

# AMERICAN HC 50 Hydraulic Crawler Crane



#### **FEATURES**

- 50 tons (45.4 mt) max lift capacity
- 160 ft. (48.8 m) max lift crane boom length
- 130+40 ft. (39.6+12.2 m) max lift crane boom & jib length
- Power up/down and freefall on main, auxiliary and optional third drum
- 32,400 lbs. (14 697 kg) max single line pull, 500 fpm (153 mpm) max line speed
- Swing speed 3.5 rpm
- Quiet, comfortable operator's cab with excellent viewing range
- Wet type multi-disc, spring set, hydraulically released parking brake for safe, easy control and maintenance
- Variable displacement axial piston hydraulic motor for both main and auxiliary drum drive
- Superior transportability: 10 ft. 10 in. (3.3 m) width 10 ft. 8 in. (3.25 m) height
- 64,720 lbs. (29 357 kg) transport weight including sideframes and boom inner
- Hydraulic counterweight removal system simplifies installation and removal

# simple, available and cost effective™

Machines shown may have optional equipment.



# AMERICAN HC 50

# Hydraulic Crawler Crane 46 HI Boom

## **LIFT RATINGS IN POUNDS**

# With 46HI Angle Boom, 3 Sheave Tip, 39,000 Pound Counterweight

Boom Length	Radius (Feet)	Boom Angle (Degrees)	Side Frames Extended (Pounds)	From Boom Pt. to Ground (Feet)
40' (12.2M)	10 12 15 20 25 30 35 40	80.3 77.4 73.0 65.3 57.1 48.1 37.5 23.4	100,000* 100,000* 93,390 59,020 42,780 33,370 27,190 22,840	45 44 44 42 39 35 30 21
50' (15.2M)	12 15 20 25 30 35 40 45 50	80.0 100,000* 76.4 93,310 70.5 58,910 64.2 42,640 57.7 33,230 50.6 27,040 42.7 22,670 33.5 19,460 20.9 16,960		55 54 53 50 48 44 39 33 23
60' (18.3M)	13 15 20 25 30 35 40 45 50 55 60	80.7 78.7 73.8 68.8 63.6 58.1 52.3 46.0 38.9 30.5 19.0	100,000* 93,230 58,800 42,510 33,100 26,890 22,520 19,330 16,820 14,820 13,190	65 64 63 61 59 56 53 49 43 36 25
70' (21.3M)	15 20 25 30 35 40 45 50 55 60 65 70	80.4 76.2 71.9 67.6 63.0 58.4 53.4 48.1 42.4 35.9 28.1 17.6	93,100 58,630 42,320 32,900 26,700 22,320 19,140 16,630 14,620 12,990 11,640 10,500	74 73 72 70 68 65 62 58 53 46 38 27
80' (24.4M)	16 20 25 30 35 40 45 50 55 60 65 70 75 80	80.8 77.9 74.2 70.5 66.6 62.7 58.6 54.3 49.7 44.8 39.5 33.5 26.3 16.5	83,260 58,520 42,190 32,780 26,560 22,180 19,010 16,500 14,490 12,860 11,510 10,370 9,390 8,560	84 84 82 81 79 76 74 70 66 62 56 50 41 28
90' (27.4M)	18 20 25 30 35 40	80.6 79.3 76.0 72.7 69.4 65.9	68,630 58,360 41,990 32,580 26,360 21,960	94 94 93 91 90 88

Boom Length	Radius (Feet)	Boom Angle (Degrees)	Side Frames Extended (Pounds)	From Boom Pt. to Ground (Feet)
90' (con't)	45 50 55 60 65 70	62.4 58.7 54.9 50.9 46.7 42.2	18,820 16,290 14,290 12,650 11,300 10,160	85 82 79 75 71 66
	75 80 85 90	37.2 31.5 24.8 15.5	9,180 8,330 7,610 6,970	60 52 43 29
100' (30.5M)	19 20 25 30 35 40 45 50 66 65 70 75 80 85 90 95	81.0 80.4 77.5 74.5 71.5 68.5 65.3 62.2 58.9 55.4 51.9 48.2 44.2 39.9 35.2 29.9 23.5 14.7	62,850 58,180 41,800 32,400 26,170 21,770 18,630 16,110 14,100 12,460 11,110 9,970 8,980 8,140 7,400 6,750 6,180 5,680	104 104 103 102 100 98 96 94 91 88 84 80 75 70 63 55 45 31
110' (33.5M)	21 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110	80.7 78.6 75.9 73.2 70.5 67.7 64.9 62.0 59.0 59.0 52.7 49.3 45.8 42.0 38.0 33.5 28.5 22.4	53,840 41,600 32,200 25,960 21,550 18,430 15,900 13,880 12,250 10,890 9,750 8,760 7,920 7,180 6,540 5,960 5,450 4,990 4,580	114 113 112 111 109 107 105 102 100 96 93 89 84 79 73 66 58 47 32
120' (36.6M)	23 25 30 35 40 45 50 55 60 65 70 75 80 85	80.5 79.6 77.1 74.7 72.2 69.7 67.1 64.5 61.8 59.0 56.2 53.3 50.3 47.1	46,830 41,420 32,040 25,780 21,370 18,250 15,720 13,720 12,070 10,720 9,570 8,580 7,740 7,010	124 123 122 121 120 118 116 114 111 108 105 102 98 93

Boom Length	Radius (Feet)	Boom Angle (Degrees)	Side Frames Extended (Pounds)	From Boom Pt. to Ground (Feet)
120' (con't)	90 95 100 105 110 115 120	43.7 40.2 36.3 32.0 27.2 21.4 13.4	6,350 5,770 5,260 4,800 4,380 4,020 3,680	88 83 76 69 60 49 33
130' (39.6M)	24 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130	80.8 80.4 78.1 75.9 73.6 71.3 68.9 66.6 64.1 61.7 59.1 56.5 53.8 51.0 48.2 45.1 41.9 38.5 34.8 30.8 26.1 20.6 12.9	43,780 41,220 31,830 25,570 21,160 18,050 15,520 13,500 11,870 10,500 9,350 8,370 7,520 6,780 6,130 5,550 5,040 4,580 4,160 3,790 3,440 3,140 2,850	134 134 133 131 130 129 127 125 122 120 117 114 110 107 102 98 92 86 80 72 63 51 34
140' (42.7M)	26 30 35 40 45 50 65 70 75 80 85 90 95 100 115 125 130 135 140	80.7 79.0 76.9 74.8 72.7 70.5 68.3 66.1 63.8 61.5 59.2 56.8 54.3 51.7 49.1 46.3 43.4 40.3 37.1 33.5 29.6 25.2 19.8 12.4	38,920 31,640 25,370 20,950 17,850 15,310 13,300 11,660 10,290 9,150 8,160 7,320 6,570 5,920 5,340 4,360 3,940 3,560 3,220 2,910 2,630 2,360 1,980*	144 143 142 141 139 137 136 133 131 128 126 123 119 115 111 107 102 96 90 83 75 65 53 36
150' (45.7M)	27 30 35 40 45 50	80.9 79.7 77.8 75.8 73.8 71.8	36,640 31,430 25,150 20,730 17,650 15,110	154 153 152 151 149 148

Form No. HC-50-CR-46HI

# **LIFT RATINGS IN POUNDS (continued)**

# With 46HI Angle Boom, 3 Sheave Tip, 39,000 Pound Counterweight

Boom Length	Radius (Feet)	Boom Angle (Degrees)	Side Frames Extended (Pounds)	From Boom Pt. to Ground (Feet)
150'	55	69.8	13,080	146
(con't)	60	67.8	11,440	144
` ′	65	65.7	10,080	142
	70	63.6	8,920	140
	75	61.4	7,940	137
	80	59.2	7,090	134
	85	57.0	6,340	131
	90	54.7	5,700	128
	95	52.3	5,110	124
	100	49.8	4,600	120
	105	47.3	4,130	116
	110	44.7	3,710	111
	115	41.9	3,340	106
	120	38.9	2,990	100
	125	35.8	2,680	93
	130	32.3	2,390	86

Boom Length	Radius (Feet)	Boom Angle (Degrees)	Side Frames Extended (Pounds)	From Boom Pt. to Ground (Feet)		
150' (con't)	135 140 145 150	28.6 24.3 19.1 12.0	2,120 1,880 1,660 1,080*	77 67 55 37		
160' (48.8M)	29 30 35 40 45 50 55 60 65 70	80.7 80.4 78.6 76.7 74.9 73.0 71.1 69.2 67.3 65.3 63.4	32,830 31,240 24,960 20,540 17,460 14,920 12,900 11,250 9,880 8,740 7,750	163 162 161 160 158 157 155 153 151		

Boom Length	Radius (Feet)	Boom Angle (Degrees)	Side Frames Extended (Pounds)	From Boom Pt. to Ground (Feet)
160'	80	61.3	6,900	146
(con't)	85	59.3	6,160	143
	90	57.2	5,500	140
	95	55.0	4,920	137
	100	52.8	4,400	133
	105	50.5	3,940	129
	110	48.2	3,520	125
	115	45.7	3,140	120
	120	43.2	2,800	115
	125	40.5	2,470	109
	130	37.6	2,180	103
	135	34.6	1,920	96
	140	31.3	1,670	89
	145	27.7	1,450	80
	150	23.5	1,240	69

# LIFT RATINGS IN POUNDS

## With 46HI Angle Boom, #9 Angle Jib and 39,000 Pound Counterweight

Boom and	Jib	5.0 Deg Offset		15.0 [	Deg Offset	25.0 Deg Offset	
Jib Length	Radius (Feet)	Boom Angle	Ratings (Pounds)	Boom Angle	Ratings (Pounds)	Boom Angle	Ratings (Pounds)
20' 6.1M) JIB & 50' (15.2M) BOOM	17 20 25 30 35 40 50	80.4 77.9 73.8 69.5 65.1 60.6 50.7	18,250* 18,250* 18,250* 18,250* 18,250* 18,250* 17,050	80.6 76.4 72.1 67.7 63.2 53.2	18,250* 18,250* 18,250* 18,250* 18,250* 17,060	78.9 74.6 70.1 65.5 55.3	18,250* 18,250* 18,250* 18,250* 17,060
20' (6.1M) JIB & 60' (18.3M) BOOM	18 20 25 30 35 40 50	80.8 79.4 75.8 72.1 68.4 64.5 56.3 47.3	18,250* 18,250* 18,250* 18,250* 18,250* 18,250* 16,820 13,180	78.1 74.5 70.7 66.8 58.6 49.4	18,250* 18,250* 18,250* 18,250* 16,820 13,180	80.4 76.6 72.8 68.8 60.5 51.1	18,250* 18,250* 18,250* 18,250* 16,820 13,180
20' (6.1M) JIB & 70' (21.3M) BOOM	20 25 30 35 40 50 60 70	80.6 77.4 74.2 70.9 67.5 60.5 52.9 44.4	18,250* 18,250* 18,250* 18,250* 18,250* 16,560 12,920 10,410	79.5 76.2 72.9 69.5 62.5 54.8 46.3	18,250* 18,250* 18,250* 18,250* 16,560 12,920 10,410	78.2 74.8 71.4 64.2 56.5 47.7	18,250* 18,250* 18,250* 16,560 12,920 10,420
20' (6.1M) JIB & 80' (24.4M) BOOM	21 25 30 35 40 50 60 70 80	80.9 78.7 75.8 72.8 69.8 63.6 57.1 50.0 42.0	18,250* 18,250* 18,250* 18,250* 18,250* 16,350 12,710 10,210 8,400	80.5 77.6 74.7 71.7 65.4 58.9 51.7 43.6	18,250* 18,250* 18,250* 18,250* 16,350 12,710 10,210 8,400	79.4 76.4 73.4 67.1 60.4 53.1 44.9	18,250* 18,250* 18,250* 16,360 12,710 10,220 8,400
20' (6.1M) JIB & 90' (27.4M) BOOM	23 25 30 35 40 50 60 70 80 90	80.7 79.7 77.1 74.4 71.7 66.2 60.4 54.2 47.5 40.0	18,250* 18,250* 18,250* 18,250* 18,250* 16,120 12,460 9,960 8,150 6,760	78.8 76.1 73.4 67.8 62.0 55.8 49.0 41.4	18,250* 18,250* 18,250* 16,120 12,470 9,970 8,150 6,760	80.4 77.7 74.9 69.3 63.4 57.1 50.3 42.5	18,250* 18,250* 18,250* 16,120 12,470 9,970 8,150 6,760

Boom and Jib 5.0 Deg Off			eg Offset	15.0 [	eg Offset	25.0 🛭	eg Offset
Jib Length	Radius (Feet)	Boom Angle	Ratings (Pounds)	Boom Angle	Ratings (Pounds)	Boom Angle	Ratings (Pounds)
20' (6.1M) JIB & 100' (30.5M) BOOM	25 30 35 40 50 60 70 80 90	80.5 78.1 75.7 73.3 68.2 63.0 57.6 51.7 45.4 38.2	18,250* 18,250* 18,250* 18,250* 15,880 12,240 9,740 7,910 6,520 5,440	79.7 77.3 74.8 69.8 64.5 59.0 53.2 46.8 39.5	18,250* 18,250* 18,250* 15,880 12,240 9,740 7,910 6,520 5,440	78.7 76.2 71.2 65.9 60.3 54.4 47.9 40.5	18,250* 18,250* 15,880 12,240 9,740 7,910 6,520 5,440
20' (6.1M) JIB & 110' (33.5M) BOOM	26 30 35 40 50 60 70 80 90 100	80.8 79.1 76.8 74.6 70.0 65.2 60.3 55.1 49.6 43.5 36.6	18,250* 18,250* 18,250* 18,250* 15,650 11,990 9,490 7,660 6,270 5,180 4,310	80.5 78.3 76.0 71.4 66.6 61.7 56.5 50.9 44.8 37.8	18,250* 18,250* 18,250* 15,650 11,990 9,490 7,660 6,270 5,190 4,310	79.6 77.3 72.7 67.9 62.9 57.6 51.9 45.7 38.7	18,250* 18,250* 15,650 12,000 9,490 7,660 6,270 5,190 4,320
20' (6.1M) JIB & 120' (36.6M) BOOM	28 30 35 40 50 60 70 80 90 100 110	80.7 79.8 77.8 75.7 71.5 67.1 62.6 57.9 53.0 47.7 41.8 35.2	18,250* 18,250* 18,250* 18,250* 15,440 11,790 9,280 7,450 6,060 4,970 4,100 3,380	79.1 77.0 72.8 68.4 63.9 59.2 54.2 48.9 43.0 36.3	18,250* 18,250* 15,440 11,790 9,280 7,450 6,060 4,980 4,100 3,380	80.4 78.3 74.0 69.6 65.0 60.3 55.2 49.8 43.9 37.1	18,250* 18,250* 15,440 11,790 9,290 7,450 6,070 4,980 4,100 3,380
20' (6.1M) JIB & 130' (39.6M) BOOM	29 30 35 40 50 60 70 80 90	80.9 80.5 78.6 76.7 72.7 68.7 64.6 60.3 55.8	18,250* 18,250* 18,260* 18,250* 15,210 11,550 9,050 7,220 5,820	79.9 77.9 74.0 69.9 65.8 61.5 57.0	18,250* 18,250* 15,210 11,550 9,050 7,220 5,830	79.1 75.1 71.0 66.8 62.5 57.9	18,250* 15,210 11,550 9,050 7,220 5,830

### MAXIMUM BOOM & JIB SELF-ERECTION DATA - 46HI BOOM

	Over The End &	Over The Side
	Boom Length (Ft.)	Jib Length (Ft.)
	160	0
#9 JIB	150	0
	140	20
	130	40

#### **SPECIFICATIONS**

# LOAD HOISTING INFORMATION (7/8" DIA. IPS WIRE ROPE)

Maximum Lifting Capacity	Minimum Parts	Maximum Hoisting Dist. in Ft.		
(Pounds)	of Line	Main (Right)	Aux. (Left)	
100,000	5	117	117	
90,960	4	147	147	
68,220	3	196	196	
45,480	2	294	294	
22,740	1	588	588	

#### **GROUND PRESSURE**

#### **BOOM COMPOSITION CHART - 46 HI BOOM**

	Boom Sections						
Boom Length Feet	20' 46HI Inner	10' 46HR Center	20' 46HR Center	40' 46HR Center	20' 46HR or 46 HI Outer		
40	1	0	0	0	1		
50	1	1	0	0	1		
60	1	0	1	0	1		
70	1	1	1	0	1		
80	1	0	0	1	1		
90	1	1	0	1	1		
100	1	0	1	1	1		
110	1	1	1	1	1		
120	1	0	0	2	1		
130	1	1	0	2	1		
140	1	0	1	2	1		
150	1	1	1	2	1		
160	1	0	0	3	1		

#### **#9 Angle Jib Composition**

10' Inner	10' Center	10' Outer
1	0	1
1	1	1
1	2	1

Note: The #9 jib mounted on a 46HI outer requires the use of a 46HI / #9 jib adaptor. Refer to the HC60 Operator's Manual for additional information.

#### HOIST DRUM PERFORMANCE

MAIN and AUXILIARY HOIST – 7/8" Diameter Rope							
	High Range		Low	Range			
Rope Layer	Line Speed (Feet per Minute)	Single Line Pull	Line Speed (Feet per Minute)	Single Line Pull	Total Rope Length		
1st*	337.61	24,250	258.21	32,410	81		
2nd*	365.18	22,490	279.21	29,980	174		
3rd*	393.06	20,940	300.54	27,780	268		
4th*	420.62	19,620	321.87	26,010	375		
5th*	448.51	18,300	342.86	24,470	483		
6th*	476.07	17,200	364.19	22,930	604		
7th*	503.96	16,310	385.52	21,610	725		
8th*	531.52	15,430	406.52	20,500	860		
9th**	559.41	14,770	427.84	19,620	994		
10th**	586.97	14,110	449.17	18,520	1,043		

	THIRD DRUM with FREE FALL – 3/4" Diameter Rope							
	High F	Range	Low F					
Rope Layer	Line Speed Feet Per Min.	Single Line Pull	Line Speed Feet Per Min.	Single Line Pull	Total Rope Length			
1st*	220	15,200	180	18,500	44			
2nd*	235	13,955	195	16,980	93			
3rd*	255	12,895	210	15,695	145			
4th*	270	11,990	225	14,590	201			
5th*	285	11,200	235	13,630	262			
6th*	395	10,505	250	12,790	326			
7th*	320	9,895	265	12,045	394			
8th*	335	9,350	280	11,380	466			
9th**	355	8,865	290	10,790	543			
10th**	370	8,425	305	10,255	623			

<sup>\* =</sup> Working Layers • \*\* = Storage Layers

<sup>\*\*</sup>Single Line Pull reflects the maximum hydraulic capacity of the hoist unit at the given layer and range setting. The allowable single line pull may be limited by the strength of the hoist rope. See load hoisting table for rope limitations.

# LIFT RATINGS IN POUNDS (continued)

# With 46HI Angle Boom, #9 Angle Jib and 39,000 Pound Counterweight

Boom and	Jib	5.0 D	5.0 Deg Offset		15.0 Deg Offset		25.0 Deg Offset	
Jib Length	Radius (Feet)	Boom Angle	Ratings (Pounds)	Boom Angle	Ratings (Pounds)	Boom Angle	Ratings (Pounds)	
20' JIB (con't)	100 110 120 130	51.0 46.0 40.4 34.0	4,740 3,850 3,130 2,530	52.2 47.1 41.4 35.0	4,740 3,850 3,140 2,530	53.1 47.9 42.2 35.7	4,740 3,850 3,140 2,540	
20' (6.1M) JIB & 140' (42.7M) BOOM	31 35 40 50 60 70 80 90 100 110 120 130 140	80.7 79.3 77.5 73.8 70.1 66.2 62.3 58.2 53.9 49.3 44.4 39.0 32.9	18,250* 18,250* 18,250* 14,980 11,330 8,810 6,990 5,600 4,500 3,620 2,890 2,290 1,780	80.5 78.7 75.0 71.2 67.4 63.4 59.3 55.0 50.4 45.4 40.0 33.8	18,250* 18,250* 14,980 11,330 8,810 6,990 5,600 4,500 3,620 2,890 2,290 1,780	79.8 76.1 72.3 68.4 64.4 60.2 55.9 51.2 46.2 40.7 34.4	18,250* 14,980 11,330 8,810 6,990 5,600 4,500 3,620 2,900 2,290 1,780	
30' (9.1M) JIB & 80' (24.4M) BOOM	24 25 30 35 40 50 60 70 80	80.7 80.1 77.5 74.8 72.1 66.6 60.8 54.7 48.0	18,250* 18,250* 18,260* 18,250* 18,250* 16,460 12,810 10,300 8,490	80.1 77.4 74.7 69.1 63.3 57.1 50.3	18,250* 18,250* 18,250* 16,460 12,820 10,310 8,490	79.8 77.1 71.4 65.5 59.2 52.3	18,250* 18,250* 16,460 12,820 10,310 8,490	
30' (9.1M) JIB & 90' (27.4) BOOM	25 30 35 40 50 60 70 80 90	80.9 78.5 76.1 73.7 68.7 63.4 58.0 52.1 45.8	18,250* 18,250* 18,250* 18,250* 16,210 12,560 10,060 8,230 6,840	80.9 78.5 76.0 71.0 65.7 60.2 54.3 47.9	18,250* 18,250* 18,250* 16,210 12,560 10,060 8,230 6,840	80.7 78.2 73.1 67.8 62.2 56.2 49.6	18,250* 18,250* 16,220 12,560 10,060 8,230 6,840	
30' (9.1M) JIB & 100' (30.5M) BOOM	27 30 35 40 50 60 70 80 90	80.8 79.4 77.2 74.9 70.4 65.6 60.7 55.5 49.9 43.9	18,250* 18,250* 18,250* 18,250* 15,980 12,320 9,820 7,990 6,600 5,510	79.4 77.1 72.5 67.7 62.8 57.5 51.9 45.8	18,250* 18,250* 15,980 12,320 9,820 7,990 6,600 5,520	79.2 74.5 69.7 64.6 59.3 53.6 47.3	18,250* 15,980 12,330 9,820 7,990 6,600 5,520	
30' (9.1M) JIB & 110' (33.5M) BOOM	29 30 35 40 50 60 70 80 90 100	80.6 80.2 78.1 76.0 71.8 67.5 63.0 58.3 53.3 48.0 42.2	18,250* 18,250* 18,250* 18,250* 15,730 12,080 9,560 7,740 6,350 5,250 4,380	80.2 78.1 73.8 69.4 64.9 60.2 55.2 49.8 44.0	18,250* 18,250* 15,730 12,080 9,570 7,740 6,350 5,260 4,380	80.0 75.7 71.2 66.6 61.9 56.8 51.3 45.3	18,250* 15,730 12,080 9,570 7,750 6,360 5,260 4,380	
30' (9.1M) JIB & 120' (36.6M) BOOM	30 35 40 50 60 70 80 90 100 110	80.8 78.9 77.0 73.0 69.0 64.9 60.6 56.1 51.4 46.3 40.7	18,250* 18,250* 18,250* 15,520 11,860 9,360 7,530 6,130 5,050 4,160 3,440	80.8 78.9 74.9 70.9 66.7 62.4 57.9 53.1 48.0 42.3	18,250* 18,250* 15,520 11,860 9,360 7,530 6,140 5,050 4,160 3,450	80.6 76.7 72.6 68.4 64.0 59.4 54.6 49.3 43.5	18,250* 15,520 11,870 9,360 7,530 6,140 5,050 4,160 3,450	

Boom and	Jib	5.0 D	eg Offset	15.0 Deg Offset		25.0 Deg Offset	
Jib Length	Radius (Feet)	Boom Angle	Ratings (Pounds)	Boom Angle	Ratings (Pounds)	Boom Angle	Ratings (Pounds)
30' (9.1M) JIB & 130' (39.6M) BOOM	32 35 40 50 60 70 80 90 100 110 120 130	80.7 79.6 77.8 74.1 70.4 66.6 62.6 58.5 54.2 49.6 44.7 39.3	18,250* 18,250* 18,250* 15,280 11,630 9,110 7,280 5,890 4,800 3,910 3,190 2,590	79.6 75.9 72.1 68.3 64.3 60.2 55.8 51.2 46.3 40.8	18,250* 15,280 11,630 9,110 7,280 5,890 4,800 3,910 3,190 2,590	77.5 73.7 69.8 65.8 61.6 57.2 52.6 47.5 41.9	15,290 11,630 9,120 7,280 5,890 4,800 3,910 3,200 2,590
40' (12.2M) JIB & 100' (30.5M) BOOM	29 30 35 40 50 60 70 80 90	80.9 80.6 78.6 76.4 72.2 67.8 63.3 58.6 53.7 48.4	18,250* 18,250* 18,250* 18,250* 16,040 12,390 9,870 8,040 6,650 5,560	79.1 74.8 70.5 65.9 61.2 56.2 50.8	18,250* 16,040 12,390 9,880 8,040 6,650 5,570	77.4 72.9 68.3 63.5 58.4 52.9	16,050 12,390 9,880 8,050 6,660 5,570
40' (12.2M) JIB & 110' (33.5M) BOOM	31 35 40 50 60 70 80 90 100 110	80.8 79.2 77.3 73.4 69.4 65.2 60.9 56.4 51.7 46.6	18,250* 18,250* 18,250* 15,790 12,130 9,620 7,800 6,390 5,310 4,430	79.8 75.9 71.8 67.7 63.3 58.8 54.0 48.9	18,250* 16,790 12,130 9,620 7,800 6,400 5,310 4,430	78.2 74.1 69.9 65.5 60.9 56.0 50.8	15,790 12,140 9,620 7,800 6,400 5,310 4,430
40' (12.2M) JIB & 120' (36.6M) BOOM	33 35 40 50 60 70 80 90 100 110	80.6 79.9 78.1 74.4 70.7 66.9 62.9 58.8 54.5 49.9 45.0	18,250* 18,250* 18,250* 15,570 11,920 9,400 7,570 6,180 5,090 4,210 3,480	80.5 76.8 73.0 69.2 65.2 61.0 56.7 52.1 47.1	18,250* 15,570 11,920 9,400 7,570 6,180 5,090 4,210 3,480	79.0 75.2 71.3 67.2 63.0 58.6 53.9 48.8	15,580 11,920 9,410 7,570 6,180 5,090 4,210 3,490
40' (12.2M) JIB & 130' (39.6M) BOOM	34 35 40 50 60 70 80 90 100 110 120 130	80.9 80.5 78.8 75.4 71.9 68.3 64.6 60.8 56.9 52.7 48.3 43.6	18,250* 18,250* 18,250* 15,340 11,670 9,160 7,320 5,930 4,840 3,960 3,230 2,630	77.6 74.1 70.5 66.8 62.9 59.0 54.8 50.3 45.6	15,340 11,670 9,160 7,320 5,930 4,840 3,960 3,230 2,630	79.7 76.1 72.5 68.7 64.8 60.8 56.6 52.0 47.1	15,340 11,680 9,160 7,330 5,940 4,840 3,970 3,240 2,630

#### **A** 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.

The ratings in this chart are for planning purposes only. Only those ratings specifically assigned to a crane and mounted in the operator's cab or in the Operator's Manual should be used for actual operation.

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.

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.

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.

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.

BOOM HOIST LINE is 12 parts of 5/8 inch diameter EIPS wire rope with a minimum breaking strength of 41,200 pounds.

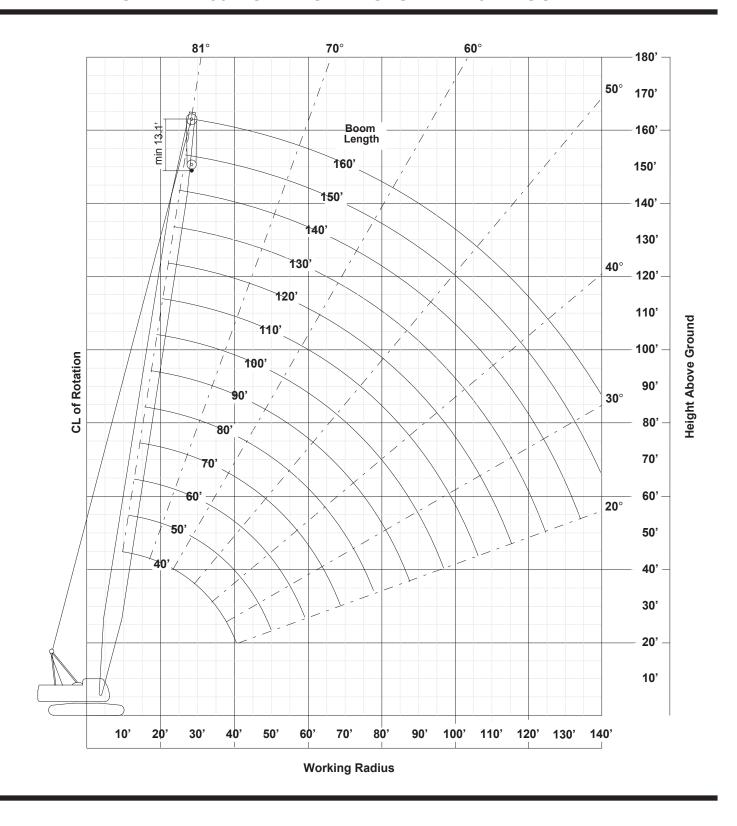
PENDANT SUSPENSION LINE is 2 parts of 1-1/4 inch diameter MONOLAY wire rope with a minimum breaking strength of 172,800 pounds.

MAIN LOAD LINE is 7/8 inch diameter EIPS wire rope with a minimum breaking strength of 79,600 pounds.

WHIP LINE is 7/8 inch diameter IPS wire rope with a minimum breaking strength of 69,200 pounds.

#### **ERECTION**

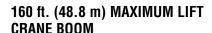
Erection is with the A-Frame fully raised. Erection "OVER THE END" is with the boom over the idler end. Erection "OVER THE SIDE" is with the boom 90° to the sideframes and with the side frames extended. Blocks, slings and other load carrying devices must be on the ground during erection.



## **AMERICAN HC 50**

# **Hydraulic Crawler Crane**

Max. Lifting Capacity: 50 tons (45.4 mt)



- 46HI angle chord boom, pin connected.
- 20 ft. (6.1 m) inner and outer and 10/20 /40 ft. (3/6/12 m) available inserts provide boom compositions in 10 ft. (3 m) increments from 40 ft. (12.2 m) basic boom to 160 ft. (48.8 m).

#### **ROBUST ENGINE**

• 197 BHP @2100 RPM Cummins 6BTA5.9 turbocharged aftercooled diesel engine, 4 cycle, 6 cylinders. Fuel tank capacity is 60 gal. (227 I)

#### **ENVIRONMENTAL OPERATOR'S CAB**

- Designed to provide excellent viewing range and quiet, comfortable operation.
- 37 in. (.94 m) wide cab has panoramic window.
- · Easy-to-operate modular and ergonomically designed controls minimize operator fatigue and increase productivity.
- · Load Moment Indicator with interactive screen. Operator can select from three display modes: loaded condition diagram, rated lifting curve, and rated lifting load table.
- Adjustable operator's seat, radio, air conditioner, overhead window, sun visor, fan, overhead and front wipers, and drum rotation indicators standard.

#### **HEAVY DUTY CARBODY** AND CRAWLERS

• Fabricated steel carbody is deep box constructed with square axles for the crawler side frames. Precision machined top supports anti-friction



Environmental operator's cab

swing circle and multiple pass hydraulic swivel joint.

- · Crawlers have high alloy steel tumbler vokes and rigid fabricated structures with sealed rollers.
- 30" (762 mm) crawler shoes.
- · Travel mechanism is set within shoe width.
- · Side frames extended or retracted by cylinders inside the carbody.
- 1 mph (1.6 km/h) travel speed.
- 40% (22°) gradeability.

#### **POWERFUL, HIGH-SPEED** HOIST SYSTEM

- Identical inline, independent main and auxiliary load hoisting drums are grooved for 7/8 in. (22.4 mm) diameter rope. Maximum line speed is 500 fpm (153 mpm), maximum line pull, 32,400 lbs. (14 697 kg).
- Each drum, including optional third, has power up/down and freefall. Load hoists are further controllable in stepless mode.
- · Ample work space in front of drums allows easy access for cable installation and maintenance.
- External contracting brake.
- Internal expanding band clutch.

#### HIGH CAPACITY, DEPENDABLE HYDRAULIC SYSTEM

- Open circuit system has 2 variable displacement piston pumps with system capacity of 116 gpm (440 lpm)
- Hydraulic reservoir with 79 gal. (300 l) capacity and 10 micron filtration.



Hydraulic removable counterweight system

- Component working range is between -4 and 195° F (-20 and 90° C).
- Flip up doors provide easy access to engine and hydraulic components for service.

#### TWO PIECE REMOVABLE **COUNTERWEIGHT**

- Two piece pin connected counterweight can be assembled or disassembled easily within minutes - 17,000 lb. (7711 kg) outside piece and 22,000 lb. (9979 kg) inside piece for a total weight of 39,000 lbs. (17 690 kg).
- Hydraulic counterweight removal system is standard and utilizes the "A" frame and crane boom hoist drum to make the HC 50 one of the most transportable cranes in its class.
- Moves on three trucks with full boom and #9 jib. Upper, carbody, sideframes and boom inner weigh under 65,000 lbs. (29 484 kg).
- The HC 50 can be transported on one truck with reduced counterweight and folding boom option, utilizing a boom dolly. Total load weighs under 95,000 lbs. (43 091 kg).

#### **OPTIONS INCLUDE:**

- Third drum.
- Automotive type lights.
- Hvdraulic power take off.
- · Jib and jib inserts.
- Folding boom.
- 36" (914 mm) crawler shoes.
- Single sheave boom tip extension.
- · Dragline.



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Disclaimer: Effective Date: March, 2008. Product specifications and prices are subject to change without notice or obligation. The photographs and/or drawings in this document are for illustrative purposes only. Refer to the appropriate Operator's Manual for instructions on the proper use of this equipment. Failure to follow the appropriate Operator's Manual when using our equipment or to otherwise act irresponsibly may result in serious injury or death. The only warranty applicable to our equipment is the standard written warranty applicable to the particular product and sale and Terex makes no other warranty, express or implied. Products and services listed may be trademarks, service marks or trade-names of Terex Corporation and/or its subsidiaries in the USA and other countries.