GROVE

RT875E







 The Grove MEGAFORM™ boom shape eliminates weight and increases capacity compared to conventional shapes.



Max. tip height of 232 ft. (70.6 m) w/56 ft. (17.0 m) bi Electronically controlled Cummins diesel

fold and (2) 20 ft. (6.3 m) inserts.



 For improved operator comfort and visibility of the boom load the cab can be tilted up to 20°.



 Electronically controlled Cummins diesel engine provides plenty of power at the jobsite.



specifications

Superstructure



Boom

41 ft. - 128 ft. (12.6 m - 39.0 m) four-section, sequenced synchronized full power boom. Maximum tip height: 138 ft. (41.9



Lattice Extension

33 ft.-56 ft. (10.1 m-17 m) offsettable bifold lattice swingaway extension. Offsets 0°, 25° and 45°. Stows alongside base boom section. Maximum tip height: 192 ft. (58.6 m).



*Optional Lattice Extension Inserts

(2) x 20 ft. (6.1 m) lattice extension inserts. Installs between the boom nose and bifold extension, non-stowable. Maximum tip height: 232 ft. (70.6 m).



Boom Nose

Four nylatron sheaves mounted on heavy-duty tapered roller bearings with removable pin-type rope guards. Quick-reeving type boom nose. Removable auxiliary boom nose with removable pin type rope guard.



Boom Elevation

One double-acting hydraulic cylinder with integral holding valve provides elevation from -3° to +78°



Load Moment & Anti-Two Block System

Standard "Graphic Display" load moment and anti-two block system with audio-visual warning and control lever lockout. These systems provide electronic display of boom angle, length, radius, tip height, relative load moment, maximum permissible load, load indication and warning of impending two-block condition. The standard Work Area Definition System allows the operator to pre-select and define safe working areas. If the crane approaches the pre-set limits, audio-visual warnings aid the operator in avoiding job-site obstructions.



Full-vision, all-steel fabricated with acoustical lining and tinted safety glass throughout. Cab tilts to +20 degrees. Deluxe seat incorporates armrest-mounted hydraulic single-axis controllers. Dash panel incorporates gauges for all engine functions. Other standard features include: hot water heater, cab circulating air fan, sliding side and rear windows, sliding skylight with electric wiper and sunscreen, electric windshield wash/wipe, fire extinguisher and seat belt.

Swing

Two speed, planetary swing drive with foot-applied multi-disc wet brake. Spring applied, hydraulically-released swing brake. Single position mechanical house lock, operated from cab. Maximum speed: 2.0 RPM.



Counterweight

18,000 lbs. (8 168 kg). Hydraulically installed and removed.



Hydraulic System

Two main pumps ([1] piston and [1] gear) with a combined capacity of 133 GPM (503 LPM).

Maximum operating pressure: 4000 psi (277.7 bar).

Three section pressure compensated valve bank. Return line type filter with full flow by-pass protection and service indicator. Replaceable cartridge with micron filtration rating of 5/12/16. 263 gallon (995 L) hyd. reservoir. Carrier mounted oil cooler with thermostatically controlled hydraulic motor driven fan/air to oil. System pressure test ports.

Hoist Specifications Main and Auxiliary Hoist

Planetary reduction with automatic spring applied multi-disc wet brake. Electronic hoist drum rotation indicators and hoist drum cable followers.

Maximum Single Line Pull:

1st layers: 20,250 lb. (9 185 kg) 3rd layer: 17,010 lb. (7 715 kg) 5th layer: 14,660 lb. (6 650 kg)

Maximum Permissible Line Pull:

16,800 lb. (7 620 kg) with 6 x 36 class rope 16,800 lb. (7 620 kg) with 35 x 7 class rope

Maximum Single Line Speed: 514 FPM (156 m/min)

Rope Construction:

6 x 37 EIPS IWRC, Special Flexible 35 x 7 Flex-X, Rotation Resistant

Rope Diameter: 3/4" (19 mm)

Rope Length:

Main Hoist: 600 ft. (182.8 m) Auxiliary Hoist: 600 ft. (182.8 m)

Maximum Rope Stowage: 841 ft. (256 m)

*Denotes optional equipment



specifications

Carrier Chassis

Box section frame fabricated from high-strength, low alloy steel. Front/rear towing and tie down lugs.

Cutrigger System

Four hydraulic telescoping single-stage double box beam outriggers with inverted jacks and integral holding valves. Three position setting, 0%, 50% and fully extended. All steel fabricated, quick-release type round outrigger floats, 30.5 in. (775 mm) diameter. Maximum outrigger pad load: 125,000 lb. (56 700 kg).

Uninger Controls

Controls and crane level indicator located in cab.

Engine

Cummins QSB 5.9L diesel, six cylinders, 275 bhp (205 kW) (Gross) @ 2,500 rpm. Maximum torque: 730 ft. lbs. (990 Nm) @ 1,500 RPM.

Fuel Tank Capacity

72 gallons (273 L)

☐ Transmission

Full powershift with 6 forward and 6 reverse speeds. Front axle disconnect for 4 x 2 travel

5 Electrical System

Two 12-V maintenance free batteries. 12-V starting and lighting. Battery disconnect. CanBus Diagnostic system.

I---I Drive

 4×4

T Steering

Fully independent power steering:

Front: Full hydraulic, steering wheel controlled.

Rear: Full hydraulic, switch controlled.

Provides infinite variations of 4 main steering modes: front only, rear only, crab and coordinated.

Rear steer indicator. Turning radius - 25 ft.

Axles

Front: Drive/steer with differential and planetary

reduction hubs rigid-mounted to frame.

Rear: Drive/steer with differential and planetary reduction hubs pivot-mounted to frame.

Oscillation Lockouts

Automatic full hydraulic lockouts on rear axle permits 10 in. (25.4 cm) oscillation only with boom centered over the front.

Full hydraulic split circuit brakes operating on all wheels. Springapplied, hydraulically released parking brake mounted on front

U Tires

Std. 29.5 x 25 - 34 bias ply, General.

Lights

Full lighting including turn indicators, head, tail, brake and hazard warning lights.

$raket{oldsymbol{arV}}$ Maximum Speed

22 MPH (35 kph).

Gradeability (Theoretical)

75% (Based on 109,043 lb. [49 462 kg] GVW) 29.5 x 25 tires, 128 ft. (39.0 m) boom, plus 56 ft. (17.0 m) swingaway, 18,000 lb. (8 165 kg) counterweight, 75T hookblock and 10T headache

Miscellaneous Standard Equipment

Full width steel fenders, full length aluminum decking, dual rear view mirrors, hookblock tiedown, electronic back-up alarm, light package, front stowage well, tachometer/hourmeter, rear wheel position indicator, 36,000 BTU hot water cab heater, hoist mirrors, engine distress A/V warning system, front/rear tie down and two lugs, coolant sight level indicator.

*Optional Equipment

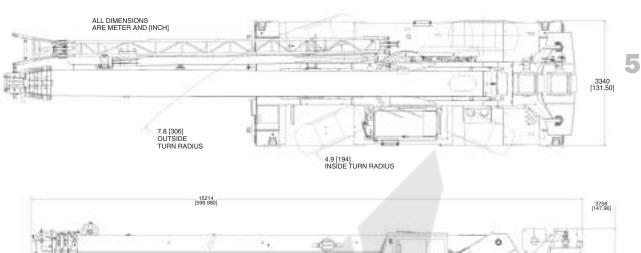
*Auxiliary Hoist Package (includes cab mounted amber flashing light, hoist mounted work light, and dual base boom mounted floodlights.)

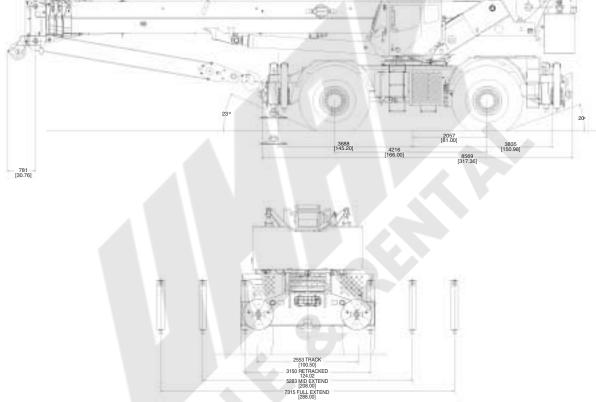
- *LMI light bar (in cab)
- *Air Conditioning (28,500 BTU)
- *360 degree NYC style mechanical swinglock
- *Rear Pintle hook
- *Cab controlled cross axle differential locks, (front and rear)
- *PAT data logger
- *Rubber mat for stowage trough

*Denotes optional equipment



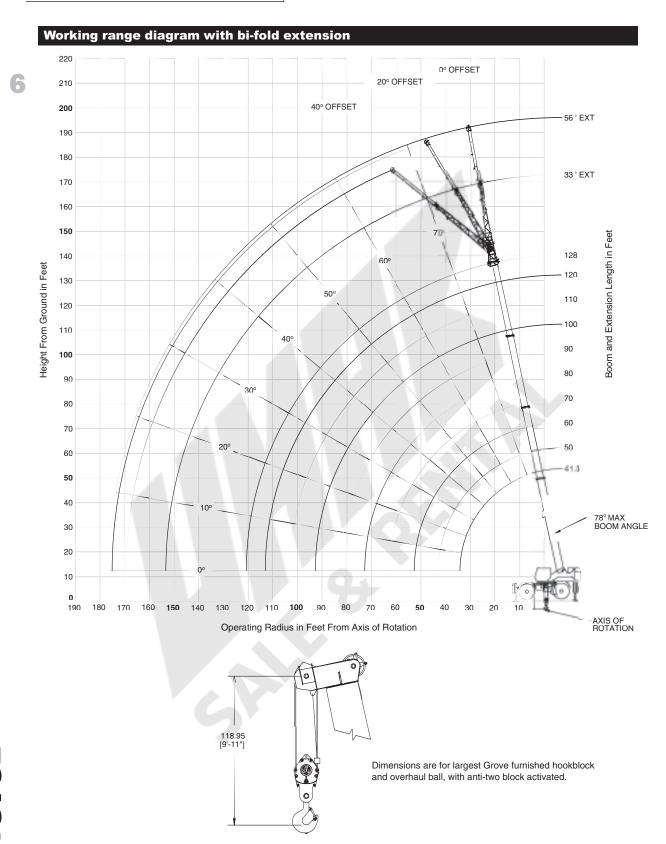
dimensions





Note: [] Reference dimensions in mm [inches]

Weights	Y 64					
	G'	vw	Fi	ront	R	ear
	lb.	kg	lb.	kg	lb.	kg
RT875E Basic Machine						
Basic Machine including 128 ft. main boom, main and aux. hoist with 600 ft. of scope, manual offsettable bifold swingaway, pull counterweight, 10T headache ball, and 75T hookblock:	107,417	48 724	53,787	24 398	53,630	24 327
Remove counterweight and aux. hoist. Manual offsettable S/A.	87,176	39 543	63,420	28 767	23,756	10 776
Remove counterweight, aux. hoist, and manual offsettable S/A.	84,544	38 349	58,625	26 592	25,919	11 757



RT875E load chart

-128 ft.	18,000 lbs		100%	360°						
₹		24	spread		P	ounds				
Feet	41.3	50	60	**70	Main Boom Leng	th in Feet 90	100	110	120	128
10	+150,000	124,000	105,500	70	00	30	100	110	120	120
12	(71) +150,000	(74.5) 124,000	(77.5) 105,500	59,500						
15	(67.5) 130,000	(72) 124,000	(75.5) 104,000	(78) 59,500	42,100	*42,000				
	(63) 100,000	(68.5) 99,850	(72.5) 85,900	(75.5) 59,500	(78) 42,100	(78) 42,000	*39,650	*31,950		
20	(54.5) 80.550	(62) 80.250	(67.5) 72.550	(71) 57.050	(74) 42,100	(76) 42.000	(78) 39,650	(78) 31.950	*25.750	*22 000
25	(44.5) 59,050	(55) 58,150	(62) 57,850	(66.5) 49,300	(70) 42,100	(73) 39,050	(75) 36,150	(77) 31,950	(78) 25,750	(78) 22,000
30	(31.5)	(47)	(56)	(62)	(66)	(69.5)	(72)	(74)	(76)	(77)
35		43,250 (37.5)	43,000 (49.5)	42,600 (57)	38,150 (62)	34,100 (66)	31,350 (68.5)	29,300 (71.5)	25,750 (73.5)	22,000 (74.5)
40		33,600 (24.5)	33,400 (42.5)	32,950 (52)	33,750 (58)	30,050 (62)	27,500 (65.5)	25,650 (68.5)	23,900 (71)	22,000 (72.5)
45			26,600 (34)	26,200 (46)	27,400 (53)	26,750 (58.5)	24,400 (62)	22,700 (65.5)	21,450 (68)	20,650 (70)
50	See Note 16		21,600 (22)	21,150 (39.5)	22,450 (48.5)	23,250 (54.5)	21,850 (59)	20,250 (62.5)	19,100 (65.5)	18,350 (67.5)
55				17,250 (31.5)	18,650 (43)	19,400 (50)	19,700 (55)	18,200 (59.5)	17,100 (63)	16,400 (65)
60				14,200 (21)	15,600 (37)	16,400 (45.5)	17,050 (51.5)	16,450 (56)	15,450 (60)	14,750 (62.5)
65				(21)	13,100	13,850	14,550	14,950	14,000	13,350
70					(29.5) 11,050	(40.5) 11,800	(47.5) 12,450	(53) 12,900	(57) 12,700	(59.5) 12,150
75					(19)	(34.5) 10,000	(43) 10,700	(49.5) 11,200	(54) 11,600	(57) 11,050
						(28) 8.540	(38.5) 9.170	(45.5) 9.670	(51) 10.150	(54)
80						(18)	(33) 7,860	(41.5) 8,360	(47.5) 8,850	(51) 9,180
85							(26.5) 6.710	(37) 7.210	(44) 7,700	(48) 8.050
90							(17.5)	(32)	(40)	(44.5)
95								6,200 (25.5)	6,700 (35.5)	7,050 (41)
100							4	5,310 (17)	5,800 (30.5)	6,160 (37)
105									5,010 (25)	5,360 (32.5)
110									4,290 (16.5)	4,640 (27.5)
115										4,000 (21.5)
120										3,410 (10.5)
imum boom	angle (deg.) for in	dicated length (no load)		4					9
II operating is capacity is a: () Boom a	length (ft.) at 0 de code. Refer to LM s based upon maxi angles are in degr quired to lift this ca	I manual for ins mum obtainable ses.	tructions. boom angle. x. boom nose). R		's & Safety Handb		agram.		A	120
Boom					Main Boom Leng	-				
Angle	41.3 20,750	50 15,150	60 10,500	**70 6,700	80 5,100	90 3,900	100 2,900	110 2,000	120 1,300	
0°	(34.1)	(42.8)	(52.8)	(63)	(72.8)	(82.8)	(92.8)	(102.8)	(112.8)	. /

41.3 - 128 ft. 3	3 - 56 ft.	18,000 lbs		100 24 ft. s	l% pread	360°
		mq.		Pounds		
		3 ft. LENG			6 ft. LENG	
Feet	0° OFFSET	20° OFFSET	40° OFFSET	0° OFFSET	20° OFFSET	40° OFFSET
1000	#0021	#0022	#0023	#0041	#0042	#0043
35	11,900 (78)					
40	11,900 (77)			6,060 (78)		
45	11,900 (75.5)	*11,900 (78)		6,060 (77.5)		
50	11,900 (73.5)	10,600 (76.5)	*9,790 (78)	6,060 (76)		
55	11,900 (71.5)	9,770 (74.5)	8,470 (77)	6,060 (74.5)		
60	11,000 (69.5)	9,020 (72.5)	7,920 (75)	6,060 (72.5)	*6,060 (78)	
65	10,000	8,360	7,430	6,060	5,900	
70	(67.5) 9,190	(70.5) 7,780	(73) 6,980	(71) 6,060	(76.5) 5,730	*5,060
	(65.5) 8,460 (63.5)	(68.5) 7.260	(71) 6,580	(69.5) 6,060	(75) 5.330	(78) 4,640
75	(63.5) 7,820	7,260 (66.5) 6,790	(69) 6,210	(67.5) 6,040	5,330 (73) 4,980	(77) 4,370
80	(61.5) 7.250	(64.5) 6.370	(66.5) 5.870	(66) 5.570	(71.5) 4.650	(75.5) 4.120
85	(59.5)	(62)	(64.5)	(64)	(69.5)	(73.5)
90	6,740 (57)	5,990 (60)	5,560 (62)	5,150 (62.5)	4,360 (67.5)	3,890 (71.5)
95	6,290 (55)	5,640 (57.5)	5,280 (60)	4,780 (60.5)	4,090 (66)	3,680 (69.5)
100	5,880 (52.5)	5,320 (55.5)	5,020 (57.5)	4,440 (58.5)	3,840 (64)	3,480 (67.5)
105	5,510 (50)	5,030 (53)	4,770 (55)	4,130 (56.5)	3,610 (62)	3,300 (65.5)
110	5,170 (47.5)	4,760 (50.5)	4,550 (52)	3,850 (54.5)	3,400 (60)	3,130 (63.5)
115	4,830	4,510	4,340	3,590	3,200	2,970
120	(45) 4,230 (42)	(47.5) 4,280 (45)	(49.5) 4,150 (46.5)	(52.5) 3,360 (50.5)	(58) 3,020 (55.5)	(61) 2,820 (59)
	(42) 3,690	(45) 3,960	(46.5)	(50.5)	(55.5) 2,840	(59) 2,680
125	(39)	(41.5) 3.430		(48) 2.940	(53.5) 2,690	(56.5) 2.540
130	(36)	(38.5)		(46)	(51) 2,540	(54)
135	2,740 (32)	2,930 (35)		2,760 (43.5)	(48.5)	2,420 (51.5)
140	2,320 (28)	2,480 (30.5)		2,590 (41)	2,400 (46)	2,300 (48.5)
145	1,940 (23)			2,430 (38.5)	2,270 (43.5)	
150	1,580 (16.5)			(35.5)	2,140 (40.5)	
155				1,730 (32.5)	2,030 (37)	
160				1,420 (29)	1,710 (33.5)	
165				1,120 (24.5)		
Minimum boom angle (°) for indicated length (no load)		28	44	23	31	46
Maximum boom lengt (ft.) at 0° boom angle	h	110			110	

NOTE: () Boom angles are in degrees.

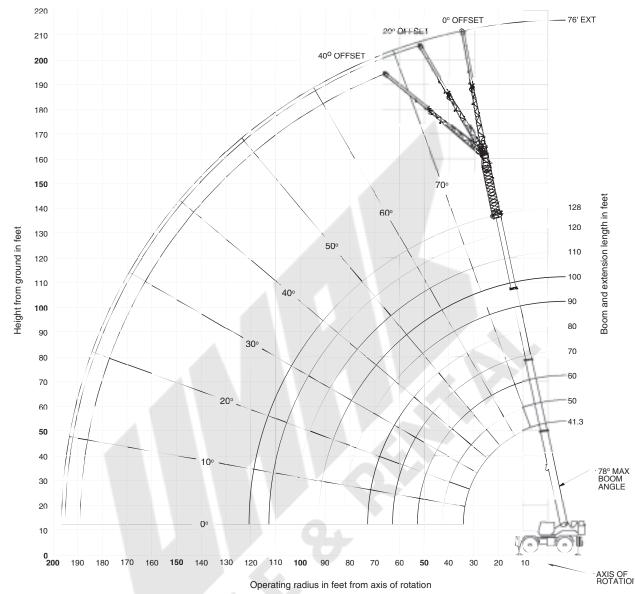
#LMI operating code. Refer to LMI manual for operating instruction

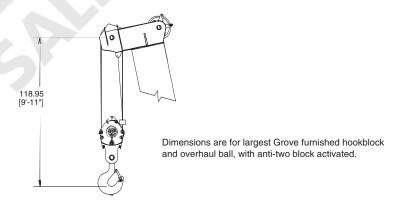
*This apposit is based upon manipular boom angle.

NOTES

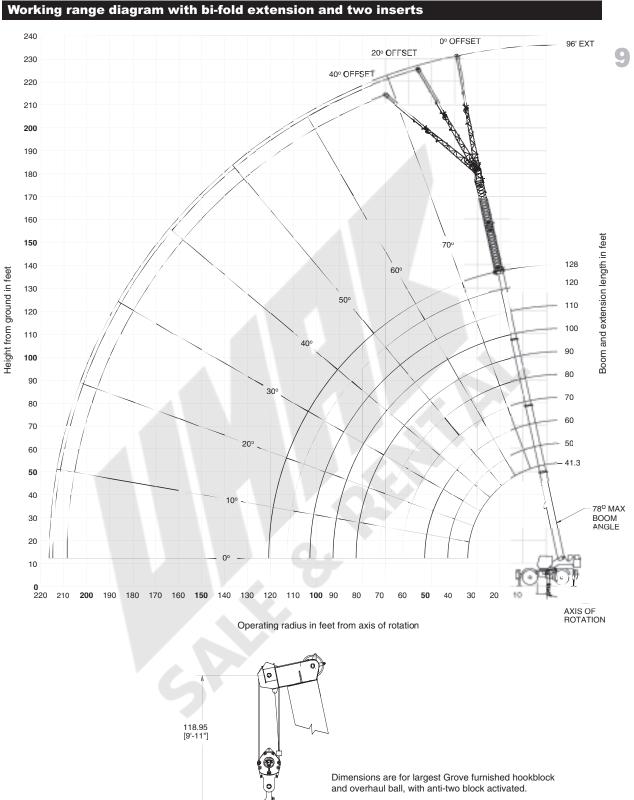
- All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads, in accordance with SAE J-765.
- The 33 ft. extension length may be used with single or double part line lifting service. The 56 ft. extension length may be used for single line lifting service only.
- 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 the 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.
- 6. 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 ft. 4 in. spread).













RT875E load chart

Q

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41.3-128 ft.	33-56 ft.	20 ft. inse	ert 18,0	00 lbs 25	100% ift. spread	360°
		medi:	VA.	Pounds		
		LENGTH + 1			LENGTH + 2	INSERTS)
Feet	0° OFFSET	20° OFFSET	40° OFFSET	0° OFFSET	20° OFFSET	40° OFFSET
	#0084 4,850	#0085	#0086	#0084	#0085	#0086
50	(78) 4,850			3,520		
55	(77.5)			(78)		
60	4,850 (76)			3,520 (77.5)		
65	4,850 (74.5)	*5,290 (78)		3,520 (76.5)		
70	4,850 (73)	4,860 (77.5)		3,520 (75)		
75	4,850 (71.5)	4,470 (76)		3,520 (73.5)	3,740 (78)	
80	4,730 (70)	4,110 (74.5)	*4,050 (78)	3,520 (72.5)	3,420 (76.5)	
85	4,310 (68.5)	3,790 (73)	3,500 (76.5)	3,300 (71)	3,100 (75)	*3,250 (78)
90	3,940	3,500	3,260	2,970	2,820	2,720
95	(67) 3,610	(71) 3,240	(75) 3,030	(69.5) 2,660	(73.5) 2,560	(77) 2,490
100	(65.5) 3,310	(69.5) 3,000	(73) 2,830	(68) 2,390	(72) 2,320	(75.5) 2,270
	(64) 3.040	(68) 2.770	(71.5) 2.630	(66.5) 2.140	(71) 2.100	(74) 2.070
105	(62) 2,790	(66) 2,570	(69.5) 2,450	(65) 1,920	(69.5) 1,900	(72) 1,890
110	(60.5) 2.560	(64.5) 2,370	(68) 2,280	(63.5) 1,710	(68) 1,710	(70.5) 1,710
115	(58.5)	(62.5)	(66)	(62)	(66.5)	(69)
120	2,350 (57)	2,200 (61)	2,120 (64)	1,520 (60.5)	1,540 (64.5)	1,550 (67.5)
125	2,160 (55)	2,030 (59)	1,970 (62)	1,350 (59)	1,380 (63)	1,390 (66)
130	1,990 (53)	1,880 (57)	1,830 (60)	1,190 (57.5)	1,230 (61.5)	1,250 (64)
135	1,820 (51.5)	1,730 (55)	1,700 (58)	1,040 (56)	1,080 (60)	1,110 (62.5)
140	1,670 (49.5)	1,590 (53)	1,570 (56)			
145	1,530 (47)	1,470 (51)	1,450 (53.5)			\overline{A}
150	1,400 (45)	1,340 (49)	1,340 (51.5)			
155	1,270 (43)	1,230 (46.5)	1,230 (48.5)		4.1	
160	1,160 (40.5)	1,120	1,130 (46)		0.1	
165	1,050	1,020	(40)			
Minimum boom an (°) for indicated length (no load)	(38) gle 36	40	44	54	58	60
Maximum boom length (ft.) at 0° bo angle (no load) NOTE: () Boom an #LMI operating cod *This capacity is ba RT875E - S/N 223	gles are in de e. Refer to LI sed upon ma	MI manual fo	or operating n angle.	instructions		829-103655
111010L - 0/11 ZZ3	555					

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 56 ft. boom extension length may be used for single line lifting service only.
- 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.
- 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.
- When lifting over the main boom nose with 56 ft. extension erected and inserts, the outriggers must be fully extended and vertical jacks set.

41.3-90 ft.	18,000 lbs		Stationa	ry	Q 360°	
			100g	, Pounds		
			#9	005		
		M	lain Boom L	ength in Feet		
Feet	41.3	50	60	*70	80	90
12	49,200 (67.5)	40,750 (72)				
15	39,150 (63)	35,700 (68.5)				
20	24,200 (54.5)	24,350 (62)	22,800 (67.5)	22,000 (71)		
25	16,200 (44.5)	16,200 (55)	15,600 (62)	15,950 (66.5)	15,850 (70)	
30	11,250 (31.5)	11,250 (47)	10,950 (56)	10,650 (62)	11,600 (66)	12,150 (69,5)
35		7,900 (37.5)	7,690 (49.5)	7,270 (57)	8,420 (62)	8,820 (66)
40		5,490 (24.5)	5,280 (42.5)	4,880 (52)	6,020 (58)	6,330 (62)
45		, ,	3,430 (34)	3,110 (46)	4,130 (53)	4,480 (58.5)
50			1,350 (22)	1,740 (39.5)	2,610 (48.5)	3,040 (54.5)
55			,		1,360 (43)	1,070 (50)
Minimum booindicated leng	m angle (de th (no load)	g.) for	21	38.5	42	49
Maximum boo deg. boom an	gle (no load	l)		5	0	
#LMI operating	g code. Ref	er to LMI mai	nual for instru	uctions.		

Note: () Boom angles are in degrees.

*This boom length is with inner-mid fully extended and outer-mid & fly fully

lote: () Reference radii in feet.

A6-829-0103649A

41.3-90ft. 18,000 ibs Pick & Carry Up to 2.5 mph Pounds

#9006

Main Boom Length in Feet

41.3 50 60 *70 80

12 59,450 (770)

			M	lain Boom I	ength in F	eet	
	Feet	41.3	50	60	*70	80	90
	12	59,450 (67.5)	49,400 (72)				
	15	49,650 (63)	49,400 (68.5)				
	20	38,100 (54.5)	37,800 (62)	36,850 (67.5)	29,750 (71)		
	25	30,000 (44.5)	29,700 (55)	29,200 (62)	29,700 (66.5)		
	30	24,100 (31.5)	23,750 (47)	23,500 (56)	23,850 (62)	24,450 (66)	
	35	7	18,000 (37.5)	17,900 (49.5)	18,150 (57)	19,000 (62)	19,900 (66)
	40		13,650 (24.5)	13,700 (42.5)	13,750 (52)	14,700 (58)	15,500 (62)
	45			9,400 (34)	9,290 (46)	11,500 (53)	12,300 (58.5)
	50			7,420 (22)	7,200 (39.5)	8,220 (48.5)	8,960 (54.5)
	55				5,450 (31.5)	6,510 (43)	7,220 (50)
	60				3,970 (21)	5,060 (37)	5,740 (45.5)
	65					3,810 (29.5)	4,460 (40.5)
	70					2,720 (19)	3,350 (34.5)
	75						2,380 (28)
	80						1,520 (18)
Min	imum bo	om angle (deg.) for ind	icated lengt	n (no load)		0
Max	ximum bo	om length	(ft.) at 0 deg	g. boom ang	le (no load)		90
#I N	/II onerati	na code R	efer to I MI	manual for it	estructions		

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

Note: () Boom angles are in degrees.

	Litting	Capacities	at Zeio De	gree boon	Aligie	
Boom		M	ain Boom	Length in F	eet	
Angle	41.3	50	60	*70	80	90
0°	19,400 (34.1)	10,250 (42.8)	6,460 (52.8)	3,170 (63)	2,170 (72.8)	1,080 (82.8)
Note: () Re	ference rad	ii in feet.			A6-82	9-0103650

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

NOTES:

- Capacities are in pounds and do not exceed 75% of tipping loads as determined by test in accordance with SAE J765.
- Capacities are applicable to machines equipped with 29.6x25 (34 ply)
 General tires at 76 psi cold inflation pressure.
- Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
- Capacities are applicable only with machine on firm level surface.
- 5. On rubber lifting with boom extensions not permitted.
- 6. For pick and carry operation, boom must be centered over front of machine, mechanical swing lock engaged and load restrained from swinging. When handling loads in the structural range with capacities close to maximum ratings, travel should be reduced to creep speeds.
- Axle lockouts must be functioning when lifting on rubber.
- All lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. See lifting capacity chart for tire used. Damaged tires are hazardous to safe operation of crane.
- Creep Not over 200 ft.
 of movement in any 30
 minute period and not
 exceeding 1 mph.

875

load handling

Weight Reductions for Load Handling Devices

33 FT56 FT. FOLDING BOOM EXTENSION	
*33 ft. Extension (Erected) -	3,700 lb.
*56 ft. Extension (Erected) -	7,830 lb.
*76 ft. (1 insert Erected) -	10,350 lb.
*96 ft. (2 inserts Erected) -	13,300 lb.
*Peduction of main boom canacities	

*Reduction of main boom capacities (no deduct required for stowed boom extension)

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.

L	ine Pulls and Reeving I	nformatio	on
Hoists	Cable Specs	Permissible Line Pulls	Nominal Cable Length
Main	3/4" (19 mm) 6x37 Class, EIPS, IWRC Special Flexible Min. Breaking Str. 58,800 lb.	16,800 lb.	600 ft.
Main & Aux.	3/4" (19 mm) Flex-X 35 Rotation Resistant (non-rotating) Min. Breaking Strength 85,800 lb.	16,800 lb.	607 ft.

The approximate weight of 3/4" wire rope is 1.5 lb./ft.

Line Pulls and Reeving Infor	mation
AUXILIARY BOOM NOSE	136 lb.
HOOKBLOCK AND OVERHAUL BALL: 75 Ton, 4 Sheave 10 Ton, Overhaul Ball	1,275 lb.+ 568 lb. +

+Refer to rating plate for actual weight.

Boom S	Section	on v	s. Se	ectio	n Ex	tensi	on P	erce	ntag	jes
				Main B	oom L	ength i	n Feet			
	41.3	50	60	70	80	90	100	110	120	128
Boom section	ns:			Per	cent E	xtensio	n			
Inner-mid	0	30	65	100	100	100	100	100	100	100
Outer-mid	0	0	0	0	17	34	52	69	86	100
Fly	0	0	0	0	17	34	52	69	86	100



Hoist Performance Drum Rope Capacity (ft.) 15 in. Drum Hoist Line Pulls Rope Two Speed Hoist Layer Low High Available lb.* Available lb.3 Total 20,250 9,610 101 101 18,490 8,770 110 211 17.010 8.070 120 331 3 15,750 7,470 129 460

> Installation and Removal of Counterweight and Auxiliary Hoist

6,960

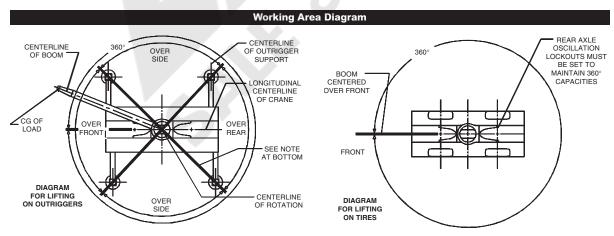
*Max. lifting capacity: 6x37 or 35x7 class = 16,800 lb.

139

14,660

Rated Lifting Capacities in Pounds on Outriggers Fully Extended – 360°

Radius in	LMI Code #0801 Main Boom Length
Feet	41.3 ft.*
10	24,000
12	24,000
15	24,000
20	24,000
25	24,000
30	24,000
*The boo	m must be fully retracted.



Bold lines determine the limiting position of any load for operation within working areas indicated.





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and accessories, and may not include all standard equipment.

GROVE

RT875E







 The Grove MEGAFORM™ boom shape eliminates weight and increases capacity compared to conventional shapes.



• Max. tip height of 232 ft. (70.6 m) w/56 ft. (17.0 m) bi-fold • Electronically controlled Cummins diesel and (2) 20 ft. (6.1 m) inserts.



For improved operator comfort and visibility of the boom load the cab can be tilted up to 20°.



engine provides plenty of power at the jobsite.



specifications

Superstructure



Boom

41 ft. - 128 ft. (12.6 m - 39.0 m) four-section, sequenced synchronized full power boom. Maximum tip height: 138 ft. (41.9



Lattice Extension

33 ft.-56 ft. (10.0 m-17 m) offsettable bifold lattice swingaway extension. Offsets 0°, 20°, and 40°. Stows alongside base boom section. Maximum tip height: 192 ft. (58.6 m).



*Optional Lattice Extension Inserts

(2) x 20 ft. (6.1 m) lattice extension inserts. Installs between the boom nose and bifold extension, non-stowable. Maximum tip height: 232 ft. (70.6 m).



Boom Nose

Four nylatron sheaves mounted on heavy-duty tapered roller bearings with removable pin-type rope guards. Quick-reeving type boom nose. Removable auxiliary boom nose with removable pin type rope guard.



Boom Elevation

One double-acting hydraulic cylinder with integral holding valve provides elevation from -3° to +78°.



Load Moment & Anti-Two Block System

Standard "Graphic Display" load moment and anti-two block system with audio-visual warning and control lever lockout. These systems provide electronic display of boom angle, length, radius, tip height, relative load moment, maximum permissible load, load indication and warning of impending two-block condition. The standard Work Area Definition System allows the operator to pre-select and define safe working areas. If the crane approaches the pre-set limits, audio-visual warnings aid the operator in avoiding job-site obstructions.



Full-vision, all-steel fabricated with acoustical lining and tinted safety glass throughout. Cab tilts to +20 degrees. Deluxe seat incorporates armrest-mounted hydraulic single-axis controllers. Dash panel incorporates gauges for all engine functions. Other standard features include: hot water heater, cab circulating air fan, sliding side and rear windows, sliding skylight with electric wiper and sunscreen, electric windshield wash/wipe, fire extinguisher and seat belt.

Swing

Two speed, planetary swing drive with foot-applied multi-disc wet brake. Spring applied, hydraulically-released swing brake. Single position mechanical house lock, operated from cab. Maximum speed: 2.0 RPM.



Counterweight

18,000 lbs. (8 165 kg). Hydraulically installed and removed.



Hydraulic System

Two main pumps ([1] piston and [1] gear) with a combined capacity of 133 GPM (503 LPM).

Maximum operating pressure: 4000 psi (277.7 bar).

Three section pressure compensated valve bank. Return line type filter with full flow by-pass protection and service indicator. Replaceable cartridge with micron filtration rating of 5/12/16. 263 gallon (995 L) hyd. reservoir. Carrier mounted oil cooler with thermostatically controlled hydraulic motor driven fan/air to oil. System pressure test ports.



Hoist Specifications (HP30-19G) Main and Auxiliary Hoist

Planetary reduction with automatic spring applied multi-disc wet brake. Electronic hoist drum rotation indicators and hoist drum cable followers.

Maximum Single Line Pull:

1st layers: 20,250 lb. (9 185 kg) 3rd layer: 17,010 lb. (7 715 kg) 5th layer: 14,660 lb. (6 650 kg)

Maximum Permissible Line Pull:

16,800 lb. (7 620 kg) with 6 x 37 class rope 16,800 lb. (7 620 kg) with 35 x 7 class rope

Maximum Single Line Speed: 514 FPM (156 m/min)

Rope Construction:

6 x 36 EIPS IWRC, Special Flexible 35 x 7 Flex-X, Rotation Resistant

Rope Diameter: 3/4" (19 mm)

Rope Length:

Main Hoist: 600 ft. (182.8 m) Auxiliary Hoist: 600 ft. (182.8 m)

Maximum Rope Stowage: 841 ft. (256 m)

*Denotes optional equipment



specifications

Carrier



ା ⊞ା Chassis

Box section frame fabricated from high-strength, low alloy steel. Front/rear towing and tie down lugs.



Cutrigger System

Four hydraulic telescoping single-stage double box beam outriggers with inverted jacks and integral holding valves. Three position setting, 0%, 50% and fully extended. All steel fabricated, quick-release type round outrigger floats, 30.5 in. (775 mm) diameter. Maximum outrigger pad load: 125,000 lb. (56 700 kg).



Outrigger Controls

Controls and crane level indicator located in cab.



Engine (Tier III)

Cummins QSB 6.7L diesel, six cylinders, 275 bhp (205 kW) (Gross) @ 2,500 rpm. Maximum torque: 728 ft. lbs. (987 Nm) @ 1,500 RPM.



Fuel Tank Capacity

72 gallons (273 L)



Transmission

Full rangeshift with 6 forward and 6 reverse speeds. Front axle disconnect for 4 x 2 travel



Electrical System

Two 12-V maintenance free batteries. 12-V starting and lighting. Battery disconnect. CanBus Diagnostic system.



 4×4



Fully independent power steering:

Front: Full hydraulic, steering wheel controlled.

Full hydraulic, switch controlled. Rear:

Provides infinite variations of 4 main steering modes: front only, rear only, crab and coordinated.

Rear steer indicator.

Turning radius - 25 ft.



Front: Drive/steer with differential and planetary

reduction hubs rigid-mounted to frame.

Rear: Drive/steer with differential and planetary

reduction hubs pivot-mounted to frame.



Oscillation Lockouts

Automatic full hydraulic lockouts on rear axle permits 10 in. (25.4 cm) oscillation only with boom centered over the front.

Full hydraulic split circuit brakes operating on all wheels. Springapplied, hydraulically released parking brake mounted on front



U Tires

Std. 29.5 x 25 - 34 bias ply, General.



Lights

Full lighting including turn indicators, head, tail, brake and hazard warning lights.



W Maximum Speed

22 MPH (35 kph).



Gradeability (Theoretical)

75% (Based on 108,158 lb. [49 060 kg] GVW) 29.5 x 25 tires, 128 ft. (39.0 m) boom, plus 56 ft. (17.0 m) swingaway, 18,000 lb. (8 165 kg) counterweight, 75T hookblock and 10T headache ball).

Miscellaneous Standard Equipment

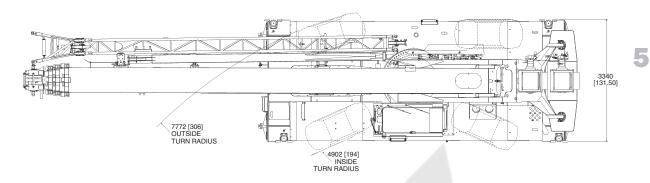
Full width steel fenders, full length aluminum decking, dual rear view mirrors, hookblock tiedown, electronic back-up alarm, light package, front stowage well, tachometer/hourmeter, rear wheel position indicator, 36,000 BTU hot water cab heater, hoist mirrors, engine distress A/V warning system, front/rear tie down and two lugs, coolant sight level indicator.

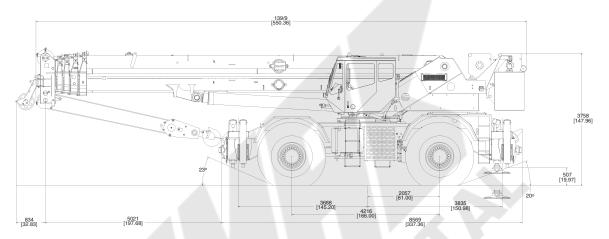
*Optional Equipment

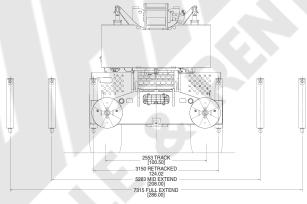
- *Auxiliary Lighting Package (includes cab mounted amber flashing light, hoist mounted work light, and dual base boom mounted floodlights.)
- *LMI light bar (in cab)
- *Air Conditioning (28,500 BTU)
- *360 degree NYC style mechanical swinglock
- *Rear Pintle hook
- *Cab controlled cross axle differential locks, (front and rear)
- *PAT data logger
- *Rubber mat for stowage trough
- *Denotes optional equipment



dimensions







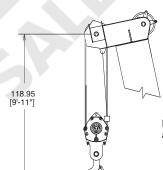
Note: Reference dimensions in mm [inches]

Weights	Y / ^ /					
	G'	vw	Front		Rear	
	lb.	kg	lb.	kg	lb.	kg
RT875E Basic Machine						
Basic Machine including 128 ft. main boom, main and aux. hoist with 600 ft. of rope, 56' (17 m) bifold swingaway, full counterweight, 10T headache ball, and 75T hookblock:	108,158	49 060	53,888	24 444	54,270	24 617
Remove counterweight and aux. hoist. 56' (17 m) bifold.	87,917	39 879	63,520	28 813	24,397	11 066
Remove counterweight, aux. hoist, and 56' (17 m) bifold swingaway.	85,285	38 685	58,725	26 638	26,560	12 048





Working range diagram with bi-fold extension 220 0° OFFSET 20° OFFSET 210 40° OFFSET 200 56 ' EXT 190 180 33 ' EXT 170 160 150 Boom and Extension Length in Feet 128 140 60° Height From Ground in Feet 120 130 50° 110 120 100 110 40° 100 90 30° 80 70 60



170 160 **150** 140 130 120 110 **100** 90

Dimensions are for largest Grove furnished hookblock and overhaul ball, with anti-two block activated.

41.3

78° MAX BOOM ANGLE

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.

80 70

Operating Radius in Feet From Axis of Rotation

50 40 30 20



50

302010

190 180

RT875E load chart

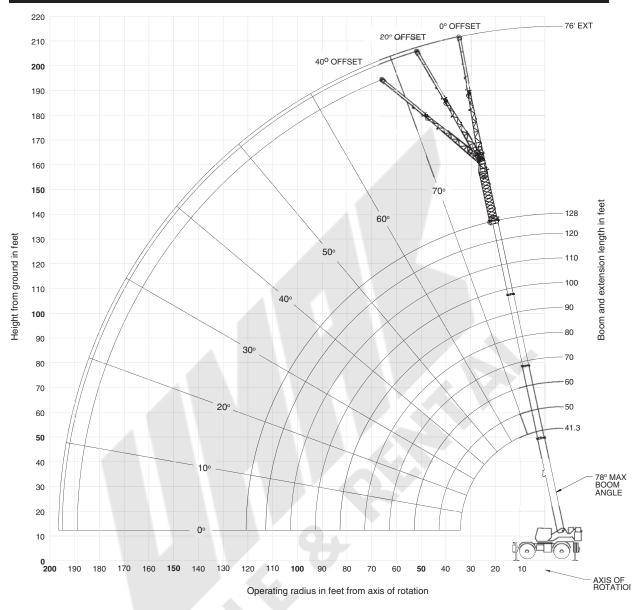
		24'	spread							
7						ounds				
Feet	41.3	50	60	**70	Main Boom Leng 80	th in Feet 90	100	110	120	128
10	+150,000 (71)	124,000 (74.5)	105,500 (77.5)							
12	+150,000 (67.5)	124,000 (72)	105,500 (75.5)	59,500 (78)						
15	130,000 (63)	124,000 (68.5)	104,000 (72.5)	59,500 (75.5)	42,100 (78)	*42,000 (78)				
20	100,000 (54.5)	99,850 (62)	85,900 (67.5)	59,500 (71)	42,100 (74)	42,000 (76)	*39,650 (78)	*31,950 (78)		
25	80,550 (44.5)	80,250 (55)	72,550 (62)	57,050 (66.5)	42,100 (70)	42,000 (73)	39,650 (75)	31,950 (77)	*25,750 (78)	*22,000 (78)
30	59,050 (31.5)	58,150 (47)	57,850 (56)	49,300 (62)	42,100 (66)	39,050 (69.5)	36,150 (72)	31,950 (74)	25,750 (76)	22,000
35	(01.0)	43,250 (37.5)	43,000 (49.5)	42,600 (57)	38,150 (62)	34,100 (66)	31,350 (68.5)	29,300 (71.5)	25,750 (73.5)	22,000 (74.5)
40		33,600 (24.5)	33,400 (42.5)	32,950 (52)	33,750 (58)	30,050 (62)	27,500 (65.5)	25,650 (68.5)	23,900	22,000 (72.5)
45		(24.0)	26,600 (34)	26,200 (46)	27,400 (53)	26,750 (58.5)	24,400 (62)	22,700 (65.5)	21,450 (68)	20,650 (70)
50	See Note 16		21,600	21,150	22,450 (48.5)	23,250	21,850 (59)	20,250	19,100	18,350 (67.5)
55	Note to		(22)	(39.5) 17,250 (31.5)	18,650 (43)	(54.5) 19,400 (50)	19,700 (55)	(62.5) 18,200 (59.5)	(65.5) 17,100 (63)	16,400
60				14,200 (21)	15,600 (37)	16,400 (45.5)	17,050 (51.5)	16,450 (56)	15,450 (60)	(65) 14,750 (62.5)
65				(21)	13,100 (29.5)	13,850 (40.5)	14,550 (47.5)	14,950 (53)	14,000	13,350 (59.5)
70					11,050	11,800	12,450	12,900	(57) 12,700	12,150
75					(19)	(34.5) 10,000	(43) 10,700	(49.5) 11,200	(54) 11,600	(57) 11,050
80						(28) 8,540	(38.5) 9,170	(45.5) 9,670	(51) 10,150	(54) 10,100
85						(18)	(33) 7,860	(41.5) 8,360	(47.5) 8,850	9,180
90							(26.5) 6,710 (17.5)	7,210 (32)	7,700 (40)	(48) 8,050
95							(17.5)	6,200 (25.5)	6,700 (35.5)	7,050 (41)
100								5,310	5.800	6.160
105							4	(17)	(30.5) 5,010	5,360
110									(25) 4,290	(32.5) 4,640
115						-6			(16.5)	(27.5) 4,000
120										(21.5) 3,410
	angle (deg.) for i	ndicated length (r	no load)				_			(10.5)
MI operating is capacity is e: () Boom	code. Refer to LI s based upon ma angles are in dec	deg. boom angle of MI manual for inst ximum obtainable grees. apacity (using au	tructions. boom angle. x. boom nose). R		& Safety Handbo		agram.		A	120
Boom			Litting C		Degree Boom / Main Boom Leng	-				
Angle	41.3	50	60	**70	80	90	100	110	120	
0°	20,750	15,150 (42.8)	10,500 (52.8)	6,700 (63)	5,100 (72.8)	3,900 (82.8)	2,900 (92.8)	2,000 (102.8)	1,300 (112.8)	

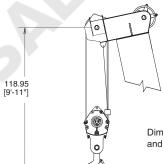
		ang:		Pounds		
	3	3 ft. LENG	_		6 ft. LENG	TH
Feet	0° OFFSET #0021	20° OFFSET #0022	40° OFFSET #0023	0° OFFSET #0041	20° OFFSET #0042	40° OFFSET #0043
35	11,900 (78)	,, ooll			1100-12	1100-10
40	11,900 (77)			6,060 (78)		
45	11,900 (75.5)	*11,900 (78)		6,060 (77.5)		
50	11,900 (73.5)	10,600 (76.5)	*9,790 (78)	6,060 (76)		
55	11,900 (71.5)	9,770 (74.5)	8,470 (77)	6,060 (74.5)		
60	11,000 (69.5)	9,020 (72.5)	7,920 (75)	6,060 (72.5)	*6,060 (78)	
65	10,000 (67.5)	8,360 (70.5)	7,430 (73)	6,060 (71)	5,900 (76.5)	
70	9,190 (65.5)	7,780 (68.5)	6,980 (71)	6,060 (69.5)	5,730 (75)	*5,060 (78)
75	8,460 (63.5)	7,260 (66.5)	6,580 (69)	6,060 (67.5)	5,330 (73)	4,640 (77)
80	7,820 (61.5)	6,790 (64.5)	6,210 (66.5)	6,040 (66)	4,980 (71.5)	4,370 (75.5)
85	7,250 (59.5)	6,370 (62)	5,870 (64.5)	5,570 (64)	4,650 (69.5)	4,120 (73.5)
90	6,740 (57)	5,990 (60)	5,560 (62)	5,150 (62.5)	4,360 (67.5)	3,890 (71.5)
95	6,290 (55)	5,640 (57.5)	5,280 (60)	4,780 (60.5)	4,090 (66)	3,680 (69.5)
100	5,880 (52.5)	5,320 (55.5)	5,020 (57.5)	4,440 (58.5)	3,840 (64)	3,480 (67.5)
105	5,510 (50)	5,030 (53)	4,770 (55)	4,130 (56.5)	3,610 (62)	3,300 (65.5)
110	5,170 (47.5)	4,760 (50.5)	4,550 (52)	3,850 (54.5)	3,400 (60)	3,130 (63.5)
115	4,830 (45)	4,510 (47.5)	4,340 (49.5)	3,590 (52.5)	3,200 (58)	2,970 (61)
120	4,230 (42)	4,280 (45)	4,150 (46.5)	3,360 (50.5)	3,020 (55.5)	2,820 (59)
125	3,690 (39)	3,960 (41.5)		3,140 (48)	2,840 (53.5)	2,680 (56.5)
130	3,200 (36)	3,430 (38.5)		2,940 (46)	2,690 (51)	2,540 (54)
135	2,740 (32)	2,930 (35)		2,760 (43.5)	2,540 (48.5)	2,420 (51.5)
140	2,320 (28)	2,480 (30.5)		2,590 (41)	2,400 (46)	2,300 (48.5)
145	1,940 (23)			2,430 (38.5)	2,270 (43.5)	
150	1,580 (16.5)			2,070 (35.5)	2,140 (40.5)	
155				1,730 (32.5)	2,030 (37)	
160	7	977		1,420 (29)	1,710 (33.5)	
165				1,120 (24.5)		
Minimum boom angle (°) for indicated length (no load)	15	28	44	23	31	46
Maximum boom length (ft.) at 0° boom angle (no load) IOTE: () Boom angles		110			110	

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 the 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
- 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 (17 ft. 4 in. spread).

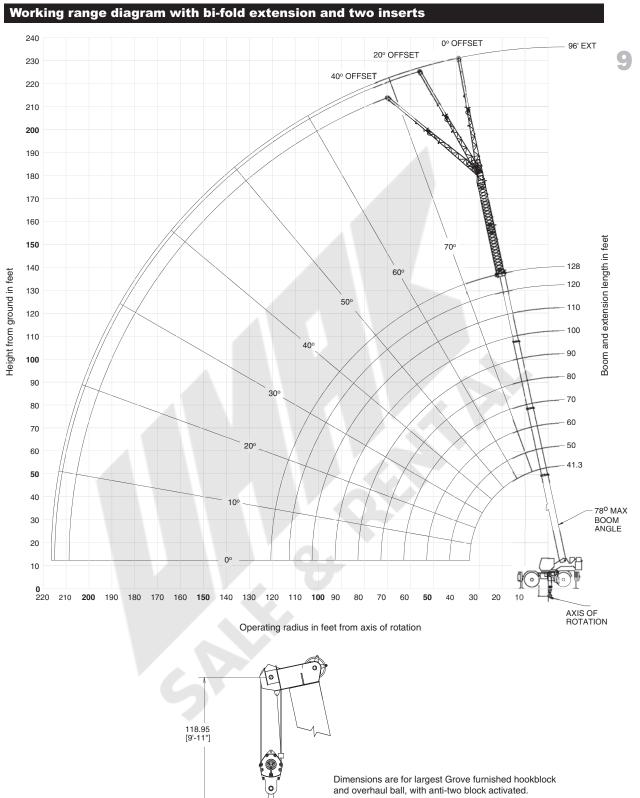






Dimensions are for largest Grove furnished hookblock and overhaul ball, with anti-two block activated.

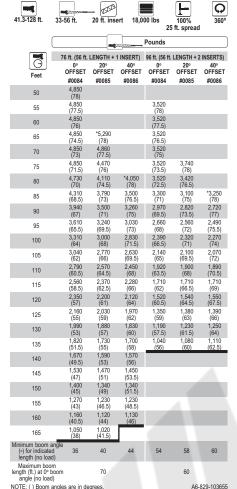






RT875E load chart

10



NOTE: () Boom angles are in degrees.
#LMI operating code. Refer to LMI manual for operating instructions.
*This capacity is based upon maximum boom angle.
RT875E - S/N 223983

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 56 ft. boom 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. When lifting over the main boom nose with 56 ft. extension erected and inserts, the outriggers must be fully extended and vertical iacks set.

41.3-90 ft.	18,000 lbs		Stationary		Q 360°	
			NIT.	Pounds		
			#90	105		
<u> </u>		N	lain Boom Le	ength in Feet		
Feet	41.3	50	60	*70	80	90
12	49,200 (67.5)	40,750 (72)				
15	39,150 (63)	35,700 (68.5)				
20	24,200 (54.5)	24,350 (62)	22,800 (67.5)	22,000 (71)		
25	16,200 (44.5)	16,200 (55)	15,600 (62)	15,950 (66.5)	15,850 (70)	
30	11,250 (31.5)	11,250 (47)	10,950 (56)	10,650 (62)	11,600 (66)	12,150 (69,5)
35	, ,	7,900 (37.5)	7,690 (49.5)	7,270 (57)	8,420 (62)	8,820 (66)
40		5,490 (24.5)	5,280 (42.5)	4,880 (52)	6,020 (58)	6,330 (62)
45		, ,	3,430 (34)	3,110 (46)	4,130 (53)	4,480 (58.5)
50			1,350 (22)	1,740 (39.5)	2,610 (48.5)	3,040 (54.5)
55			,		1,360 (43)	1,070 (50)
Minimum boo indicated leng		g.) for	21	38.5	42	49
Maximum boo deg. boom an				5	0	

teg, stoom angle in loady

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

Note: () Boom angles are in degrees.

*This boom length is with inner-mid fully extended and outer-mid & fly fully

retracted.				
	Lifting	Capacities	at Zero Degree Boom Angle	•
Boom Angle	41.3	50	Main Boom Length in Feet	
0°	8,340 (34.1)	4,400 (42.8)		
Note: () Ref	erence radii ir	n feet.		A6-829-0103649A

		_		Possessite .	_	-
				Pounds		_
			#9	006		/
Feet		N	lain Boom	Length in F	eet	
геец	41.3	50	60	*70	80	90
12	59,450 (67.5)	49,400 (72)				
15	49,650 (63)	49,400 (68.5)				
20	38,100 (54.5)	37,800 (62)	36,850 (67.5)	29,750 (71)		
25	30,000 (44.5)	29,700 (55)	29,200 (62)	29,700 (66.5)		
30	24,100 (31.5)	23,750 (47)	23,500 (56)	23,850 (62)	24,450 (66)	
35	7	18,000 (37.5)	17,900 (49.5)	18,150 (57)	19,000 (62)	19,90 (66)
40		13,650 (24.5)	13,700 (42.5)	13,750 (52)	14,700 (58)	15,50 (62)
45	V		9,400 (34)	9,290 (46)	11,500 (53)	12,30 (58.5)
50			7,420 (22)	7,200 (39.5)	8,220 (48.5)	8,960 (54.5)
55				5,450 (31.5)	6,510 (43)	7,220 (50)
60				3,970 (21)	5,060 (37)	5,740 (45.5)
65					3,810 (29.5)	4,460 (40.5
70					2,720 (19)	3,350 (34.5
75						2,380 (28)
80						1,520 (18)
Minimum bo	om angle (deg.) for ind	licated lengt	h (no load)		0

Lifting Capacities at Zero Degree Boom Angle Main Boom Length in Feet Boom Angle 60 1,080 (82.8)

A6-829-0103650

0° 19,400 10,250 6,460 3,77 (42.8) (52.8) (63 Note: () Reference radii in feet. This boom length is with inner-mid fully extended and outer-mid & fly fully retracted.

NOTES:

- 1. Capacities are in pounds and do not exceed 75% of tipping loads as determined by test in accordance with SAE J765.
- 2. Capacities are applicable to machines equipped with 29.6x25 (34 plv) General tires at 76 psi cold inflation pressure.
- 3. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
- 4. Capacities are applicable only with machine on firm level surface.
- 5. On rubber lifting with boom extensions not permitted.
- 6. For pick and carry operation, boom must be centered over front of machine, mechanical swing lock engaged and load restrained from swinging. When handling loads in the structural range with capacities close to maximum ratings, travel should be reduced to creep speeds.
- 7. Axle lockouts must be functioning when lifting on rubber.
- 8. All lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. See lifting capacity chart for tire used. Damaged tires are hazardous to safe operation of crane.
- 9. Creep Not over 200 ft. of movement in any 30 minute period and not exceeding 1 mph.



load handling

Weight Reductions for Load Handling Devices

33 FT56 FT. FOLDING BOOM EXTENSION	
*33 ft. Extension (Erected) -	3,700 lb.
*56 ft. Extension (Erected) -	7,830 lb.
*76 ft. (1 insert Erected) -	10,350 lb.
*96 ft. (2 inserts Erected) -	13,300 lb.
*Reduction of main boom canacities	

(no deduct required for stowed boom extension)

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.

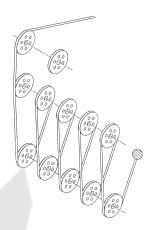
Line Pulls and Reeving Information							
Hoists	Cable Specs	Permissible Line Pulls	Nominal Cable Length				
Main	3/4" (19 mm) 6x37 Class, EIPS, IWRC Special Flexible Min. Breaking Str. 58,800 lb.	16,800 lb.	600 ft.				
Main & Aux.	3/4" (19 mm) Flex-X 35 Rotation Resistant (non-rotating) Min. Breaking Strength 85,800 lb.	16,800 lb.	607 ft.				

The approximate weight of 3/4" wire rope is 1.5 lb./ft.

Line Pulls and Reeving Information						
AUXILIARY BOOM NOSE	136 lb.					
HOOKBLOCK AND OVERHAUL BALL: 75 Ton, 4 Sheave 10 Ton, Overhaul Ball	1,275 lb.+ 568 lb. +					

+Refer to rating plate for actual weight.

Boom S	Section	on v	s. Se	ectio	n Ex	tensi	on P	erce	ntag	es
				Main E	Boom L	ength i	n Feet			
	41.3	50	60	70	80	90	100	110	120	128
Boom sectio	ns:			Pei	rcent E	xtensio	n			
Inner-mid	0	30	65	100	100	100	100	100	100	100
Outer-mid	0	0	0	0	17	34	52	69	86	100
Flv	Λ	Λ	Λ	Λ	17	3.4	52	69	86	100



4									
Hoist Performance									
Wire Rope Layer	Hoist Line Two Speed Low		Drum Rope Capacity (ft.) 15 in. Drum						
Luyor	Available lb.*	Available lb.*	Layer	Total					
1	20,250	9,610	101	101					
2	18,490	8,770	110	211					
3	17,010	8,070	120	331					
4	15,750	7,470	129	460					
5	14,660	6,960	139	599					
	*Max. lifting ca	pacity: 6x37 or 35x7 cl	ass = 16,800 lb.						

Installation and Removal of Counterweight and Auxiliary Hoist

Rated Lifting Capacities in Pounds on Outriggers Fully Extended – 360°

LMI Code #0801
Main Boom Length
41.3 ft.*
24,000
24,000
24,000
24,000
24,000
24,000
nust be fully retracted.

Working Area Diagram REAR AXLE OSCILLATION CENTERLINE
OF OUTRIGGER CENTERLINE OF BOOM 360° LOCKOUTS MUST BE SET TO MAINTAIN 360° SUPPORT BOOM CENTERED OVER FRONT CAPACITIES ONGITUDINAL CENTERLINE OF CRANE CG OF LOAD OVER OVER REAF SEE NOTE AT BOTTOM FRONT DIAGRAM FOR LIFTING ON OUTRIGGERS CENTERLINE DIAGRAM FOR LIFTING ON TIRES OVER SIDE

Bold lines determine the limiting position of any load for operation within working areas indicated.







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