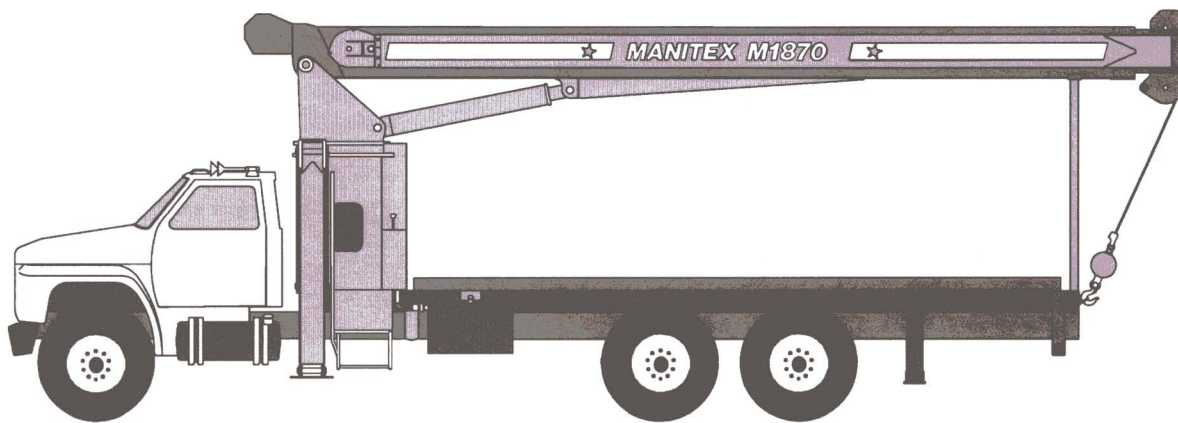




Millennium Series™ M1800

General Specifications



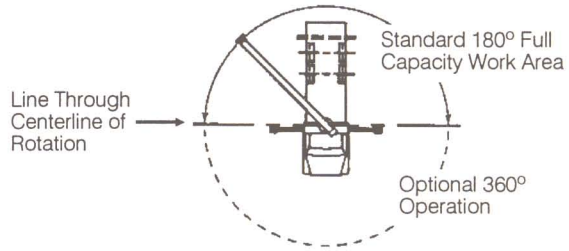
Model shown is M1870 with optional jib.

STANDARD EQUIPMENT

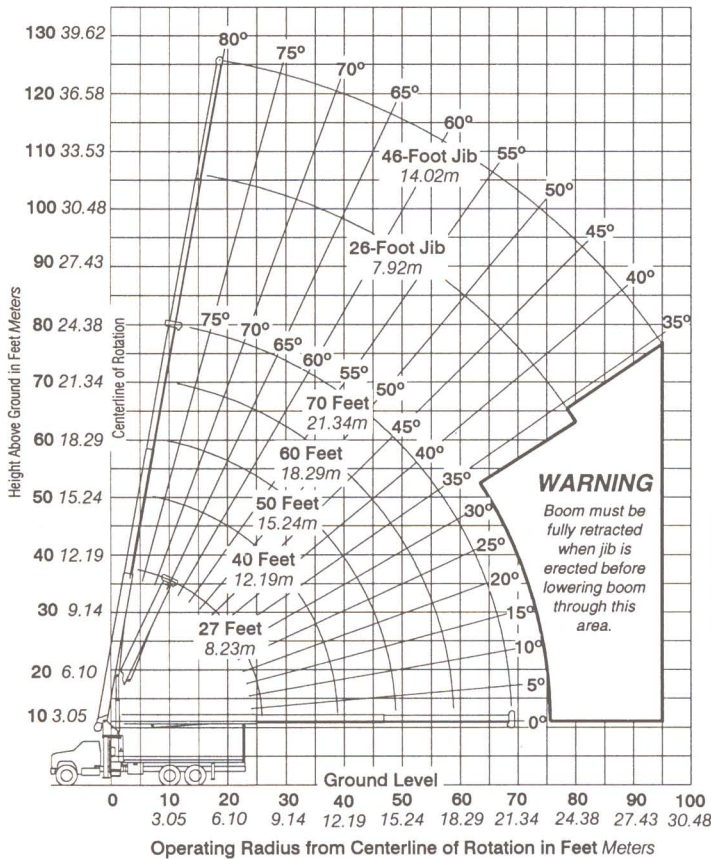
- 3-Section telescopic boom.
M1870 - 27' to 70' (8.23m to 21.34m).
M1849 - 20' to 49' (6.10m to 14.94m).
- 2-Speed planetary hoist.
- 5-Ton (4.5-mt) hook and ball.
- 3-Sheave boom point.
- Anti-two block shutoff.
- Boom hoist cylinder.
- System pressure gauge
- 70-Gallon (265-liter) hydraulic reservoir.
- Removable boom rest.
- Finish paint in Manitex colors.
- Engine start/stop.
- Operator/service/parts manuals.
- 260' (79.25m) of 1/2" (12.7mm) EIPS IWRC wire rope.
- 372° Non-continuous rotation.
- Pedestal, turret, rotation bearing and swing system.
- Dual operator control stations.
- Electronic capacity alert system - audio/visual warning.
- Audible outrigger/stabilizer motion alarm.
- A-frame rear stabilizers.
- A-frame link type outriggers.
- 3-Section vane type hydraulic pump.
- 20' (6.10m) Subframe.
- Signal horn.

MODEL M1870

AREA OF OPERATION



M1870 RANGE DIAGRAM



ALLOWABLE LINE PULL					WARNING
1 PART LINE	2 PART LINE	3 PART LINE	4 PART LINE	5 PART LINE	
					ANTI-TWO BLOCK SYSTEM MUST BE IN GOOD OPERATING CONDITION BEFORE OPERATING CRANE. REFER TO OWNER'S MANUAL. KEEP AT LEAST 3 WRAPS OF LOAD ON DRUM AT ALL TIMES.
7600 lb 3477 kg	15200 lb 6895 kg	22800 lb 10342 kg	30400 lb 13789 kg	36000 lb 16329 kg	
7400 lb 3357 kg	14800 lb 6713 kg	22200 lb 10070 kg	29600 lb 13426 kg	36000 lb 16329 kg	1/2" (12.7mm) or 9/16" (14.3mm) 6x25 IWRC (3.5:1 SF), 26600 lb (12066 kg) Minimum breaking strength. 9/16" (14.29mm) Rotation resistant (5.0:1 SF), 37000 lb (16782 kg) Minimum breaking strength.

WEIGHTS

Total crane, including hydraulic fluid.....	15,700 lb	7,121 kg
26' (7.93m) Fixed length jib	819 lb	372 kg
46' (14.02m) Telescopic jib.....	1,220 lb	553 kg
15-Ton (13.6-mt) single-sheave block.....	260 lb	118 kg
20-Ton (18.1-mt) double-sheave block	345 lb	156 kg
Hanger sheave for 5-part line	50 lb	23 kg
20'4" (6.20m) steel or wood bed.....	1,900 lb	862 kg

DEDUCTIONS

Hanger Sheave.....	50 lb.....	23 kg
Overhaul Ball.....	120 lb.....	54 kg
Single-Sheave Load Block.....	260 lb.....	118 kg
Double-Sheave Load Block.....	350 lb.....	159 kg
Hose Reel.....	190 lb.....	86 kg

Swing-Around Jib..... See Load Rating Chart

WARNING

Lifting off the main boom point while the swing-around jib is erected is not intended or approved.

Outriggers and stabilizers fully extended and machine level.

M1870 LOAD RATING CHART

Meets ANSI B30.5 Requirements.

Operating Radius		BOOM LOAD RATINGS										JIB LOAD RATINGS							
		27 Feet 8.23 Meters		40 Feet 12.19 Meters		50 Feet 15.24 Meters		60 Feet 18.29 Meters		70 Feet 21.34 Meters		26 Foot 7.93 Meters			46 Foot 14.02 Meters				
Feet	Meters	∠	lb	kg	∠	lb	kg	∠	lb	kg	∠	lb	kg	∠	lb	kg	∠	lb	kg
5	1.52	79°	36,000	16,329															
8	2.44	72°	25,580	11,603	79°	21,500	9,752												
10	3.05	68°	21,630	9,811	76°	19,540	8,863	79°	15,810	7,171									
12	3.66	63°	18,800	8,528	73°	16,890	7,661	77°	13,620	6,178	79°	12,780	5,797						
15	4.57	56°	15,760	7,148	68°	14,110	6,400	73°	11,270	5,112	76°	10,570	4,794	79°	10,000	4,536			
20	6.10	41°	12,280	5,570	60°	11,100	5,034	67°	8,750	3,969	71°	8,230	3,733	75°	7,750	3,515	79°	4,900	2,233
25	7.62	17°	8,970	4,068	51°	9,140	4,146	60°	7,160	3,247	66°	6,710	3,043	70°	6,320	2,866	76°	4,170	1,892
30	9.14				41°	7,660	3,474	53°	6,010	2,726	61°	5,630	2,553	66°	5,280	2,395	73°	3,540	1,606
35	10.67				27°	6,100	2,767	46°	5,120	2,322	55°	4,810	2,181	61°	4,520	2,050	70°	3,040	1,379
40	12.19							37°	4,360	1,977	49°	4,170	1,891	56°	3,920	1,778	67°	2,620	1,188
45	13.72							25°	3,580	1,623	42°	3,620	1,642	51°	3,430	1,555	64°	2,280	1,034
50	15.24										34°	3,110	1,410	45°	3,010	1,365	60°	1,970	894
55	16.76										23°	2,550	1,156	39°	2,630	1,193	57°	1,690	767
60	18.29													31°	2,260	1,025	53°	1,450	658
65	19.81																21°	1,830	830
70	21.34																		
75	22.86																		
80	24.38																		
85	25.91																		
90	27.43																		
95	28.96																		
7300037-001			670	304		450	204		360	163		300	136		260	118			

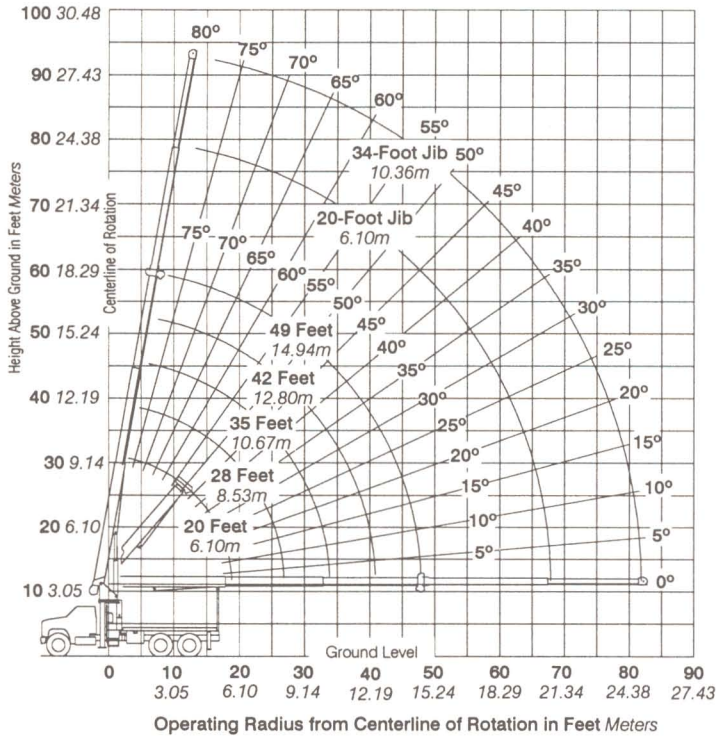
Main boom load ratings are based on machine structural competence and do not exceed 85% of tipping.

Do not operate crane or accessories within 10 feet, 3.05 meters, of live power lines.

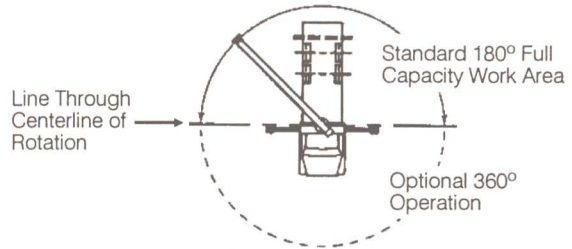
Deductions for stowed jib

MODEL M1849

M1849 RANGE DIAGRAM



AREA OF OPERATION



ALLOWABLE LINE PULL					WARNING ANTI-TWO BLOCK SYSTEM MUST BE IN GOOD OPERATING CONDITION BEFORE OPERATING CRANE. REFER TO OWNER'S MANUAL. KEEP AT LEAST 3 WRAPS OF LOAD ON DRUM AT ALL TIMES.
1 PART LINE	2 PART LINE	3 PART LINE	4 PART LINE	5 PART LINE	
					1/2" (11.1mm) or 9/16" (14.29mm) 6x25 IWRC (3.5:1 SF), 26600 lb (12066 kg) Minimum breaking strength.
7600 lb 3477 kg	15200 lb 6895 kg	22800 lb 10342 kg	30400 lb 13789 kg	34000 lb 15422 kg	
7400 lb 3357 kg	14800 lb 6713 kg	22200 lb 10070 kg	29600 lb 13426 kg	34000 lb 15422 kg	9/16" (14.29mm) Rotation resistant (5.0:1 SF), 37000 lb (16782 kg) Minimum breaking strength.

WEIGHTS

Total crane, including hydraulic fluid.....	14,521 lb	6587 kg
20' (6.10m) Fixed length jib	490 lb	222 kg
34' (10.36m) Telescopic jib	944 lb	428 kg
15-Ton (13.6-mt) single-sheave block	260 lb	118 kg
20-Ton (18.1-mt) double-sheave block	345 lb	156 kg
Hanger sheave for 5-part line	50 lb	23 kg
20'4" (6.20m) Steel or wood bed	1,900 lb	862 kg

DEDUCTIONS

Hanger Sheave	50 lb	23 kg
Overhaul Ball	120 lb	54 kg
Single-Sheave Load Block	260 lb	118 kg
Double-Sheave Load Block	350 lb	159 kg
Hose Reel	190 lb	86 kg

Swing-Around Jib

WARNING Lifting off the main boom point while the swing-around jib is erected is not intended or approved.

Outriggers and stabilizers fully extended and machine level.

M1849 LOAD RATING CHART

Meets ANSI B30.5 Requirements.

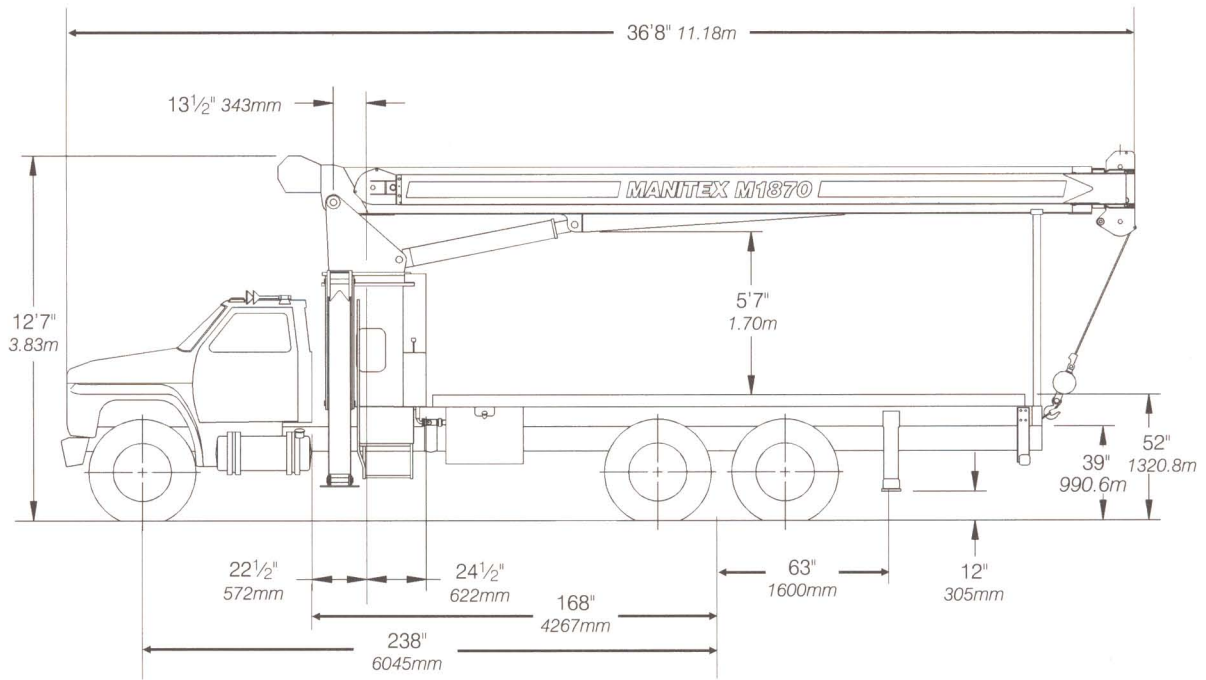
Operating Radius		BOOM LOAD RATINGS										JIB LOAD RATINGS								
		20 Feet 6.10 Meters		28 Feet 8.53 Meters		35 Feet 10.67 Meters		42 Feet 12.80 Meters		49 Feet 14.94 Meters		20 Foot 6.10 Meters		34 Foot 10.36 Meters						
Feet	Meters	∠	lb	kg	∠	lb	kg	∠	lb	kg	∠	lb	kg	∠	lb	kg	∠	lb	kg	
5	1.52	75°	36,000	16,329																
8	2.44	66°	28,000	12,701	73°	24,450	11,090	77°	20,790	9,430	80°	20,070	9,104							
10	3.05	59°	23,910	10,845	69°	21,880	9,925	74°	17,620	7,992	77°	16,900	7,666	79°	16,070	7,289				
12	3.66	52°	20,940	9,498	64°	19,120	8,673	70°	15,330	6,954	74°	14,680	6,659	77°	14,050	6,373	80°	7,600	3,447	
15	4.57	39°	17,500	7,938	57°	16,160	7,330	65°	12,920	5,860	70°	12,300	5,579	73°	11,730	5,321	78°	7,370	3,343	
20	6.10				43°	12,830	5,820	55°	10,290	4,667	62°	9,750	4,423	67°	9,260	4,200	74°	6,040	2,740	
25	7.62				23°	10,030	4,550	44°	8,500	3,856	54°	8,100	3,674	60°	7,680	3,484	69°	4,960	2,250	
30	9.14							29°	6,990	3,171	44°	6,890	3,125	53°	6,570	2,980	65°	4,150	1,882	
35	10.67										33°	5,840	2,649	45°	5,690	2,581	60°	3,520	1,597	
40	12.19										14°	4,490	2,037	35°	4,930	2,236	55°	3,030	1,374	
45	13.72													22°	4,100	1,860	50°	2,650	1,202	
50	15.24																44°	2,330	1,057	
55	16.76																38°	2,060	934	
60	18.29																30°	1,840	835	
65	19.81																19°	1,650	748	
70	21.34																	33°	1,280	581
75	22.86																	26°	1,160	526
80	24.38																	15°	1,050	476

This capacity chart is for reference use only and must not be used for a specific serial number crane.

Main boom load ratings are based on machine structural competence and do not exceed 85% of tipping.

Do not operate crane or accessories within 10 feet, 3.05 meters, of live power lines.

M1800 OUTLINE DIMENSIONS



These dimensions are general, not for Engineering. Some dimensions depend on truck selection. Dimensions shown on this page apply to both the M1870 and M1849 models.

TRUCK CHASSIS DATA

Minimum Requirements for M1800 Series

Some configurations and options may increase requirements.

Wheelbase	234 In.....	5,944mm
Cab to Axle.....	168 In.....	4,267mm
Frame Section Modulus.....	110,000 psi.....	758,450 kPa
	15.9 In ³	260cc
Nominal Frame Width	34 In.....	864mm
Front Axle Gross Weight Rating	12,000 lb.....	5,443 kg
Rear Axle Gross Weight Rating	34,000 lb.....	15,422 kg

