblock
	Grade		Gear
	Lattice Extension		Luffing Jib

TMS870/TTS870