

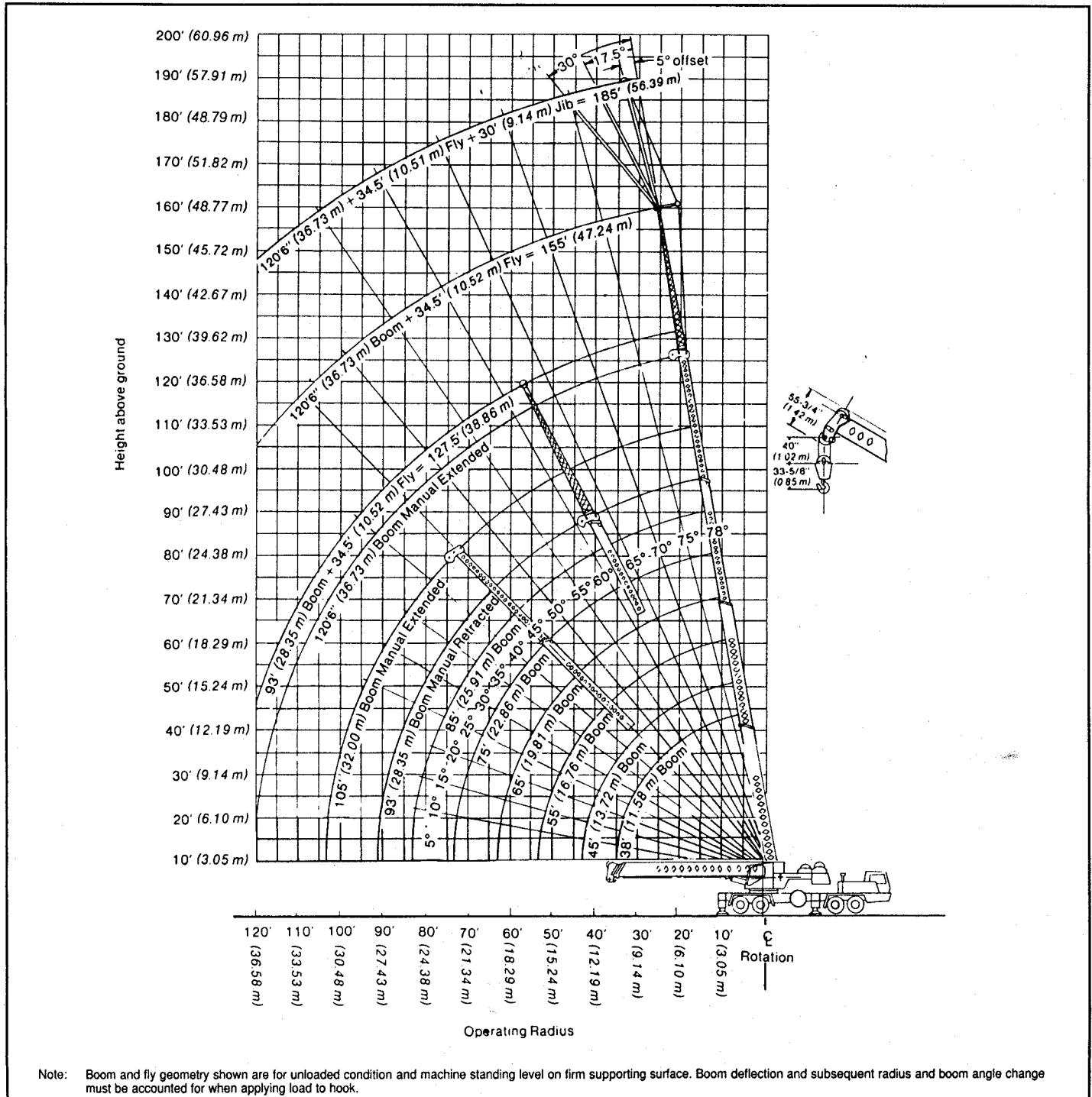
# Lifting Capacities

GENERAL INFORMATION ONLY

Hydraulic Truck Crane

## HTC-1060 60-ton (54.50 metric ton)

38' -- 120' 6" (11.58 m -- 36.73 m) 4-Section Boom



# GENERAL INFORMATION ONLY

Refer to Operating Instructions page 4

## HTC-1060 Lifting Capacities

10' carrier

38' - 120' 6" (11.58m - 36.73m) 4-section boom

38 Ft. - 93 Ft. Boom With Manual Section Retracted																					
38 Ft.				45 Ft.			55 Ft.			65 Ft.			75 Ft.			85 Ft.			93 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°		Loaded Boom Angle (Deg.)	360°		Loaded Boom Angle (Deg.)	360°		Loaded Boom Angle (Deg.)	360°	
		Over Rear	Over Rear		Over Rear	Over Rear		Over Rear	Over Rear		Over Rear	Over Rear		Over Rear	Over Rear		Over Rear				
10	70	120,000	120,000	74	77,900	77,900	77	76,700	76,700												
12	67	92,900	92,900	71	77,900	77,900	75	76,700	76,700	78	76,000	76,000									
15	62	73,600	73,600	67	73,500	73,500	72	73,400	73,400	75	70,000	70,000	77	50,300	50,300						
20	53	53,600	53,600	60	53,600	53,600	66	53,600	53,600	70	53,500	53,500	73	44,300	44,300	76	35,900	35,900	77	31,000	31,000
25	42	41,200	41,200	52	41,200	41,200	60	41,200	41,200	65	41,200	41,200	69	39,000	39,000	72	32,600	32,600	74	27,800	27,800
30	29	32,800	32,800	43	32,800	32,800	53	32,800	32,800	60	32,800	32,800	65	32,800	32,800	69	29,500	29,500	71	24,300	24,300
35				32	25,000	25,300	46	25,000	25,300	55	25,000	25,300	61	25,000	25,300	65	25,000	25,300	68	21,400	21,400
40							39	19,300	20,100	49	19,300	20,100	56	19,300	20,100	61	19,300	20,100	64	18,800	18,800
45							29	15,100	16,000	43	15,100	16,200	51	15,100	16,200	57	15,100	16,200	60	15,100	15,500
50							14	11,800	12,900	36	12,100	13,200	46	12,100	13,200	53	12,100	13,200	57	12,100	13,200
55										27	9,700	10,700	40	9,700	10,700	48	9,700	10,700	53	9,700	10,700
60										13	7,700	8,700	33	7,700	8,800	43	7,700	8,800	49	7,700	8,700
70													13	4,900	5,900	31	4,900	5,900	39	4,900	5,900
80																12	2,900	3,900	28	2,900	3,900
90																					
100																					
Minimum Boom Angle (Deg.) For Indicated Length With No Load. See Warning Note 18.													0°			12°			28°		

Tire Pressure			
Size	Load Range (PLY)	Creep	1 M.P.H.
11X20	G(14)	100 PSI	100 PSI
12X20	G(14)	100 PSI	90 PSI
12.00R20	J(18)	120 PSI	120 PSI

See Set Up Notes No. 3 & 4.

Hydraulic Circuit Pressure Settings		
Circuit	Function	Pressure
Main	Boom Hoist	2,900 PSI
	Wire Rope Hoist	2,750 PSI
Secondary	Inner Mid-Telescope	2,500 PSI
	Swing	1,500 PSI at Port Relief
	Outrigger Outer Mid-Telescope	2,500 PSI
Charge Pump	Winch Brake And Clutch	1,800 PSI

Refer to Operating Instructions page 4

### HTC-1060 Lifting Capacities

10' carrier

38' - 120' 6" (11.58m - 36.73m) 4-section boom

27.5 Ft. Manual Extended			34.5 Ft. Fly With Manual Retracted			34.5 Ft. Fly With Manual Extended			Load Rad. In Feet
105 Ft.		120.5 Ft.	127.5 Ft.		155 Ft.		360°	Over Rear	
Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)			360°
(See Note 15)		(See Note 15)	(See Note 16)		(See Note 17)				10
									12
									15
									20
76	23,500	23,500	78	16,300	16,300				25
73	21,000	21,000	76	16,300	16,300	76	14,200	14,200	30
71	18,400	18,400	74	15,800	15,800	74	13,300	13,300	35
68	16,300	16,300	71	13,600	13,600	72	11,900	11,900	40
65	14,600	14,600	69	12,500	12,500	70	10,900	10,900	45
62	13,400	13,400	66	11,200	11,200	67	9,700	9,700	50
58	12,000	12,300	63	9,900	9,900	65	8,700	8,700	55
55	10,000	11,000	61	8,800	8,800	62	7,900	7,900	60
48	7,100	8,000	55	6,800	7,300	57	6,500	6,500	70
39	5,000	5,900	49	4,800	5,500	51	4,800	5,500	80
29	3,400	4,200	41	3,200	4,000	44	3,200	4,000	90
									100
									50°

Jib Capacities 30 Ft. Jib and 34.5 Ft. Fly Combination (See Note 19)			
Min. Boom Angle	Jib Offset Angle		
	5°	17.5°	30°
78°	4,000	4,000	4,000
75°	4,000	4,000	3,200
70°	4,000	3,000	2,300
65°	3,000	2,000	1,600
60°	2,000	1,000	1,000

Jib Capacities Are Based On Structural Strength

Crane Capacities On Tires (See Set Up Note 3)	
Boom Centered Over Rear	
Load Rad. (Ft.)	1 M.P.H.
10	27,000
12	25,100
15	22,200
20	17,900
25	13,400
30	10,100
35	7,100
40	5,200
45	3,700
50	2,500

Deductions For Auxiliary Load Handling Equipment	
Picking From Main Boom With	
Aux. Head	200 lbs.
Jib Stowed	700 lbs.
Fly Stowed	700 lbs.
Fly Erected	2,000 lbs.
Fly & Jib Stowed	1,400 lbs.
Fly & Jib Erected	6,100 lbs.
Picking From 34.5 Ft. Fly With	
Jib Erected	2,000 lbs.
Jib Stowed	700 lbs.

**Warning and Operating Instructions HTC-1060**

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 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. 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. Boom sections must be extended equally. Capacities on tires are restricted to a maximum speed of 1 M.P.H. the boom must be centered over rear with swinglock engaged and the load must be restrained from swinging. Lifts with manual extended, fly or fly-jib combination erected are prohibited on tires.
4. When making lifts on rubber, tires must be inflated to the recommended pressure.
5. Outriggers must be set before swinging boom to over side position as defined on working area plate. When installing or removing counterweight, use fully retracted boom only. Do not swing counterweight beyond a 25 ft. radius. Machine must be on outriggers during this operation.
7. For required parts of line, see wire rope strength plate.

**OPERATION:**

1. Rated lifting capacities at rated radius shall not be exceeded.

2. 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 7,000 pounds or 80% of rated lifting capacity, whichever is less. For magnet and magnet operation, maximum boom length is restricted to 55 feet and the boom angle is restricted to a minimum of 35°. Manual extended, fly and jib 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 and 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 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 rated loads for the manual extended are determined by boom angle only for boom lengths other than 105 ft. and 120.5 ft. as follows: For boom lengths less than 105 ft., the rated loads are determined by boom angle only in the column headed by 105 ft. For boom lengths between 105 ft. and 120.5 ft., the rated loads are determined by boom angle only in the column headed by 120.5 ft., manual extended. For angles not shown use the next lower boom angle to determine allowable capacity.
16. For boom lengths with fly less than 127.5 ft. with manual retracted, the rated loads are determined by boom angle only in the column headed by 127.5 ft. For angles not shown, use the next lower boom angle to determine allowable capacity.
17. For boom lengths with fly less than 155 ft., with manual extended, the rated loads are determined by boom angle only in the column headed by 155 ft. For angles not shown, use the next lower boom angle to determine allowable capacity.
18. Do not lower indicated boom length below boom angle specified at bottom of capacity chart. Failure to follow this note will result in a tipping condition.
19. The 30 ft. 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 30 ft. jib in working position below 60 degrees unless boom is fully retracted.
20. The 38 ft. boom length capacities are based on boom fully retracted. If not fully retracted, do not exceed ratings for the 45 ft. boom length.

**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.

**Working Areas HTC-1060**

