

AMERICAN CRANE CORPORATION

202 Raleigh Street · Wilmington · NC, 28412 USA

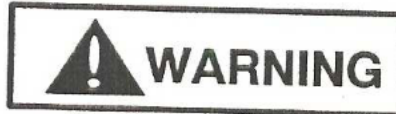
MODEL: 7460

RATING CHART COVER SHEET

**For all adjustments, maintenance and other services, please
refer to your Operator's Manual for complete instructions.**

IMPORTANT LOAD LIFTING RESTRICTIONS AND REGULATIONS

Crawlers and Truck Cranes



**Study the following carefully.
Failure to observe any of the following
limitations may result in serious structural
or mechanical failure or accidents.**

Ratings have been established by American Crane on the basis of sound engineering methods and testing procedures. The machine complies with applicable U. S. Industry standards for stability and material strength factors. These standards require operation within rated capacities and in accordance with good operating practice, including the limitations shown on these pages and Page 100.

DO NOT EXCEED THE RATING OF THE MACHINE. Lifting loads greater than those shown on the rating chart or operation at positions not shown **CAN CAUSE STRUCTURAL FAILURE, TIPPING OR COLLAPSE OF THE BOOM OR CRANE.**

1. All ratings apply only to machines as originally manufactured and equipped but include machines on which repairs or replacements have been made in accordance with original specifications. American Crane shall have no responsibility for machines or components on which replacements have been made with parts or spares not manufactured by American Crane, or on which any unauthorized changes have been made, or which are operated after damage which has not been repaired. The safe handling of loads with a crane depends on ground conditions, boom length and radius. These factors as well as many others must be taken into consideration by the operator.

2. Ratings are based on the machine standing level on a firm, uniformly supporting surface. Level should be within 1/2% of true level and the supporting surface must be sufficiently firm to maintain this level under load. If the operating surface is not level, the crane should be

removed and the foundation leveled before making a lift. If the operating surface is not sufficiently firm and stable, crane mats should be used to reduce soil loadings. If operation is necessary under adverse conditions, contact American Crane for further information before attempting operation.

3. For operation of land-based cranes (truck, crawler or wagon mounted) from a barge or other floating platform the above listed level requirements must be maintained throughout the lift cycle. In addition, other factors such as securing the crane to the platform must be considered by the user. Contact American Crane for further information.

4. Under certain conditions cranes can be overturned without a load. This can be prevented by observing the rating chart and avoiding boom positions which show no load ratings.

5. The rating charts apply up to maximum wind speeds as indicated in the table below. This table lists the maximum wind velocity for which ratings apply. These wind speeds refer to steady winds or gusts where the maximum wind speeds reached are the magnitudes stated. Velocities must be measured at a point equivalent to the highest boom or jib elevation and should be taken at some location in close proximity to the crane. **No account is taken of the wind force on the load.** This effect, which is substantial for loads with large surface areas, must be considered by the user and ratings reduced accordingly. For more information contact American Crane.

WIND SPEED LIMITATIONS

Boom Size	Boom or Boom Plus Jib	Operation	No operation. Lower boom to 50-60 degrees. Position rear of crane into wind.	Lower or secure boom
37"	0-140' (0-42.3m)	0-30 mph (0-13.4 mps)	30-50 mph (13.4-22 mps)	Over 50 mph (22.4 mps)
37"	Over 140' (0-42.3m)	0-20 mph (0-8.9 mps)	20-30 mph (8.9-13.4 mps)	Over 30 mph (13.4 mps)
46"-47"	0-170' (0-51.8m)	0-30 mph (0-13.4 mps)	30-50 mph (13.4-22 mps)	Over 50 mph (22.4 mps)
46"-47"	Over 170' (51.8m)	0-20 mph (0-8.9 mps)	20-30 mph (8.9-13.4 mps)	Over 30 mph (13.4 mps)
58"-59"	0-220' (0-67.1m)	0-30 mph (0-13.4 mps)	30-50 mph (13.4-22 mps)	Over 50 mph (22.4 mps)
58"-59"	Over 220' (67.1m)	0-30 mph (0-13.4 mps)	30-50 mph (13.4-22 mps)	Over 50 mph (22.4 mps)
77"	0-290' (0-88.4m)	0-30 mph (0-13.4 mps)	30-50 mph (13.4-22 mps)	Over 50 mph (22.4 mps)
77"	Over 290' (88.4m)	0-20 mph (0-8.9 mps)	20-30 mph (8.9-13.4 mps)	Over 30 mph (13.4 mps)
92"-94"-118"	0-360' (0-109.8m)	0-30 mph (0-13.4 mps)	30-50 mph (13.4-22 mps)	Over 50 mph (22.4 mps)
92"-94"-118"	Over 360' (109.8m)	0-20 mph (0-8.9 mps)	20-30 mph (8.9-13.4 mps)	Over 30 mph (13.4 mps)
130"	0-400' (0-122m)	0-30 mph (0-13.4 mps)	30-50 mph (13.4-22 mps)	Over 50 mph (22.4 mps)
130'	Over 400' (122m)	0-20 mph (0-8.9 mps)	20-30 mph (8.9-13.4 mps)	Over 30 mph (13.4 mps)

6. Crawler sideframes and truck or wagon crane outriggers must be fully extended and set to maximum width to obtain ratings listed for such on the chart. When operating in the "FREE" condition without outriggers on a truck or wagon crane, the boom must never be operated at radii for which no ratings are shown in the "Outriggers Free-Over The Side" area of the chart. Tires must be in good condition and properly inflated for operation. For truck cranes equipped with a front outrigger jack, the ratings designated "Outriggers Set-Over Side" can be used for 360 degree rotation.

7. Do not lift over the front of a truck crane either with or without outriggers. See diagrams on next page for definition of working areas with various types of cranes. If such a lift is unavoidable, consult American Crane for special instructions and suitably reduced ratings.

8. NEVER SIDELOAD THE BOOM. Such sideloading can cause structural failure or collapse. Always keep the boom point directly over the load to avoid sideloading. Operating the crane while out of level or in high winds as well as dragging a load sideways by swinging or pulling on a load while it is partially or fully attached to a structure are all causes of sideloading & must be avoided.

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9. The A-Frame must be in the fully raised position for lifting all rated loads. (Sky Horse operation is an exception). Do not operate with the A-Frame in any intermediate (partially raised) position.

10. Check brakes, clutches, and rigging daily and before any heavy lifts. Brakes and clutches must be dry, well adjusted and free from oil. Do not lift load or bucket after the machine has been standing during damp weather without first riding the brakes to evaporate moisture. All wire rope should be checked for wear and stranding and should be replaced if it is defective.

11. Disengage the master clutch before leaving the machine.

12. Never lift or release a load when the boom is solid against the boom stops.

13. Do not leave the operator's seat with the bucket or load suspended. Cooling of the brakes and brake drum may release the brake bands allowing the load to fall. Avoid traveling with a suspended load. When such travel is necessary, keep the load from swinging. Keep feet on the brake pedals while propelling the machine. Jarring of the load may cause the brakes to slip. When the machine is equipped with spring-set, air-released auxiliary brake chambers, the control valve should be placed in the "Brake Set" position so the brakes are engaged by the springs when holding the load or traveling. Reduced ratings must be used when traveling on grades to compensate for changes in stability, load radius, and sideloading of the boom. When traveling uphill, lower the boom to prevent it from falling backward.

14. Lowering against the torque converter (whereby the load runs the machinery backwards) should only be used for inching down loads. Place the sprag clutch flipper valve in the "Sprag Out, Dog In" position and disconnect the tailshaft governor cable at the torque converter on machines so equipped. Excessive lowering speed must be controlled by increasing engine RPM. In extreme cases, it is possible to stall the engine and cause the load to free fall. Keep a foot on the hoist brake pedal and be prepared to apply the brake quickly and smoothly. Be sure to reconnect tailshaft governor cable for duty cycle operation.

15. Detailed instructions for operating and maintenance are given elsewhere in this manual. Read and study the operating instructions carefully.

16. Cranes can self-erect all boom or boom-jib combinations shown on the rating chart unless specifically stated otherwise. During erection the A-Frame must be fully raised and all load-carrying devices must be on the ground. On truck cranes the outriggers must be fully extended and set and the boom erected over the rear of the carrier to achieve maximum capability. On a crawler crane the boom must be erected directly over the idler end of the crawler sideframes with the idler tumblers securely blocked to achieve maximum

capability. When erecting over the side of a crawler the sideframes must be fully extended.

17. When two cranes are making a lift together, both cranes must be level. The rigging must be designed so that each crane is lifting a share of the load which is well within its rating. The swing brakes of both machines must be released so that the boom points are free to remain directly over their load attachment points at all times. This can be a dangerous procedure and should be attempted only after substantial planning.

18. PERSONNEL LIFTING



THIS MACHINE IS NOT INTENDED TO BE USED AS A PERSONNEL HOIST! IF SUCH USE IS ALLOWED BY LOCAL, STATE OR FEDERAL REGULATIONS, THE OWNER OR USER IS RESPONSIBLE FOR COMPLYING WITH SUCH REGULATIONS AND ANY OTHER APPLICABLE REQUIREMENTS.

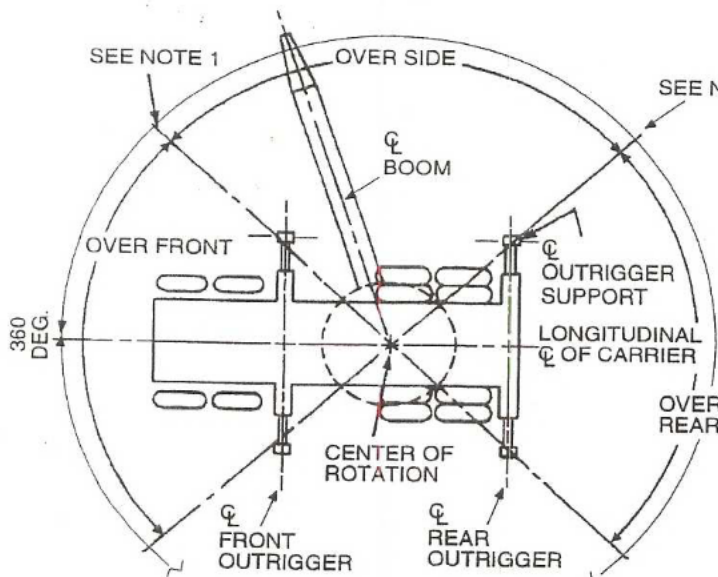
TO THE BEST OF OUR KNOWLEDGE, THIS WOULD REQUIRE THE CRANE TO BE EQUIPPED AS FOLLOWS TO MEET THE CURRENT ANSI/ASME B30.5-1982 OR LATEST REVISION.

- 1. OVERHOISTING DEVICE TO PREVENT THE LOAD BLOCK/OVERHAUL BALL FROM HITTING THE BOOM POINT.**
- 2. SINGLE LEVER CONTROL TO PREVENT ANY POSSIBILITY OF FREEFALL**
- 3. CONTROLLED LOAD LOWERING ON THE HOIST BEING UTILIZED TO LOWER THE MAN BASKET.**
- 4. PERSONNEL SHALL NOT BE PERMITTED TO RIDE THE BARE HOOK OR LOAD SUSPENDED FROM THE HOOK.**

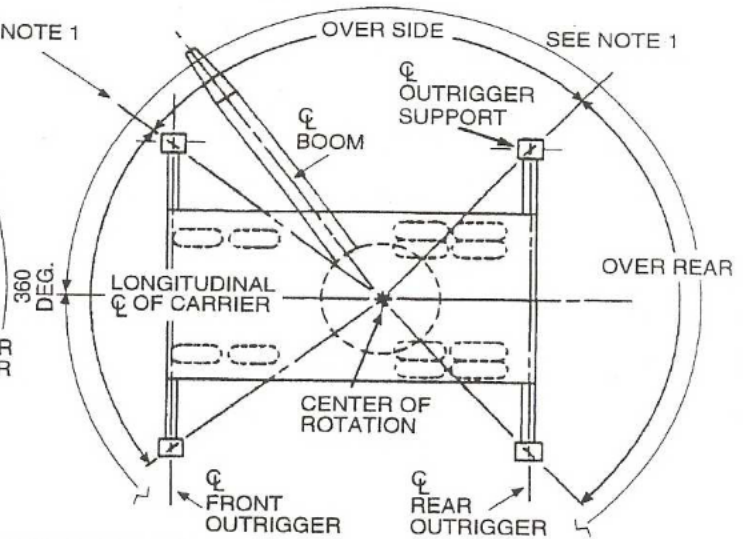
IMPORTANT: THE TOTAL WEIGHT OF THE LIFTED LOAD (INCLUDING PERSONNEL) SHALL NOT EXCEED 50% OF THE CRANE RATING WITH MACHINE EQUIPPED AS ABOVE; IT IS THE RESPONSIBILITY OF USER OF THIS CRANE TO ASSURE THAT THE FOOTING UNDER ALL THE OUTRIGGERS/CRAWLERS IS ADEQUATE TO SUPPORT THE CRANE AS ANY POSSIBILITY OF FREEFALLING THE LOAD HAS BEEN ELIMINATED.

19. BE SAFE. For any clarification or answers to additional questions contact American Crane before attempting operation.

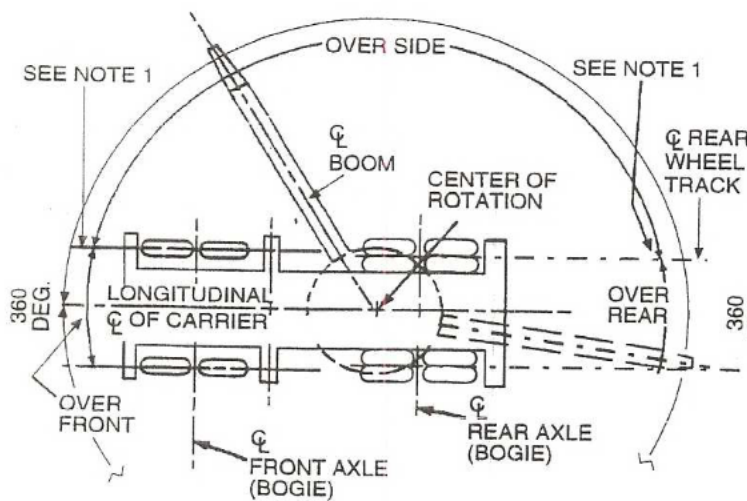
**ALL SERIES
IMPORTANT LOAD LIFTING
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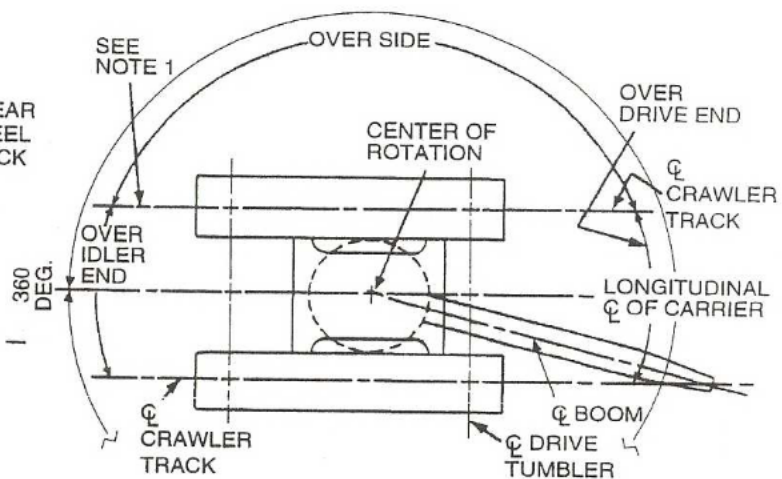
FRONT OUTRIGGER BEHIND FRONT WHEELS



FRONT OUTRIGGER AHEAD OF FRONT WHEELS



CARRIER ON TIRES



CRAWLER TYPE LOWER

WORKING AREA DEFINITIONS

NOTE 1

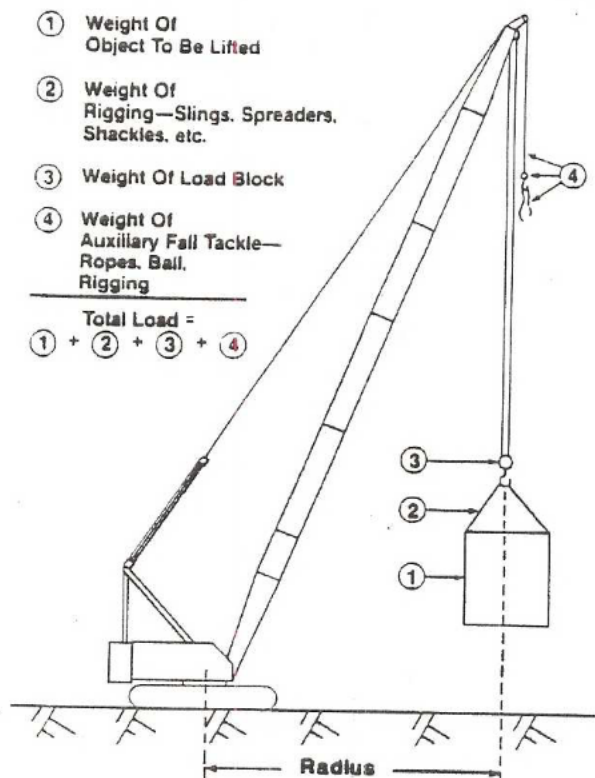
These lines determine the limiting position of any load for operation within working areas indicated.

CALCULATING TOTAL LOAD WEIGHT

Crane's Lifted Load on Main Fall Includes:

- ① Weight Of Object To Be Lifted
- ② Weight Of Rigging—Slings, Spreaders, Shackles, etc.
- ③ Weight Of Load Block
- ④ Weight Of Auxiliary Fall Tackle—Ropes, Ball, Rigging

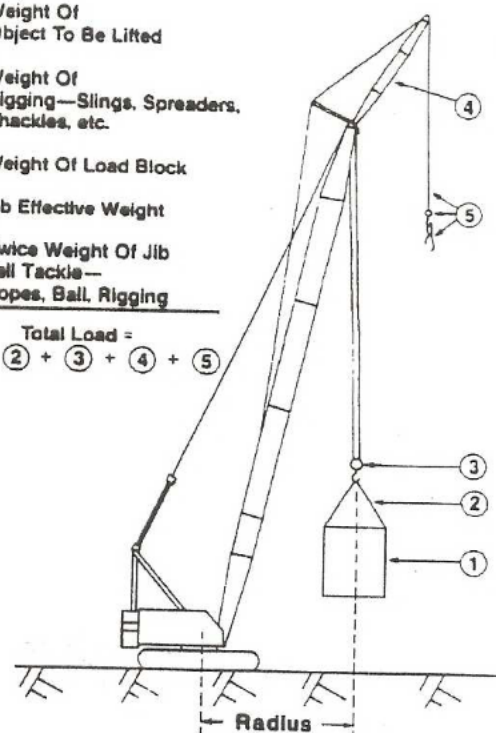
$$\text{Total Load} = \text{①} + \text{②} + \text{③} + \text{④}$$



Crane's Lifted Load on Main Fall Must Also Include Jib and Jib Tackle:

- ① Weight Of Object To Be Lifted
- ② Weight Of Rigging—Slings, Spreaders, Shackles, etc.
- ③ Weight Of Load Block
- ④ Jib Effective Weight
- ⑤ Twice Weight Of Jib Fall Tackle—Ropes, Ball, Rigging

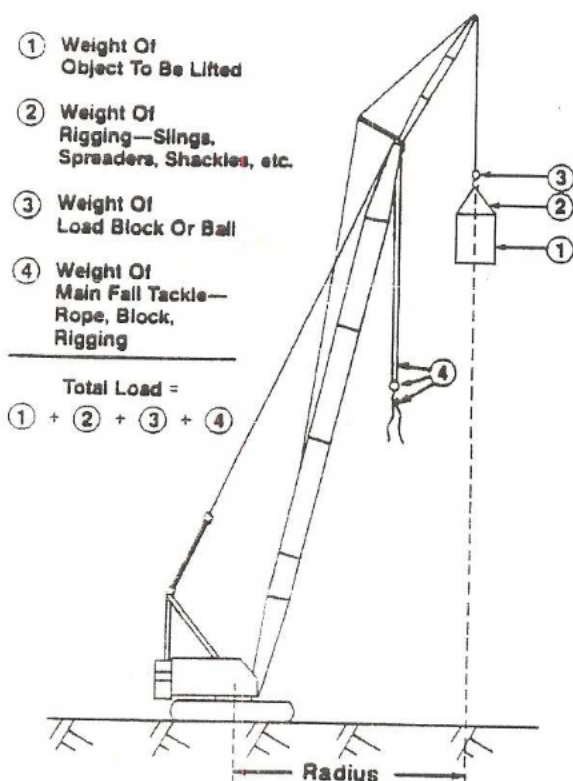
$$\text{Total Load} = \text{①} + \text{②} + \text{③} + \text{④} + \text{⑤}$$



Crane's Lifted Load on Jib Fall Includes:

- ① Weight Of Object To Be Lifted
- ② Weight Of Rigging—Slings, Spreaders, Shackles, etc.
- ③ Weight Of Load Block Or Ball
- ④ Weight Of Main Fall Tackle—Rope, Block, Rigging

$$\text{Total Load} = \text{①} + \text{②} + \text{③} + \text{④}$$



NOTE: The weight of the minimum parts of line required to lift the rated load has already been considered in this chart. It need not be added to the load. This applies only to the load fall being used. If additional parts of line are reeved beyond the minimum required to handle a rated load, or if a second fall is in place but not used, the weight of these ropes should be added to the weight lifted. Refer to the Crane Rating Chart and the Rope Weight Table on the back of this page for rope weight reference data.

ROPE WEIGHT PER GIVEN LENGTH

Use the data in the table below when the total weight of the load being lifted is calculated according to one of the Total Load Formulas in Appendix "A", on the front side of this page.

For IPS, EIPS, or EEIPS Wire Ropes. For other ropes, consult specific chart or the rope manufacturer's own reference data or user's manual.

ROPE DIAMETER		WEIGHT OF ONE FOOT (OR ONE METER) OF ROPE	
IN MILLIMETERS	IN INCHES	LBS./FT.	Kg/M
12.7	1/2	.46	.68
15.9	5/8	.72	1.07
19.1	3/4	1.04	1.55
22.2	7/8	1.42	2.11
25.4	1	1.85	2.75
28.6	1-1/8	2.34	3.48
31.8	1-1/4	2.89	4.30
34.9	1-3/8	3.50	5.21
38.1	1-1/2	4.16	6.19
41.3	1-5/8	4.88	7.26
44.5	1-3/4	5.67	8.44
47.6	1-7/8	6.50	9.67
50.8	2	7.39	11.00
54.0	2-1/8	8.35	12.42
57.2	2-1/4	9.36	13.93
63.5	2-1/2	11.60	17.26
69.9	2-3/4	14.00	20.83

ALL SERIES
WEIGHTS OF MATERIALS

MATERIAL	KG/CU. METER	KG/CU. FOOT	1 CU. YARD
Ashes - Piled Dry	560.70	35	945
Brick Bats	881.10	55	1485
Cement - Portland	1505.88	94	2538
Charcoal	400.50	25	695
Cinders	881.10	55	1485
Clinker - Portland Cement	1361.70	85	2295
Clay - Dry, in Lumps	1009.26	63	1701
Clay - Compact, Natural Bed	1746.18	109	2943
Coal - Anthracite	897.12	56	1512
Coal - Bituminous R of M Piled	881.10	55	1485
Coal - Bituminous Slack, Piled	801.00	50	1350
Coke - Blast Furnace Size	432.54	27	729
Coke - Foundry Size	448.56	28	756
Concrete - Ready to Pour	2370.96	148	3996
Dolomite - Crushed Fine	1521.90	95	2565
Dolomite - Broken Lump	1521.90	95	2565
Earth - Loamy, Dry Loose	1201.50	75	2025
Earth - Dry, Packed	1521.90	95	2565
Earth - Wet (Mud)	1762.20	110	2970
Flue Dust - Blast Furnace	1842.30	115	3105
Flue Dust - Blast Furnace, Wet	2403.00	150	4050
Gypsum - Crushed to 3"	1521.90	95	2565
Gypsum - Calcined	961.20	60	1620
Gravel - Dry, Loose	1762.20	110	2970
Gravel - Dry, Packed	1810.26	113	3051
Gravel - Wet, Packed	1922.40	120	3240
Iron Ore - 60% Iron	4806.00	300	8100
Iron Ore - 50% Iron	4005.00	250	6750
Iron Ore - 40 % Iron	3204.00	200	5400
Iron Punchings - Scrap	4325.40	270	7290
Iron Turnings - Scrap	2803.50	175	4725
Limestone - Run of Crushed	1521.90	95	2565
Limestone - Fines Out	1602.00	100	2700
Limestone - 1 1/2 or 2 Graded	1361.70	85	2295
Limestone - Above 2 Graded	1281.60	80	2160
Phosphate, Acid (Fertilizer)	1361.70	85	2295
Phosphate, Rock	1281.60	80	2160
Pyrites	2167.70	135	3645
Salt	929.16	58	1566
Sand - Dry, Loose	1521.90	95	2565
Sand - Wet, Packed	1922.40	120	3240
Scale - Rolling Mill, Wet	2114.64	132	3564
Shale - Broken	1361.70	85	2295
Slag - Blast Furnace, Broken	2210.76	138	3726
Slag - Open Hearth, Crushed	1682.10	105	2835
Slag - Granulated, Dry	606.76	38	1026
Slag - Granulated, Wet	929.16	58	1566
Snow	528.66	33	891
Sulphur - Broken	528.66	60	1620
Timber - Green Cedar	592.74	37	999
Douglas Fir	606.76	38	1026
Hemlock	656.82	41	1107
Southern Pine	881.10	55	1485
Spruce	576.72	36	972
Redwood	801.00	50	1350
Zinc Ore - Broken	2403.00	150	4050

ALL SERIES
FRACTION/DECIMAL CONVERSION

FRACTION/DECIMAL CONVERSION																			
4THS	8THS	16THS	32NDS	64THS	TO 4 PLACES	TO 3 PLACES	TO 2 PLACES	4THS	8THS	16THS	32NDS	64THS	TO 4 PLACES	TO 3 PLACES	TO 2 PLACES				
				1/64	0.0156	0.016	0.02					33/64	0.5156	0.516	0.52				
			1/32		0.0312	0.031	0.03				17/32		0.5312	0.531	0.53				
				3/64	0.0469	0.047	0.05					35/64	0.5469	0.547	0.55				
			1/16				0.0625				0.063	0.06	9/16				0.5625	0.563	0.56
					5/64	0.0781	0.078				0.08			37/64	0.5781	0.578	0.58		
			3/32		0.0938	0.094	0.09				19/32		0.5938	0.594	0.59				
					7/64	0.1094	0.109				0.11			39/64	0.6094	0.609	0.61		
			1/8				0.1250				0.125	0.13	5/8				0.6250	0.625	0.63
						9/64	0.1406				0.141	0.14				41/64	0.6406	0.641	0.64
			5/32		0.1562	0.156	0.16				21/32		0.6562	0.656	0.66				
					11/64	0.1719	0.172				0.17			43/64	0.6719	0.672	0.67		
			3/16				0.1875				0.188	0.19	11/16				0.6875	0.688	0.69
						13/64	0.2031				0.203	0.20				45/64	0.7031	0.703	0.70
			7/32		0.2188	0.219	0.22				23/32		0.7188	0.719	0.72				
						15/64	0.2344				0.234	0.23				47/64	0.7344	0.734	0.73
1/4				0.2500	0.250	0.25	3/4				0.7500	0.750	0.75						
				17/64	0.2656	0.266	0.27					49/64	0.7656	0.766	0.77				
			9/32		0.2812	0.281	0.28				25/32		0.7812	0.781	0.78				
				19/64	0.2969	0.297	0.30					51/64	0.7969	0.797	0.80				
			5/16				0.3125				0.313	0.31	13/16				0.8125	0.813	0.81
					21/64	0.3281	0.328				0.33			53/64	0.8281	0.828	0.83		
			11/32		0.3438	0.344	0.34				27/32		0.8438	0.844	0.84				
					23/64	0.3594	0.359				0.36			55/64	0.8594	0.859	0.86		
			3/8				0.3750				0.375	0.38	7/8				0.8750	0.875	0.88
						25/64	0.3906				0.391	0.39				57/64	0.8906	0.891	0.89
			13/32		0.4062	0.406	0.41				29/32		0.9062	0.906	0.91				
					27/64	0.4219	0.422				0.42			59/64	0.9219	0.922	0.92		
			7/16				0.4375				0.438	0.44	15/16				0.9375	0.938	0.94
						29/64	0.4531				0.453	0.45				61/64	0.9531	0.953	0.95
			15/32		0.4688	0.469	0.47				31/32		0.9688	0.969	0.97				
						31/64	0.4844				0.484	0.48				63/64	0.9844	0.984	0.98
1/2				0.5000	0.500	0.50	1				1.0000	1.000	1.00						

BOOM LENGTH	RADIUS	BOOM ANGLE	ON TIRES		OUTRIGGERS SET		FROM BOOM POINT TO GROUND (FEET)
			OVER SIDE (POUNDS)	OVER REAR (POUNDS)	OVER SIDE (POUNDS)	OVER REAR (POUNDS)	
40' (12.2M) BOOM	11	82.8					
	12	81.3		102,480*	180,000*	180,000*	47
	15	77.0		98,490*	180,000*	180,000*	47
	20	69.6		87,990*	163,530*	174,470*	46
	25	61.7		59,690*	126,060*	134,640*	45
	30	53.1	28,100*	44,740*	96,660	99,560	42
	35	43.3	23,930*	35,510*	71,590	74,550	39
	40	30.9	20,720*	29,200*	56,510	59,260	35
				24,660	46,470	48,980	27
50' (15.2M) BOOM	13	81.9		94,240*	180,000*	180,000*	57
	15	79.6		87,690*	163,390*	174,330*	56
	20	73.8		59,600*	125,750*	134,270*	55
	25	67.7		44,650*	96,770	99,650	54
	30	61.3	27,870*	35,430*	71,660	74,610	51
	35	54.5	23,710*	29,110*	56,530	59,270	48
	40	47.0	20,550*	24,600	46,510	49,010	44
	50	27.4	15,720	18,390	33,870	35,950	30
60' (18.3M) BOOM	14	82.3		90,460*	172,810*	180,000*	67
	15	81.3		87,260*	163,260*	174,200*	67
	20	76.5		59,490*	125,830*	133,800*	66
	25	71.6		44,540*	96,820	99,680	64
	30	66.4	27,660*	35,330*	71,680	74,600	62
	35	61.1	23,520*	29,010	56,530	59,260	60
	40	55.5	20,390*	24,520	46,510	48,990	57
	50	42.6	15,660	18,330	33,860	35,930	48
	60	24.8	12,100	14,320	26,250	28,010	32
70' (21.3M) BOOM	15	82.6		86,690*	162,470*	173,370*	77
	20	78.4		59,290*	125,370*	133,280*	76
	25	74.3	32,770*	44,350*	96,800	99,630	75
	30	70.0	27,340*	35,150*	71,620	74,530	73
	35	65.6	23,200*	28,820	56,440	59,150	71
	40	61.0	20,100*	24,350	46,420	48,900	68
	50	51.0	15,440*	18,140	33,740	35,800	62
	60	39.3	11,930	14,150	26,130	27,880	51
	70	22.9	9,510	11,410	21,110	22,620	34
80' (24.4M) BOOM	16	82.8		79,950*	149,990*	149,990*	87
	20	79.9		59,110*	124,860*	133,210*	86
	25	76.3	32,480*	44,180*	96,750	99,560	85
	30	72.6	27,080*	35,000	71,550	74,450	84
	35	68.8	22,950*	28,660	56,340	59,050	82
	40	64.9	19,880*	24,200	46,330	48,800	80

BOOM LENGTH	RADIUS	BOOM ANGLE	ON TIRES		OUTRIGGERS SET		FROM BOOM POINT TO GROUND (FEET)
			OVER SIDE (POUNDS)	OVER REAR (POUNDS)	OVER SIDE (POUNDS)	OVER REAR (POUNDS)	
(FEET)	(DEG.)	(DEG.)					
80' (24.4M) BOOM	50	56.6	15,230*	18,000	33,640	35,700	74
	60	47.5	11,800	14,010	26,030	27,770	66
	70	36.6	9,400	11,300	21,030	22,540	55
	80	21.3	7,570	9,220	17,380	18,700	36
90' (27.4M) BOOM	17	82.9		73,280*	131,560*	131,560*	97
	20	81.0		58,880*	124,360*	130,720*	96
	25	77.8	32,080*	43,940*	96,670	99,460	95
	30	74.5	26,710*	34,770	71,440	74,330	94
	35	71.2	22,590*	28,430	56,210	58,900	92
	40	67.8	19,550*	23,990	46,190	48,660	91
	50	60.8	14,910*	17,780	33,480	35,530	86
	60	53.1	11,580	13,790	25,850	27,590	79
	70	44.6	9,210	11,110	20,870	22,380	70
	80	34.4	7,390	9,040	17,230	18,550	58
	90	20.0	5,960	7,430	14,470	15,650	38
100' (30.5M) BOOM	19	82.5	41,340*	62,880*	114,580*	114,580*	106
	20	81.9	39,370*	58,670*	114,430*	114,430*	106
	25	79.0	31,760*	43,730*	96,580	99,360	105
	30	76.1	26,410*	34,570	71,320	74,200	104
	35	73.2	22,290*	28,220	56,060	58,750	103
	40	70.1	19,270*	23,800	46,060	48,510	101
	50	63.9	14,640*	17,590	33,320	35,370	97
	60	57.3	11,380	13,590	25,680	27,420	91
	70	50.2	9,050	10,940	20,730	22,230	84
	80	42.2	7,220	8,870	17,080	18,400	74
	90	32.5	5,800	7,270	14,330	15,510	61
	100	18.9	4,680	6,000	12,190	13,260	39
110' (33.5M) BOOM	20	82.7	38,140*	58,620*	99,420*	99,420*	116
	25	80.0	31,340*	43,480	96,480	99,240	116
	30	77.4	26,020*	34,320	71,190	74,050	115
	35	74.7	21,910*	27,970	55,900	58,580	113
	40	72.0	18,920*	23,570	45,900	48,340	112
	50	66.4	14,300*	17,350	33,140	35,180	108
	60	60.6	11,120*	13,350	25,490	27,220	103
	70	54.4	8,830	10,710	20,540	22,040	97
	80	47.7	7,000	8,650	16,890	18,210	88
	90	40.1	5,590	7,060	14,150	15,320	78
	100	31.0	4,480	5,800	12,010	13,070	64
	110	18.0	3,570	4,770	10,300	11,260*	41

BOOM LENGTH	RADIUS	BOOM ANGLE	ON TIRES		OUTRIGGERS SET		FROM BOOM POINT TO GROUND (FEET)
			OVER SIDE (POUNDS)	OVER REAR (POUNDS)	OVER SIDE (POUNDS)	OVER REAR (POUNDS)	
(FEET)		(DEG.)					
120' (36.6M) BOOM	21	82.8	37,000*	54,680*	85,110*	85,110*	126
	25	80.9	31,020*	43,270	85,110*	85,110*	126
	30	78.5	25,720*	34,120	71,070	73,920	125
	35	76.0	21,610*	27,760	55,740	58,410	124
	40	73.6	18,640*	23,370	45,740	48,180	122
	50	68.5	14,020*	17,150	32,970	35,010	119
	60	63.3	10,850*	13,140	25,310	27,040	114
	70	57.8	8,640	10,530	20,380	21,880	109
	80	51.9	6,820	8,470	16,730	18,040	102
	90	45.5	5,400	6,870	13,970	15,150	93
	100	38.3	4,290	5,600	11,830	12,890	81
	110	29.6	3,390	4,580	10,130	11,090	66
	120	17.2	2,650	3,740	8,730	9,620	42
130' (39.6M) BOOM	22	82.9			72,780*	72,780*	136
	25	81.6			72,780*	72,780*	136
	30	79.3			70,930	72,780*	135
	35	77.1			55,580	58,240	134
	40	74.8			45,570	48,010	133
	50	70.2			32,780	34,810	130
	60	65.5			25,310	27,040	126
	70	60.5			20,190	21,680	120
	80	55.3			16,520	17,830	114
	90	49.7			13,770	14,950	106
	100	43.6			11,630	12,680	97
	110	36.7			9,920	10,880	85
140' (42.7M) BOOM	120	28.4			8,520	9,410	69
	130	16.5			7,350	8,170	44
	24	82.6			63,690*	63,690*	146
	25	82.2			63,690*	63,690*	146
	30	80.1			63,690*	63,690*	145
	35	78.0			55,410	58,060	144
	40	75.9			45,410	47,830	143
	50	71.7			32,590	34,620	140
	60	67.3			25,140	26,860	136
	70	62.8			20,000	21,490	132
	80	58.1			16,330	17,640	126
	90	53.1			13,580	14,750	119
	100	47.8			11,440	12,490	111

BOOM LENGTH	RADIUS	BOOM ANGLE	ON TIRES		OUTRIGGERS SET		FROM BOOM POINT TO GROUND (FEET)
			OVER SIDE (POUNDS)	OVER REAR (POUNDS)	OVER SIDE (POUNDS)	OVER REAR (POUNDS)	
(FEET)	(DEG.)	(DEG.)					
140'	110	41.9					
(42.7M)	120	35.3			9,730	10,690	101
BOOM	130	27.3			8,320	9,200	88
	140	15.9			7,150	7,970	71
					6,180	6,930	45
150'	25	82.7			55,610*	55,610*	156
(45.7M)	30	80.8			55,610*	55,610*	155
BOOM	35	78.8			55,240	55,610*	154
	40	76.9			45,230	47,650	153
	50	72.9			32,390	34,410	151
	60	68.9			24,940	26,660	147
	70	64.8			19,800	21,290	143
	80	60.5			16,130	17,430	138
	90	55.9			13,370	14,530	131
	100	51.2			11,220	12,270	124
	110	46.1			9,510	10,460	115
	120	40.4			8,100	8,980	104
	130	34.1			6,940	7,750	91
	140	26.3			5,950	6,710	73
	150	15.3			5,110	5,820	46
160'	26	82.8			47,820*	47,820*	166
(48.8M)	30	81.4			47,820*	47,820*	166
BOOM	35	79.6			47,820*	47,820*	165
	40	77.7			45,070	47,480	164
	50	74.0			32,210	34,220	161
	60	70.3			24,760	26,470	158
	70	66.4			19,610	21,100	154
	80	62.5			15,930	17,240	149
	90	58.3			13,170	14,340	143
	100	54.0			11,020	12,070	137
	110	49.4			9,310	10,270	129
	120	44.5			7,900	8,780	119
	130	39.1			6,730	7,540	108
	140	32.9			5,740	6,500	94
	150	25.5			4,900	5,600	76
	160	14.8			4,180	4,840	48
170'	27	82.9			42,390*	42,390*	176
(51.8M)	30	81.9			42,390*	42,390*	176
BOOM	35	80.2			42,390*	42,390*	175
	40	78.5			42,240*	42,240*	174
	50	75.0			32,010	34,020	172
	60	71.5			24,570	26,270	168

BOOM LENGTH	RADIUS	BOOM ANGLE	ON TIRES		OUTRIGGERS SET		FROM BOOM POINT TO GROUND (FEET)
			OVER SIDE (POUNDS)	OVER REAR (POUNDS)	OVER SIDE (POUNDS)	OVER REAR (POUNDS)	
(FEET)		(DEG.)					
170' (51.8M) BOOM	70	67.9					
	80	64.2			19,410	20,890	165
	90	60.4			15,720	17,030	160
	100	56.4			12,960	14,120	155
	110	52.3			10,810	11,850	149
	120	47.8			9,080	10,040	142
	130	43.1			7,680	8,560	133
	140	37.9			6,510	7,320	123
	150	31.9			5,520	6,270	111
	160	24.7			4,660	5,370	97
	170	14.3			3,940	4,600	78
					3,310	3,930	49
180' (54.9M) BOOM	28	83.0			37,610*	37,610*	186
	30	82.3			37,610*	37,610*	186
	35	80.7			37,610*	37,610*	185
	40	79.1			37,370*	37,370*	184
	50	75.8			31,810	33,810	182
	60	72.6			24,370	26,080	179
	70	69.2			19,210	20,690	176
	80	65.7			15,520	16,820	171
	90	62.2			12,750	13,910	166
	100	58.5			10,600	11,640	161
	110	54.7			8,870	9,830	154
	120	50.7			7,460	8,330	146
	130	46.4			6,290	7,100	138
	140	41.8			5,300	6,050	127
	150	36.7			4,450	5,150	115
	160	31.0			3,720	4,380	100
	170	24.0			3,090	3,710	80
	180	13.9			2,530	3,120	50

 WARNING

This rating chart is invalid if the crane has been modified or altered by use of other than GENUINE AMERICAN PARTS as such modifications or alterations may affect its capacity or safe operation. See American Crane Corporation Service Bulletin #259.

Ratings in this chart are in POUNDS and do not exceed the percentage of tipping specified for this crane by ANSI B30.5. All ratings require that the crane be standing level on a firm uniformly supporting surface.

Do not lift loads in excess of those shown on this chart. Lifting loads in excess of those shown or operation not in accordance with good operating practice, including limitations shown on page 3499 of Operator's Manual, can cause tipping, structural damage or catastrophic failure.

Asterisk (*) areas on this chart indicate ratings which are limited by strength of material or factors other than stability (tipping).

" RADIUS IN FEET " is the horizontal distance at ground level from the crane centerline of rotation to a vertical line through the center of gravity of the suspended load.

When using the main boom fall with jib in place, the main fall ratings must be reduced by the jib effective weight shown on the jib rating chart plus twice the weight of all suspended blocks, slings, rope, etc., at the jib fall. See Appendix A.

When using the main boom fall with boom tip extension in place, the main fall ratings must be reduced by the weight of the boom tip extension plus twice the weight of all suspended blocks, slings, rope, etc., at the boom tip extension fall. See Appendix A.

Blocks, slings, buckets and other load carrying devices are considered part of the load. The weight of standard hoisting ropes for the rating at a given radius has been calculated as part of the boom point load and need not be considered in determining net allowable loads. See Appendix A.

This chart was developed exclusively for use with a boom only. Under no circumstances are these ratings to be interpreted for use with a jib.

Ratings shown on this chart make no allowance for such factors as out of plumb loads, wind, poor soil conditions, improper inflation of rubber tires and dynamic effects due to excessive operating speeds. The user (operator) must exercise judgement to make allowance for these conditions. See page 3499 of Operator's Manual for detailed information.

No account is taken of the wind force on the load. This effect, which can be substantial for loads with large surface areas, must be considered by the user. In any wind it is strongly recommended that taglines be used to control the load.

Combinations of boom or boom and jib with a total length exceeding 350' can be operated at full rated capacity only in wind speeds of 15 MPH or less. If lifts are to be performed in winds between 15 MPH and 25 MPH, ratings must be reduced 10%. No operation of the above combinations should be attempted in wind speeds over 25 MPH. The above limitations do not take into account loads with excessive surface area which are not restrained by tag lines.

Outriggers must be fully extended and set when using "OUTRIGGERS SET" ratings.

For tire inflation pressure for ratings "FREE", see Operator's Manual. See Operator's Manual for recommended tire loading and tire pressure for travel speeds.

When operating "FREE", the boom must never be operated at radii for which no ratings are shown in this chart.

Do not make a lift over the front of a truck crane, either with or without outriggers unless equipped with a front bumper outrigger. If such a lift is unavoidable, consult American Crane for special instructions and reduced ratings. See back of page 3499 of Operator's Manual for definition of working areas on various types of cranes.

 WARNING

Do not rotate the crane upperworks over the side of the truck carrier with any counterweight in place unless the outriggers are fully extended and set. When on tires with any counterweight in place, the crane may tip over backwards if swung to any position over the side.

BOOM HOIST LINE is 10 parts of .75 inch diameter 6 x 26, WS, FW, LAL, IWRC, EIPS wire rope with a minimum breaking strength of 58,800 pounds.

PENDANT SUSPENSION LINE is 2 parts of 1.375 inch diameter MONOLAY with a minimum breaking strength of 208,000 pounds.

MAIN LOAD LINE is 1.0 inch diameter 6 x 25, FW, RRL, IWRC, IPS wire rope with a minimum breaking strength of 89,800 pounds.

ERECTION

Erection over the rear or over the side must be done with A-Frame fully raised and the outriggers fully extended and set. Blocks, slings and other load-carrying devices must be on the ground during erection.

MAXIMUM BOOM & JIB SELF-ERECTION DATA				
9HL JIB	OVER THE END		OVER THE SIDE	
	BOOM LENGTH (FT)	JIB LENGTH (FT)	BOOM LENGTH (FT)	JIB LENGTH (FT)
	180	70	180	70

LOAD HOISTING INFORMATION			
MAXIMUM LIFTING CAPACITY - LBS.	MINIMUM PARTS OF LINE	MAXIMUM HOISTING DISTANCE - FT	
		MAIN DRUM - C.L.L.	AUX. DRUM
180,000	8	72	55
179,600	7	83	63
153,940	6	96	73
128,280	5	116	88
102,620	4	145	110
76,970	3	193	147
51,310	2	290	221
25,650	1	581	442

BOOM COMPOSITION CHART						
BOOM LENGTH (FEET)	BOOM SECTIONS					
	20' 59H INNER	10' 59S CENTER	20' 59S CENTER	40' 59S CENTER	20' 59SH OUTER	20' 59 HH TIP
40	1	0	0	0	1	1
50	1	1	0	0	1	1
60	1	0	1	0	1	1
70	1	1	1	0	1	1
80	1	0	0	1	1	1
90	1	1	0	1	1	1
100	1	0	1	1	1	1
110	1	1	1	1	1	1
120	1	0	0	2	1	1
130	1	1	0	2	1	1
140	1	0	1	2	1	1
150	1	1	1	2	1	1
160	1	0	0	3	1	1
170	1	1	0	3	1	1
180	1	0	1	3	1	1