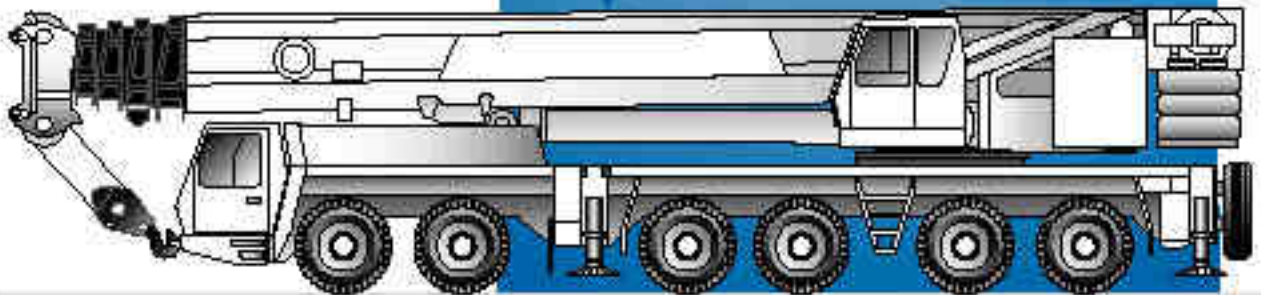




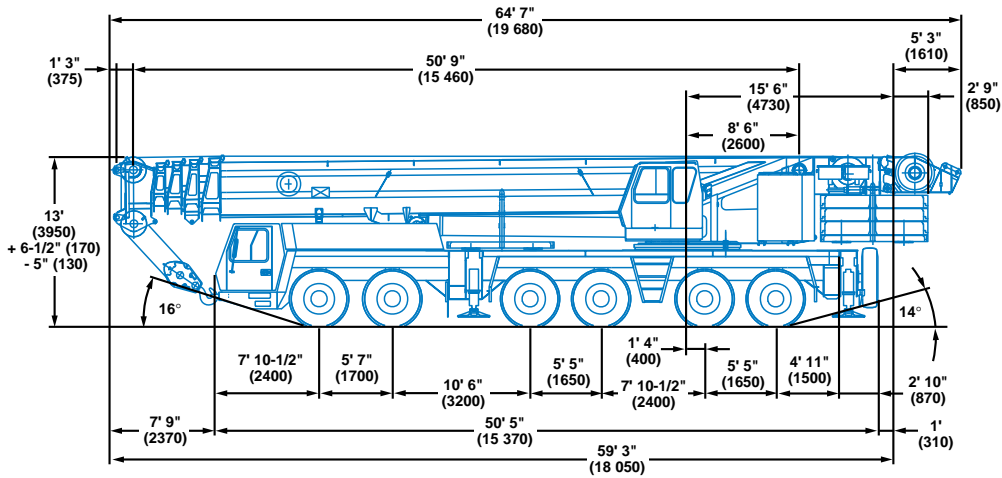
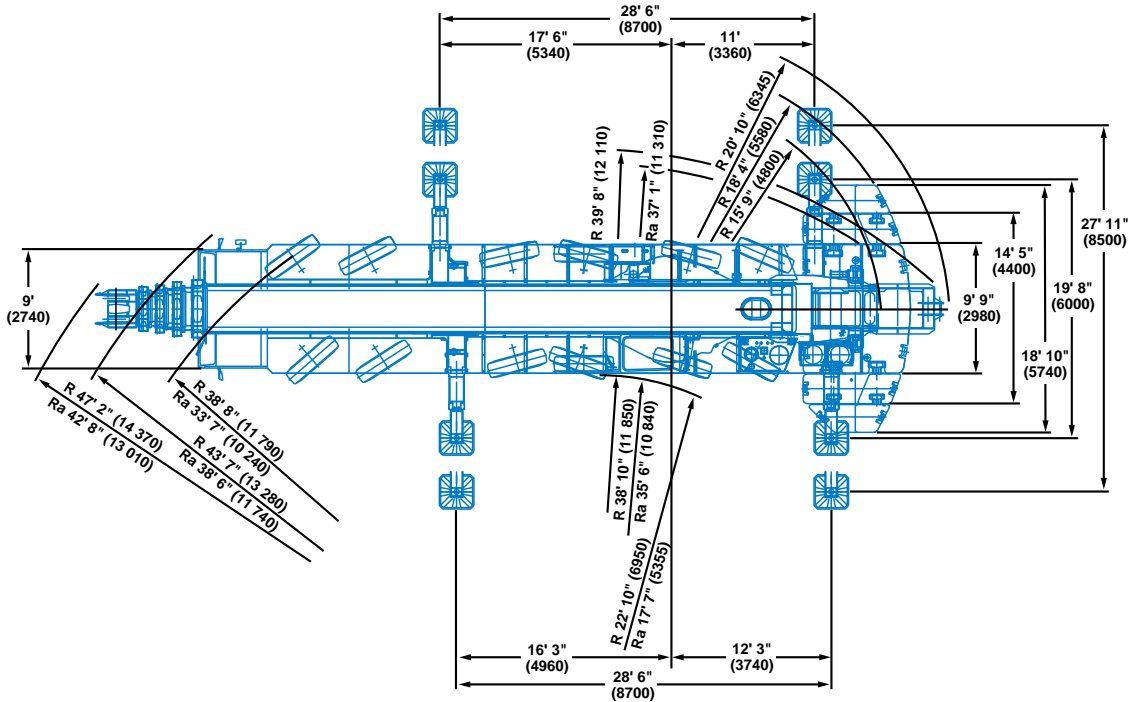
GROVE
CRANE

GMK6300B



All Terrain Hydraulic Crane

Dimensions



Note: () Reference dimensions in mm

BASIC WEIGHTS (LBS.)	Axles 1 & 2	Axles 3 - 6	Total
With Mercedes Power	50,278	107,369	157,648
With Cummins Power	50,640	107,713	158,353
Additions:			
Outrigger Pads	-	772	772
Removable rear outrigger box option	-(1,197)	3,402	2,205
Auxiliary Hoist	-(5,362)	11,446	6,081
Removal:			
Front Outrigger Beams & Jacks	-(3,377)	-(1,980)	-(5,357)
Rear Outrigger Beams & Jacks	3,732	-(9,652)	-(5,920)
Outrigger Box (must add weight above for option)	6,457	-(16,819)	-(10,362)
Substitute 14.00 tires for standard 20.5	-(900)	-(1,800)	-(2,700)
Boom Assembly (minus lift cylinder)*	-(32,245)	-(23,995)	-(56,240)
Telescope Sections 1-4*	-(23,034)	-(13,783)	-(36,817)
Lift Cylinder*	-(2,121)	-(3,258)	-(5,379)

*Reflects weights with superstructure facing forward

Working range



51 - 197 ft.
(15.5 - 60 m)



220,458 lbs.
(100 000 kg)

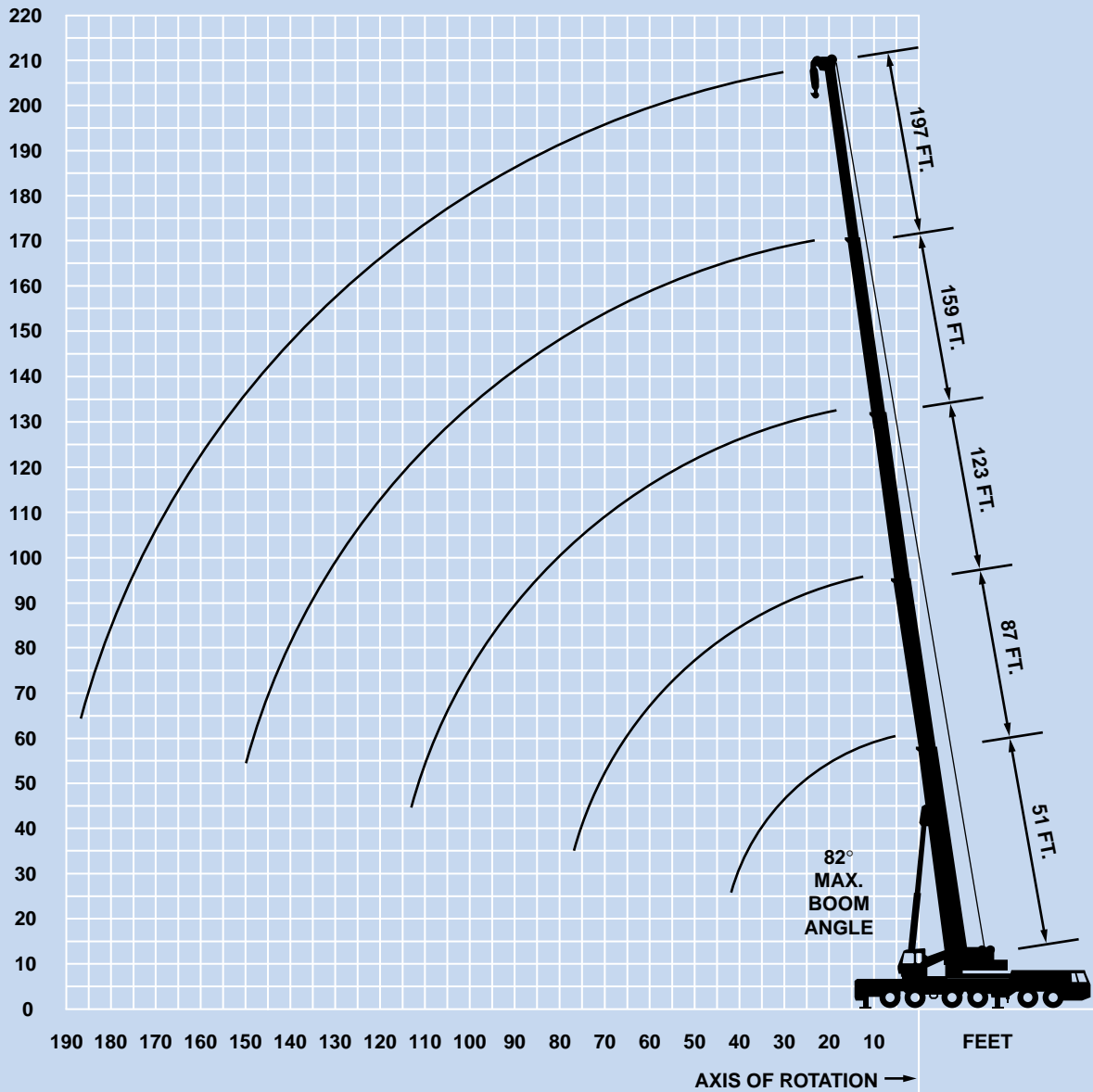


100%



360°

FEET



Superstructure specifications

Boom

51 ft. - 197 ft. (15.5 m - 60 m) five section, full power boom with patented "twin-lock" boom pinning system. Maximum tip height: 207 ft. (63 m).

Boom Elevation

Single lift cylinder with safety valve provides boom angle from -1.5° to +82°.

Lattice Jib

Luffing Jib is a lattice design with lengths of 69 ft. - 200 ft. (21 m - 61 m) in sections of 26 ft. (8 m). The luffing jib converts to a fixed offset lattice jib using an offset angle adapter and provides lengths of 62 ft. - 167 ft. (19 m - 51 m) offsettable at 3° and 25°.

Load Moment & Anti-Two Block System

Load moment and anti-two block system with audio/visual warning and control lever lockout provides electronic display of boom angle, length, radius, tip height, relative load moment, maximum permissible load, load indication and warning of impending two-block condition.

Cab

All aluminum construction cab is tiltable (approximately 20°) and includes safety glass and adjustable operator's seat with hydraulic suspension. Other features include engine dependent hot water heater, armrest integrated crane controls, and ergonomically arranged instrumentation.

Swing

3 axial piston fixed displacement motors provide swing speed of 0 - 1.6 RPM thru planetary gear box. Also provided is a spring applied, hydraulically released automatic swing brake with foot-operated release for free swing.

Counterweight

220,458 lbs. (100 000 kg) consisting of various sections with hydraulic installation/removal system (see counterweight configuration on page 16).

Engine

Mercedes-Benz OM906LA, diesel, 6 cylinders, water cooled, turbocharged, 258 HP (190 kW) at 1800 rpm. Max. torque: 803 ft./lbs. (1100 Nm) at 1300 rpm. Engine emission: EURO II/EUROMOT/EPA/CARB (non road).

*Optional engine: Cummins 6 CTA 8.3-260, diesel, 6 cylinders 260 HP (194 kW) at 1800 rpm. Fuel tank capacity: 87 gal. (330 L).

Hydraulic system

4 axial piston variable displacement pumps provide four separate circuits for craning functions. Standard thermostatically controlled oil cooler keeps oil at optimum operating temperature.

Tank capacity: 322 gal. (1220 L)

Control system

Full electronic control of all crane movements is accomplished using electrical control levers with automatic reset to zero. Controls are integrated with the LMI and engine management system by a CAN-BUS.

Hoist

Main and auxiliary hoist are powered by axial piston variable displacement motor with planetary gear and brake. "Thumb-thumper" hoist drum rotation indicator alerts operator of hoist movement.

	<u>Main</u>	<u>Auxiliary</u>
Line length:	984 ft. (300 m)	1,378 ft. (420 m)
Rope diameter:	24 mm	24 mm
Line speed:	460 ft./min.	426 ft./min.
Line pull:	24,700 lbs. (112 kN)	24,700 lbs. (112 kN)

Electrical system

24 V system with three-phase alternator 28 V/80 A, 2 batteries 12 V/170 Ah.

*Optional equipment

- *Engine-independent hot water heater, with engine pre-heater
- *Second spotlight
- *Stereo/cassette player
- *Air Conditioning

*Denotes optional equipment

Carrier specifications

Chassis

Box-type, torsion resistant frame is fabricated from high-strength steel.

Outrigger System

Hydraulic two-stage outrigger beams are extended by a single hydraulic cylinder and two cables. Outriggers can adjust to two positions:

Fully extended (100%) - 27' 11" (8.5 m)

Partially extended (50%) - 19' 8" (6 m)

Four 29.5 in. x 32 in. (750 mm x 810 mm), self stowing, steel outrigger pads provide rigid lifting base. Outrigger controls are located on both sides of the carrier. An electronic level indicator is located next to each outrigger control bos. In-cab and outrigger control station outrigger pressure readouts are also available.

Engine

Mercedes-Benz OM502LA, diesel, 8 cylinders, water cooled, turbo charged and aftercooled, 563 HP (420 kW) at 1800 rpm. Max. torque: 1,971 ft./lbs. (2700 Nm) at 1080 rpm.

Engine emission: EURO II/EUROMOT/EPA/CARB (non road).

*Optional engine: Cummins N525 E20 (EUROMOT/EPA/CARB - non road), diesel, 6 cylinders 533 HP (392 kW) at 1800 rpm.

Fuel Tank capacity: 132 gal. (500 L).

Transmission

Allison automatic CLT 755, 5 forward and 1 reverse speed. Transfer case with 2 speeds and inter-axle differential lock.

Axles

6 axles. 1, 2, 4 and 5 are drive/steer. Axles 3 and 6 are steer only. (12 x 8 x 12).

Suspension

GMK6300B features the Grove exclusive MEGATRAK** suspension. This revolutionary design features an independent hydroneumatic system with hydraulic lockout acting on all wheels. The suspension can be raised 6-1/2" (170 mm) or lowered 5" (130 mm) both longitudinally and transversely and features an automatic leveling system for on-highway travel.

Tires

12 tires, 20.5 R25.

Steering

Dual circuit steering system is hydraulic power assisted with a transfer case mounted, ground driven, emergency steering pump. Axles 1, 2, 3, 5 and 6 steer on highway. Separate steering of the 4th, 5th and 6th axle for all wheel steer and crab-steer is controlled by an electric rocker switch.

Brakes

A dual circuit air system operates on all wheels with a spring-applied, air released parking brake acting on axles 2, 4, 5 and 6. An air dryer is fitted to remove moisture from the air system.

Auxiliary exhaust brake (Cummins) or transmission retarder (Mercedes) is standard.

Cab

Two-man, aluminum construction driver's cab includes the following features: safety glass; driver and passenger seats with hydraulic suspension, engine-dependent hot water heater, complete instrumentation and driving controls.

Electrical system

24 V system with three-phase alternator 28 V/80 A, 2 batteries 12 V/170 Ah.

*Optional equipment

*Electric driveline retarder

*12 tires, 16.00 R25 (vehicle width 9 ft. 10 in. [3 m])

*14.00 R25 tires (vehicle width 9 ft. 9 in. [2.98 m])

*Folding bunk bed in carrier cab

*Engine-independent hot water heater, with engine pre-heater





*Third seat

*Trailing boom "boost" weight transfer kit

*Air conditioning

Denotes optional equipment



51 - 197 ft.
 (15.5 - 60.0 m)





220,458 lbs.
 (100 000 kg)

100%
 28' 6" Spread

360°

Feet	Pounds										
	51**	51	72	87	93	108	114	136	160	181	197
*9	600.0										
10		470.0	388.0	290.0							
15		372.0	370.0	282.0	252.0	204.0					
20		306.0	302.0	258.0	224.0	201.0	177.0	140.0			
25		258.0	254.0	230.0	200.0	189.0	160.0	134.0			
30		222.0	222.0	203.0	178.0	173.0	144.0	123.0	95.0	73.0	59.0
35		188.0	188.0	181.0	160.0	156.0	130.0	113.0	95.0	73.0	59.0
40			162.0	157.0	145.0	141.0	118.0	104.0	94.0	73.0	59.0
45			142.0	137.0	132.0	128.0	107.0	95.0	90.0	73.0	59.0
50			126.0	123.0	122.0	117.0	99.0	88.0	85.0	73.0	59.0
55			112.0	112.0	110.0	107.0	91.0	81.0	79.0	71.0	59.0
60				101.0	99.0	98.0	84.0	74.0	74.0	68.0	59.0
65				91.0	89.0	88.0	78.0	70.0	69.0	64.0	58.0
70				82.0	80.0	79.0	73.0	65.0	65.0	60.0	55.0
75				46.0	73.0	71.0	68.0	61.0	61.0	57.0	52.0
80						65.0	64.0	57.0	57.0	53.0	50.0
85						59.0	60.0	53.0	53.0	50.0	47.0
90						54.0	56.0	50.0	50.0	47.0	45.0
95						39.4	53.0	47.0	47.0	45.0	43.0
100								44.0	44.0	42.2	40.8
105								42.6	42.0	40.2	38.8
110								40.6	39.8	38.2	37.0
115								38.6	37.6	36.0	35.0
120								36.6	35.8	34.4	33.4
125									34.0	32.6	31.8
130									32.0	30.8	30.0
135									29.8	29.2	28.4
140									23.6	27.4	26.8
145									22.2	25.6	25.2
150									19.4	24.2	23.8
155										23.2	22.8
160										22.4	22.0
165										18.0	21.0
170										15.6	20.2
175											19.2

*Lifting capacities greater than 430,000 lbs. (195 050 kg) require special equipment. **Over rear only, 28' 6" x 9' 4" (100% Front, 0% Rear) outrigger base.




51 - 197 ft.
 (15.5 - 60.0 m)

220,458 lbs.
 (100 000 kg)

50%
 19' 8" Spread

360°

Feet	Pounds									
	50.72	71.78	71.95	72.05	72.21	86.51	87.01	87.5	87.99	
10	526.0	242.0	133.0	189.0	388.0	290.0	206.0	146.0		
15	400.0	242.0	133.0	189.0	382.0	282.0	206.0	146.0		121.0
20	332.0	242.0	133.0	189.0	316.0	258.0	206.0	146.0		121.0
25	268.0	242.0	133.0	189.0	264.0	230.0	205.0	138.0		107.0
30	222.0	222.0	127.0	178.0	218.0	203.0	181.0	122.0		95.0
35	188.0	188.0	115.0	159.0	184.0	181.0	162.0	109.0		85.0
40		162.0	105.0	144.0	159.0	157.0	147.0	99.0		78.0
45		142.0	97.0	130.0	138.0	137.0	133.0	90.0		71.0
50		126.0	90.0	120.0	122.0	121.0	123.0	83.0		65.0
55		112.0	84.0	110.0	109.0	107.0	112.0	76.0		61.0
60						96.0	101.0	70.0		56.0
65						86.0	91.0	66.0		53.0
70						77.0	82.0	61.0		49.0
75										46.0


51 - 197 ft.
 (15.5 - 60.0 m)

110,229 lbs.
 (50 000 kg)

100%
 28' 6" Spread

360°

		Pounds									
Feet	51	72	87	93	108	114	136	160	181	197	
10	448.0	388.0	290.0								
15	356.0	352.0	282.0	252.0	204.0						
20	280.0	278.0	258.0	224.0	201.0	177.0	140.0				
25	224.0	224.0	219.0	200.0	189.0	160.0	134.0				
30	183.0	183.0	181.0	178.0	173.0	144.0	123.0	95.0	73.0	59.0	
35	150.0	154.0	150.0	148.0	147.0	130.0	113.0	95.0	73.0	59.0	
40		130.0	126.0	124.0	122.0	118.0	104.0	94.0	73.0	59.0	
45		112.0	108.0	110.0	103.0	107.0	95.0	90.0	73.0	59.0	
50		94.0	90.0	94.0	94.0	92.0	88.0	85.0	73.0	59.0	
55		83.0	77.0	81.0	80.0	78.0	81.0	74.0	71.0	59.0	
60			70.0	70.0	69.0	71.0	71.0	65.0	66.0	59.0	
65			62.0	61.0	61.0	65.0	62.0	58.0	59.0	58.0	
70			55.0	56.0	53.0	58.0	55.0	52.0	53.0	53.0	
75			46.0	52.0	49.0	51.0	49.0	47.0	48.0	48.0	
80				46.0	46.0	43.6	45.0	45.0	45.0	43.8	
85				42.4	41.4	38.8	41.8	41.6	41.6	39.8	
90				38.2	37.4	34.8	39.0	37.6	37.6	36.0	
95				34.6	33.6	31.2	35.4	34.0	34.0	32.4	
100						28.0	32.2	30.8	30.8	29.2	
105						25.2	29.2	27.8	27.8	26.4	
110						22.6	26.6	25.4	25.4	23.8	
115						20.2	24.4	23.0	23.0	21.4	
120						18.0	22.2	20.8	20.8	19.4	
125							20.2	19.0	19.0	17.4	
130							18.6	17.2	17.2	15.6	
135							16.8	15.6	15.6	14.0	
140							15.4	14.0	14.0	12.4	
145							13.8	12.6	12.6	11.0	
150							12.6	11.4	11.4	9.8	
155								10.0	10.0	8.6	
160								9.0	9.0	7.4	
165								7.8	7.8	6.4	
170								6.8	6.8	5.4	
175										4.6	






51 - 197 ft.
 (15.5 - 60.0 m)


17,637 lbs.
 (8 000 kg)

100%
 28' 6" Spread

360°

		Pounds									
Feet	51	72	87	93	108	114	136	160	181	197	
10	432.0	388.0	290.0								
15	316.0	310.0	278.0	252.0	204.0						
20	224.0	198.0	180.0	180.0	165.0	156.0	140.0				
25	157.0	144.0	136.0	130.0	119.0	124.0	108.0				
30	109.0	111.0	100.0	104.0	98.0	94.0	82.0	82.0	69.0	59.0	
35	79.0	85.0	84.0	81.0	77.0	74.0	65.0	66.0	59.0	54.0	
40		66.0	67.0	65.0	62.0	59.0	51.0	54.0	48.0	43.4	
45		52.0	55.0	53.0	51.0	48.0	41.0	43.8	39.0	35.0	
50		41.6	44.0	43.6	41.6	39.4	33.0	36.4	32.0	28.6	
55		32.8	35.8	35.4	34.4	32.4	26.6	30.2	26.4	23.2	
60			29.2	28.8	28.8	26.8	21.4	25.4	21.8	18.8	
65			23.8	23.4	23.6	22.2	17.2	21.2	18.0	15.2	
70			19.4	19.2	19.2	18.2	13.6	17.8	14.6	12.0	
75			15.8	15.6	15.6	14.6	10.6	14.8	11.8	9.4	
80				12.6	11.6	8.0	12.2	9.4	7.0	7.0	
85				10.0	9.0	5.6	9.8	7.2	4.8	4.8	
90				7.8	6.8	3.6	7.8	5.4	5.4	5.4	
95				5.8	5.0		6.0	3.6	3.6	3.6	
100							4.6			4.6	






51 - 197 ft.
 (15.5 - 60.0 m)

0 lbs.
 (0 kg)

100%
 28' 6" Spread

360°

		Pounds					
Feet	51	72	87	93	108	114	
10	428.0	388.0	290.0				
15	298.0	230.0	197.0				
20	172.0	149.0	134.0	189.0	156.0	115.0	
25	114.0	107.0	100.0	130.0	88.0	83.0	
30	79.0	77.0	74.0	71.0	65.0	61.0	
35	57.0	57.0	56.0	54.0	50.0	46.0	
40		43.6	43.2	41.4	38.4	35.8	
45		33.8	34.0	32.6	30.2	28.0	
50		26.4	27.0	25.8	24.0	21.8	
55		20.2	21.6	20.6	19.0	17.0	
60			17.4	16.2	15.0	13.2	
65			13.8	12.8	11.6	9.8	
70			10.4	9.8	8.8	7.2	
75			7.6	7.2	6.4	4.8	
80					4.2		

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.

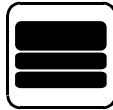
Working Range



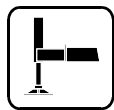
51 - 197 ft.
(15.5 - 60 m)



62 - 167 ft.
(19.0 - 51.0 m)



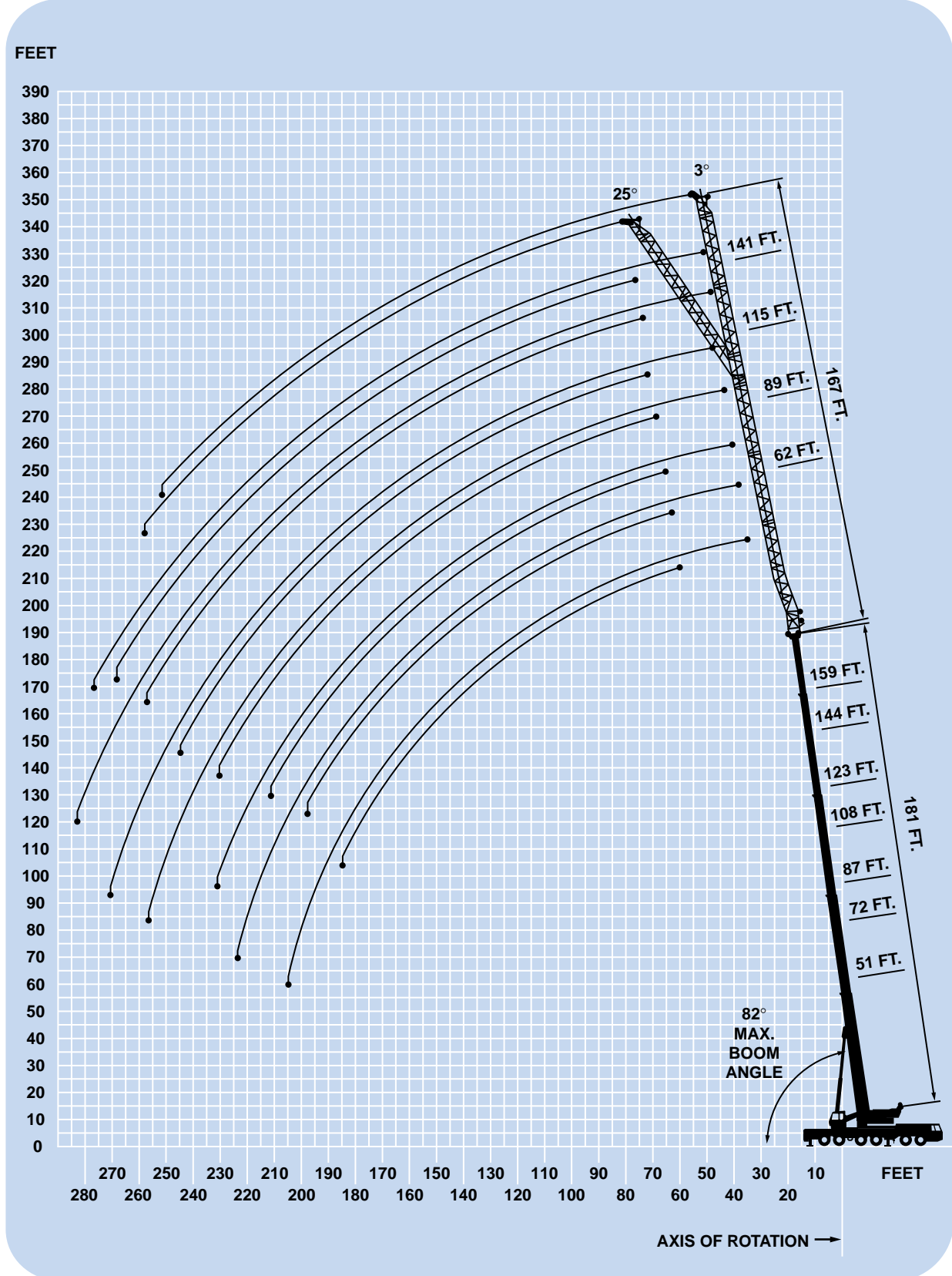
220,458 lbs.
(100 000 kg)



100%



360°



 51 - 197 ft. (15.5 - 60.0 m)
  62 - 167 ft. (19.0 - 51.0 m)
  220,458 lbs. (100 000 kg)
  100%
  360°

Feet	Pounds									
	62 FT		89 FT		115 FT		141 FT		167 FT	
	3°	25°	3°	25°	3°	25°	3°	25°	3°	25°
50	21.8									
55	21.8									
60	21.8	21.2	15.8							
65	21.8	21.2	15.8							
70	21.8	21.2	15.8		11.0					
75	21.8	21.2	15.8		11.0					
80	21.8	21.2	15.8	15.8	11.0		9.2			
85	21.8	21.2	15.8	15.8	11.0		9.2			
90	21.8	21.2	15.8	15.8	11.0		9.2		6.0	
95	21.8	21.2	15.8	15.8	11.0		9.2		6.0	
100	21.2	20.8	15.8	15.8	11.0	11.0	9.2		6.0	
105	20.2	20.0	15.8	15.8	11.0	11.0	9.2		6.0	
110	19.4	19.2	15.8	15.6	11.0	11.0	9.2		6.0	
115	18.6	18.4	15.8	15.2	11.0	11.0	9.2	9.2	6.0	
120	17.8	17.8	15.4	14.8	11.0	11.0	9.2	9.2	6.0	5.6
125	17.0	17.0	14.6	14.4	11.0	11.0	9.2	9.2	6.0	5.6
130	16.4	16.2	14.0	14.0	11.0	10.8	9.2	9.0	6.0	5.6
135	15.6	15.6	13.4	13.4	10.8	10.6	9.0	8.8	6.0	5.6
140	15.0	15.0	13.0	13.0	10.6	10.2	8.6	8.6	6.0	5.6
145	14.4	14.4	12.4	12.4	10.2	10.0	8.4	8.2	6.0	5.6
150	13.8	13.8	11.8	12.0	10.0	9.8	8.2	8.0	5.8	5.6
155	13.2	13.4	11.4	11.4	9.6	9.4	7.8	7.8	5.6	5.6
160	12.8	12.8	10.8	11.0	9.2	9.2	7.6	7.4	5.4	5.6
165	12.2	12.2	10.4	10.4	8.8	8.8	7.2	7.2	5.2	5.4
170	11.8	11.8	10.0	10.0	8.4	8.6	7.0	7.0	5.0	5.2
175	11.2	11.4	9.6	9.6	8.0	8.2	6.6	6.6	4.8	5.0
180	10.8	11.0	9.2	9.2	7.6	7.8	6.2	6.4	4.6	4.8
185	10.4	10.4	8.8	8.8	7.2	7.6	6.0	6.2	4.4	4.6
190	10.0	10.0	8.4	8.4	7.0	7.2	5.6	5.8	4.2	4.4
195	9.6	9.6	8.0	8.0	6.6	6.8	5.2	5.6	4.0	4.2
200	9.2	9.2	7.6	7.8	6.2	6.6	5.0	5.4	3.8	4.0
205	8.6	8.8	7.2	7.4	6.0	6.2	4.6	5.0	3.6	3.8
210	8.2		7.0	7.2	5.6	6.0	4.4	4.8	3.2	3.6
215	7.8		6.6	6.8	5.4	5.6	4.2	4.6	3.0	3.4
220	7.4		6.4	6.6	5.2	5.4	3.8	4.2		3.2
225	7.0		6.0	6.2	4.8	5.0	3.6	4.0		3.0
230	6.2		5.8	6.0	4.6	4.8	3.4	3.6		
235	5.4		5.4	5.6	4.4	4.6	3.2	3.4		
240			5.2		4.0	4.4	3.0	3.2		
245			5.0		3.8	4.0	2.8	3.0		
250			4.2		3.6	3.8		2.8		
255			3.6		3.4	3.6				
260					3.2					

 51 - 197 ft. (15.5 - 60.0 m)
  62 - 167 ft. (19.0 - 51.0 m)
  110,229 lbs. (50 000 kg)
  100%
  360°

Feet	Pounds									
	62 FT		89 FT		115 FT		141 FT		167 FT	
	3°	25°	3°	25°	3°	25°	3°	25°	3°	25°
50	21.8									
55	21.8									
60	21.8	21.2	15.8							
65	21.8	21.2	15.8							
70	21.8	21.2	15.8		11.0					
75	21.8	21.2	15.8		11.0					
80	21.8	21.2	15.8	15.8	11.0		9.2			
85	21.8	21.2	15.8	15.8	11.0		9.2			
90	21.8	21.2	15.8	15.8	11.0		9.2		6.0	
95	21.8	21.2	15.8	15.8	11.0		9.2		6.0	
100	21.2	20.8	15.8	15.8	11.0	11.0	9.2		6.0	
105	20.2	20.0	15.8	15.8	11.0	11.0	9.2		6.0	
110	19.4	19.2	15.8	15.6	11.0	11.0	9.2		6.0	
115	18.6	18.4	15.8	15.2	11.0	11.0	9.2	9.2	6.0	
120	17.2	17.8	15.4	14.8	11.0	11.0	9.2	9.2	6.0	5.6
125	15.4	16.4	14.6	14.4	11.0	11.0	9.2	9.2	6.0	5.6
130	13.6	14.6	14.0	14.0	11.0	10.8	9.2	9.0	6.0	5.6
135	12.0	13.0	12.8	13.4	10.8	10.6	9.0	8.8	6.0	5.6
140	10.6	11.4	11.4	13.0	10.6	10.2	8.6	8.6	6.0	5.6
145	9.2	10.0	10.0	12.2	10.2	10.0	8.4	8.2	6.0	5.6
150	8.0	8.6	8.6	10.8	9.2	9.8	8.2	8.0	5.8	5.6
155	6.8	7.4	7.4	9.4	8.0	9.4	7.8	7.8	5.6	5.6
160	5.6	6.2	6.4	8.2	6.8	9.2	7.0	7.4	5.4	5.6
165	4.4	5.2	5.2	7.0	5.8	8.8	6.0	7.2	5.2	5.4
170	3.4	4.0	4.2	6.0	4.8	7.6	5.0	7.0	5.0	5.2
175		3.0	3.4	5.0	3.8	6.4	4.0	6.6	4.2	5.0
180				4.0	3.0	5.4	3.2	5.8	3.2	4.8
185				3.0		4.6		4.8		4.6
190						3.6		4.0		4.2
195						2.6		3.0		3.2

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.

Working Range



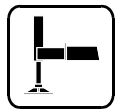
51 - 181 ft.
(15.5 - 55 m)



69 - 200 ft.
(21.0 - 61.0 m)



220,458 lbs.
(100 000 kg)



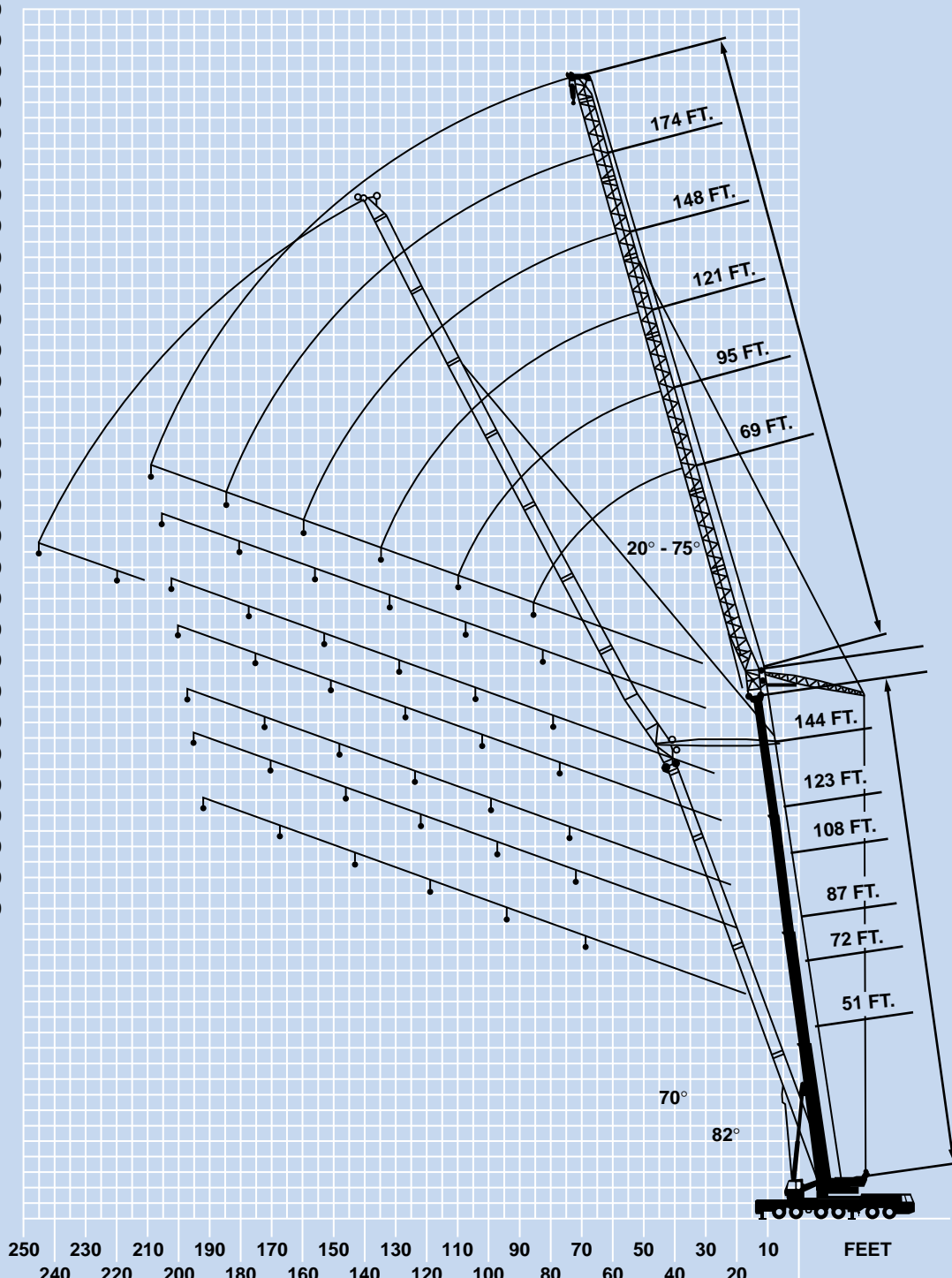
100%



360°

FEET

390
380
370
360
350
340
330
320
310
300
290
280
270
260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0



250 230 210 190 170 150 130 110 90 70 50 30 10 FEET
240 220 200 180 160 140 120 100 80 60 40 20

AXIS OF ROTATION →

 51 - 181 ft. (15.5 - 55.0 m)
  69 ft. (21.0 m)
  220,458 lbs. (100 000 kg)
  100% 28' 6" Spread
  360°

		Pounds						
		70° MAIN BOOM ANGLE						
Feet	51	72	87	108	123	144	160	181
55	102.0							
60	96.0							
65	89.0	89.0						
70	77.0	84.0						
75	65.0	78.0	69.0					
80		72.0	65.0					
85		66.0	62.0	47.0				
90			59.0	45.0				
95				43.0	35.0			
100					33.6			
105					32.2	25.8		
110						25.0		
115							20.0	
120								15.6
125								15.2

 51 - 181 ft. (15.5 - 55.0 m)
  95 ft. (37.0 m)
  220,458 lbs. (100 000 kg)
  100% 28' 6" Spread
  360°

		Pounds						
		70° MAIN BOOM ANGLE						
Feet	51	72	87	108	123	144	160	181
65	78.0							
70	78.0							
75	75.0							
80	69.0	67.0						
85	62.0	67.0	60.0					
90	55.0	63.0	57.0					
95	49.0	60.0	55.0					
100	43.4	56.0	52.0	39.6				
105	37.6	51.0	51.0	38.0	30.4			
110		45.0	48.0	36.4	29.2			
115			46.0	35.0	28.0			
120				33.8	27.0	21.6		
125				32.8	26.2	20.6	17.0	
130					25.4	20.0	16.2	
135						19.4	15.6	
140							15.0	12.0
145							14.4	11.4
150								11.0

 51 - 181 ft. (15.5 - 55.0 m)
  121 ft. (37.0 m)
  220,458 lbs. (100 000 kg)
  100% 28' 6" Spread
  360°

		Pounds						
		70° MAIN BOOM ANGLE						
Feet	51	72	87	108	123	144	160	181
80	56.0							
85	56.0							
90	55.0							
95	53.0	49.0						
100	50.0	49.0	44.0					
105	46.0	49.0	44.0					
110	42.2	49.0	44.0					
115	38.4	46.0	43.6	33.4				
120	34.8	42.4	42.4	32.0	25.6			
125	31.0	39.0	40.8	30.8	24.8	19.4		
130	27.4	35.2	39.0	29.8	23.8	18.6		
135		31.2	36.6	28.6	23.0	17.6		
140			33.8	27.6	22.2	16.8	13.4	
145			30.2	26.8	21.2	16.2	13.0	
150				26.0	20.6	15.8	12.4	9.4
155					20.0	15.2	12.0	9.0
160						14.8	11.4	8.6
165						14.2	11.0	8.4
170							10.6	8.0
175								7.6

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.

 51 - 181 ft.
 (15.5 - 55.0 m)
  148 ft.
 (45.0 m)
  220,458 lbs.
 (100 000 kg)
  100%
 28' 6" Spread
  360°

		70° MAIN BOOM ANGLE						
		Pounds						
Feet	51	72	87	108	123	144	160	181
95	40.2							
100	39.8							
105	39.6	35.8						
110	39.4	35.6						
115	38.4	35.4	32.2					
120	37.0	35.2	32.2					
125	35.4	35.0	32.2	27.2				
130	32.8	34.8	32.0	27.0				
135	30.2	34.6	32.0	26.6	21.6			
140	27.8	33.2	31.8	26.2	20.8			
145	25.4	30.8	31.8	25.4	20.0	15.0		
150	23.2	28.2	31.6	24.6	19.2	14.4		
155	21.0	26.0	29.8	24.0	18.4	13.8		
160		23.8	27.6	23.2	17.8	13.2	10.2	
165		21.4	25.4	22.4	17.2	12.6	9.6	
170			23.2	21.8	16.6	12.2	9.2	6.6
175				21.2	16.0	11.8	8.8	6.4
180					15.6	11.4	8.4	6.0
185						11.0	8.0	5.6
190						10.6	7.8	5.4
195							7.6	5.2
200								4.8

 51 - 160 ft.
 (15.5 - 48.8 m)
  174 ft.
 (53.0 m)
  220,458 lbs.
 (100 000 kg)
  100%
 28' 6" Spread
  360°

		70° MAIN BOOM ANGLE						
		Pounds						
Feet	51	72	87	108	123	144	160	
105	28.8							
110	28.6							
115	28.4							
120	28.0	25.2						
125	27.6	25.2	23.0					
130	27.0	24.8	22.8					
135	26.2	24.6	22.8					
140	25.4	24.6	22.6	19.2				
145	24.4	24.4	22.4	19.2	16.6			
150	24.0	24.0	22.2	19.0	16.6			
155	23.2	23.8	22.2	19.0	16.6			
160	22.2	23.4	22.2	19.0	16.4	11.6		
165	20.6	22.8	22.0	19.0	16.0	11.4		
170	19.0	22.4	21.8	18.8	15.4	11.2	7.8	
175	17.2	20.8	21.6	18.8	15.0	10.8	7.4	
180	15.6	19.2	21.0	18.6	14.4	10.4	7.0	
185		17.6	19.8	18.2	14.0	10.0	6.8	
190		16.0	18.6	18.0	13.4	9.6	6.4	
195			17.2	17.8	13.2	9.2	6.0	
200				17.4	12.8	8.8	5.8	
205					12.4	8.4	5.4	
210					12.2	8.2	5.2	
215							5.0	

 51 - 144 ft.
 (15.5 - 43.9 m)
  200 ft.
 (61.0 m)
  220,458 lbs.
 (100 000 kg)
  100%
 28' 6" Spread
  360°


		70° MAIN BOOM ANGLE				
		Pounds				
Feet	51	72	87	108	123	144
120	17.0					
125	16.2					
130	15.8					
135	15.2	15.8				
140	14.8	15.2	15.2			
145	14.2	14.8	15.0			
150	13.8	14.4	14.4	13.0		
155	13.4	14.0	14.0	13.0		
160	13.0	13.4	13.4	13.0	11.0	
165	12.6	13.2	13.2	12.8	11.0	
170	12.2	12.6	12.8	12.6	11.0	7.2
175	11.8	12.2	12.4	12.4	11.0	7.2
180	11.4	12.0	12.2	12.2	11.0	7.2
185	11.2	11.6	11.8	11.8	10.8	7.2
190	10.8	11.2	11.4	11.4	10.8	7.2
195	10.6	11.0	11.2	11.2	10.8	7.2
200	10.4	10.8	11.0	11.0	10.6	7.2
205	10.2	10.6	10.6	10.6	10.6	7.0
210	10.0	10.4	10.4	10.4	10.4	7.0
215		10.0	10.2	10.2	10.0	6.8
220			10.0	10.0	9.8	6.4
225				9.8	9.6	6.2
230				9.4	9.4	6.0

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.

 51 - 181 ft.
(15.5 - 55.0 m)

 69 ft.
(21.0 m)

 220,458 lbs.
(100 000 kg)

 100%
28' 6" Spread


 360°

		Pounds						
		82° MAIN BOOM ANGLE						
Feet	51	72	87	108	123	144	160	181
30	122.0							
35	122.0	103.0						
40	114.0	103.0	90.0					
45	104.0	103.0	90.0	71.0	58.0			
50	89.0	101.0	90.0	71.0	58.0	44.0		
55	76.0	93.0	90.0	71.0	58.0	44.0	34.2	
60	64.0	78.0	88.0	70.0	58.0	44.0	34.2	24.6
65	52.0	65.0	75.0	69.0	58.0	44.0	34.2	24.6
70		53.0	62.0	65.0	55.0	44.0	34.2	24.6
75					52.0	44.0	34.2	24.6
80							34.2	24.6
85							34.2	24.6

 51 - 181 ft.
(15.5 - 55.0 m)

 95 ft.
(29.0 m)

 220,458 lbs.
(100 000 kg)

 100%
28' 6" Spread


 360°

		Pounds						
		82° MAIN BOOM ANGLE						
Feet	51	72	87	108	123	144	160	181
40	84.0	72.0						
45	84.0	72.0	64.0					
50	84.0	72.0	64.0					
55	82.0	72.0	64.0	53.0	44.0			
60	77.0	71.0	64.0	53.0	44.0	33.2		
65	67.0	71.0	64.0	53.0	44.0	33.2	25.8	
70	60.0	66.0	64.0	53.0	44.0	33.2	25.8	
75	54.0	61.0	62.0	53.0	44.0	33.2	25.8	17.8
80	47.0	55.0	57.0	53.0	44.0	33.2	25.8	17.8
85	41.4	49.0	53.0	53.0	43.8	33.2	25.8	17.8
90	35.4	42.6	47.0	50.0	43.6	33.2	25.8	17.8
95			41.0	47.0	42.4	33.2	25.8	17.8
100					41.0	33.0	25.8	17.8
105					39.2	32.6	25.8	17.8
110							25.8	17.8

 51 - 181 ft.
(15.5 - 55.0 m)

 121 ft.
(37.0 m)

 220,458 lbs.
(100 000 kg)

 100%
28' 6" Spread

 360°

		Pounds						
		82° MAIN BOOM ANGLE						
Feet	51	72	87	108	123	144	160	181
45	60.0							
50	59.0							
55	58.0	50.0	46.0					
60	58.0	50.0	46.0	38.2	33.0			
65	58.0	50.0	45.0	38.2	33.0	24.4		
70	57.0	50.0	45.0	38.0	33.0	24.4		
75	55.0	50.0	45.0	38.0	33.0	24.4	18.8	
80	53.0	49.0	45.0	38.0	33.0	24.4	18.8	12.6
85	49.0	49.0	45.0	38.0	32.8	24.4	18.8	12.6
90	44.0	48.0	45.0	38.0	32.8	24.4	18.8	12.6
95	40.2	45.0	44.0	37.8	32.8	24.4	18.8	12.6
100	36.4	40.8	42.8	37.6	32.8	24.4	18.8	12.6
105	32.6	36.8	41.2	37.6	32.8	24.4	18.8	12.6
110	29.0	33.0	37.2	35.8	32.8	24.4	18.8	12.6
115	25.6	29.0	33.2	34.0	32.8	24.4	18.8	12.6
120			29.0	32.2	32.4	24.4	18.8	12.6
125			24.8	30.6	31.0	24.4	18.8	12.6
130					29.4	24.4	18.8	12.6
135							18.8	12.6

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.

 51 - 181 ft.
 (15.5 - 55.0 m)
  148 ft.
 (45.0 m)
  220,458 lbs.
 (100 000 kg)
  100%
 28' 6" Spread
  360°

		82° MAIN BOOM ANGLE						
		Pounds						
Feet	51	72	87	108	123	144	160	181
55	40.2							
60	41.8	36.6	33.2					
65	41.4	36.4	33.0	27.6				
70	41.2	36.4	33.0	27.6				
75	41.2	36.2	33.0	27.6	23.8			
80	41.0	36.2	32.8	27.6	23.8	17.4	12.8	
85	40.6	36.0	32.6	27.4	23.8	17.4	12.8	7.8
90	40.4	35.8	32.6	27.4	23.8	17.4	12.8	7.8
95	39.4	35.6	32.6	27.4	23.8	17.4	12.8	7.8
100	37.8	35.2	32.4	27.2	23.6	17.4	12.8	7.8
105	36.4	34.6	32.2	27.2	23.6	17.4	12.8	7.8
110	33.6	33.8	32.2	27.2	23.6	17.4	12.8	7.8
115	31.0	33.0	32.0	27.2	23.6	17.4	12.8	7.8
120	28.4	31.6	32.0	27.0	23.6	17.4	12.8	7.8
125	25.8	29.0	31.6	26.8	23.4	17.4	12.8	7.8
130	23.6	26.4	29.2	26.0	23.4	17.2	12.8	7.8
135	21.2	23.8	26.8	25.2	23.2	17.2	12.8	7.8
140		21.4	24.6	24.2	22.8	17.2	12.8	7.8
145		19.0	22.0	23.2	22.4	17.2	12.8	7.8
150			19.0	22.4	22.0	17.2	12.8	7.8
155					21.6	17.2	12.8	7.8
160								7.8
165								7.8


 51 - 160 ft.
 (15.5 - 48.8 m)
  174 ft.
 (53.0 m)
  220,458 lbs.
 (100 000 kg)
  100%
 28' 6" Spread
  360°

		82° MAIN BOOM ANGLE						
		Pounds						
Feet	51	72	87	108	123	144	160	
60	30.2							
65	30.0	26.4	23.8					
70	29.8	26.4	23.8					
75	29.6	26.2	23.8	19.8				
80	29.4	26.0	23.6	19.6	17.0			
85	29.2	26.0	23.4	19.6	17.0	12.2	8.4	
90	29.0	25.8	23.4	19.6	17.0	12.2	8.4	
95	28.8	25.6	23.2	19.6	17.0	12.0	8.4	
100	28.6	25.6	23.0	19.4	17.0	12.0	8.4	
105	28.0	25.4	23.0	19.4	16.8	12.0	8.4	
110	27.4	25.2	23.0	19.4	16.8	12.0	8.4	
115	26.8	25.0	22.8	19.2	16.8	12.0	8.4	
120	26.2	24.8	22.6	19.2	16.8	12.0	8.4	
125	25.8	24.4	22.4	19.2	16.8	12.0	8.4	
130	25.2	24.2	22.4	19.0	16.6	12.0	8.4	
135	24.0	23.8	22.2	19.0	16.6	12.0	8.4	
140	22.4	23.4	22.0	19.0	16.6	12.0	8.4	
145	21.0	23.0	21.8	19.0	16.6	12.0	8.4	
150	19.2	21.2	21.4	18.8	16.4	12.0	8.4	
155	17.6	19.6	21.2	18.8	16.4	12.0	8.4	
160	15.8	17.8	20.2	18.6	16.4	12.0	8.4	
165	14.0	16.0	18.2	18.4	16.2	11.8	8.4	
170		14.2	16.4	17.4	16.0	11.8	8.2	
175			14.2	16.4	15.8	11.6	8.2	
180					15.4	11.6	8.2	
185							8.2	
190							8.2	


51 - 160 ft.
(15.5 - 48.8 m)


200 ft.
(61.0 m)


220,458 lbs.
(100 000 kg)

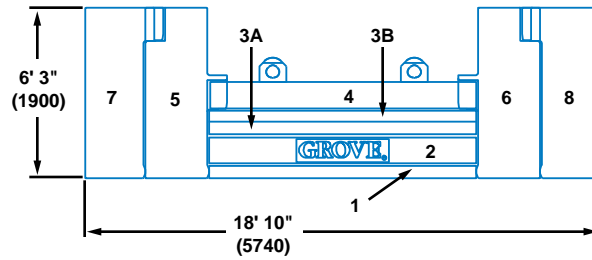

100%
28' 6" Spread


360°

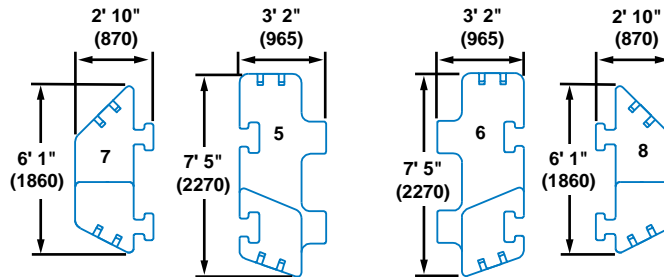
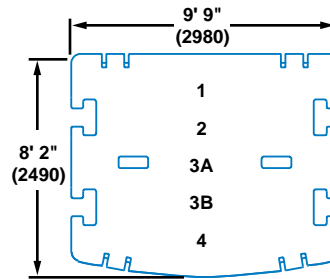
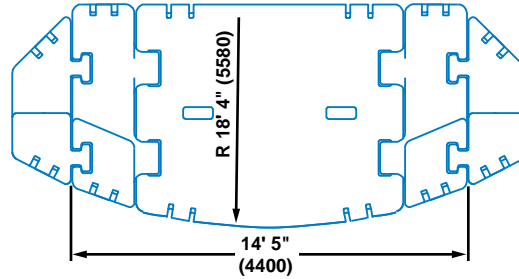
		Pounds					
		82° MAIN BOOM ANGLE					
Feet	51	72	87	108	123	144	160
65	21.2						
70	20.8						
75	20.6	18.4	16.6				
80	20.2	18.2	16.6	13.6			
85	20.0	18.0	16.6	13.6	11.4		
90	19.2	18.0	16.4	13.6	11.4		
95	18.6	18.0	16.4	13.4	11.4	7.4	
100	18.0	17.6	16.2	13.4	11.4	7.4	4.4
105	17.4	17.2	15.8	13.4	11.4	7.4	4.4
110	16.8	16.6	15.6	13.2	11.2	7.4	4.4
115	16.2	16.2	15.2	13.2	11.2	7.4	4.4
120	15.6	15.6	15.0	13.2	11.2	7.4	4.4
125	15.2	15.2	14.8	13.2	11.2	7.4	4.4
130	14.4	14.6	14.4	13.0	11.2	7.4	4.4
135	14.0	14.2	14.0	12.8	11.2	7.4	4.4
140	13.8	13.8	13.6	12.6	11.0	7.4	4.4
145	13.4	13.4	13.2	12.4	11.0	7.4	4.4
150	12.8	13.0	12.8	12.2	11.0	7.4	4.4
155	12.6	12.6	12.6	12.0	11.0	7.2	4.4
160	12.0	12.2	12.2	11.8	11.0	7.2	4.4
165	11.6	11.8	11.8	11.4	10.8	7.2	4.4
170	11.2	11.6	11.6	11.2	10.6	7.2	4.4
175	11.0	11.2	11.2	11.0	10.4	7.2	4.4
180	10.6	10.8	11.0	10.8	10.2	7.2	4.4
185	10.2	10.4	10.8	10.4	10.0	7.2	4.4
190	10.0	10.2	10.4	10.2	10.0	7.2	4.4
195		9.6	10.2	10.0	9.8	7.2	4.4
200				9.8	9.4	7.2	4.4
205						7.2	4.4
210						7.2	4.4
215							4.4

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.


Counterweight configurations



- 1. 17,637 lbs. (8000 kg)
- 2. 30,864 lbs. (14000 kg)
- 3A. 15,432 lbs. (7000 kg)
- 3B. 15,432 lbs. (7000 kg)
- 4. 30,864 lbs. (14000 kg)
- 5. 33,067 lbs. (15000 kg)
- 6. 33,067 lbs. (15000 kg)
- 7. 22,046 lbs. (10000 kg)
- 8. 22,046 lbs. (10000 kg)



Note: () Reference dimensions in mm

	1	2	3A	3B	4	5	6	7	8
17,637 lbs.	X								
45,500 lbs.	X	X							
79,635 lbs.	X	X	X	X					
110,229 lbs.	X	X	X	X	X				
176,367 lbs.	X	X	X	X	X	X	X		
220,459 lbs.	X	X	X	X	X	X	X	X	X


































Rated Lifting Capacities

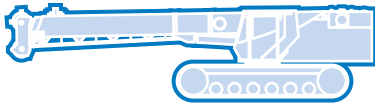
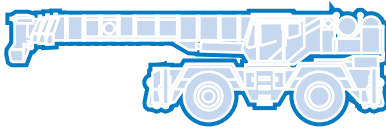
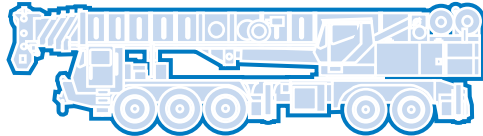
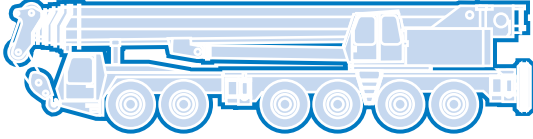
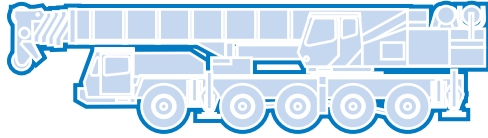
IMPORTANT NOTES:

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 meet ANSI/ASME B30.5, Mobile and Locomotive Cranes. Testing and development were performed to SAEJ1063, Cantilevered Boom Crane Structures - Method of Test and SAEJ765 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. The machine shall be leveled on a firm supporting surface. Depending on the nature of the supporting surface, it may be necessary to have structural supports under the outrigger floats to spread the load to a larger bearing surface.
4. When either boom length or radius or both are between values listed, the smallest load shown at either the next larger radius or next longer or shorter boom length shall be used.
5. For outrigger operation, outriggers shall be properly extended with tires raised off the ground before operating the boom or lifting loads.

Symbols Glossary

	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



**Grove Worldwide –
World Headquarters
Grove U.S. L.L.C.**
1565 Buchanan Trail East
P.O. Box 21
Shady Grove, Pennsylvania 17256, U.S.A.
Tel: [Int + 1] (717) 597-8121
Fax: [Int + 1] (717) 597-4062
Western Hemisphere, Asia/Pacific

Grove Europe Limited*
Sunderland SR4 6TT, England
Tel: [Int + 44] 191 565-6281
Fax: [Int + 44] 191 564-0442
Europe, Africa, Middle East

Grove Europe Limited*
P.O. Box No. 268
4A Kimber Road
Abingdon, Oxfordshire, OX141SG
Tel: [Int + 44] 1235 55-3184
Fax: [Int + 44] 1235 55-3218
*Grove Europe Limited, Registered in England,
Number 1845128, Registered office, Crown Works,
Pallion, Sunderland, Tyne & Wear, England SR4 6TT

**Deutsche Grove GmbH
Sales and Service**
Helmholtzstrasse 12, Postfach 5026
D-40750 Langenfeld, Germany
Tel: [Int + 49] (2173) 8909-0
Fax: [Int + 49] (2173) 8909-30

Wilhelmshaven Works
Industriegelände West, Postfach 1853
D-26358 Wilhelmshaven, Germany
Tel: [Int + 49] (4421) 294-0
Fax: [Int + 49] (4421) 294-301

Grove France S.A.
16, chaussée Jules-César, 95520 OSNY
B.P. 203, 95523 CERGY PONTOISE CEDEX
France
Tel: [Int + 33] (1) 30313150
Int: [Int + 33] (1) 30386085

Grove Asia/Pacific - Regional Office
171 Chin Swee Road
#06-01 San Centre
Singapore 0316
Tel: [Int + 65] 536-6112
Fax: [Int + 65] 536-6119
Asia/Pacific, Near East

Grove China - Representative Office
Beijing Suite 6074
No. 33 East Chang An Avenue
Beijing, 100004, China
Tel: [Int + 86] (10) 513-7766
Fax: [Int + 86] (10) 513-7307

Grove Product Support
Western Hemisphere, Asia/Pacific
1086 Wayne Avenue
Chambersburg, Pennsylvania USA
Tel: [Int + 1] (717) 263-5100
Fax: [Int + 1] (717) 267-0404

Europe, Africa, Middle East
Sunderland SR4 6TT, England
Tel: [Int + 44] 191 565-6281
Parts Fax: [Int + 44] 191 510-9242
Service Fax: [Int + 44] 191 510-9560

<http://www.grovetracked.com>

Constant improvement and engineering progress make it necessary that we reserve the right to make specification, equipment, and price changes without notice. Illustrations shown may include optional equipment and accessories and may not include all standard equipment.

Distributed By:

