MEGA CRANES LTD.

AFM Gru

35 Ton R.T. Capacity Chart

On Outriggers Fully Extended – 360°											
Radius (FT)	Trapezoidal Boom length (FT) – Power Pinned Fly Retracted									Power Pin Fly & 81 ft.	32 ft. Ext. & 104 ft.
	34	38	44	50	56	62	68	74	81	104	136
10’	70,000	68,000	63,700	58,000	48,500						
12’	62,000	61,000	57,500	52,300	48,500	43,900					
15’	53,000	52,200	50,200	45,400	42,000	39,500	36,500	35,000			
20’	41,000	41,700	41,000	37,000	34,100	31,900	30,200	28,600	27,200		
25’	30,600	30,000	30,000	29,600	28,400	26,500	25,000	23,600	22,400	19,500	
30’		24,500	24,500	24,500	24,300	22,500	21,100	19,900	19,100	16,400	
35’			19,120	19,120	19,120	19,120	18,100	17,000	16,000	14,000	9,600
40’				14,650	14,650	14,650	14,650	14,650	13,800	12,100	7,700
45’					11,480	11,480	11,480	11,480	11,480	10,500	6,870
50’						9,200	9,200	9,200	9,200	9,270	6,220
55’							7,330	7,330	7,330	8,180	5,650
60’							5,870	5,870	5,870	7,250	5,110
65’								4,560	4,560	6,340	4,700
70’									3,380	5,280	4,320
75’										4,380	4,000
80’										3,620	3,690
85’										2,950	3,390
90’										2,370	3,090
95’										1,860	2,650
100’											2,150
105’											1,700
110’											1,290

NOTE: Boom must be fully extended when lifting with extended power pinned fly or with 32 ft. Ext. Capacities do not exceed 85% of tipping loads as determined by test in accordance with SAE recommended practice – crane load stability test code – SAE J-765.

Do not exceed any rated load when lifting regardless of whether it is based on structural strength or stability.

On Outriggers Fully Extended – Over Front											
Radius (FT)	Trapezoidal Boom length (FT) – Power Pinned Fly Retracted									Power Pin Fly & 81 ft.	32 ft. Ext. & 104 ft.
	34	38	44	50	56	62	68	74	81	104	136
10’	70,000	68,000	63,700	58,000	48,500						
12’	62,000	61,000	57,500	52,300	48,500	43,900					
15’	53,000	52,200	50,200	45,400	42,000	39,500	36,500	35,000			
20’	41,000	41,700	41,000	37,000	34,100	31,900	30,200	28,600	27,200		
25’	30,600	30,000	30,000	29,600	28,400	26,500	25,000	23,600	22,400	19,500	
30’		24,500	24,500	24,500	24,300	22,500	21,100	19,900	19,100	16,400	
35’			21,200	21,200	21,000	19,400	18,100	17,000	16,000	14,000	9,600
40’				17,350	17,350	17,000	15,800	14,800	13,800	12,100	7,700
45’					13,760	13,760	13,760	12,900	12,000	10,500	6,870
50’						11,240	11,240	11,240	10,600	9,270	6,220
55’							9,200	9,200	9,200	8,180	5,650
60’							7,520	7,520	7,520	7,250	5,110
65’								6,090	6,090	6,450	4,700
70’									5,110	5,750	4,320
75’										5,140	4,000

80’										4,600	3,690
85’										3,980	3,390
90’										3,310	3,090
95’										2,730	2,810
100’											2,500
105’											2,210
110’											1,940
115’											1,700
120’											1,380
125’											1,070

On Rubber Capacities

Radius (FT.)	Stationary Capacity	2.5 MPH Capacity	Stationary apacity
	Defined Arc (1) Over Front	Boom Centered (2) Over Front	360° Arc
10	44800 (a)	36210 (a)	36000 (a)
12	39130 (a)	31420 (a)	28300 (b)
15	31250 (a)	25950 (a)	20500 (c)
20	25000 (b)	19650 (b)	11500 (c)
25	19180 (c)	15270 (c)	7810 (c)
30	13720 (c)	12190 (c)	5000 (c)
35	10070 (c)	9690 (c)	3140 (c)
40	7310 (c)	6920 (c)	1600 (c)
45	5590 (c)	5110 (c)	

(a) 34 FT. Maximum permissible Boom Length.
(b) 44 FT. Maximum Permissible Boom Length.
(c) 56 FT. Maximum Permissible Boom Length.

(1) (Defined Arc) – Left front track CL to right front track CL.
(2) Mechanical swing lock pin must be engaged. Chart based on 21.00x25 (24 ply)/26.5x25 (26 ply)/29.5x25 (22 ply) tires and 70/65/50 PSI cold inflation pressures. Loads must be reduced for lower inflation pressures.
Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
Capacities do not exceed 85% of tipping loads in accordance with SAE J-765.
Capacities are applicable with the machine on a firm level surface only.
32 ft. boom ext. and extended power pinned fly not permitted for on rubber lifts.

Weight Reduction for Load Handling Devices

32 Ft. Boom Extension	
Stowed †	346 lbs.
Erected †	2630 lbs.
24 Ft. Jib & 32 Ft. Ext. Combination	
Erected †	6000 lbs.
Erected ††	950 lbs.

Hook Block	
40 Ton, 3 Sheave	640 lbs.
15 Ton, 1 Sheave	310 lbs.
Auxiliary Boom Head	190 lbs.
5 Ton, Headache Ball	150 lbs.
7.5 Ton, Headache Ball	300 lbs.
10 Ton, Headache Ball	500 lbs.

1. Do not exceed any rated lifting capacity. Rated lifting capacities are based on freely suspended loads with the machine levelled and standing on a firm supporting surface. Ratings with outriggers are based on outriggers being extended to their maximum position and tires raised free of crane weight before extending the boom or lifting loads.
2. Practical working loads for each particular job shall be established by the user depending on operating condition to include: the supporting surface, wind, and other factors affecting stability, hazardous surroundings, esperience of personnel, handling of load, etc. No attempt must be made to move a load horizontally o the ground in any direction.
3. Operating radius is the horizontal distance from the axis of rotation before loading to the centerline of the vertical hoist line or tackle with loads applied.
4. “On Rubber” lifting (if permitted) depends on proper tire inflation, capacity and condition. “On Rubber” loads may be transported at a maximum vehicle speed of 2.5mph (4 km/h) on a firm and level surface under condition specified.
5. Jibs may be used for lifting crane service only. Jib capacities are based on structural strength of jib or main boom and on main boom angle.
6. Operation is not intended or approved for any conditions outside of those shown hereon. Handling of personnel from the boom is not authorized except with equipment furnished and installed by Grove Manufacturing Company.
7. For clamshell or concrete bucket operation, weight of bucket and load must not exceed 80% of rated lifting capacities.
8. Power-telescoping boom sections must be extended equally at all times. Long cantilever booms can create a tipping condition when in extended and lowered position.
9. The maximum load which may be telescoped is limited by hydraulic pressure, boom angle, boom lubrication, etc. It is safe to attempt to telescope any load within the limits of rated lifting capcity chart.
10. With certain boom and hoist tackle combinations, maximum capacities may not be obtainable with standard cable lengths.
11. With certain boom and load combinations, raising of load with boom lift cylinders may not be possible. Operational safety is not affected by this condition.
12. Keep load handling devices a minimum of 12 inches (30 cm) below boom head when lowering or extending boom.
13. If actual boom length and/or radius is between values listed, use lifting capacity for the next longer rated length and/or radius.
14. All load handling devices and boom attachments are considered part of the load and suitable allowances must be made for their combined weights.
15. Operation of this equipment in excess of rating charts or disregard of the instructions is hazardous and voids the warranty and manufacturer’s liability.