



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

Boom Length	Radius (Feet)	Boom Angle (Degrees)	Side Frames Extended (Pounds)	From Boom Pt. to Ground (Feet)
90' (con't)	45	62.4	18,820	85
	50	58.7	16,290	82
	55	54.9	14,290	79
	60	50.9	12,650	75
	65	46.7	11,300	71
	70	42.2	10,160	66
	75	37.2	9,180	60
100' (30.5M)	80	31.5	8,330	52
	85	24.8	7,610	43
	90	15.5	6,970	29
	19	81.0	62,850	104
	20	80.4	58,180	104
	25	77.5	41,800	103
	30	74.5	32,400	102
110' (33.5M)	35	71.5	26,170	100
	40	68.5	21,770	98
	45	65.3	18,630	96
	50	62.2	16,110	94
	55	58.9	14,100	91
	60	55.4	12,460	88
	65	51.9	11,110	84
120' (36.6M)	70	48.2	9,970	80
	75	44.2	8,980	75
	80	39.9	8,140	70
	85	35.2	7,400	63
	90	29.9	6,750	55
	95	23.5	6,180	45
	100	14.7	5,680	31
110' (33.5M)	21	80.7	53,840	114
	25	78.6	41,600	113
	30	75.9	32,200	112
	35	73.2	25,960	111
	40	70.5	21,550	109
	45	67.7	18,430	107
	50	64.9	15,900	105
120' (36.6M)	55	62.0	13,880	102
	60	59.0	12,250	100
	65	55.9	10,890	96
	70	52.7	9,750	93
	75	49.3	8,760	89
	80	45.8	7,920	84
	85	42.0	7,180	79
120' (36.6M)	90	38.0	6,540	73
	95	33.5	5,960	66
	100	28.5	5,450	58
	105	22.4	4,990	47
	110	14.0	4,580	32
	23	80.5	46,830	124
	25	79.6	41,420	123
120' (36.6M)	30	77.1	32,040	122
	35	74.7	25,780	121
	40	72.2	21,370	120
	45	69.7	18,250	118
	50	67.1	15,720	116
	55	64.5	13,720	114
	60	61.8	12,070	111
120' (36.6M)	65	59.0	10,720	108
	70	56.2	9,570	105
	75	53.3	8,580	102
	80	50.3	7,740	98
	85	47.1	7,010	93

Boom Length	Radius (Feet)	Boom Angle (Degrees)	Side Frames Extended (Pounds)	From Boom Pt. to Ground (Feet)
120' (con't)	90	43.7	6,350	88
	95	40.2	5,770	83
	100	36.3	5,260	76
	105	32.0	4,800	69
	110	27.2	4,380	60
	115	21.4	4,020	49
	120	13.4	3,680	33
130' (39.6M)	24	80.8	43,780	134
	25	80.4	41,220	134
	30	78.1	31,830	133
	35	75.9	25,570	131
	40	73.6	21,160	130
	45	71.3	18,050	129
	50	68.9	15,520	127
140' (42.7M)	55	66.6	13,500	125
	60	64.1	11,870	122
	65	61.7	10,500	120
	70	59.1	9,350	117
	75	56.5	8,370	114
	80	53.8	7,520	110
	85	51.0	6,780	107
150' (45.7M)	90	48.2	6,130	102
	95	45.1	5,550	98
	100	41.9	5,040	92
	105	38.5	4,580	86
	110	34.8	4,160	80
	115	30.8	3,790	72
	120	26.1	3,440	63
140' (42.7M)	125	20.6	3,140	51
	130	12.9	2,850	34
	26	80.7	38,920	144
	30	79.0	31,640	143
	35	76.9	25,370	142
	40	74.8	20,950	141
	45	72.7	17,850	139
150' (45.7M)	50	70.5	15,310	137
	55	68.3	13,300	136
	60	66.1	11,660	133
	65	63.8	10,290	131
	70	61.5	9,150	128
	75	59.2	8,160	126
	80	56.8	7,320	123
150' (45.7M)	85	54.3	6,570	119
	90	51.7	5,920	115
	95	49.1	5,340	111
	100	46.3	4,830	107
	105	43.4	4,360	102
	110	40.3	3,940	96
	115	37.1	3,560	90
150' (45.7M)	120	33.5	3,220	83
	125	29.6	2,910	75
	130	25.2	2,630	65
	135	19.8	2,360	53
	140	12.4	1,980*	36
	27	80.9	36,640	154
	30	79.7	31,430	153
150' (45.7M)	35	77.8	25,150	152
	40	75.8	20,730	151
	45	73.8	17,650	149
	50	71.8	15,110	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)	Boom Length	Radius (Feet)	Boom Angle (Degrees)	Side Frames Extended (Pounds)	From Boom Pt. to Ground (Feet)	Boom Length	Radius (Feet)	Boom Angle (Degrees)	Side Frames Extended (Pounds)	From Boom Pt. to Ground (Feet)
150' (con't)	55	69.8	13,080	146	150' (con't)	135	28.6	2,120	77	160' (con't)	80	61.3	6,900	146
	60	67.8	11,440	144		140	24.3	1,880	67		85	59.3	6,160	143
	65	65.7	10,080	142		145	19.1	1,660	55		90	57.2	5,500	140
	70	63.6	8,920	140		150	12.0	1,080*	37		95	55.0	4,920	137
	75	61.4	7,940	137		160' (48.8M)	29	80.7	32,830		163	100	52.8	4,400
	80	59.2	7,090	134	30		80.4	31,240	163		105	50.5	3,940	129
	85	57.0	6,340	131	35		78.6	24,960	162		110	48.2	3,520	125
	90	54.7	5,700	128	40		76.7	20,540	161		115	45.7	3,140	120
	95	52.3	5,110	124	45		74.9	17,460	160		120	43.2	2,800	115
	100	49.8	4,600	120	50		73.0	14,920	158		125	40.5	2,470	109
	105	47.3	4,130	116	55		71.1	12,900	157		130	37.6	2,180	103
	110	44.7	3,710	111	60		69.2	11,250	155		135	34.6	1,920	96
	115	41.9	3,340	106	65		67.3	9,880	153		140	31.3	1,670	89
	120	38.9	2,990	100	70	65.3	8,740	151	145		27.7	1,450	80	
125	35.8	2,680	93	75	63.4	7,750	148	150	23.5	1,240	69			
130	32.3	2,390	86											

**LIFT RATINGS IN POUNDS**

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

Boom and Jib Length	Jib Radius (Feet)	5.0 Deg Offset		15.0 Deg Offset		25.0 Deg Offset		Boom and Jib Length	Jib Radius (Feet)	5.0 Deg Offset		15.0 Deg Offset		25.0 Deg Offset	
		Boom Angle	Ratings (Pounds)	Boom Angle	Ratings (Pounds)	Boom Angle	Ratings (Pounds)			Boom Angle	Ratings (Pounds)	Boom Angle	Ratings (Pounds)	Boom Angle	Ratings (Pounds)
20' (6.1M) JIB & 50' (15.2M) BOOM	17	80.4	18,250*					20' (6.1M) JIB & 100' (30.5M) BOOM	25	80.5	18,250*				
	20	77.9	18,250*	80.6	18,250*				30	78.1	18,250*	79.7	18,250*		
	25	73.8	18,250*	76.4	18,250*	78.9	18,250*		35	75.7	18,250*	77.3	18,250*	78.7	18,250*
	30	69.5	18,250*	72.1	18,250*	74.6	18,250*		40	73.3	18,250*	74.8	18,250*	76.2	18,250*
	35	65.1	18,250*	67.7	18,250*	70.1	18,250*		50	68.2	15,880	69.8	15,880	71.2	15,880
20' (6.1M) JIB & 60' (18.3M) BOOM	40	60.6	18,250*	63.2	18,250*	65.5	18,250*	60	63.0	12,240	64.5	12,240	65.9	12,240	
	50	50.7	17,050	53.2	17,060	55.3	17,060	70	57.6	9,740	59.0	9,740	60.3	9,740	
	18	80.8	18,250*					80	51.7	7,910	53.2	7,910	54.4	7,910	
	20	79.4	18,250*					90	45.4	6,520	46.8	6,520	47.9	6,520	
	25	75.8	18,250*	78.1	18,250*	80.4	18,250*	100	38.2	5,440	39.5	5,440	40.5	5,440	
20' (6.1M) JIB & 70' (21.3M) BOOM	30	72.1	18,250*	74.5	18,250*	76.6	18,250*	20' (6.1M) JIB & 110' (33.5M) BOOM	26	80.8	18,250*				
	35	68.4	18,250*	70.7	18,250*	72.8	18,250*		30	79.1	18,250*	80.5	18,250*		
	40	64.5	18,250*	66.8	18,250*	68.8	18,250*		35	76.8	18,250*	78.3	18,250*	79.6	18,250*
	50	56.3	18,820	58.6	16,820	60.5	16,820		40	74.6	18,250*	76.0	18,250*	77.3	18,250*
	60	47.3	13,180	49.4	13,180	51.1	13,180		50	70.0	15,650	71.4	15,650	72.7	15,650
20' (6.1M) JIB & 80' (24.4M) BOOM	20	80.6	18,250*					60	65.2	11,990	66.6	11,990	67.9	12,000	
	25	77.4	18,250*	79.5	18,250*			70	60.3	9,490	61.7	9,490	62.9	9,490	
	30	74.2	18,250*	76.2	18,250*	78.2	18,250*	80	55.1	7,660	56.5	7,660	57.6	7,660	
	35	70.9	18,250*	72.9	18,250*	74.8	18,250*	90	49.6	6,270	50.9	6,270	51.9	6,270	
	40	67.5	18,250*	69.5	18,250*	71.4	18,250*	100	43.5	5,180	44.8	5,190	45.7	5,190	
20' (6.1M) JIB & 90' (27.4M) BOOM	50	60.5	16,560	62.5	16,560	64.2	16,560	110	36.6	4,310	37.8	4,310	38.7	4,320	
	60	52.9	12,920	54.8	12,920	56.5	12,920	20' (6.1M) JIB & 120' (36.6M) BOOM	28	80.7	18,250*				
	70	44.4	10,410	46.3	10,410	47.7	10,420		30	79.8	18,250*				
	21	80.9	18,250*						35	77.8	18,250*	79.1	18,250*	80.4	18,250*
	25	78.7	18,250*	80.5	18,250*				40	75.7	18,250*	77.0	18,250*	78.3	18,250*
30	75.8	18,250*	77.6	18,250*	79.4	18,250*	50		71.5	15,440	72.8	15,440	74.0	15,440	
20' (6.1M) JIB & 100' (30.5M) BOOM	35	72.8	18,250*	74.7	18,250*	76.4	18,250*	60	67.1	11,790	68.4	11,790	69.6	11,790	
	40	69.8	18,250*	71.7	18,250*	73.4	18,250*	70	62.6	9,280	63.9	9,280	65.0	9,290	
	50	63.6	16,350	65.4	16,350	67.1	16,360	80	57.9	7,450	59.2	7,450	60.3	7,450	
	60	57.1	12,710	58.9	12,710	60.4	12,710	90	53.0	6,060	54.2	6,060	55.2	6,070	
	70	50.0	10,210	51.7	10,210	53.1	10,220	100	47.7	4,970	48.9	4,980	49.8	4,980	
20' (6.1M) JIB & 130' (39.6M) BOOM	80	42.0	8,400	43.6	8,400	44.9	8,400	110	41.8	4,100	43.0	4,100	43.9	4,100	
	23	80.7	18,250*					120	35.2	3,380	36.3	3,380	37.1	3,380	
	25	79.7	18,250*					20' (6.1M) JIB & 130' (39.6M) BOOM	29	80.9	18,250*				
	30	77.1	18,250*	78.8	18,250*	80.4	18,250*		30	80.5	18,250*				
	35	74.4	18,250*	76.1	18,250*	77.7	18,250*		35	78.6	18,260*	79.9	18,250*		
40	71.7	18,250*	73.4	18,250*	74.9	18,250*	40		76.7	18,250*	77.9	18,250*	79.1	18,250*	
50	66.2	16,120	67.8	16,120	69.3	16,120	50		72.7	15,210	74.0	15,210	75.1	15,210	
20' (6.1M) JIB & 140' (42.7M) BOOM	60	60.4	12,460	62.0	12,470	63.4	12,470	60	68.7	11,550	69.9	11,550	71.0	11,550	
	70	54.2	9,960	55.8	9,970	57.1	9,970	70	64.6	9,050	65.8	9,050	66.8	9,050	
	80	47.5	8,150	49.0	8,150	50.3	8,150	80	60.3	7,220	61.5	7,220	62.5	7,220	
	90	40.0	6,760	41.4	6,760	42.5	6,760	90	55.8	5,820	57.0	5,830	57.9	5,830	



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

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

## SPECIFICATIONS

Swing Speed .....	3.50 RPM
Travel Speed .....	1.00 MPH
Gradeability .....	40% (approximately 22°)

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

Maximum Lifting Capacity (Pounds)	Minimum Parts of Line	Maximum Hoisting Dist. in Ft.	
		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

Lifting crane with 40' 46HI boom, standard counterweight 30" (762 mm) Shoes ..... 9.20 psi

## BOOM COMPOSITION CHART - 46 HI BOOM

Boom Length Feet	Boom Sections				
	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

Jib Length Feet	10' Inner	10' Center	10' Outer
20	1	0	1
30	1	1	1
40	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					
Rope Layer	High Range		Low Range		Total Rope Length
	Line Speed (Feet per Minute)	Single Line Pull	Line Speed (Feet per Minute)	Single Line Pull	
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					
Rope Layer	High Range		Low Range		Total Rope Length
	Line Speed Feet Per Min.	Single Line Pull	Line Speed Feet Per Min.	Single Line Pull	
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

\* = Working Layers • \*\* = Storage Layers

\*\*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 Length	Jib Radius (Feet)	5.0 Deg Offset		15.0 Deg Offset		25.0 Deg Offset	
		Boom Angle	Ratings (Pounds)	Boom Angle	Ratings (Pounds)	Boom Angle	Ratings (Pounds)
20' JIB (con't)	100	51.0	4,740	52.2	4,740	53.1	4,740
	110	46.0	3,850	47.1	3,850	47.9	3,850
	120	40.4	3,130	41.4	3,140	42.2	3,140
	130	34.0	2,530	35.0	2,530	35.7	2,540
	140	31.0	2,130	32.0	2,130	32.7	2,140
20' (6.1M) JIB & 140' (42.7M) BOOM	31	80.7	18,250*	80.5	18,250*		
	35	79.3	18,250*				
	40	77.5	18,250*	78.7	18,250*	79.8	18,250*
	50	73.8	14,980	75.0	14,980	76.1	14,980
	60	70.1	11,330	71.2	11,330	72.3	11,330
	70	66.2	8,810	67.4	8,810	68.4	8,810
	80	62.3	6,990	63.4	6,990	64.4	6,990
	90	58.2	5,600	59.3	5,600	60.2	5,600
	100	53.9	4,500	55.0	4,500	55.9	4,500
	110	49.3	3,620	50.4	3,620	51.2	3,620
30' (9.1M) JIB & 80' (24.4M) BOOM	24	80.7	18,250*				
	25	80.1	18,250*				
	30	77.5	18,260*	80.1	18,250*		
	35	74.8	18,250*	77.4	18,250*	79.8	18,250*
	40	72.1	18,250*	74.7	18,250*	77.1	18,250*
	50	66.6	16,460	69.1	16,460	71.4	16,460
	60	60.8	12,810	63.3	12,820	65.5	12,820
	70	54.7	10,300	57.1	10,310	59.2	10,310
30' (9.1M) JIB & 90' (27.4) BOOM	25	80.9	18,250*				
	30	78.5	18,250*				
	35	76.1	18,250*	80.9	18,250*	80.7	18,250*
	40	73.7	18,250*	76.0	18,250*	78.2	18,250*
	50	68.7	16,210	71.0	16,210	73.1	16,220
	60	63.4	12,560	65.7	12,560	67.8	12,560
	70	58.0	10,060	60.2	10,060	62.2	10,060
	80	52.1	8,230	54.3	8,230	56.2	8,230
30' (9.1M) JIB & 100' (30.5M) BOOM	27	80.8	18,250*				
	30	79.4	18,250*				
	35	77.2	18,250*	79.4	18,250*		
	40	74.9	18,250*	77.1	18,250*	79.2	18,250*
	50	70.4	15,980	72.5	15,980	74.5	15,980
	60	65.6	12,320	67.7	12,320	69.7	12,330
	70	60.7	9,820	62.8	9,820	64.6	9,820
	80	55.5	7,990	57.5	7,990	59.3	7,990
	90	49.9	6,600	51.9	6,600	53.6	6,600
	100	43.9	5,510	45.8	5,520	47.3	5,520
30' (9.1M) JIB & 110' (33.5M) BOOM	29	80.6	18,250*				
	30	80.2	18,250*				
	35	78.1	18,250*	80.2	18,250*		
	40	76.0	18,250*	78.1	18,250*	80.0	18,250*
	50	71.8	15,730	73.8	15,730	75.7	15,730
	60	67.5	12,080	69.4	12,080	71.2	12,080
	70	63.0	9,560	64.9	9,570	66.6	9,570
	80	58.3	7,740	60.2	7,740	61.9	7,750
	90	53.3	6,350	55.2	6,350	56.8	6,360
	100	48.0	5,250	49.8	5,260	51.3	5,260
	110	42.2	4,380	44.0	4,380	45.3	4,380
30' (9.1M) JIB & 120' (36.6M) BOOM	30	80.8	18,250*				
	35	78.9	18,250*	80.8	18,250*		
	40	77.0	18,250*	78.9	18,250*	80.6	18,250*
	50	73.0	15,520	74.9	15,520	76.7	15,520
	60	69.0	11,860	70.9	11,860	72.6	11,870
	70	64.9	9,360	66.7	9,360	68.4	9,360
	80	60.6	7,530	62.4	7,530	64.0	7,530
	90	56.1	6,130	57.9	6,140	59.4	6,140
40' (12.2M) JIB & 130' (39.6M) BOOM	30	80.9	18,250*				
	35	79.2	18,250*				
	40	77.3	18,250*	79.8	18,250*		
	50	73.4	15,790	75.9	16,790	78.2	16,790
	60	69.4	12,130	71.8	12,130	74.1	12,140
	70	65.2	9,620	67.7	9,620	69.9	9,620
40' (12.2M) JIB & 120' (36.6M) BOOM	31	80.8	18,250*				
	35	79.2	18,250*				
	40	77.3	18,250*	79.8	18,250*		
	50	73.4	15,790	75.9	16,790	78.2	16,790
	60	69.4	12,130	71.8	12,130	74.1	12,140
	70	65.2	9,620	67.7	9,620	69.9	9,620
	80	60.9	7,800	63.3	7,800	65.5	7,800
	90	56.4	6,390	58.8	6,400	60.9	6,400
40' (12.2M) JIB & 100' (30.5M) BOOM	33	80.6	18,250*				
	35	79.9	18,250*				
	40	78.1	18,250*	80.5	18,250*		
	50	74.4	15,570	76.8	15,570	79.0	15,580
	60	70.7	11,920	73.0	11,920	75.2	11,920
	70	66.9	9,400	69.2	9,400	71.3	9,410
	80	62.9	7,570	65.2	7,570	67.2	7,570
	90	58.8	6,180	61.0	6,180	63.0	6,180
40' (12.2M) JIB & 110' (33.5M) BOOM	34	80.9	18,250*				
	35	80.5	18,250*				
	40	78.8	18,250*	77.6	15,340	79.7	15,340
	50	75.4	15,340	74.1	11,670	76.1	11,680
	60	71.9	11,670	70.5	9,160	72.5	9,160
	70	68.3	9,160	66.8	7,320	68.7	7,330
	80	64.6	7,320	62.9	5,930	64.8	5,940
	90	60.8	5,930	59.0	4,840	60.8	4,840
40' (12.2M) JIB & 130' (39.6M) BOOM	34	80.9	18,250*				
	35	80.5	18,250*				
	40	78.8	18,250*	77.6	15,340	79.7	15,340
	50	75.4	15,340	74.1	11,670	76.1	11,680
	60	71.9	11,670	70.5	9,160	72.5	9,160
	70	68.3	9,160	66.8	7,320	68.7	7,330
	80	64.6	7,320	62.9	5,930	64.8	5,940
	90	60.8	5,930	59.0	4,840	60.8	4,840
40' (12.2M) JIB & 120' (36.6M) BOOM	34	80.9	18,250*				
	35	80.5	18,250*				
	40	78.8	18,250*	77.6	15,340	79.7	15,340
	50	75.4	15,340	74.1	11,670	76.1	11,680
	60	71.9	11,670	70.5	9,160	72.5	9,160
	70	68.3	9,160	66.8	7,320	68.7	7,330
	80	64.6	7,320	62.9	5,930	64.8	5,940
	90	60.8	5,930	59.0	4,840	60.8	4,840

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

## CRANE RATING DATA

### **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.

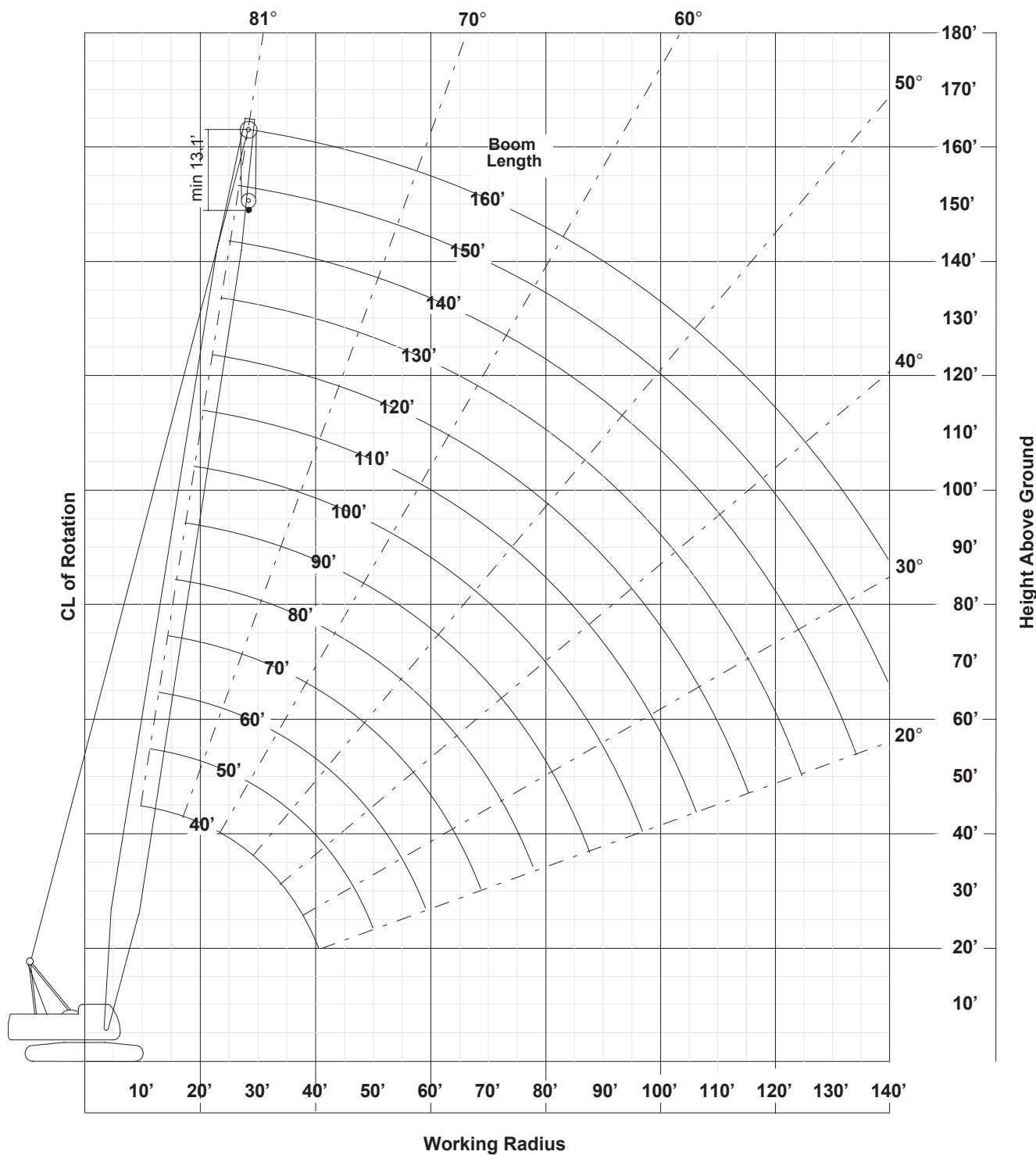
MAIN LOAD LINE is 7/8 inch diameter EIPS wire rope with a minimum breaking strength of 79,600 pounds.

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 MODEL HC 50 WORKING RANGES WITH 46HI BOOM



## AMERICAN HC 50

### Hydraulic Crawler Crane

Max. Lifting Capacity:  
50 tons (45.4 mt)

### 160 ft. (48.8 m) MAXIMUM LIFT CRANE BOOM

- 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 l)

### 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 yokes 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 frefall. 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.
- Hydraulic power take off.
- Jib and jib inserts.
- Folding boom.
- 36" (914 mm) crawler shoes.
- Single sheave boom tip extension.
- Dragline.



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