

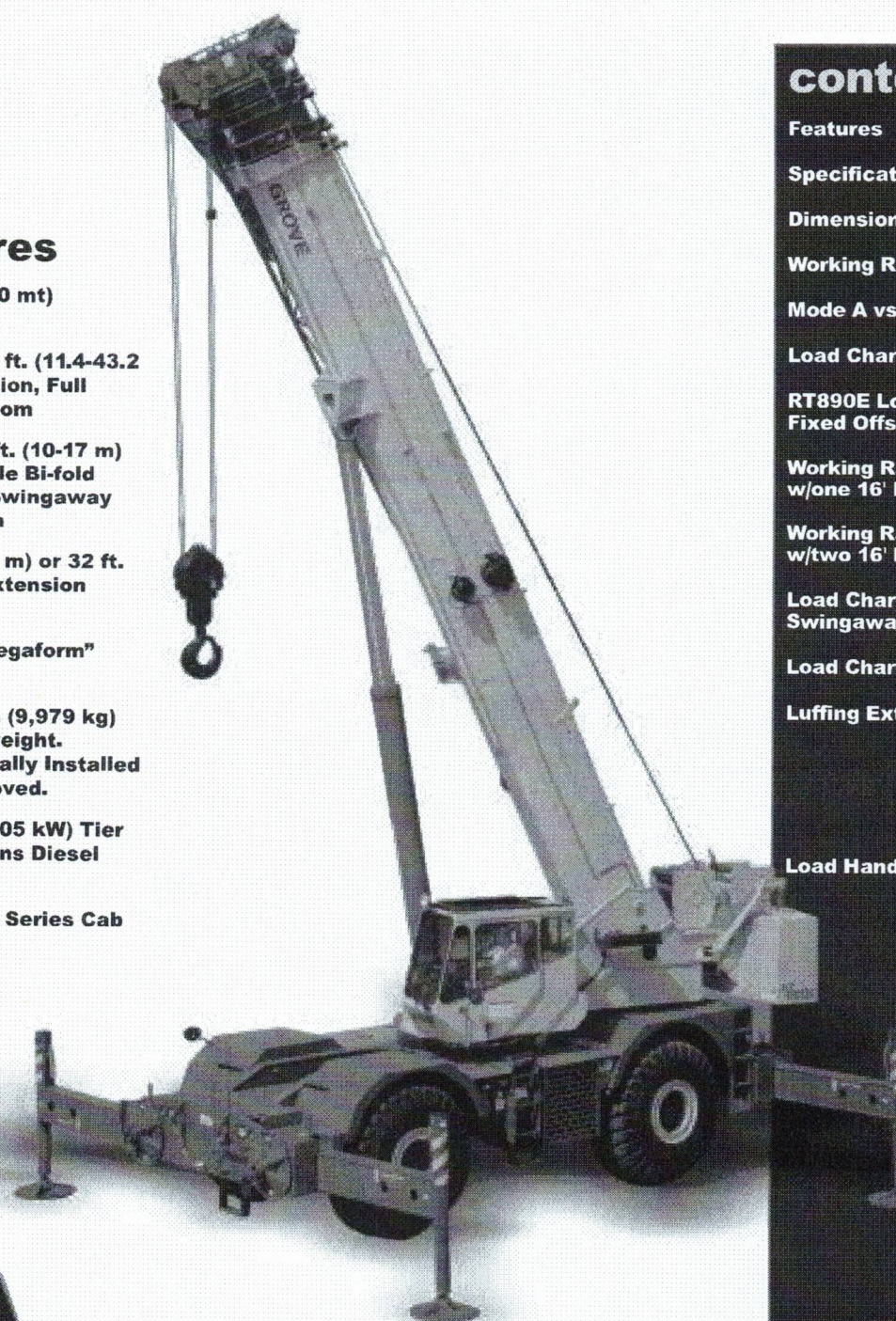
GROVE®

RT890E

product guide

features

- 90 Ton (80 mt) Capacity
- 38 ft.-142 ft. (11.4-43.2 m) 5 Section, Full Power Boom
- 33 ft.-56 ft. (10-17 m) Offsettable Bi-fold Lattice, Swingaway Extension
- 16 ft. (4.8 m) or 32 ft. (9.7 m) Extension Inserts
- Grove "Megaform" Boom
- 22,000 lb. (9,979 kg) Counterweight. Hydraulically Installed and Removed.
- 275 HP (205 kW) Tier III Cummins Diesel Engine
- Grove "E" Series Cab



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Rough Terrain Hydraulic Crane

load chart (Mode A)

 37.3 - 141.7 ft.
  22,000 lbs
  100%
  360...

Feet	Pounds							
	37.3	50.4	63.4	76.4	89.4	102.4	115.4	141.7
10	180,000 (68.5)	134,000 (75)	*80,800 (78)					
12	156,000 (65)	134,000 (72.5)	80,800 (76.5)	*38,700 (78)				
15	129,500 (59.5)	129,000 (68.5)	80,800 (73.5)	38,700 (77)	*38,500 (78)			
20	98,650 (49.5)	98,950 (62)	70,950 (68.5)	38,700 (73)	38,500 (76.5)	*38,400 (78)		
25	78,800 (36.5)	79,150 (55)	62,300 (63.5)	38,700 (69)	38,500 (73)	38,400 (76)	24,400 (78)	
30	51,550 (12.5)	60,500 (47)	55,250 (58)	38,700 (65)	38,500 (69.5)	37,500 (73)	24,400 (76)	*24,400 (78)
35		45,150 (38)	44,900 (52.5)	38,700 (60.5)	38,750 (66)	33,150 (70)	24,400 (73.5)	24,400 (77)
40		35,250 (25.5)	34,700 (46)	36,750 (56)	32,750 (62)	29,550 (67)	24,400 (70.5)	24,250 (75)
45			27,600 (39)	29,450 (51)	29,400 (58.5)	26,500 (63.5)	24,400 (68)	21,900 (73)
50			22,400 (30)	24,000 (45.5)	25,650 (54.5)	23,950 (60.5)	22,050 (65)	19,800 (70.5)
55			18,250 (15.5)	19,850 (39.5)	21,350 (50)	21,750 (57)	20,000 (62)	17,900 (68.5)
60				16,600 (32.5)	17,950 (45.5)	18,900 (53.5)	18,250 (59)	16,150 (66)
65				13,650 (23)	15,200 (40)	16,150 (49.5)	16,700 (56)	14,650 (64)
70					12,950 (34.5)	13,850 (45.5)	14,800 (53)	12,850 (61.5)
75					11,000 (27.5)	11,950 (41)	12,900 (49.5)	10,950 (59)
80					9,340 (17)	10,300 (36)	11,250 (45.5)	9,380 (56.5)
85						8,900 (30)	9,830 (42)	7,980 (54)
90						7,640 (22.5)	8,590 (37.5)	6,770 (51)
95						6,520 (8)	7,510 (32.5)	5,730 (48.5)
100							6,520 (26.5)	4,750 (45.5)
105							5,640 (18.5)	3,910 (42)
110								3,150 (38.5)
115								2,460 (35)
120								1,840 (30.5)
125								1,250 (25.5)

Minimum boom angle (deg.) for indicated length (no load)

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

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

*This capacity is based upon maximum obtainable boom angle.

Note: () Boom angles are in degrees.

Lifting Capacities at Zero Degree Boom Angle

Boom Angle	Main Boom Length in Feet							
	37.3	50.4	63.4	76.4	89.4	102.4	115.4	
0°	27,500 (30.1)	17,300 (43.2)	11,050 (56.2)	8,580 (69.2)	6,700 (82.2)	5,380 (95.2)	4,280 (108.2)	

Note: () Reference radii in feet.

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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.

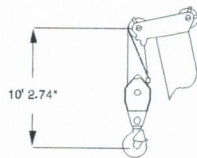
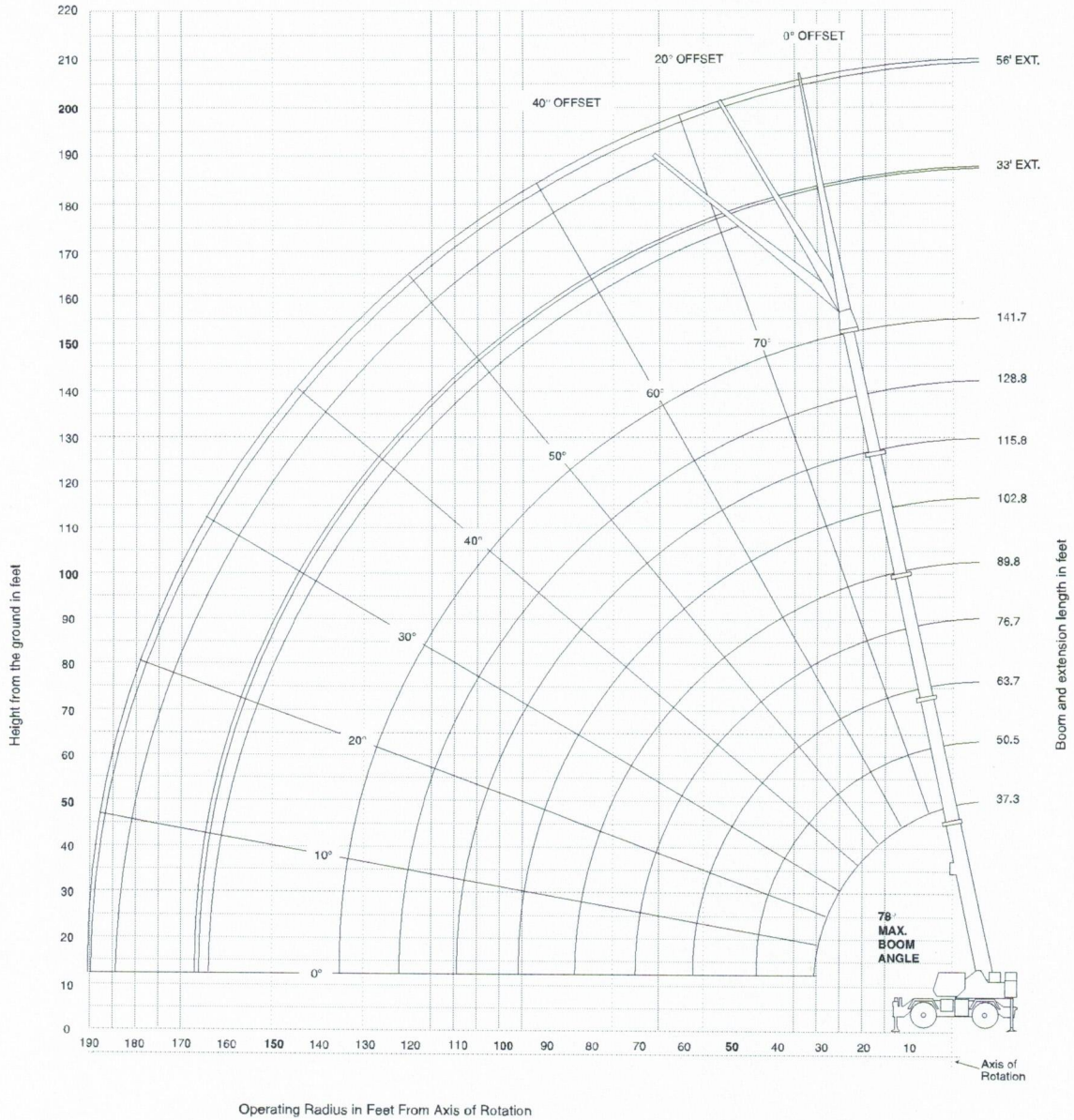
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6-829-103320A

working range

Working range – 141.7 ft. Main Boom 32-56 ft. Fixed Offset Swingaway

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Dimensions are for Largest Grove furnished Hook Block and Headache Ball, with Anti-Two Block Activated.

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RT890E load charts fixed offset swingaway



Feet	Pounds					
	33 ft. LENGTH			56 ft. LENGTH		
	0° OFFSET #0021	20° OFFSET #0022	40° OFFSET #0023	0° OFFSET #0041	20° OFFSET #0042	40° OFFSET #0043
40	13,700 (78)					
45	13,700 (76.5)	13,000 (78)		7,160 (78)		
50	13,700 (75)	12,950 (77.5)		7,160 (77.5)		
55	13,700 (73)	12,600 (76)	10,250 (78)	7,160 (74.5)		
60	13,700 (71.5)	12,200 (74)	10,050 (77)	7,160 (73)	6,400 (78)	
65	13,700 (69.5)	11,900 (72.5)	9,900 (75)	7,160 (73)	6,250 (77.5)	
70	13,500 (68)	11,550 (70.5)	9,750 (73)	7,160 (71.5)	6,110 (76)	
75	12,400 (66)	11,250 (68.5)	9,510 (71)	7,160 (70)	5,980 (74.5)	5,110 (78)
80	10,800 (64)	11,000 (67)	8,480 (69)	7,160 (68.5)	5,850 (73)	5,020 (77)
85	9,330 (62)	10,250 (65)	9,370 (67)	7,150 (66.5)	5,730 (71.5)	4,930 (75)
90	8,050 (60)	8,900 (63)	8,980 (65)	6,980 (65)	5,620 (69.5)	4,850 (73.5)
95	6,920 (58)	7,700 (61)	8,530 (63)	6,770 (63.5)	5,510 (68)	4,780 (71.5)
100	5,920 (56)	6,530 (59)	7,360 (61)	6,590 (61.5)	5,410 (66)	4,710 (69.5)
105	5,030 (54)	5,690 (56.5)	6,310 (58.5)	6,030 (60)	5,310 (64.5)	4,650 (68)
110	4,230 (52)	4,830 (54.5)	5,370 (56.5)	5,200 (58)	5,220 (62.5)	4,600 (66)
115	3,510 (49.5)	4,060 (52)	4,520 (54)	4,450 (56.5)	5,110 (60.5)	4,550 (64)
120	2,850 (47.5)	3,360 (50)	3,750 (51.5)	3,770 (54.5)	4,780 (58)	4,500 (62)
125	2,250 (45)	2,730 (47.5)	3,040 (49)	3,150 (52.5)	4,080 (57)	4,460 (60)
130	1,700 (42)	2,150 (44.5)	2,400 (46)	2,580 (50.5)	3,450 (55)	3,970 (58)
135	1,200 (39.5)	1,610 (42)		2,060 (48.5)	2,870 (53)	3,330 (55.5)
140		1,120 (39)		1,470 (46.5)	2,330 (50.5)	2,730 (53)
145				1,130 (44)	1,830 (48.5)	2,180 (50.5)
150					1,370 (46)	1,670 (48)
155						1,200 (45)
Minimum boom angle (°) for indicated length (no load)	38	38	40	43	44	44
Maximum boom length (ft.) at 0° boom angle (no load)		102.8			89.8	

NOTE: () Boom angles are in degrees.

A6-829-103447

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

*This capacity is based upon maximum boom angle.

NOTES:

- 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.
- 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.
- For main boom lengths less than 141.7 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.
- 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.
- Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
- Capacities listed are with outriggers properly extended and vertical jacks set only.
- When lifting over the main boom nose with 33 ft. or 56 ft. extension erected, the outriggers must be fully extended or 50% extended (17.3 spread).

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