



50 TON

Hydraulic Truck Crane



Boom Lengths: 35' to 110'
Jib Lengths: 33' to 58'



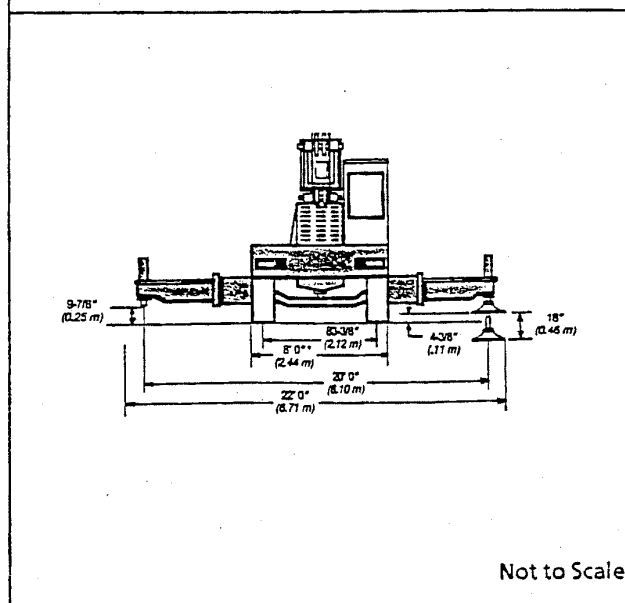
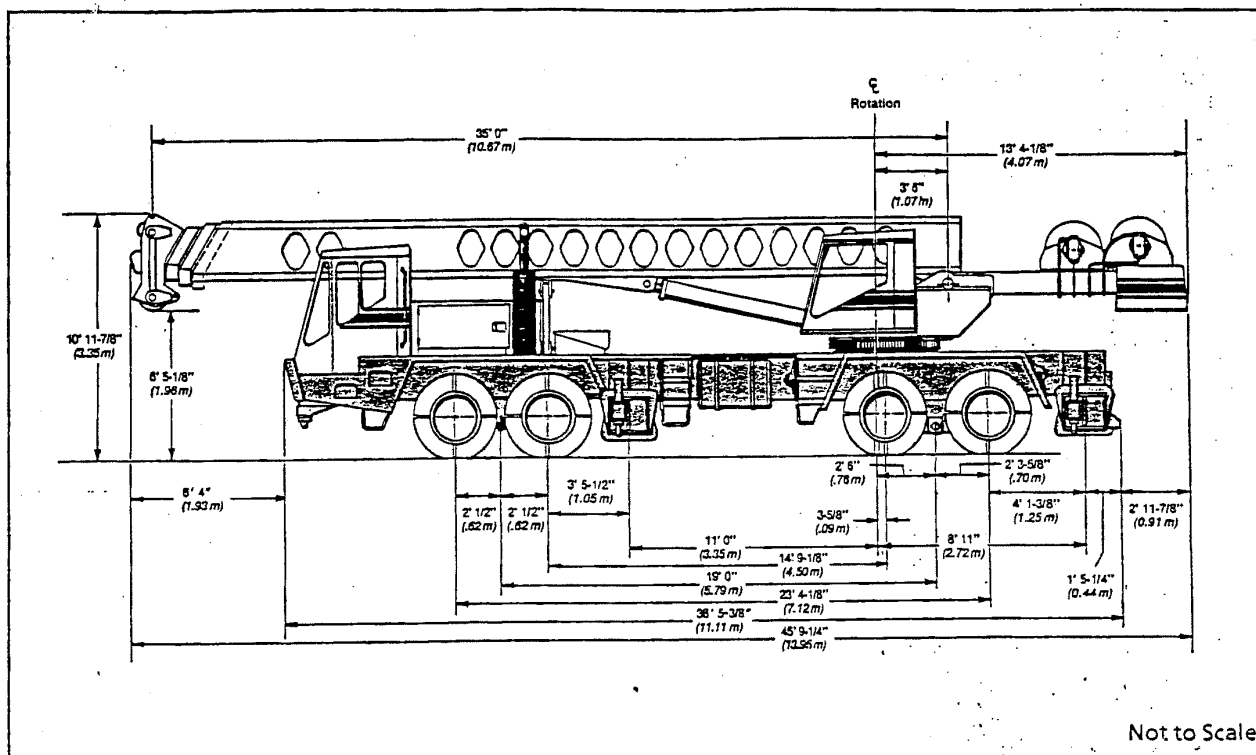
Notes:





Specifications

Hydraulic Truck Crane

HTC-850**50-Ton (45.36 metric ton)**

General dimensions	feet	meters
Tailswing of counterweight	13' 8-5/8"	4.18
Ground clearance — Standard tires	8-1/2"	.22
Ground clearance — Optional tires	9"	.23
Turning radius — Standard tires	49' 0"	14.93
Turning radius — (wall to wall) (outside front bumper)	55' 7"	16.94

Litho in U.S.A 1/92

- 1 -

#5175 (supersedes #5117)

50TM1





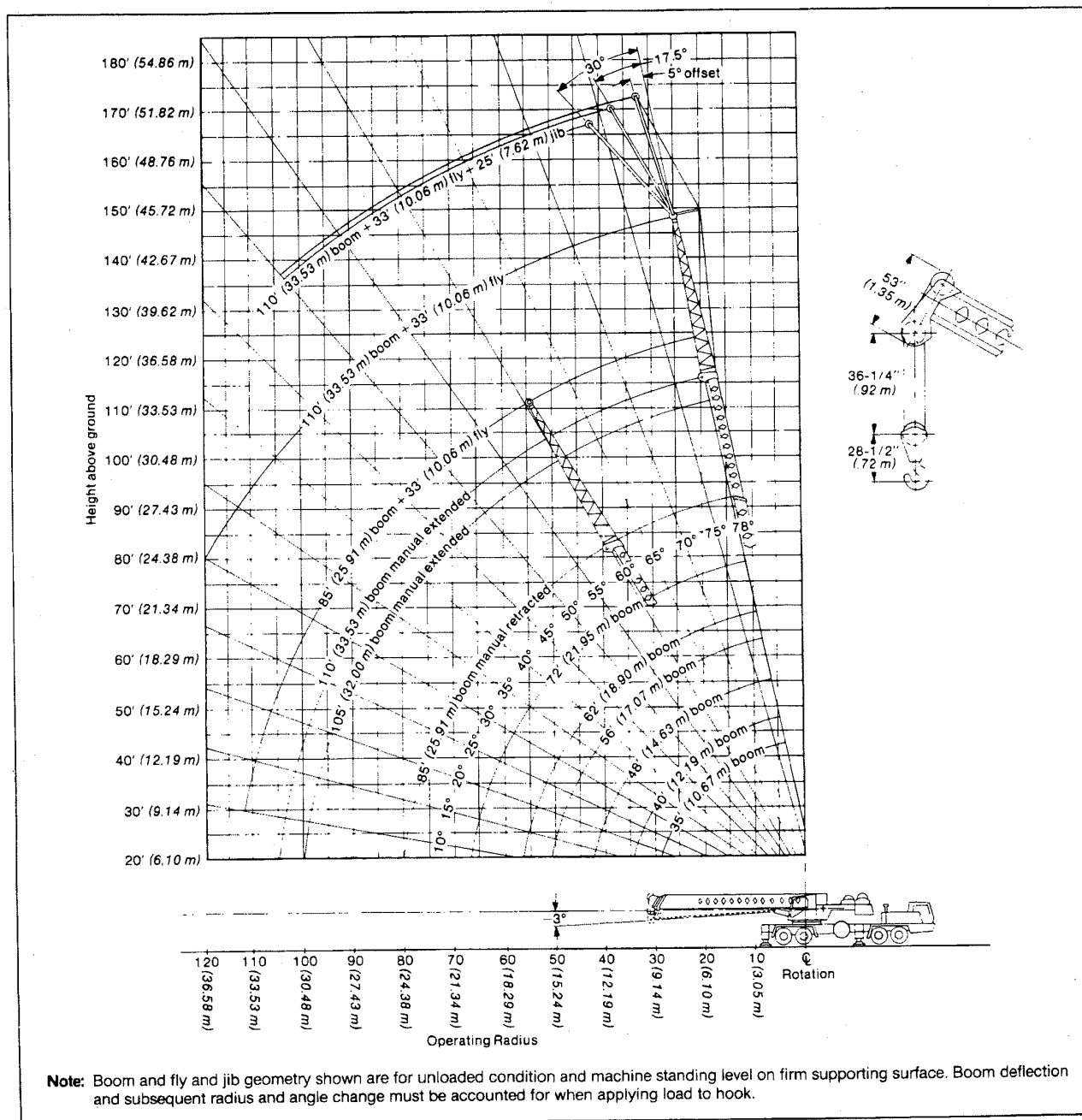
Link-Belt
CONSTRUCTION EQUIPMENT

Lifting Capacities Hydraulic Crane

PCSA Class 10-154

HTC-850 50-ton (45.36 metric ton)

4-section boom



Litho in U.S.A. 4/86

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.

#6070

50TM2



HTC-850 Lifting Capacities

8' (2.44 m) carrier

35'-110' (10.67-33.53 m) 4-section boom

Refer to Operating Instructions page 4

Capacities On Outriggers① Manual Section Retracted																77' (23.47 m) boom With 33' (10.06 m) Fly			85' (25.91 m) boom With 33' (10.06 m) Fly		
Load radius	35' (10.67 m)		40' (12.19 m)		48' (14.63 m)		56' (17.07 m)		62' (18.90 m)		72' (21.95 m)		85' (25.91 m)		110' (33.52 m)②			118' (35.96 m)②			
	Side	Rear	Side	Rear	Side	Rear	Side	Rear	Side	Rear	Side	Rear	Side	Rear	Angle	Side	Rear	Angle	Side	Rear	
10' 3.05 m	100,000 45 360	100,000 45 360	72,100 32 705	72,100 32 705	70,800 32 115	70,800 32 115	68,000 30 845	68,000 30 845							See Note ①			See Note ①			
12' 3.66 m	92,200 41 822	92,200 41 822	71,800 32 568	71,800 32 568	70,800 32 115	70,800 32 115	68,000 30 845	68,000 30 845	67,200 30 482	67,200 30 482											
15' 4.57 m	73,100 33 158	73,100 33 158	68,700 31 162	68,700 31 162	63,300 28 713	63,300 28 713	63,300 28 713	63,300 28 713	58,800 26 672	58,800 26 672	50,000 22 680	50,000 22 680									
20' 6.10 m	53,300 24 177	53,300 24 177	53,000 24 041	53,000 24 041	53,000 24 041	53,000 24 041	53,000 24 041	53,000 24 041	48,500 22 000	48,500 22 000	42,100 19 097	42,100 19 097	36,200 16 420	36,200 16 420							
25' 7.62 m	37,800 17 055	42,000 19 051	37,800 17 055	42,000 19 051	37,800 17 055	42,000 19 051	37,800 17 055	42,000 19 051	37,800 17 055	41,000 18 598	36,300 16 466	36,300 16 466	30,000 13 608	30,000 13 608	77.0	22,200 10 070	22,200 10 070	77.0	18,500 8 392	18,500 8 392	
30' 9.14 m			27,000 12 247	31,600 14 334	27,000 12 247	31,600 14 334	27,000 12 247	31,600 14 334	27,000 12 247	31,600 14 334	27,000 12 247	31,500 14 288	24,700 11 204	24,700 11 204	75.0	22,200 10 070	22,200 10 070	75.0	17,500 7 938	17,500 7 938	
35' 10.67 m					20,100 9 117	24,400 11 068	20,100 9 117	24,400 11 068	20,100 9 117	24,400 11 068	20,100 9 117	24,400 11 068	20,100 9 117	22,100 10 025	72.0	20,200 9 163	20,200 9 163	73.0	15,500 7 031	15,500 7 031	
40' 12.19 m					15,400 6 985	19,500 8 845	15,400 6 985	19,500 8 845	15,400 6 985	19,500 8 845	15,400 6 985	19,500 8 845	15,400 6 985	18,900 8 573	69.0	17,700 8 029	18,900 8 573	71.0	13,900 6 305	13,900 6 305	
45' 13.72 m							12,200 5 534	15,600 7 076	12,200 5 534	15,600 7 076	12,200 5 534	15,600 7 076	12,200 5 534	15,600 7 076	67.0	14,400 6 532	17,300 7 847	68.0	12,400 5 625	12,400 5 625	
50' 15.24 m							9,700 4 400	12,800 5 806	9,700 4 400	12,800 5 806	9,700 4 400	12,800 5 806	9,700 4 400	12,800 5 806	64.0	11,900 5 398	15,000 6 804	65.0	10,900 4 944	10,900 4 944	
55' 16.76 m									7,800 3 538	10,700 4 854	7,800 3 538	10,700 4 854	7,800 3 538	10,700 4 854	61.0	9,900 4 491	12,800 5 806	63.0	9,600 4 355	9,600 4 355	
60' 18.29 m											6,300 2 858	8,800 3 992	6,300 2 858	8,800 3 992	57.0	8,300 3 765	10,900 4 944	60.0	8,100 3 674	8,600 3 901	
65' 19.81 m											5,000 2 268	7,500 3 402	5,000 2 268	7,500 3 402	54.0	7,000 3 175	9,400 4 264	57.0	6,800 3 084	7,700 3 493	
70' 21.34 m													4,000 1 814	6,300 2 858	50.0	5,900 2 676	8,100 3 674	54.0	5,700 2 586	6,900 3 130	
80' 24.38 m														2,200 998	43.0	4,200 1 905	6,100 2 767	47.0	3,900 1 769	5,600 2 540	
90' 27.43 m															34.0	2,800 1 270	4,600 2 087	40.0	2,600 1 179	4,400 1 996	
100' 30.48 m															22.0	1,800 816	3,500 1 588	31.0	1,600 726	3,300 1 497	

Note: For 360 capacities, use the over side capacities with the bumper outrigger set in proper working position.

① Boom sections must be extended equal distances.

② Intermediate capacities for boom plus fly are permissible; See Operating Instructions Number 16.

Main Boom Capacities① On Tires												
Load radius		Bias Tires				Radials Tires				Crane capacities on tires depend on tire capacity, condition of tires, and tire pressures.		
		Creep® over rear only		1 mph. (1.61 kph) over rear only		Creep® over rear only		1 mph. (1.61 kph) over rear only				
Feet	meters	Pounds	Kg	Pounds	Kg	Pounds	Kg	Pounds	Kg			
10	3.05	34,800	15 785	22,000	9,979	26,800	12,156	21,600	9,798			
12	3.66	32,400	14,697	20,500	9,299	25,000	11,340	20,100	9,117			
15	4.57	29,100	13,200	18,400	8,346	22,500	10,206	18,100	8,210			
20	6.10	18,900	8,573	14,800	6,713	18,300	8,301	14,600	6,623			
25	7.62	13,200	5,988	11,900	5,398	12,800	5,806	11,700	5,307			
30	9.14	9,400	4,264	9,200	4,173	9,100	4,128	9,100	4,128			
35	10.67	6,900	3,130	6,800	3,084	6,600	2,994	6,600	2,994			

① See Operating Instruction; Set-Up Number 4

② See Operating Instruction; Set-Up Number 3

Wire rope size and type

Wire rope application	Size and type used	Wire rope description
Main winch Auxiliary winch	3/4" (19 mm) diameter, Type "N" 3/4" (19 mm) diameter, Type "N"	Type "N" - 6 x 25 (6 x 19 class) filler wire, extra improved plow steel, preformed, independent wire rope core, right lay, regular lay.

**HTC-850 Lifting Capacities**

8' (2.44 m) carrier

35'-110' (10.67-33.53 m) 4-section boom

Refer to Operating Instructions page 4

Capacities On Outriggers Manual Section Extended									
Load radius	105' (32.00 m) ① ③						110' (33.53 m) Boom With 33' (10.06 m) Fly		
	105' (32.00 m) ① ③			110' (33.53 m) ①			143' (43.58 m) ②		
	Angle	Side	Rear	Angle	Side	Rear	Angle	Side	Rear
	See Note ①			See Note ①			See Note ②		
25' 7.62 m	77°	20,200 9163	20,200 9163	77°	19,000 8618	19,000 8618			
30' 9.14 m	74°	20,200 9163	20,200 9163	75°	18,500 8392	18,500 8392			
35' 10.67 m	72°	19,500 8845	19,500 8845	73°	17,900 8119	17,900 8119			
40' 12.19 m	69°	17,200 7802	18,000 8165	70°	16,000 7258	16,000 7258			
45' 13.72 m	66°	14,000 6350	16,200 7348	67°	13,900 6305	14,100 6396	77°	9,400 4264	9,400 4264
50' 15.24 m	63°	11,400 5171	14,600 6623	64°	11,300 5126	12,500 5670	75°	9,400 4264	9,400 4264
55' 16.76 m	60°	9,400 4264	12,400 5625	61°	9,400 4264	11,100 5035	73°	9,000 4082	9,000 4082
60' 18.29 m	56°	7,900 3583	10,500 4763	58°	7,800 3538	10,000 4536	71°	8,400 3810	8,400 3810
65' 19.81 m	53°	6,800 2994	9,000 4082	55°	6,500 2948	8,900 4037	69°	8,000 3629	8,000 3629
70' 21.34 m	49°	5,500 2495	7,800 3538	51°	5,400 2449	7,700 3483	67°	7,300 3311	7,300 3311
80' 24.38 m	40°	3,700 1678	5,800 2631	44°	3,600 1633	5,700 2586	65°	6,500 2948	6,500 2948
90' 27.43 m	30°	2,400 1089	4,300 1950	35°	2,300 1043	4,200 1905	62°	5,700 2586	5,700 2586
100' 30.48 m							57°	4,500 2041	4,600 2087
110' 33.53 m							52°	3,200 1452	3,600 1633
							47°	2,200 998	2,800 1270
							40°		2,100 953

Note: For 360° capacities, use the over side capacities with the bumper outrigger set in proper working position.

① Capacities for boom with manual section extended can be extended or retracted, but are based on boom angle only: See Operating Instructions Number 15.

② Capacities for boom plus fly can be extended or retracted, but are based on boom angle only. See Operating Instructions Number 17.

③ Capacities are shown for 4-section boom with manual extended and with boom retracted to 105' (32.00 m)

Jib Capacities			
33' (10.06 m) fly plus 25' (7.62 m) jib			
Boom angle	Jib Offset		
	5°	17.5°	30°
78°	5,100 2313	5,100 2313	4,200 1905
75°	5,100 2313	5,100 2313	4,000 1814
70°	5,100 2313	4,900 2223	3,600 1633
65°	4,500 2041	4,100 1860	3,400 1542
60°	2,900 1315	2,600 1179	2,400 1089
55°	1,800 816	1,600 726	1,500 680

Capacity Deductions for Auxiliary Load Handling Equipment	
Aux. Head	200 lb. (91 kg)
Jib Stowed	600 lb. (272 kg)
Fly Stowed	700 lb. (318 kg)
Fly Erected	1700 lb. (771 kg)
Fly & Jib Stowed	1300 lb. (590 kg)
Fly & Jib Erected	4300 lb. (1951 kg)
Picking From 33 Ft. (10.66 m) Fly With	
Jib Erected	2000 lb. (907 kg)
Jib Stowed	600 lb. (272 kg)

Drum wire rope capacities

Wire rope layer	Main and auxiliary drum 17" (0.43 m) root diameter smooth and grooved lagging			
	3/4" (19 mm) wire rope			
	Rope per layer		Total wire rope	
	Feet	meters	Feet	meters
1	97	29.57	97	29.57
2	111	33.83	208	63.40
3	114	34.75	322	98.15
4	122	37.19	444	135.33
5	130	39.62	574	174.96
6	139	42.37	713	217.32
7	140	42.67	853	259.99

Line Speeds and Pulls

Layer	Speed	Main or auxiliary winch -17" (0.43 m) drum			
		Line Speeds		Available Line Pulls	
		F.p.m.	m/min.	Lbs.	kgs.
First	Low	172	52.43	15,870	7199
	High	364	110.95	7,520	3411
Second	Low	187	57.00	14,630	6636
	High	394	120.09	6,930	3143
Third	Low	201	61.26	13,580	6160
	High	425	129.54	6,430	2917
Fourth	Low	216	65.84	12,660	5743
	High	456	138.99	6,000	2722
Fifth	Low	230	70.10	11,860	5380
	High	487	148.44	5,620	2549
Sixth	Low	245	74.68	11,160	5062
	High	517	157.58	5,280	2395
Seventh	Low	260	79.25	10,530	4776
	High	548	167.03	4,990	2264

Hydraulic Circuit Pressure Settings		
Circuit	Function	Pressure
Main	Boom hoist	2,900 p.s.i. (200.0 Bars)
	Wire rope hoist	2,750 p.s.i. (189.66 Bars)
Secondary	Swing	1,500 p.s.i. (103.45 Bars) at port relief
	Inner-mid telescope	2,500 p.s.i. (172.41 Bars)
	Outer-mid telescope	2,500 p.s.i. (172.41 Bars)
	Outriggers	2,500 p.s.i. (172.41 Bars)
Charge Pump	Winch brake and clutch	1,500 p.s.i. (103.45 Bars)

50TM4

