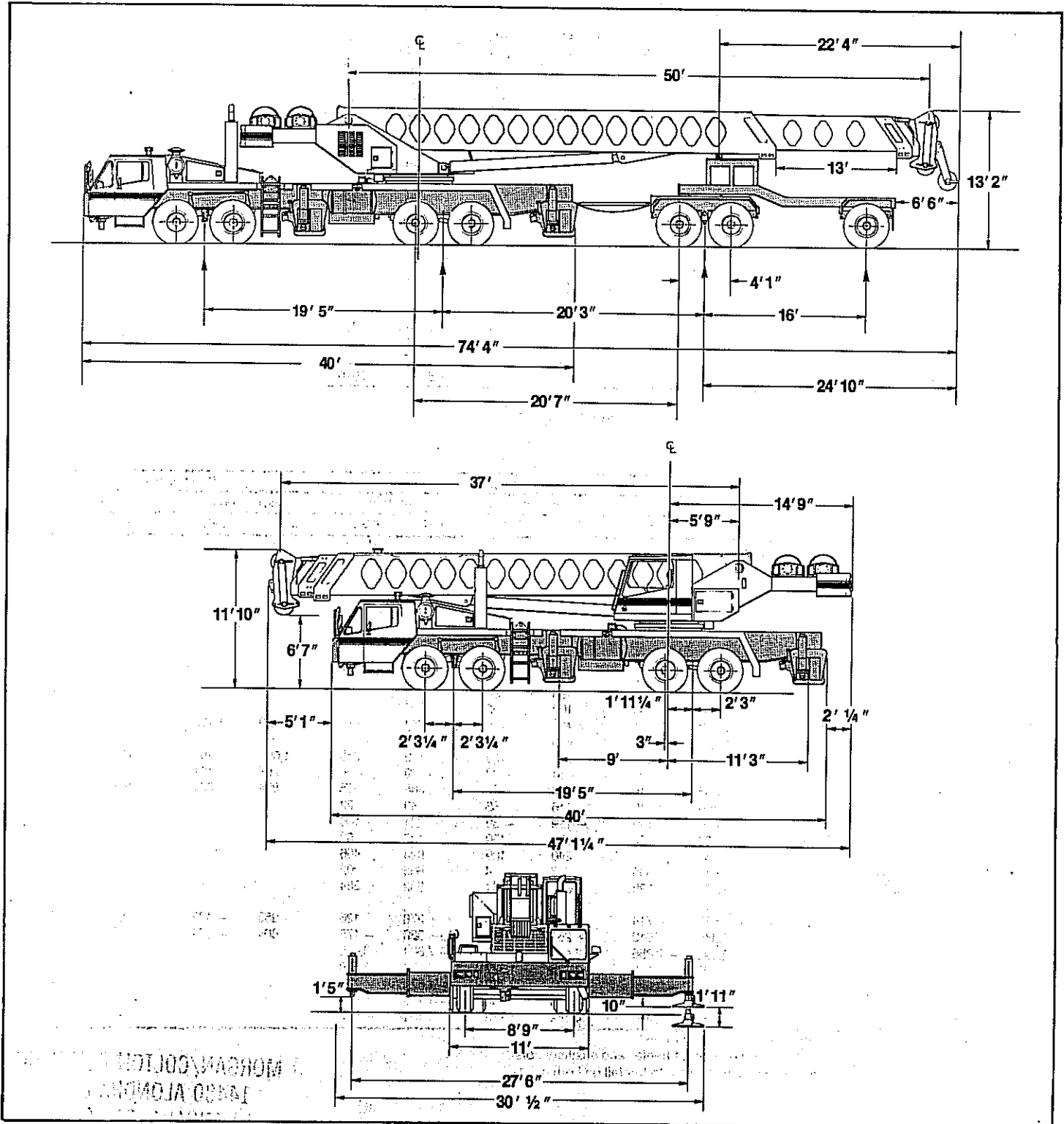


Specifications

Hydraulic Truck Crane

HTC-11100 100-ton (90.78 metric ton)



AXLE LOADS

	Boom Over Front					
	G.V.W.		Front Axle		Rear Axle	
	LBS	KGS	LBS	KGS	LBS	KGS
Standard machine includes 37' - 115' 4-section manual boom, 33' Lattice Fly, 2-speed rear winch with rope, Link-Belt 8x4 11' wide carrier with GM 6-71TA diesel engine, road ranger transmission, full fuel and hydraulics, counterweight.	112,607	51,079	40,062	18,172	72,545	32,906
ADD						
Cummins-300 Engine	367	167	424	192	- 57	- 26
Cummins-400 Engine	427	194	493	224	- 66	- 30
Automatic Transmission	150	68	102	46	47	21
Hook Block in Storage Compartment	1,700	771	2,249	1,020	- 549	- 249
Headache Ball on Boom Head	325	147	514	233	- 189	- 86
Full Power Boom	2,450	1,111	1,356	615	1,094	496
Auxiliary Lifting Sheave	182	83	330	150	- 148	- 67
A-Frame Jib (Manual Boom Only)	1,345	610	840	381	505	229
CTWT Removal System	165	75	- 83	- 38	248	113
Aluminum Fenders	- 350	- 159	- 129	- 59	- 221	- 100
Freefall Rear Winch	490	222	- 255	- 116	745	338
Freefall Front/Rear Winch	1,135	515	- 14	- 6	1,149	521
2-Winch Power up/down	673	305	126	57	547	248
2-Winch Freefall Rear Only	1,163	528	- 129	- 59	1,292	586
REMOVE						
Lattice Fly	- 1,575	- 714	- 1,433	- 650	- 142	- 64
A-Frame Jib (Manual Boom Only)	- 1,345	- 610	- 840	- 381	- 505	- 229
Rear O/R Beams/Jacks	- 5,193	- 2,356	+ 2,491	+ 1,130	- 7,684	- 3,485
Front O/R Beams/Jacks	- 5,193	- 2,356	- 2,925	- 1,327	- 2,268	- 1,029
*8000 # CTWT	- 8,000	- 3,629	+ 4,730	+ 2,146	- 12,730	- 5,774
**6000 # CTWT	- 6,000	- 2,722	+ 3,547	+ 1,609	- 9,547	- 4,331
***5500 # CTWT	- 5,500	- 2,495	+ 3,252	+ 1,475	- 8,752	- 3,970

*Use 8000 # counterweight for main hoist with or without freefall.
 **Use 6000 # counterweight for main hoist with or without freefall and auxiliary hoist.
 ***Use 5500 # counterweight for main and auxiliary hoist with freefall on both hoists.

	Boom Over Rear									
	G.V.W.		Front Axle		Rear Axle		Tandem Axle		Rear Axle	
	LBS	KGS	LBS	KGS	LBS	KGS	LBS	KGS	LBS	KGS
Base Weight of machine includes 37' - 115' 4-section manual boom, 33' Lattice Fly, 2-speed rear winch with rope, Link-Belt 8x4 11' wide carrier with GM 6-71TA diesel engine, road ranger transmission, full fuel and hydraulics, counterweight and boom dolly.	121,747	55,223	34,982	15,868	51,400	23,315	28,665	13,002	6,700	3,039
ADD										
Cummins-300 Engine	367	167	424	192	- 57	- 26				
Cummins-400 Engine	427	194	493	224	- 66	- 30				
Automatic Transmission	150	68	102	46	47	21				
Hook Block on Boom Head	1,700	771	- 453	- 205	- 691	- 313	2,429	1,102	415	188
Headache Ball in Storage Compartment	325	147	430	195	- 105	- 48				
Full Power Boom	2,450	1,111	505	229	770	349	1,004	455	171	78
Auxiliary Lifting Sheave	182	83	- 51	- 23	- 79	- 36	267	121	46	21
A-Frame Jib (Manual Boom Only)	1,345	610	253	115	386	175	604	274	103	47
CTWT Removal System	165	75	116	53	49	22				
Aluminum Fenders	- 350	- 159	- 129	- 59	- 221	- 100				
Freefall Rear Winch	490	222	353	160	137	62				
Freefall Front/Rear Winch	1,135	515	240	109	894	406				
2-Winch Power up/down	673	305	8	4	665	302				
2-Winch Freefall Rear Only	1,163	528	361	164	802	364				
REMOVE										
Lattice Fly	- 1,575	- 714	- 182	- 83	- 278	- 126	- 953	- 432	- 163	- 74
A-Frame Jib (Manual Boom Only)	- 1,345	- 610	- 253	- 115	- 386	- 175	- 604	- 274	- 103	- 47
Rear O/R Beams/Jacks	- 5,193	- 2,356	+ 2,491	+ 1,130	- 7,684	- 3,485				
Front O/R Beams/Jacks	- 5,193	- 2,356	- 2,925	- 1,327	- 2,268	- 1,029				
*8000 # CTWT	- 8,000	- 3,629	- 6,326	- 2,869	- 1,674	- 759				
**6000 # CTWT	- 6,000	- 2,722	- 4,745	- 2,152	- 1,255	- 569				
***5500 # CTWT	- 5,500	- 2,495	- 4,349	- 1,973	- 1,151	- 522				

*Use 8000 # counterweight for main hoist with or without freefall.
 **Use 6000 # counterweight for main hoist with or without freefall and auxiliary hoist.
 ***Use 5500 # counterweight for main and auxiliary hoist with freefall on both hoists.

MORGAN/COLTON EQUIP. CO.
 14480 ALONDRA BLVD.
 LA MIRADA, CA. 90638
 213-868-4754 - 714-521-6410

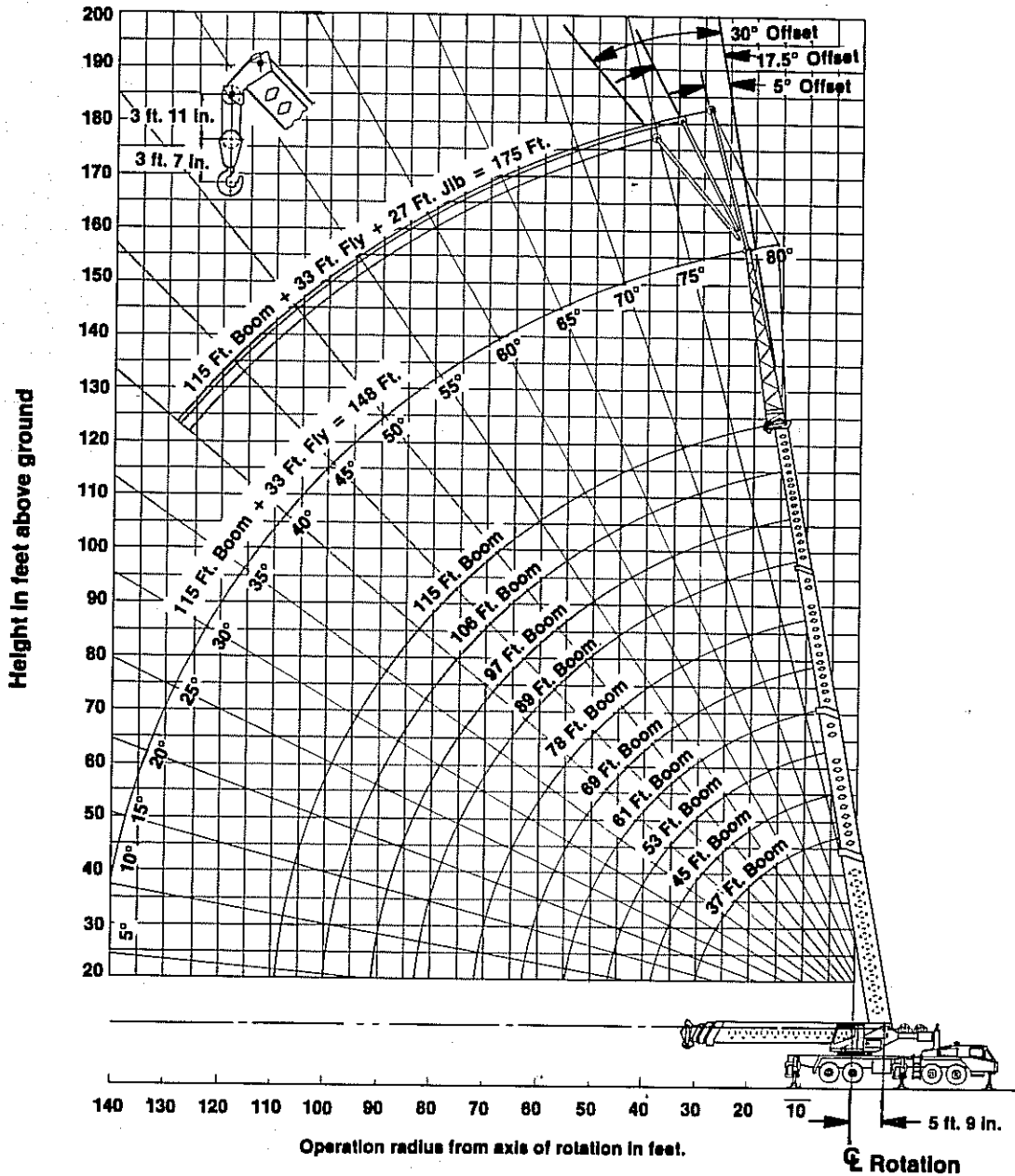
Lifting Capacities

Hydraulic Truck Crane

HTC-11100 100-ton (90.78 metric ton)

MORGAN/COLTON EQUIP. CO.
14480 ALONDRA BLVD.
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4-Section Boom—Full Power



Note: Boom and fly and jib geometry shown are for unloaded condition and machine standing level on firm supporting surface. Boom deflection and subsequent radius and angle change must be accounted for when applying load to hook.

CAUTION: This material is supplied for reference only. Operator MUST refer to in-cab capacity plate to determine allowable machine lifting capacities and operating procedures.

HTC-11100

maximum allowable lifting capacities

**Rated Lifting Capacities in Pounds
On Outriggers-Fully Extended
With Fifth Front Outrigger Extended**

**Carrier Mounted Hydraulic Crane
27.5 Ft. Outrigger Spread, 11 Ft. Wide Carrier**

37 Ft. to 115 Ft. Power Boom

		37 Ft.			45 Ft.			53 Ft.			61 Ft.			69 Ft.			78 Ft.			89 Ft.		
Load Rad. In Feet	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	
10	70.0	200,000	200,000	73.5	105,000	105,000	76.5	103,600	103,600	78.5	102,700	102,700	80.0	102,100	102,100							
12	65.5	161,500	161,500	71.0	105,000	105,000	74.0	103,600	103,600	76.5	102,700	102,700	78.0	99,400	99,400	80.0	93,000	93,000				
15	61.0	137,800	137,800	66.5	105,000	105,000	70.5	103,600	103,600	73.5	100,000	100,000	75.5	91,500	91,500	77.5	84,500	84,500	79.5	67,000	67,000	
20	51.0	101,300	101,300	59.5	101,300	101,300	64.5	101,300	101,300	68.5	89,500	89,500	71.5	80,900	80,900	74.0	70,500	70,500	76.0	60,000	60,000	
25	39.0	78,600	78,600	51.0	78,600	78,600	58.0	78,600	78,600	63.0	77,600	77,600	67.0	69,400	69,400	70.0	57,500	57,500	73.0	54,500	54,500	
30	20.5	60,800	60,800	41.5	60,800	60,800	51.5	60,800	60,800	57.5	60,800	60,800	62.0	58,300	58,300	66.0	50,300	50,300	69.5	44,500	44,500	
35							43.5	46,600	46,600	51.5	46,600	46,600	57.0	46,600	46,600	61.5	42,600	42,600	66.0	36,500	36,500	
40							34.0	36,600	36,600	44.5	36,600	36,600	51.5	36,600	36,600	57.0	36,600	36,600	62.0	32,500	32,500	
45							20.5	28,900	28,900	37.0	28,900	28,900	46.0	28,900	28,900	52.5	28,900	28,900	58.5	28,900	28,900	
50										27.5	23,900	23,900	39.0	23,900	23,900	47.5	23,900	23,900	54.5	23,900	23,900	
60													21.0	16,700	16,700	35.5	16,700	16,700	45.5	16,700	16,700	
70																17.0	12,000	12,000	34.5	12,000	12,000	
80																			18.5	8,500	8,500	
90																						
100																						
110																						
120																						
130																						

Minimum Boom Angle (Deg.) For Indicated Length With No Load. See Note 18.

WARNING AND OPERATING INSTRUCTIONS

READ AND UNDERSTAND THESE OPERATING INSTRUCTIONS AND THE CHART VALUES BEFORE OPERATING CRANE. OPERATION WHICH DOES NOT FOLLOW THESE INSTRUCTIONS MAY RESULT IN AN ACCIDENT.

GENERAL:

1. Rated lifting capacities in pounds as shown on lift chart pertain to this machine as originally manufactured and normally equipped. Modifications to the machine or use of optional equipment other than that specified can result in a reduction of capacity.
2. Construction equipment can be dangerous if improperly operated or maintained. Operation and maintenance of this machine must be in compliance with the information in the operator's, parts and safety manuals supplied with this machine. If these manuals are missing, order replacements through the distributor.
3. The operator and other personnel associated with this machine shall fully acquaint themselves with the latest applicable American National Standards Institute (ANSI) safety standards for cranes.
4. The maximum allowable lifting capacities are based on machine standing level on firm supporting surface.

SET UP:

1. 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 or tires to spread the load to a larger bearing surface.
2. When making lifts on outriggers, outrigger beams and front bumper jack cylinder must be fully extended with tires free of supporting surface.
3. When making lifts on rubber, tires must be inflated to the recommended pressure. (See note 21).
4. Boom sections must be fully retracted on tires before swinging to over side or over front position as defined on working area plate.
5. When installing or removing counterweight, use fully retracted boom only. Do not swing counterweight beyond a 30 ft. radius; machine must be on outriggers during this operation.
6. For required parts of line, see wire rope strength plate.

OPERATION:

1. Rated lifting capacities at rated radius shall not be exceeded. Do not tip the machine to determine allowable loads. For concrete bucket operation, weight of bucket and load shall not exceed 80% of rated lifting capacities. For clamshell bucket operation, weight of bucket and bucket content is restricted to a maximum weight of 8,000 pounds or 80% of rated lifting capacity, whichever is less. For magnet operation, weight of magnet and load is restricted to a maximum weight of 8,000 pounds or 80% of rated lifting capacity, whichever is less. For clamshell and magnet operation, maximum boom length is restricted to 61 feet and the boom angle is

restricted to a minimum of 35°. Fly, jib, or fly-jib combinations are all prohibited for both clam and magnet operation.

2. The crane capacities shown on outriggers do not exceed 85% of the tipping loads and crane capacities shown on tires do not exceed 75% of the tipping loads as determined by SAE Crane Stability Test Code J-765a.
3. The crane capacities above the bold lines are based on structural strength or hydraulic limitations.
4. Rated lifting capacities include the weight of hook block, slings, bucket, magnet and auxiliary lifting devices. Their weights must be subtracted from the listed rated load to obtain the net load to be lifted. See also deductions for auxiliary head, fly and jib.
5. Rated lifting capacities are based on freely suspended loads. No attempt shall be made to move a load horizontally on the ground in any direction.
6. Rated lifting capacities are for lift crane service only.
7. Do not operate at radii or boom lengths where capacities are not listed. At these positions, the machine can overturn without any load on the hook.
8. The maximum loads which can be telescoped are not definable because of variation in loadings and crane maintenance, but it is permissible to attempt retraction and extension within the limits of the load rating chart.
9. When either boom length or radius or both are between values listed, the smallest load shown at either the next larger radius or boom length shall be used.
10. The user shall operate at reduced ratings to allow for adverse job conditions, such as; soft or uneven ground, out of level conditions, wind, side loads, pendulum action, jerking or sudden stopping of loads, hazardous conditions, experience of personnel, two machine lifts, traveling with loads, electrical wires, etc. Side load on boom, fly or jib is extremely dangerous.
11. When making lifts with auxiliary head machinery, the effective length of the boom increases by 2 ft.
12. Power sections of boom must be extended equally.
13. The least stable rated working area on outriggers is over the side.
14. Rated lifting capacities are based on correct reeving. Deduction must be made for excessive reeving. Any reeving over minimum required (see wire rope strength plate) is considered excessive and must be accounted for. Use working range plate to estimate the extra feet of rope then deduct 1 lb. for each foot of wire rope before attempting to lift a load.
15. The loaded boom angle combined with the boom length give only an approximation of the operating radius. The boom angle, before loading, should be greater to account for deflection.
16. The 37 foot boom length capacities are based on boom fully retracted. If boom is not fully retracted, do not exceed ratings shown for the 45 foot boom length.

Counterweight:
5,800 Lbs. – 2 drum machine
7,800 Lbs. – 1 drum machine

37 Ft. to 115 Ft. Power Boom										33 Ft. Fly With 115 Ft. Boom					
		97 Ft.		106 Ft.			115 Ft.			148 Ft.					
Load Rad. in Feet	Loaded Boom Angle (Deg.)	360°		Over Rear	360°		Over Rear	360°		Over Rear	Load Rad. in Feet	360°		Over Rear	
		360°	Over Rear		360°	Over Rear		360°	Over Rear			360°	Over Rear		
10															10
12															12
15															15
20	77.5	55,000	55,000		79.0	51,000	51,000		80.0	50,500	50,500				20
25	74.5	52,500	52,500		76.5	45,000	45,000		77.5	44,000	44,000				25
30	71.5	43,500	43,500		73.5	37,500	37,500		75.0	36,100	36,100				30
35	68.5	34,600	34,600		70.5	33,500	33,500		72.5	32,500	32,500	80.0	28,000	28,000	35
40	65.0	31,000	31,000		67.5	29,000	29,000		70.0	27,100	27,100	75.5	24,000	24,000	40
45	61.5	27,500	27,500		64.5	26,300	26,300		67.0	25,300	25,300	73.5	22,000	22,000	45
50	58.0	23,900	23,900		61.5	23,900	23,900		64.5	21,100	21,100	71.0	19,700	19,700	50
60	50.5	16,700	16,700		55.0	16,700	16,700		58.5	16,700	16,700	67.0	15,800	15,800	60
70	41.5	12,000	12,000		47.5	12,000	12,000		52.0	12,000	12,000	62.5	13,500	13,500	70
80	30.5	8,500	8,600		39.0	8,500	8,600		45.0	8,500	8,600	58.0	11,400	11,400	80
90					28.5	6,000	6,200		36.5	6,000	6,200	53.0	8,100	8,200	90
100									26.0	4,000	4,300	47.5	6,000	6,100	100
110												41.5	4,300	4,400	110
120												34.5	2,900	3,100	120
130												26.0	1,800	2,000	130
					0°				20°						26°

Jib Capacities 27 Ft. Jib and 33 Ft. Fly Combination (See Note 19)			
Min. Main Boom Angle	Jib Offset Angle		
	5°	17.5°	30°
80°	11,900	8,600	6,800
75°	10,300	7,600	6,000
70°	9,000	6,700	5,700
65°	7,500	5,700	4,900
60°	6,200	4,800	4,300
55°	5,200	4,000	3,200
50°	3,900	3,300	2,600
45°	2,700	2,600	2,200
40°	1,900	1,800	1,800

Hydraulic Circuit Pressure Settings	
Function	Pressure
Winch	3250 PSI
Outriggers Retract	3000 PSI
Outriggers Extend	2000 PSI
Boom Hoist	3250 PSI
Boom Telescope	3000 PSI
Swing	1200 PSI
Hydraulic Controls	2000 PSI
Steering	1750 PSI
Free Fall Clutch	1500 PSI

17. For boom lengths with Fly less than 148 feet, the rated loads are determined by boom angle only in the column headed by 148 feet. For angles not shown, use the next lower boom angle to determine allowable capacity. Lifting from fly tip with 27 foot jib stored beneath is prohibited.
18. Do not lower 115 foot boom below 20 degrees. Do not lower 115 foot boom with 33 foot fly below 26 degrees unless main boom length is 89 feet or less. Failure to follow this note will result in a tipping condition.
19. The 27 foot jib capacities are based on main boom angle regardless of main boom length. For angles not shown, use next lower boom angle to determine allowable capacity. Capacity values are for 360 degrees on outriggers operation. Warning: Do not lower 27 foot jib in working position below 40 degrees unless main boom length is 78 feet or less, since loss of stability will occur causing a tipping condition. The 27 foot jib capacities are based on structural strength of the boom, fly, and jib combination.
20. The tubular jib capacities are based on main boom angle regardless of main boom length. Refer to 43 ft. to 88 ft. Jib Capacity Chart for rated hook loads and additional information when using the tubular jib.
 Warning, 43 ft. tubular jib:
 Do not lower 43 ft. tubular jib in working position below 45 degrees unless main boom length is 100 ft. or less, since loss of stability will occur causing a tipping condition.
 Warning, 58 ft. tubular jib:
 Do not lower 58 ft. tubular jib in working position below 50 degrees unless main boom length is 97 ft. or less, since loss of stability will occur causing a tipping condition.
 Warning, 73 ft. tubular jib:
 Do not lower 73 ft. tubular jib in working position below 55 degrees unless main boom length is 89 ft. or less, since loss of stability will occur causing a tipping condition.
 Warning, 88 ft. tubular jib:
 Do not lower 88 ft. tubular jib in working position below 60 degrees unless main boom length is 78 ft. or less, since loss of stability will occur causing a tipping condition.
21. Crane capacities on tires depend on tire capacity, condition of tires, and tire air pressure. On tire picks require lifting from main boom head only on a smooth and level surface. Lifts with fly, jib, or fly-jib combination erected are prohibited on tires. The boom sections must be extended equally at all times. For stationary operations, maximum boom length is restricted to 69 feet. For Pick and Carry operations, maximum boom length is restricted to 53 feet and maximum permissible speed is 2.5 MPH. The boom must be centered over the rear of machine with two-position travel swing lock engaged and the load must be restrained from swinging.

DEFINITIONS:

1. Load Radius: Horizontal distance from a projection of the axis of rotation to the supporting surface before loading to the center of the vertical hoist line or tackle with load applied.
2. Loaded Boom Angle: The angle between the boom base section and the horizontal after lifting the load at the rated radius.
3. Working Area: Area measured in a circular arc about the center line of rotation as shown on the working area plate.
4. Freely Suspended Load: Load hanging free with no direct external force applied except by the hoist line.
5. Side Load: Horizontal side force applied to the lifted load either on the ground or in the air.

Crane Capacities On Tires (See Note 21)		
Tire Pressure for 0 to 2.5 MPH, 14RX20, 22 Ply – 120 PSI.		
Load Rad. in Feet	Boom Centered Over Rear	
	69 Ft. Boom Max.	53 Ft. Boom Max.
	Stationary 2.5 MPH	
15	32,300	26,500
20	20,000	20,000
25	13,000	13,000
30	8,400	8,400
35	5,500	5,500
40	3,500	3,500
45	2,000	2,000

Capacity Deductions For Auxiliary Load Handling Equipment	
Picking From Main Boom With:	
Aux. Head Attached	200 Lbs.
33 Ft. Fly Stowed on Base	400 Lbs.
27 Ft. Jib Stowed on Base	400 Lbs.
33 Ft. Fly & 27 Ft. Jib Stowed	800 Lbs.
33 Ft. Fly Erected	4000 Lbs.
33 Ft. Fly & 27 Ft. Jib Erected	10000 Lbs.
43 Ft. Tubular Jib Erected	12000 Lbs.
58 Ft. Tubular Jib Erected	18000 Lbs.
73 Ft. Tubular Jib Erected	25000 Lbs.
88 Ft. Tubular Jib Erected	35000 Lbs.
Picking From 33 Ft. Fly With:	
Aux. Head on Main Boom	200 Lbs.
27 Ft. Jib Stowed on Base	400 Lbs.
27 Ft. Jib Erected	4000 Lbs.
Picking From Tubular Jib With:	
Aux. Head on Main Boom	200 Lbs.
33 Ft. Fly Stowed on Base	400 Lbs.
33 Ft. Fly & 27 Ft. Jib Stowed	800 Lbs.

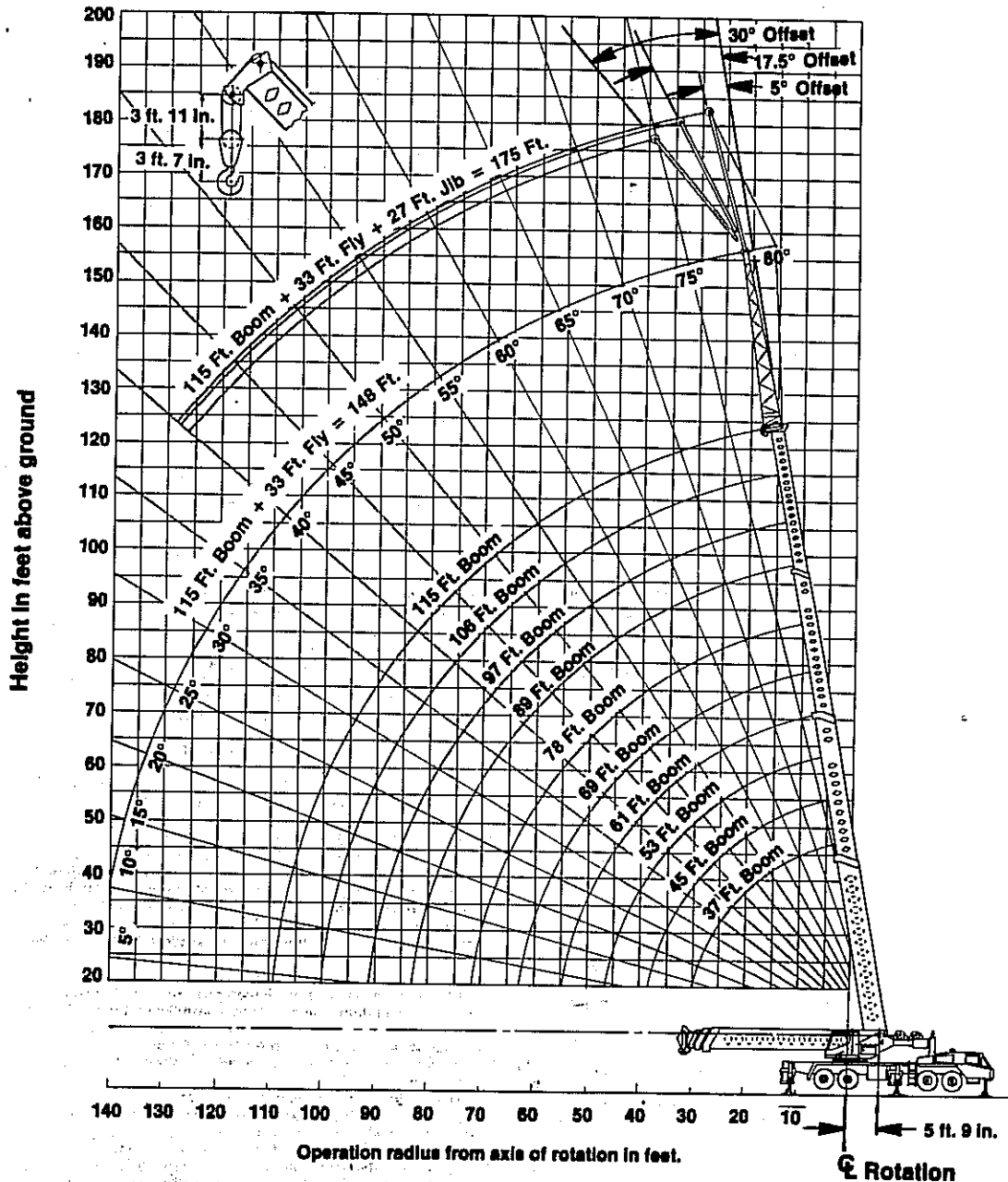
Lifting Capacities

Hydraulic Truck Crane

HTC-11100 100-ton (90.78 metric ton)

MORGAN/COLTON EQUIP. CO.
14480 ALONDRA BLVD.
LA MIRADA, CA. 90638
213-868-4754 · 714-521-6410

4-Section Boom—Full Power



Note: Boom and fly and jib geometry shown are for unloaded condition and machine standing level on firm supporting surface. Boom deflection and subsequent radius and angle change must be accounted for when applying load to hook.

CAUTION: This material is supplied for reference only. Operator MUST refer to in-cab capacity plate to determine allowable machine lifting capacities and operating procedures.

HTC-11100

maximum allowable lifting capacities

**Rated Lifting Capacities in Pounds
On Outriggers-Fully Extended
With Fifth Front Outrigger Extended**

**Carrier Mounted Hydraulic Crane
27.5 Ft. Outrigger Spread, 11 Ft. Wide Carrier**

37 Ft. to 115 Ft. Power Boom

37 Ft.				45 Ft.			53 Ft.			61 Ft.			69 Ft.			78 Ft.			89 Ft.			
Load Rad. In Feet	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	
10	70.0	200,000	200,000	73.5	105,000	105,000	76.5	103,600	103,600	78.5	102,700	102,700	80.0	102,100	102,100							
12	66.5	161,500	161,500	71.0	105,000	105,000	74.0	103,600	103,600	76.5	102,700	102,700	78.0	99,400	99,400	80.0	93,000	93,000				
15	61.0	137,800	137,800	66.5	105,000	105,000	70.5	103,600	103,600	73.5	100,000	100,000	75.5	91,500	91,500	77.5	84,500	84,500	79.5	67,000	67,000	
20	51.0	101,300	101,300	59.5	101,300	101,300	64.5	101,300	101,300	68.5	89,500	89,500	71.5	80,900	80,900	74.0	70,500	70,500	76.0	60,000	60,000	
25	39.0	78,600	78,600	51.0	78,600	78,600	58.0	78,600	78,600	63.0	77,600	77,600	67.0	69,400	69,400	70.0	57,500	57,500	73.0	54,500	54,500	
30	20.5	60,800	60,800	41.5	60,800	60,800	61.5	60,800	60,800	67.5	60,800	60,800	72.0	58,300	58,300	76.0	50,300	50,300	79.5	44,500	44,500	
35							43.5	46,600	46,600	51.5	46,600	46,600	57.0	46,600	46,600	61.5	42,600	42,600	66.0	36,500	36,500	
40	(See Note 16)						34.0	38,600	38,600	44.5	38,600	38,600	51.5	36,600	36,600	57.0	36,600	36,600	62.0	32,500	32,500	
45							20.5	28,900	28,900	37.0	28,900	28,900	46.0	28,900	28,900	52.5	28,900	28,900	58.5	28,900	28,900	
50										27.5	23,900	23,900	39.0	23,900	23,900	47.5	23,900	23,900	54.5	23,900	23,900	
60													21.0	18,700	18,700	35.5	18,700	18,700	45.5	16,700	16,700	
70																17.0	12,000	12,000	34.5	12,000	12,000	
80																			18.5	8,500	8,500	
90																						
100																						
110																						
120																						
130																						

Minimum Boom Angle (Deg.) For Indicated Length With No Load. See Note 18.

WARNING AND OPERATING INSTRUCTIONS

READ AND UNDERSTAND THESE OPERATING INSTRUCTIONS AND THE CHART VALUES BEFORE OPERATING CRANE. OPERATION WHICH DOES NOT FOLLOW THESE INSTRUCTIONS MAY RESULT IN AN ACCIDENT.

GENERAL:

- Rated lifting capacities in pounds as shown on lift chart pertain to this machine as originally manufactured and normally equipped. Modifications to the machine or use of optional equipment other than that specified can result in a reduction of capacity.
- Construction equipment can be dangerous if improperly operated or maintained. Operation and maintenance of this machine must be in compliance with the information in the operator's, parts and safety manuals supplied with this machine. If these manuals are missing, order replacements through the distributor.
- The operator and other personnel associated with this machine shall fully acquaint themselves with the latest applicable American National Standards Institute (ANSI) safety standards for cranes.
- The maximum allowable lifting capacities are based on machine standing level on firm supporting surface.

SET UP:

- 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 or tires to spread the load to a larger bearing surface.
- When making lifts on outriggers, outrigger beams and front bumper jack cylinder must be fully extended with tires free of supporting surface.
- When making lifts on rubber, tires must be inflated to the recommended pressure. (See note 21).
- Boom sections must be fully retracted on tires before swinging to over side or over front position as defined on working area plate.
- When installing or removing counterweight, use fully retracted boom only. Do not swing counterweight beyond a 30 ft. radius; machine must be on outriggers during this operation.
- For required parts of line, see wire rope strength plate.

OPERATION:

- Rated lifting capacities at rated radius shall not be exceeded. Do not tip the machine to determine allowable loads. For concrete bucket operation, weight of bucket and load shall not exceed 80% of rated lifting capacities. For clamshell bucket operation, weight of bucket and bucket content is restricted to a maximum weight of 8,000 pounds or 80% of rated lifting capacity, whichever is less. For magnet operation, weight of magnet and load is restricted to a maximum weight of 8,000 pounds or 80% of rated lifting capacity, whichever is less. For clamshell and magnet operation, maximum boom length is restricted to 61 feet and the boom angle is

restricted to a minimum of 35°. Fly, jib, or fly-jib combinations are all prohibited for both clam and magnet operation.

- The crane capacities shown on outriggers do not exceed 85% of the tipping loads and crane capacities shown on tires do not exceed 75% of the tipping loads as determined by SAE Crane Stability Test Code J-785a.
- The crane capacities above the bold lines are based on structural strength or hydraulic limitations.
- Rated lifting capacities include the weight of hook block, slings, bucket, magnet and auxiliary lifting devices. Their weights must be subtracted from the listed rated load to obtain the net load to be lifted. See also deductions for auxiliary head, fly and jib.
- Rated lifting capacities are based on freely suspended loads. No attempt shall be made to move a load horizontally on the ground in any direction.
- Rated lifting capacities are for lift crane service only.
- Do not operate at radii or boom lengths where capacities are not listed. At these positions, the machine can overturn without any load on the hook.
- The maximum loads which can be telescoped are not definable because of variation in loadings and crane maintenance, but it is permissible to attempt retraction and extension within the limits of the load rating chart.
- When either boom length or radius or both are between values listed, the smallest load shown at either the next larger radius or boom length shall be used.
- The user shall operate at reduced ratings to allow for adverse job conditions, such as: soft or uneven ground, out of level conditions, wind, side loads, pendulum action, jerking or sudden stopping of loads, hazardous conditions, experience of personnel, two machine lifts, traveling with loads, electrical wires, etc. Side load on boom, fly or jib is extremely dangerous.
- When making lifts with auxiliary head machinery, the effective length of the boom increases by 2 ft.
- Power sections of boom must be extended equally.
- The least stable rated working area on outriggers is over the side.
- Rated lifting capacities are based on correct reeving. Deduction must be made for excessive reeving. Any reeving over minimum required (see wire rope strength plate) is considered excessive and must be accounted for. Use working range plate to estimate the extra feet of rope then deduct 1 lb. for each foot of wire rope before attempting to lift a load.
- The loaded boom angle combined with the boom length give only an approximation of the operating radius. The boom angle, before loading, should be greater to account for deflection.
- The 37 foot boom length capacities are based on boom fully retracted. If boom is not fully retracted, do not exceed ratings shown for the 45 foot boom length.

Counterweight:
5,800 Lbs. – 2 drum machine
7,800 Lbs. – 1 drum machine

37 Ft. to 115 Ft. Power Boom										33 Ft. Fly With 115 Ft. Boom			
97 Ft.				106 Ft.			115 Ft.			148 Ft.			
Load Rad. in Feet	Loaded Boom Angle (Deg.)	360°		Loaded Boom Angle (Deg.)	360°		Loaded Boom Angle (Deg.)	360°		Loaded Boom Angle (Deg.)	360°		Load Rad. in Feet
		Over Rear	Over Rear		Over Rear	Over Rear		Over Rear	Over Rear				
10													10
12													12
15													15
20	77.5	55,000	55,000	79.0	51,000	51,000	80.0	50,500	50,500				20
25	74.5	52,500	52,500	76.5	45,000	45,000	77.5	44,000	44,000				25
30	71.5	43,500	43,500	73.5	37,500	37,500	75.0	36,100	36,100				30
35	68.5	34,600	34,600	70.5	33,500	33,500	72.5	32,500	32,500	80.0	28,000	28,000	35
40	65.0	31,000	31,000	67.5	29,000	29,000	70.0	27,100	27,100	77.0	26,000	26,000	40
45	61.5	27,500	27,500	64.5	26,300	26,300	67.0	25,300	25,300	75.5	24,000	24,000	45
50	58.0	23,900	23,900	61.5	23,900	23,900	64.5	21,100	21,100	73.5	22,000	22,000	50
60	50.5	16,700	16,700	55.0	16,700	16,700	58.5	16,700	16,700	71.0	19,700	19,700	60
70	41.5	12,000	12,000	47.5	12,000	12,000	52.0	12,000	12,000	67.0	15,800	15,800	70
80	30.5	8,500	8,600	39.0	8,500	8,600	45.0	8,500	8,600	62.5	13,500	13,500	80
90				28.5	6,000	6,200	36.5	6,000	6,200	58.0	11,400	11,400	90
100							26.0	4,000	4,300	53.0	8,100	8,200	100
110										47.5	6,000	6,100	110
120										41.5	4,300	4,400	120
130										34.5	2,900	3,100	130
										26.0	1,800	2,000	130
					0°			20°					26°

Jib Capacities 27 Ft. Jib and 33 Ft. Fly Combination (See Note 19)			
Min. Main Boom Angle	Jib Offset Angle		
	5°	17.5°	30°
80°	11,900	8,600	6,800
75°	10,300	7,600	6,000
70°	9,000	6,700	5,700
65°	7,500	5,700	4,900
60°	6,200	4,800	4,300
55°	5,200	4,000	3,200
50°	3,900	3,300	2,600
45°	2,700	2,600	2,200
40°	1,900	1,800	1,800

Hydraulic Circuit Pressure Settings	
Function	Pressure
Winch	3250 PSI
Outriggers Retract	3000 PSI
Outriggers Extend	2000 PSI
Boom Hoist	3250 PSI
Boom Telescope	3000 PSI
Swing	1200 PSI
Hydraulic Controls	2000 PSI
Steering	1750 PSI
Free Fall Clutch	1500 PSI

- For boom lengths with Fly less than 148 feet, the rated loads are determined by boom angle only in the column headed by 148 feet. For angles not shown, use the next lower boom angle to determine allowable capacity. Lifting from fly tip with 27 foot jib stored beneath is prohibited.
- Do not lower 115 foot boom below 20 degrees. Do not lower 115 foot boom with 33 foot fly below 26 degrees unless main boom length is 89 feet or less. Failure to follow this note will result in a tipping condition.
- The 27 foot jib capacities are based on main boom angle regardless of main boom length. For angles not shown, use next lower boom angle to determine allowable capacity. Capacity values are for 360 degrees on outriggers operation. Warning: Do not lower 27 foot jib in working position below 40 degrees unless main boom length is 78 feet or less, since loss of stability will occur causing a tipping condition. The 27 foot jib capacities are based on structural strength of the boom, fly, and jib combination.
- The tubular jib capacities are based on main boom angle regardless of main boom length. Refer to 43 ft. to 88 ft. Jib Capacity Chart for rated hook loads and additional information when using the tubular jib.
Warning, 43 ft. tubular jib:
Do not lower 43 ft. tubular jib in working position below 45 degrees unless main boom length is 100 ft. or less, since loss of stability will occur causing a tipping condition.
Warning, 58 ft. tubular jib:
Do not lower 58 ft. tubular jib in working position below 50 degrees unless main boom length is 97 ft. or less, since loss of stability will occur causing a tipping condition.
Warning, 73 ft. tubular jib:
Do not lower 73 ft. tubular jib in working position below 55 degrees unless main boom length is 89 ft. or less, since loss of stability will occur causing a tipping condition.
Warning, 88 ft. tubular jib:
Do not lower 88 ft. tubular jib in working position below 60 degrees unless main boom length is 78 ft. or less, since loss of stability will occur causing a tipping condition.
- Crane capacities on tires depend on tire capacity, condition of tires, and tire air pressure. On tire picks require lifting from main boom head only on a smooth and level surface. Lifts with fly, jib, or fly-jib combination erected are prohibited on tires. The boom sections must be extended equally at all times. For stationary operations, maximum boom length is restricted to 69 feet. For Pick and Carry operations, maximum boom length is restricted to 53 feet and maximum permissible speed is 2.5 MPH. The boom must be centered over the rear of machine with two-position travel swing lock engaged and the load must be restrained from swinging.

DEFINITIONS:

- Load Radius: Horizontal distance from a projection of the axis of rotation to the supporting surface before loading to the center of the vertical hoist line or tackle with load applied.
- Loaded Boom Angle: The angle between the boom base section and the horizontal after lifting the load at the rated radius.
- Working Area: Area measured in a circular arc about the center line of rotation as shown on the working area plate.
- Freely Suspended Load: Load hanging free with no direct external force applied except by the hoist line.
- Side Load: Horizontal side force applied to the lifted load either on the ground or in the air.

Crane Capacities On Tires (See Note 21)		
Tire Pressure for 0 to 2.5 MPH, 14RX20, 22 Ply = 120 PSI.		
Load Rad. in Feet	Boom Centered Over Rear	
	69 Ft. Boom Max.	53 Ft. Boom Max.
15	32,300	26,500
20	20,000	20,000
25	13,000	13,000
30	8,400	8,400
35	5,500	5,500
40	3,500	3,500
45	2,000	2,000

Capacity Deductions For Auxiliary Load Handling Equipment	
Picking From Main Boom With:	
Aux. Head Attached	200 Lbs.
33 Ft. Fly Stowed on Base	400 Lbs.
27 Ft. Jib Stowed on Base	400 Lbs.
33 Ft. Fly & 27 Ft. Jib Stowed	800 Lbs.
33 Ft. Fly Erected	4000 Lbs.
33 Ft. Fly & 27 Ft. Jib Erected	10000 Lbs.
43 Ft. Tubular Jib Erected	12000 Lbs.
58 Ft. Tubular Jib Erected	18000 Lbs.
73 Ft. Tubular Jib Erected	25000 Lbs.
88 Ft. Tubular Jib Erected	35000 Lbs.
Picking From 33 Ft. Fly With:	
Aux. Head on Main Boom	200 Lbs.
33 Ft. Jib Stowed on Base	400 Lbs.
27 Ft. Jib Erected	4000 Lbs.
Picking From Tubular Jib With:	
Aux. Head on Main Boom	200 Lbs.
33 Ft. Fly Stowed on Base	400 Lbs.
33 Ft. Fly & 27 Ft. Jib Stowed	800 Lbs.

Link-Belt

HTC-11100

Carrier Mounted Hydraulic Crane
27.5 Ft. Outrigger Spread, 11 Ft. Wide Carrier

maximum allowable lifting capacities
Rated Lifting Capacities in Pounds
360° On Outriggers-Fully Extended
With Fifth Front Outrigger Extended

450 BBL

43 Foot Jib

58 Foot Jib

73 Foot Jib

88 Foot Jib

103 Foot Jib

Main Boom Angle (Deg.)	43 Foot Jib						58 Foot Jib						73 Foot Jib						88 Foot Jib						103 Foot Jib											
	17.5°			30°			45°			17.5°			30°			45°			17.5°			30°			45°			17.5°			30°			45°		
	Ref. Rad.	Load	Rel. Rad.	Ref. Rad.	Load	Rel. Rad.	Ref. Rad.	Load	Rel. Rad.	Ref. Rad.	Load	Rel. Rad.	Ref. Rad.	Load	Rel. Rad.	Ref. Rad.	Load	Rel. Rad.	Ref. Rad.	Load	Rel. Rad.	Ref. Rad.	Load	Rel. Rad.	Ref. Rad.	Load	Rel. Rad.	Ref. Rad.	Load	Rel. Rad.						
80	32	18,300	40	41,000	47	8,000	55	5,300	60	10,100	55	7,100	67	4,000	78	2,500	80	42	7,900	60	4,900	76	2,900	85	1,900	80	43	4,000	61	2,200	81	2,800	97	1,100		
77.5	40	17,200	47	12,300	55	7,500	61	4,900	67	9,100	65	6,500	74	3,200	86	2,400	77.5	53	7,500	69	4,500	83	2,700	96	1,800	77.5	54	3,700	70	2,400	81	2,800	97	1,100		
75	48	16,100	54	11,600	61	7,000	67	4,600	75	11,900	64	8,200	72	3,100	94	2,300	75	62	7,100	78	4,100	92	2,600	106	1,700	75	63	3,400	79	2,400	81	2,800	97	1,100		
72.5	55	15,000	61	11,000	67	6,500	72	4,300	80	10,800	70	7,700	79	4,500	100	2,200	72.5	71	6,500	87	3,800	101	2,500	113	1,600	72.5	72	3,100	88	2,400	81	2,800	97	1,100		
70	62	13,600	67	10,000	73	6,100	78	4,100	87	9,500	72	7,300	85	4,600	91	2,900	70	80	5,900	95	3,500	109	2,300	119	1,500	70	81	2,800	97	1,100	81	2,800	97	1,100		
67.5	66	11,800	72	9,100	78	5,800	83	3,900	91	8,100	83	6,100	91	3,800	97	2,800	67.5	89	5,300	102	3,200	116	2,200	125	1,400	67.5	90	2,400	106	2,400	106	2,400	106	2,400		
65	73	10,300	78	8,200	84	5,500	88	3,800	97	7,000	89	5,200	97	3,700	102	2,700	65	98	4,800	109	2,900	122	2,000	131	1,300	65	99	2,300	115	2,300	115	2,300	115	2,300	115	2,300
62.5	79	9,000	83	7,000	89	5,200	93	3,600	103	6,500	95	5,300	103	3,600	108	2,600	62.5	106	4,000	116	2,600	128	1,900	137	1,200	62.5	107	1,900	107	1,900	107	1,900	107	1,900	107	1,900
60	85	7,500	89	6,000	95	4,800	98	3,500	108	5,800	101	4,400	108	3,400	114	2,500	60	111	3,400	123	2,300	130	1,700	141	1,100	60	111	3,400	123	2,300	123	2,300	123	2,300	123	2,300
55	97	5,700	100	4,800	108	4,300	107	3,200	119	5,000	113	3,300	119	2,900	121	2,400	55	117	2,900	126	2,600	131	1,700	147	1,000	55	117	2,900	126	2,600	126	2,600	126	2,600	126	2,600
50	108	4,100	109	3,700	115	3,600	115	2,900	121	3,000	123	2,700	123	2,700	123	2,700	50	117	2,900	126	2,600	131	1,700	147	1,000	50	117	2,900	126	2,600	126	2,600	126	2,600	126	2,600
45	117	3,500	119	3,800	121	2,900	121	2,900	121	3,000	123	2,700	123	2,700	123	2,700	45	117	2,900	126	2,600	131	1,700	147	1,000	45	117	2,900	126	2,600	126	2,600	126	2,600	126	2,600

WARNING AND OPERATING INSTRUCTIONS

BEFORE OPERATING CRANE, FOLLOW WARNING AND OPERATING INSTRUCTIONS IN THE MAIN BOOM CAPACITY PLATE, READ AND UNDERSTAND THESE ADDITIONAL OPERATING INSTRUCTIONS BELOW. OPERATION WHICH DOES NOT FOLLOW THESE INSTRUCTIONS MAY RESULT IN AN ACCIDENT

- All tubular jib capacities are based on structural strength of boom and jib and do not exceed 85 percent of the tipping loads as determined by SAE Crane Stability Test Code J-763a
- Rated loads are based on main boom angle regardless of main boom length. For angles not shown, use next lower boom angle to determine allowable capacity. **WARNING:** Lifting with heavier loads than the capacities listed is extremely dangerous and prohibited.
- Radius shown is for reference only for fully extended main boom. (115 ft. zero jib with third cable reeved to the tubular jib boom.)
- WARNING:** All tubular jib lengths can be reeved over rear or over side. Do not erect jibs over front of machine.

Link-Belt Construction Equipment Company Lexington, Kentucky 40512

degrees unless main boom length is 89 ft. or less, since loss of stability will occur causing a tipping condition.

- 88 ft. tubular jib: Do not lower 88 ft. tubular jib in working position below 66 degrees unless main boom length is 78 ft. or less, since loss of stability will occur causing a tipping condition.
- 103 ft. tubular jib: Do not lower 103 ft. tubular jib in working position below 62 degrees unless main boom length is 99 ft. or less, since loss of stability will occur causing a tipping condition.

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