



CROFTON
CRANE RENTAL & RIGGING

Grove TMS800E Product Guide

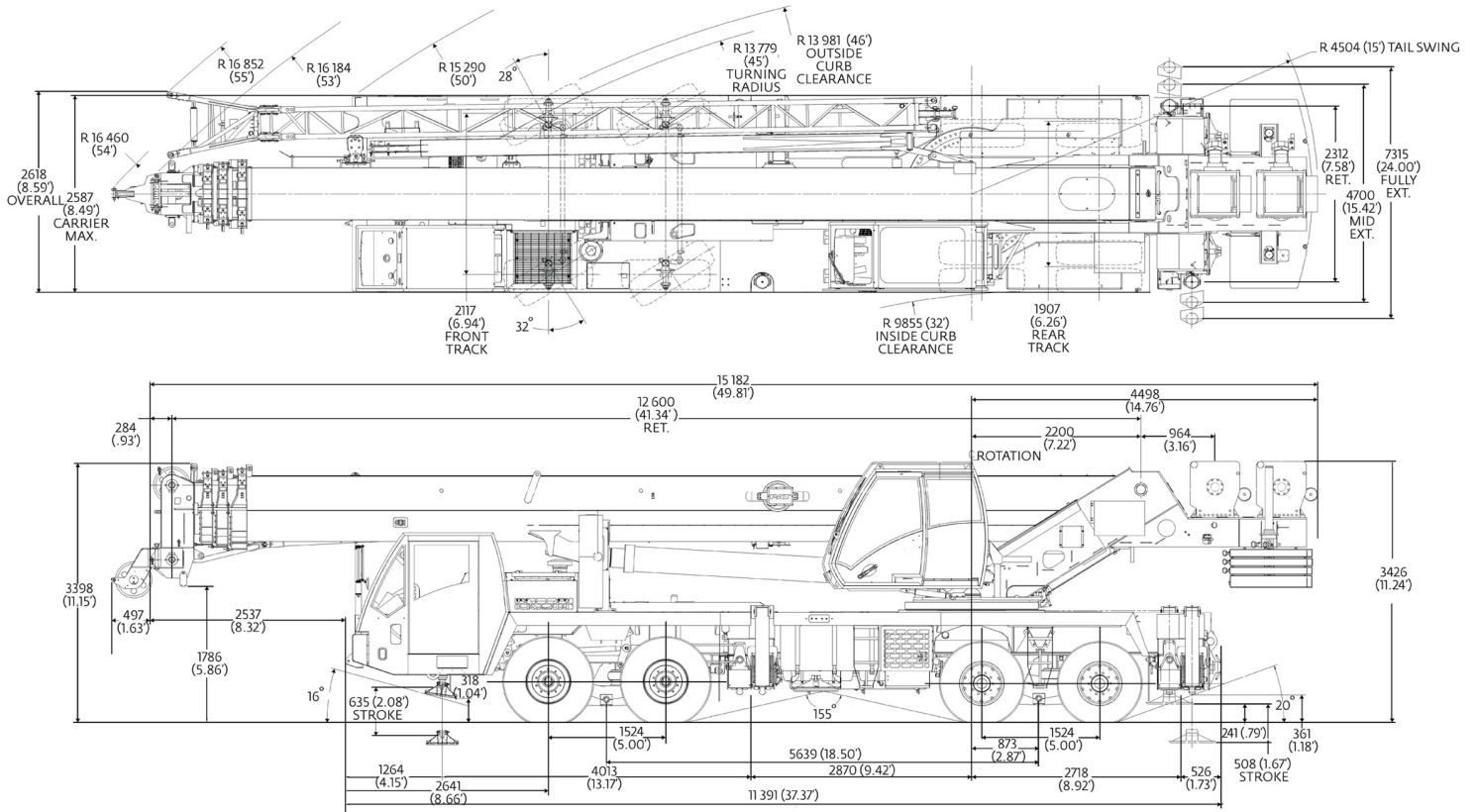


Features

- 12,6 m - 39 m (41 ft - 128 ft) four-section full power MEGAFORM™ boom
- 10 m – 17 m (33 ft – 56 ft) manual offset bifold swingaway
- 2 x 20 ft intermediate lattice inserts
- 10 886 kg (24,000 lb) counterweight with hydraulic removal system
- Cummins ISM 450, six cylinder after cooled 336 kW (450 hp) engine
- Front and rear air ride suspension



Dimensions



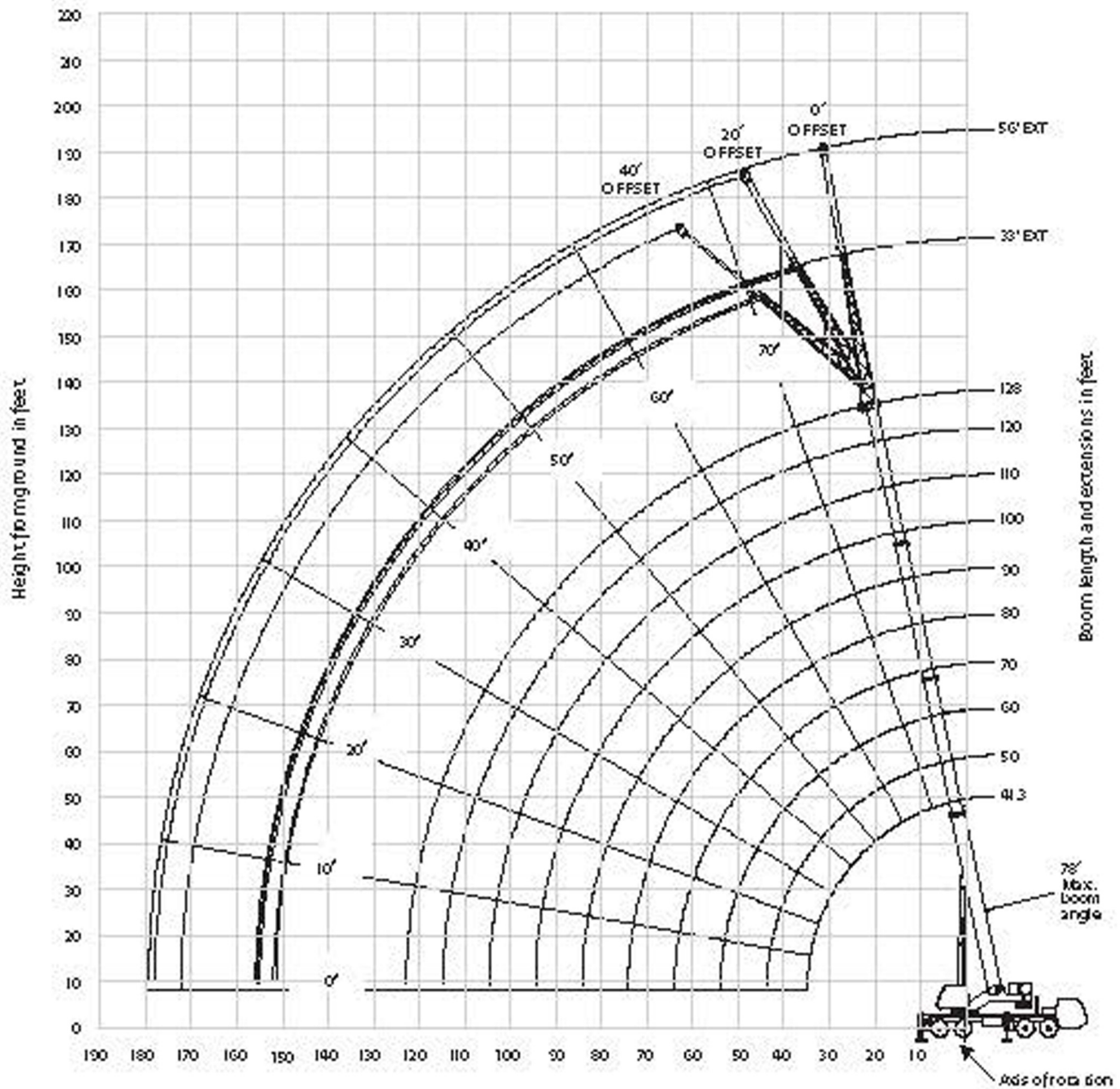
Note: Dimensions shown as mm (ft).

Unit configuration kg (lb)	Front		Rear		Gross	
Basic machine including 128 ft main boom, 56 ft bifold swingaway, main and auxiliary hoists with cable, auxiliary boom nose, air conditioning in both cabs, 40 USt hookblock tied to bumper, 10 USt headache ball stowed, zero counterweight, 200 lb driver	19 933	(43,943)	18 509	(40,804)	38 441	(84,747)
Add 4000 lb counterweight pinned to superstructure	18 965	(41,809)	21 298	(46,954)	40 263	(88,763)
Add 10,000 lb counterweight (6000 lb on deck/4000 lb pinned to superstructure)	21 261	(46,872)	21 729	(47,904)	42 990	(94,776)
Add 14,000 lb counterweight (8000 lb on deck/6000 lb pinned to superstructure)	21 549	(47,506)	23 261	(51,280)	44 809	(98,786)
Add 18,000 lb counterweight (8000 lb on deck/10,000 lb pinned to superstructure)	20 581	(45,372)	26 050	(57,430)	46 631	(102,802)
Substitute:						
Aluminum outrigger pads	-3	(-6)	-30	(-66)	-33	(-72)
Remove:						
33 ft-56 ft bifold swingaway	-1365	(-3010)	166	(365)	-1200	(-2645)
40 USt hookblock	-602	(-1327)	229	(504)	-373	(-823)
10 USt headache ball	-380	(-838)	122	(270)	-258	(-568)
Auxiliary hoist with cable	84	(185)	-240	(-530)	-156	(-345)
Air conditioning - carrier	-36	(-80)	8	(17)	-29	(-63)
Air conditioning - superstructure	15	(32)	-102	(-225)	-88	(-193)
Effect per foot of extended boom:						
Axle/tire allowable	22 317	(49,200)	27 216	(60,000)	49 533	(109,200)

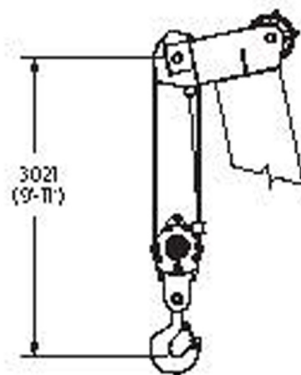
Working Range

41.3 ft – 128 ft main boom + 33 ft – 56 ft lattice extension

(Boom deflection not shown)



Operating radius in feet from axis of rotation



Dimensions are for largest Grove furnished hook block and overhaul ball, with an 8-two block attached.

Load Charts

										
41.3 ft - 128 ft	24,000 lb	100%	360°							
	24 ft 0 in spread									
	Pounds									
Feet	41.3	50	60	70	80	90	100	110	120	128
8	+160,000 (73)									
9	++150,000 (71.5)	86,000 (75)								
10	147,000 (70)	86,000 (74)	86,000 (77)							
12	130,500 (67)	86,000 (71.5)	86,000 (75)	41,000 (77)						
15	111,000 (62)	86,000 (67.5)	86,000 (71.5)	41,000 (74.5)	39,000 (76.5)					
20	87,650 (53.5)	86,000 (61)	85,900 (66.5)	41,000 (70)	39,000 (73)	38,800 (75)	*38,700 (78)	*31,950 (78)		
25	67,700 (44)	67,450 (54)	67,250 (61)	41,000 (65.5)	39,000 (69)	38,800 (71.5)	38,700 (74)	31,950 (75.5)	*25,750 (78)	*14,600 (78)
30	50,550 (31)	50,800 (46.5)	50,750 (55.5)	41,000 (61)	39,000 (65)	38,800 (68.5)	36,150 (70.5)	31,950 (72.5)	25,750 (74.5)	14,600 (75.5)
35		38,600 (37)	38,750 (49.5)	38,650 (56.5)	38,150 (61)	34,100 (65)	31,350 (67.5)	29,300 (70)	25,750 (72)	14,600 (73)
40		30,300 (24)	30,500 (42)	30,600 (51)	31,550 (57)	30,050 (61)	27,500 (64.5)	25,650 (67.5)	23,900 (69.5)	14,600 (71)
45			24,550 (33.5)	24,700 (45.5)	25,700 (52.5)	26,500 (57.5)	24,400 (61.5)	22,700 (64.5)	21,450 (67)	14,600 (68.5)
50	See Note 16		20,050 (21.5)	20,250 (39)	21,150 (47.5)	22,050 (53.5)	21,850 (58)	20,250 (61.5)	19,100 (64.5)	14,600 (66)
55				16,750 (31.5)	17,650 (42.5)	18,500 (49.5)	19,300 (54.5)	18,200 (58.5)	17,100 (62)	14,600 (64)
60				13,950 (20.5)	14,800 (36.5)	15,650 (45)	16,450 (51)	16,450 (55.5)	15,450 (59)	14,600 (61.5)
65					12,450 (29)	13,300 (40)	14,150 (47)	14,550 (52)	14,000 (56)	13,350 (59)
70					10,500 (18.5)	11,300 (34)	12,150 (42.5)	12,600 (48.5)	12,700 (53)	12,150 (56)
75						9650 (27.5)	10,500 (38)	10,950 (45)	11,350 (50)	11,050 (53.5)
80						8220 (17.5)	9100 (32.5)	9530 (41)	9950 (47)	10,100 (50.5)
85							7870 (26)	8300 (36.5)	8710 (43)	9090 (47.5)
90							6800 (17)	7220 (31)	7620 (39.5)	8000 (44)
95								6260 (25)	6660 (35)	7030 (40.5)
100								5410 (16)	5810 (30)	6170 (36.5)
105									5040 (24)	5410 (32)
110									4360 (16)	4720 (27)
115										4090 (21)
120										3530 (10)

Minimum boom angle (°) for indicated length (no load)

9

Maximum boom length (ft) at 0° boom angle (no load)

120

#LMI operating code. Refer to LMI manual for instructions.

*This capacity is based upon maximum obtainable boom angle.

Note: () Boom angles are in degrees.

+ Special equipment is required to lift this capacity.

++9 parts of line required to lift this capacity (using aux. boom nose). Refer to Operator's & Safety Handbook for reeving diagram

Lifting capacities at zero degree boom angle

Boom angle	Main boom length in feet								
	41.3	50	60	70	80	90	100	110	120
0°	20,750 (34.1)	15,150 (42.8)	10,500 (52.8)	6700 (63)	5100 (72.8)	3900 (82.8)	2900 (92.8)	2000 (102.8)	1300 (112.8)

Note: () Reference radii in feet.

° This boom length is with inner-mid fully extended and outer-mid & fly fully retracted.

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 41.3 ft - 128 ft
  33 ft - 56 ft
  24,000 lb
  100% 24 ft 0 in
  360°

Load Charts

Pounds						
	33 ft LENGTH			56 ft LENGTH		
	0° OFFSET	20° OFFSET	40° OFFSET	0° OFFSET	20° OFFSET	40° OFFSET
35	11,900 (78)					
40	11,900 (75.5)			6060 (77.5)		
45	11,900 (73.5)	11,600 (78)		6060 (76)		
50	11,900 (71.5)	10,600 (75)	9700 (78)	6060 (74.5)		
55	11,900 (70)	9770 (73)	8470 (75.5)	6060 (73)		
60	11,000 (68)	9020 (71)	7920 (73.5)	6060 (71)	6040 (78)	
65	10,000 (66)	8360 (69.5)	7430 (72)	6060 (69.5)	5900 (75)	
70	9190 (64)	7780 (67.5)	6980 (70)	6060 (68)	5730 (73.5)	4930 (78)
75	8460 (62)	7260 (65.5)	6580 (68)	6060 (66)	5330 (71.5)	4640 (76)
80	7820 (60)	6790 (63.5)	6210 (65.5)	6040 (64.5)	4980 (70)	4370 (74)
85	7250 (58)	6370 (61)	5870 (63.5)	5570 (63)	4650 (68)	4120 (72)
90	6740 (55.5)	5990 (59)	5560 (61)	5150 (61)	4360 (66.5)	3890 (70)
95	6290 (53.5)	5640 (56.5)	5280 (59)	4780 (59.5)	4090 (64.5)	3680 (68.5)
100	5880 (51)	5320 (54.5)	5020 (56.5)	4440 (57.5)	3840 (62.5)	3480 (66.5)
105	5510 (48.5)	5030 (52)	4770 (54)	4130 (55.5)	3610 (60.5)	3300 (64.5)
110	5170 (46)	4760 (49.5)	4550 (51)	3850 (53.5)	3400 (58.5)	3130 (62.5)
115	4780 (43.5)	4510 (46.5)	4340 (48.5)	3590 (52)	3200 (56.5)	2970 (60)
120	4200 (40.5)	4280 (44)	4150 (45)	3360 (49.5)	3020 (54.5)	2820 (58)
125	3660 (37.5)	3960 (41)		3140 (47.5)	2840 (52.5)	2680 (55.5)
130	3170 (34)	3420 (37.5)		2940 (45.5)	2690 (50)	2540 (53)
135	2710 (30.5)	2930 (34)		2760 (43)	2540 (48)	2420 (50.5)
140	2290 (26.5)	2470 (29.5)		2590 (40.5)	2400 (45)	2300 (47.5)
145	1910 (21.5)			2430 (38)	2270 (42.5)	
150	1550 (14.5)			2100 (35)	2140 (39.5)	
155				1770 (31.5)	2030 (36)	
160				1470 (28)	1770 (32.5)	
165				1180 (24)		

Minimum boom angle (°) for indicated length (no load)	13	28	43.5	19	31.5	46
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Maximum boom length (ft) at 0° boom angle (no load) 110 110

NOTE: () Boom angles are in degrees.
 #LMI operating code. Refer to LMI manual for operating instructions.
 *This capacity is based upon maximum boom angle.

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads, in accordance with SAE J-765.

2. The 33 ft extension length may be used with single or double part line lifting service. The 56 ft extension length may be used for single line lifting service only.

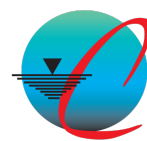
3. For main boom lengths less than 128 ft with the boom extension erected, the rated loads are determined by boom angle. Use only the column which corresponds to the boom extension length and offset for which the machine is set up. For boom angles not shown, use rating of the next lower boom angle.

4. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.

5. Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.

6. Capacities listed are with outriggers properly extended and vertical jacks set only.

7. When lifting over the main boom nose with 33 ft or 56 ft extension erected, the outriggers must be fully extended or 50% extended (15 ft 5 in spread).



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