

HC 110

110 USt capacity Hydraulic crawler crane Datasheet imperial

HC 110



WORKS FOR YOU.

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ETEREX

Features:

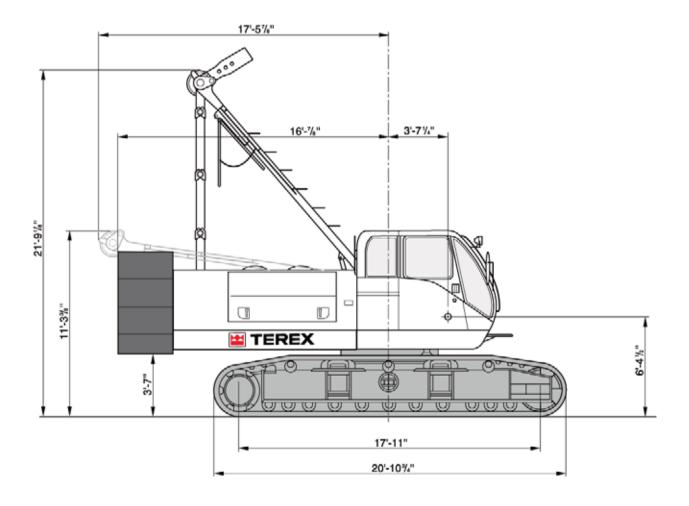
- ▶ 110 tons (100 mt) maximum lifting capacity
- 230 ft (70 m) maximum length of main boom
- ▶ 200 ft + 70 ft (61 m + 21 m) maximum boom and jib
- Power up / down and freefall on main and auxiliary drums
- Ouiet, comfortable operator's cab with excellent viewing range
- Hydraulic counterweight removal system simplifies installation and removal
- Superior transportability 11 ft (3.35 m) width; 11 ft 3 inch (3.43 m) height
- ▶ 105,000 lb (47 627 kg) transport weight includes sideframes, 3rd drum and boom inner





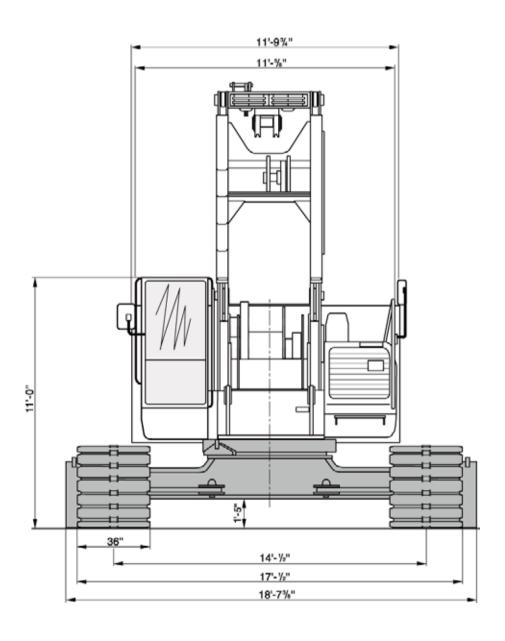
Counterweight

SC Sideframe Counterweight



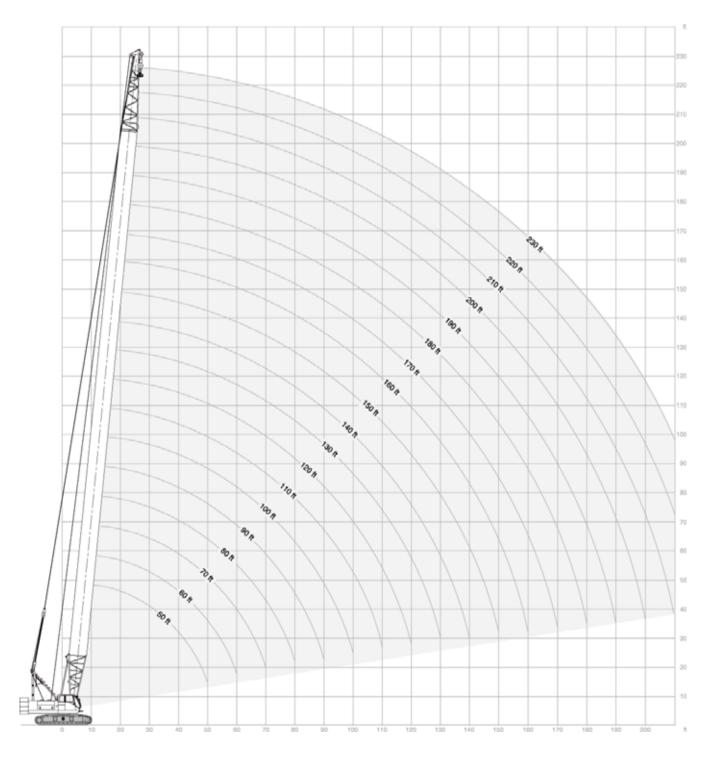


DIMENSIONS



RANGE DIAGRAM

59HI Chord Boom





With 59HI Offset Tip Boom - 4 Sheave Tip

	52,900 lb + 23,00	0 lb SC	3	60°			ANSI B 30.5
50' (1	5.2 m) Boom length			90' (27.4	m) Boom length		
Radiu (Feet)	. 0	Side Frames Extended (Pounds)	From Boom Pt. to Ground (Feet)	Radius (Feet)	Boom Angle (Degrees)	Side Frames Extended (Pounds)	From Boom Pt. to Ground (Feet)
13 15	79.9 77.6	220,000 * 190,080 *	56 55	19 20	80.6 79.9	133,440 122,580	95 95
20 25	71.6 65.4	123,290 87,670	54 52	25 30	76.7 73.4	86,970 66,860	94 93
30 35	58.9 51.9	67,640 54,900	49 46	35 40	70.0 66.6	54,150 45,210	91 89
40 50	44.1 22.7	46,010 34,480	41 26	50 60	59.4 51.6	33,630 26,570	84 77
	18.3 m) Boom length			70 80 90	42.9 32.3 16.7	21,670 18,120	68 55 32
14 15	80.7 79.7	203,570 * 189,950 *	66 65	90	10.7	15,440	32
20 25	74.8 69.7	123,100 87,490	64 63		5 m) Boom lengt		
30 35	64.5 59.1	67,430 54,700	61 58	20 25	80.9 78.0	122,380 86,760	105 104
40 50	53.3 40.0	45,790 34,250	54 45	30 35	75.1 72.1	66,630 53,930	103 102
60	20.6	27,130	27	40 50 60	69.0 62.7	44,980 33,380	100 95
	21.3 m) Boom length			70	56.0 48.8	26,340 21,430	89 82 71
16 20	80.3 77.0	177,910* 122,950	75 75	90	40.6 30.6 15.8	17,880 15,190 13,090	57 34
25 30 35	72.8 68.4 63.9	87,320 67,250 54,530	73 71 69	100		. 0,000	
40	59.2	45,620	67		5 m) Boom lengt		=
50 60 70	49.0 36.9	34,050 26,960	59 48 29	22 25	80.7 79.1	105,050 86,580	115 114
70	19.0	22,070	29	30 35	76.5 73.8	66,410 53,720	113 112
	24.4 m) Boom length			40 50	71.0 65.4	44,760 33,160	110 106
17 20	80.8 78.7	161,850 122,740	85 85	60 70	59.5 53.2	26,130 21,220	101 94
25 30	75.0 71.2	87,130 67,020	84 82	80 90 100	46.4 38.6 29.1	17,650 14,960	86 75 60
35 40	67.4 63.4	54,310 45,380	80 78	110	15.1	12,860 11,180	35
50 60 70	55.0 45.7	33,810 26,730	72 64 52				
80	34.4 17.7	21,840 18,300	52 31				

^{*} see page 10 "Notes to lifting capacity"

LOAD CHART

With 59HI Offset Tip Boom - 4 Sheave Tip

52	,900 lb + 23,00	0 lb SC	3	60°			ANSI B 30.5
120' (36.	6 m) Boom lengtl	n		150' (45.	7 m) Boom lengtl	h	
Radius (Feet)	Boom Angle	Side Frames Extended (Pounds)	From Boom Pt. to Ground (Feet)	Radius (Feet)	Boom Angle	Side Frames Extended (Pounds)	From Boom Pt. to Ground (Feet)
24	(Degrees)	91,640	125	28	(Degrees)	72,450	154
25 30	80.1 77.6	86,370 66,180	125 124	30 35	80.1 78.2	65,530 52,860	154 153
35 40	75.2 72.7	53,490 44,530	122 121	40 50	76.2 72.2	43,870 32,220	152 149
50 60	67.6 62.3	32,910 25,890	117 113	60 70	68.2 64.0	25,230 20,300	146 141
70 80	56.7 50.8	20,970 17,410	107 99	80 90	59.6 55.1	16,730 14,020	136 129
90	44.3 36.9	14,720 12,600	90 78	100	50.3 45.1	11,910 10,210	122 113
110 120	27.9 14.4	10,910 9,540	62 36	120 130	39.4 32.8	8,810 7,640	102 88
				140 150	24.9 12.8	6,670 5,840	69 40
	6 m) Boom lengtl						
25 30	80.8 78.6	86,180 65,990	135 134	160' (48.	8 m) Boom lengt	h	
35 40	76.3 74.0	53,300 44,340	133 131	30 35	80.7 78.9	65,300 52,640	164 163
50 60	69.4 64.6	32,700 25,690	128 124	40 50	77.1 73.4	43,640 31,960	162 160
70 80	59.6 54.3	20,770 17,210	118 112	60 70	69.6 65.7	24,990 20,060	156 152
90	48.6 42.4	14,510 12,400	104	80 90	61.7 57.6	16,480 13,770	147 141
110 120	35.4	10,700	82	100	53.2 48.6	11,650	134
130	26.7 13.8	9,310 8,160	65 37	120 130	43.6 38.1	9,950 8,550 7,380	126 117 105
140' (42	7 m) Boom lengtl	n		140 150	31.8 24.0	6,400 5,550	91 72
27	80.7 79.4	76,660 65,750	145 144	160	12.4	4,850	41
35 40	77.3 75.2	53,070 44,100	143 142	170' (51.8	3 m) Boom length	า	
50	70.9	32,450	139	31	80.9	62,050	174
60 70	66.5 62.0	25,450 20,530	135 130	35 40	79.6 77.9	52,430 43,420	174 173
90	57.2 52.2	16,960 14,260	124 117	50 60	74.4 70.8	31,740 24,780	170 167
100	46.8 40.8	12,140 10,440	108 98	70 80	67.2 63.5	19,850 16,270	163 159
120 130	34.0 25.7	9,050 7,890	85 67	90	59.7 55.7	13,560 11,430	153 147
140	13.3	6,920	39	110 120	51.5 47.0	9,730 8,320	139 131
				130 140	42.2 36.9	7,150 6,160	121 108
				150 160	30.8 23.3	5,320 4,600	93 74
				170	12.1	3,990	42



LOAD CHART HC 110

With 59HI Offset Tip Boom - 4 Sheave Tip

Radius Angle Extended (Foet)	52	,900 lb + 23,00	00 lb SC	3	60°			ANSI B 30.5
Radius Angle Extended Cfreut	180' (54.	9 m) Boom lengt	h		210' (64.0	m) Boom lengt	h	
Radius Angle Extended Cfround Cfreet Cfreet Chegrees Chounds Cfreet Cfreet Chegrees Chounds Cfreet Cfreet Chegrees Chounds Cfreet S3		Boom	Side Frames	From Boom Pt.		Boom	Side Frames	From Boom Pt.
35				to Ground				to Ground (Feet)
40							,	214
50								213
60								211
The color of the								209
80 66.1 16.020 170 90 65.9 12.600 15 100 62.9 10.470 15 100 62.9 10.470 15 100 62.9 10.470 15 100 62.9 10.470 15 100 62.9 10.470 15 100 62.9 10.470 15 120 56.5 7.340 18 120 54.0 9.470 152 120 56.5 7.340 18 120 49.9 8.070 144 130 53.2 6.160 17 140 41.0 5.900 124 150 46.0 4.310 15 150 35.8 5.060 112 160 42.0 3.570 14 160 29.9 4.330 96 170 37.8 2.920 15 170 22.6 3.890 76 180 33.0 2.380 11 180 11.7 3.150 43 190 27.6 1.860 16 170 37.8 2.920 15 180 33.0 2.380 11 190 27.6 1.860 16 170 37.8 2.920 15 180 33.0 2.380 12 190 27.6 1.860 16 170 37.8 2.920 15 180 33.0 2.380 12 190 27.6 1.860 16 170 37.8 2.920 15 180 33.0 2.380 12 180 33.0 2.380 12 180 33.0 2.380 12 180 33.0 2.380 12 180 33.0 2.380 12 180 33.0 2.380 12 180 33.0 2.380 12 180 33.0 2.380 12 180 33.0 2.380 12 180 33.0 2.380 12 180 33.0 2.380 12 180 33.0 2.380 12 180 33.0 2.380 12 180 33.0 2.380 12 180 33.0 2.380 12 180 33.0 2.380 22 180 33.0 33.640 22 180 33.0 33.640 22 33.640 23 33.640 23 33.640 23 33.640 33.								202
100 57.8 11,180 159 110 59.7 8,750 18 120 54.0 9,470 152 120 56.5 7,340 18 120 49.9 8,070 144 130 53.2 6,180 17 140 41.0 5,900 124 150 46.0 4,310 18 150 35.8 5,060 112 160 42.0 3,570 14 160 29.9 4,330 96 170 37.8 2,920 13 180 11.7 3,150 43 190 27.6 1,860 11 180 11.7 3,150 43 190 27.6 1,860 16 180 33.0 2,360 12 180 11.7 3,150 43 190 27.6 1,860 16 16 170 37.8 2,920 13 180 11.7 3,150 43 190 27.6 1,860 16 16 170 170 180								198
110	90		13,310					193
120								188
130								182
140								174
150 35.8 5.060 112 160 42.0 3.570 14 160 29.9 4.330 96 170 37.8 2.920 15 170 22.6 3.690 76 180 33.0 2.360 12 180 11.7 3.150 43 190 27.6 1.860 12 180 11.7 3.150 43 190 27.6 1.860 16 180 33.0 2.360 12 180 11.7 3.150 43 190 27.6 1.860 16 180 33.0 2.360 12 180 11.7 3.150 43 190 27.6 1.860 16 180 33.0 2.360 12 190 27.6 1.860 16 180 33.0 2.360 12 180 33.0 2.360 12 180 33.0 2.76 1.860 16 180 33.0 3.620 ** 22 24 27 24 2970 193 50 78.0 30,530 22 25 25 27 24 2970 193 50 78.0 30,530 22 25 25 25 25 25 25 2					-			166
160								147
170 22.6 3,690 76 180 33.0 2,360 12 180 11.7 3,150 43 190 27.6 1,860 16 190' (57.9 m) Boom length 34 81.0 52,440* 194 39 80.9 36,220* 22 40 79.2 42,970 193 50 78.0 30,530 22 50 76.1 31,260 191 60 75.3 23,640 21 60 72.9 24,330 188 70 72.6 18,670 21 80 66.5 15,790 181 90 67.1 12,350 21 90 63.2 13,070 176 100 64.2 10,220 22 100 59.7 10,940 170 110 61.3 8,490 15 110 56.2 9,230 164 120 58.2 7,090 16 120 52.4 7,820 157 130 55.1 5,900 16 130 48.5 6,650 149 140 51.9 4,900 17 150 39.8 4,810 128 160 44.9 3,300 16 160 34.8 4,070 115 170 41.0 2,650 16 170 29.1 3,430 99 180 36.9 2,090 15 180 22.0 2,880 78 190 32.3 1,590 12 200' (61.0 m) Boom length 30 56.4 9,970 20 200' (61.0 m) Boom length 30 56.4 9,970 20 200' (61.0 m) Boom length 30 56.4 9,970 20 200 54.6 7.570 169 130 56.8 5,660 19 100 61.4 10,690 182 110 62.6 8,250 20 120 54.6 7,570 169 130 56.8 5,660 16 130 51.0 63.90 162 140 53.8 4,660 16 140 47.2 5,390 153 150 50.6 3,800 17 150 33.9 3,170 118 180 40.1 1,840 18 170 33.9 3,170 118 180 40.1 1,840 18 180 28.3 2,610 101 180 20.1 1,840 18 180 28.3 2,610 101 180 20.1 1,840 18 180 28.3 2,610 101 180 20.1 1,840 18 180 28.3 2,610 101 180 20.1 1,840 18 180 28.3 2,610 101 180 20.1 1,840 18 180 28.3 2,610 101 18 180 40.1 1,840 18 180 28.3 2,610 101 180 20.1								135
180								121
34 81.0 52,440* 194 39 80.9 36,220* 22 35 80.7 51,980 194 40 80.7 35,920* 22 40 79.2 42,970 193 50 78.0 30,530 22 50 76.1 31,260 191 60 75.3 23,640 21 60 72.9 24,330 188 70 72.6 18,670 22 70 69.7 19,370 185 80 69.8 15,080 21 80 66.5 15,790 181 90 67.1 12,350 20 90 63.2 13,070 176 100 64.2 10,220 22 20 100 59.7 10,940 170 110 61.2 9,230 164 120 58.2 7,090 18 120 52.4 7,820 157 130 55.1 5,900 18								104
34	190' (57.9	m) Boom lengt	h		220' (67.1	m) Boom lengtl	1	
35				194		•		224
40			. ,					223
50								222
70	50	76.1		191	60	75.3	,	219
80 66.5 15,790 181 90 67.1 12,350 22 90 63.2 13,070 176 100 64.2 10,220 20 110 59.7 10,940 170 110 61.3 8,490 19 110 56.2 9,230 164 120 58.2 7,090 18 120 52.4 7,820 157 130 55.1 5,900 18 130 48.5 6,650 149 140 51.9 4,900 17 140 44.3 5,660 139 150 48.5 4,050 17 150 39.8 4,810 128 160 44.9 3,300 16 160 34.8 4,070 115 170 41.0 2,650 15 170 29.1 3,430 99 180 36.9 2,090 13 180 22.0 2,880 78 190								216
90								213
100								209
110								204
120								193
130								187
140								179
160								171
170 29.1 3,430 99 180 22.0 2,880 78 190 11.4 2,410 44 200' (61.0 m) Boom length 36 80.9 46,580* 204 40 79.7 42,730 203 50 76.8 31,010 201 60 73.8 24,090 198 70 70.8 19,130 195 80 67.7 15,540 191 90 90 64.6 12,820 187 100 61.4 10,690 182 110 58.0 8,980 176 120 54.6 7,570 169 130 51.0 6,390 162 140 47.2 5,390 153 150 43.1 4,540 143 160 38.8 3,800 132 170 33.9 3,170 118 180 2	150	39.8	4,810	128	160	44.9	3,300	162
180 22.0 2,880 78 190 11.4 2,410 44 200' (61.0 m) Boom length 200' (61.0 m) Boom length 200' (70.1 m) Boom length 230' (70.1 m) Boom length 46,580* 204 41 80.8 31,600* 23 50 76.8 31,010 201 60 76.0 23,410 23 60 73.8 24,090 198 70 73.4 18,440 22 70 70.8 19,130 195 80 70.8 14,840 22 90 64.6 12,820 187 100 65.4 9,970 21 100 61.4 10,690 182 110 62.6 8,250 27 120 54.6 7,570 169 130 56.8 5,660 18 140 47.2 5,390 153 150 50.6 3,800 17 160							,	151
200' (61.0 m) Boom length 36 80.9 46,580* 204 41 80.8 31,600* 23 40 79.7 42,730 203 50 78.5 27,960* 23 50 76.8 31,010 201 60 76.0 23,410 23 60 73.8 24,090 198 70 73.4 18,440 22 70 70.8 19,130 195 80 70.8 14,840 22 80 67.7 15,540 191 90 68.1 12,110 22 90 64.6 12,820 187 100 65.4 9,970 21 110 58.0 8,980 176 120 59.8 6,830 26 120 54.6 7,570 169 130 56.8 5,660 19 130 51.0 6,390 162 140 53.8 4,660 18 150 43.1<								138
36 80.9 46,580* 204 40 79.7 42,730 203 50 76.8 31,010 201 60 73.8 24,090 198 70 70.8 19,130 195 80 67.7 15,540 191 90 68.1 12,110 22 90 64.6 12,820 187 100 65.4 9,970 21 100 61.4 10,690 182 110 62.6 8,250 21 110 58.0 8,980 176 120 59.8 6,830 20 120 54.6 7,570 169 130 56.8 5,660 19 130 51.0 6,390 162 140 53.8 4,660 19 140 47.2 5,390 153 150 50.6 3,800 18 150 38.8 3,800 132 170 43.8 2,410 16 170 33.9 3,170 118 180 40.1 <					190	32.3	1,590	124
40 79.7 42,730 203 50 76.8 31,010 201 60 73.8 24,090 198 70 70.8 19,130 195 80 67.7 15,540 191 90 64.6 12,820 187 100 61.4 10,690 182 110 58.0 8,980 176 120 54.6 7,570 169 130 51.0 6,390 162 140 47.2 5,390 153 150 43.1 4,540 143 160 38.8 3,800 132 170 33.9 3,170 118 180 28.3 2,610			h		230' (70.	1 m) Boom lengt	h	
50 76.8 31,010 201 60 76.0 23,410 23 60 73.8 24,090 198 70 73.4 18,440 22 70 70.8 19,130 195 80 70.8 14,840 22 80 67.7 15,540 191 90 68.1 12,110 22 90 64.6 12,820 187 100 65.4 9,970 21 100 61.4 10,690 182 110 62.6 8,250 21 110 58.0 8,980 176 120 59.8 6,830 20 120 54.6 7,570 169 130 56.8 5,660 19 130 51.0 6,390 162 140 53.8 4,660 19 140 47.2 5,390 153 150 50.6 3,800 18 150 43.1 4,540 143 160								233
60 73.8 24,090 198 70 70.8 19,130 195 80 67.7 15,540 191 90 68.1 12,110 22 90 64.6 12,820 187 100 65.4 9,970 21 100 61.4 10,690 182 110 62.6 8,250 21 110 58.0 8,980 176 120 59.8 6,830 20 120 54.6 7,570 169 130 56.8 5,660 19 130 51.0 6,390 162 140 53.8 4,660 19 140 47.2 5,390 153 150 50.6 3,800 18 150 43.1 4,540 143 160 47.3 3,060 17 160 38.8 3,800 132 170 43.8 2,410 16 170 33.9 3,170 118								232
70 70.8 19,130 195 80 70.8 14,840 22 80 67.7 15,540 191 90 68.1 12,110 22 90 64.6 12,820 187 100 65.4 9,970 21 100 61.4 10,690 182 110 62.6 8,250 21 110 58.0 8,980 176 120 59.8 6,830 20 120 54.6 7,570 169 130 56.8 5,660 19 130 51.0 6,390 162 140 53.8 4,660 19 140 47.2 5,390 153 150 50.6 3,800 18 150 43.1 4,540 143 160 47.3 3,060 15 160 38.8 3,800 132 170 43.8 2,410 16 170 33.9 3,170 118 180								230
80 67.7 15,540 191 90 68.1 12,110 22 90 64.6 12,820 187 100 65.4 9,970 21 100 61.4 10,690 182 110 62.6 8,250 21 110 58.0 8,980 176 120 59.8 6,830 20 120 54.6 7,570 169 130 56.8 5,660 19 130 51.0 6,390 162 140 53.8 4,660 19 140 47.2 5,390 153 150 50.6 3,800 18 150 43.1 4,540 143 160 47.3 3,060 15 160 38.8 3,800 132 170 43.8 2,410 16 170 33.9 3,170 118 180 40.1 1,840 15 180 28.3 2,610 101 101								227
90 64.6 12,820 187 100 65.4 9,970 21 100 61.4 10,690 182 110 62.6 8,250 21 110 58.0 8,980 176 120 59.8 6,830 20 120 54.6 7,570 169 130 56.8 5,660 19 130 51.0 6,390 162 140 53.8 4,660 19 140 47.2 5,390 153 150 50.6 3,800 18 150 43.1 4,540 143 160 47.3 3,060 17 160 38.8 3,800 132 170 43.8 2,410 16 170 33.9 3,170 118 180 40.1 1,840 15 180 28.3 2,610 101								224 220
100 61.4 10,690 182 110 62.6 8,250 21 110 58.0 8,980 176 120 59.8 6,830 20 120 54.6 7,570 169 130 56.8 5,660 19 130 51.0 6,390 162 140 53.8 4,660 19 140 47.2 5,390 153 150 50.6 3,800 18 150 43.1 4,540 143 160 47.3 3,060 17 160 38.8 3,800 132 170 43.8 2,410 16 170 33.9 3,170 118 180 40.1 1,840 15 180 28.3 2,610 101 101 101 101 101								215
110 58.0 8,980 176 120 54.6 7,570 169 130 51.0 6,390 162 140 47.2 5,390 153 150 43.1 4,540 143 160 38.8 3,800 132 170 33.9 3,170 118 180 28.3 2,610 101								211
120 54.6 7,570 169 130 51.0 6,390 162 140 47.2 5,390 153 150 43.1 4,540 143 160 38.8 3,800 132 170 33.9 3,170 118 180 28.3 2,610 101								205
130 51.0 6,390 162 140 47.2 5,390 153 150 43.1 4,540 143 160 38.8 3,800 132 170 33.9 3,170 118 180 28.3 2,610 101	120	54.6	7,570	169	130	56.8	5,660	199
150 43.1 4,540 143 160 47.3 3,060 17 160 38.8 3,800 132 170 43.8 2,410 16 170 33.9 3,170 118 180 40.1 1,840 15 180 28.3 2,610 101			6,390				4,660	192
160 38.8 3,800 132 170 43.8 2,410 16 170 33.9 3,170 118 180 40.1 1,840 15 180 28.3 2,610 101								184
170 33.9 3,170 118 180 40.1 1,840 15 180 28.3 2,610 101								175
180 28.3 2,610 101								166
100 20.0 2,010 101					160	40.1	1,840	154
190 21.5 2,120 80		21.5						
200 11.1 1,700 45 * see page 10 ,Notes to lifting capacity"					* see page	10 "Notes to lifting	capacity"	

NOTES TO LIFTING CAPACITY

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.

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 that 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. See Appendix A.

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. See Appendix A.

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. See Appendix A.

This chart was developed exclusively for use with a boom only. Under no circumstances are these ratings to be interpreted for use with a jib.

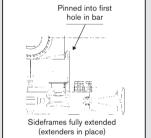
Ratings shown on this chart make no allowance for such factors as out of plumb loads, wind, poor soil conditions, improper inflation of rubber tires and dynamic effects due to excessive operating speeds. The user (operator) must exercise judgment to make allowance for these conditions. See page 3499 of Operator's Manual for detailed information.

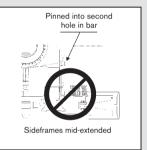
No account is taken of the wind force on the load. The user must consider this effect, which can be substantial for loads with large surface areas. In any wind it is strongly recommended that taglines be used to control the load.

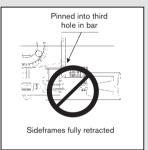
BOOM HOIST LINE - 12 parts of 3/4 inch diameter IPS wire rope with a minimum breaking strength of 51,200 pounds.

PENDANT SUSPENSION LINE - 2 parts of 1-3/8 inch diameter EEIPS wire rope with a minimum breaking strength of 211,000 pounds.

MAIN LOAD LINE – 1.000 inch diameter EIPS wire rope with a minimum breaking strength of 103,400 pounds **or** 0.875 inch diameter EIPS wire rope with a minimum breaking strength of 79,600 pounds.







SIDEFRAME POSITION DEFINITIONS

These ratings are valid for the sideframe positions as indicated below.

Refer to the HC 110 Operator's Manual for additional information.

59HI OFFSET TIP BOOM MAXIMUM BOOM & JIB SELF-ERECTION DATA											
			OVER-TI	HE-SIDE							
	OVER-THE-EI	ND BLOCKED	SIDEFRAMES FULLY-EXTENDED								
			(WITH EXTENDERS IN PLACE)								
JIB	BOOM LENGTH (FEET)	JIB LENGTH (FEET)	BOOM LENGTH (FEET)	JIB LENGTH (FEET)							
9HL	230 220 210 200	0 0 40 70	210 200 190 180	0 0 40 70							

LO	LOAD HOISTING INFORMATION - 1.00" diameter EIPS wire rope										
MAXIMUM LIFTING	MINIMUM	MAXIMUM HOISTIN	IG DISTANCE - FEET								
CAPACITY - LBS.	PARTS OF LINE	MAIN HOIST	AUX HOIST								
220,000 206,800 177,250 147,700 119,150 88,600 59,050 29,500	8 7 6 5 4 3 2 1	130 148 173 208 260 346 520 1040	NOT APPLICABLE								

LOAD HOISTING INFORMATION - 7/8" diarneter EIPS wire rope											
MAXIMUM LIFTING	MINIMUM	MAXIMUM HOISTIN	IG DISTANCE - FEET								
CAPACITY - LBS.	PARTS OF LINE	MAIN HOIST	AUX HOIST								
181,900 159,200 136,450 113,700 90,950 69,200 45,450 22,700	8 7 6 5 4 3 2 1	NOT APPLICABLE	78 89 104 125 156 208 313 626								

ERECTION

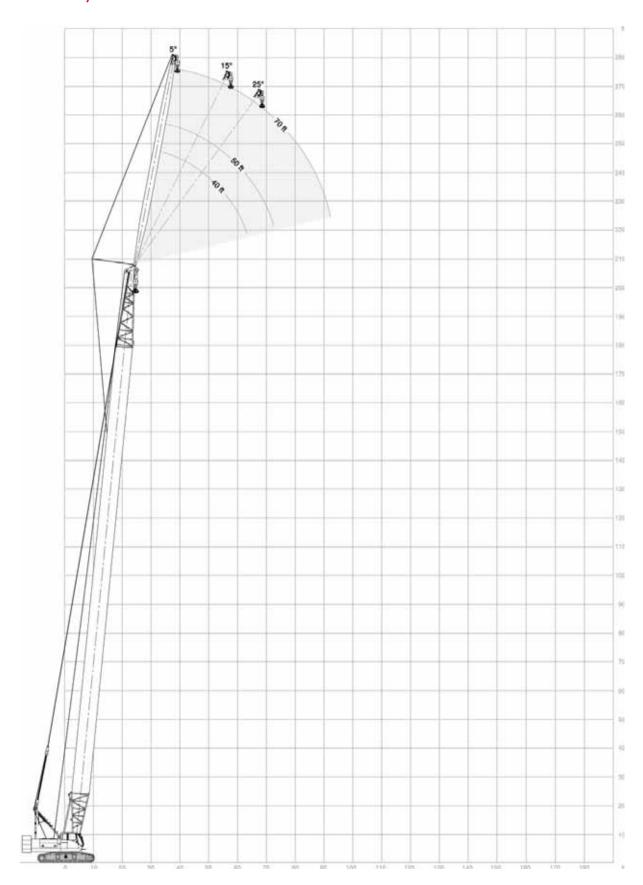
Erection "OVER-THE-END BLOCKED" is with the boom over the idler end with idler tumblers blocked (See HC 110 Operator's Manual for blocking instructions). Erection "OVER-THE-SIDE" is with the boom 90° to the sideframes. Blocks, slings and other load carrying devices must be on the ground during erection.

	BOOM COMPOSITION CHART - 59HI OFFSET TIP												
		BOOM SECTIONS											
BOOM LENGTH (FEET)	25' 59HI INNER	10' 59H CENTER	20' 59H CENTER	40' 59H CENTER	25' 59HI OUTER								
50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 1 0 0	0 0 0 1 1 1 1 2 2 2 2 3 3 3 3 4 4 4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								



RANGE DIAGRAM

59HI Boom, #9HL Jib



LOAD CHART

5	2,900	lb + 2	3,000 lb	SC			;	360°					Δ	NSI	B 30.5
40' (12.	40' (12.2 m) Jib length														
D	Jib		eg offset		Deg offset		Deg offset	D	Jib		eg offset		Deg offset		Deg offset
Boom length	Radius (Feet)	Boom	Rating (Pounds)	Boom Anale	Rating (Pounds)	Boom Anale	Rating (Pounds)	Boom length	Radius (Feet)	Boom	Rating (Pounds)	Boom Anale	Rating (Pounds)	Boom Anale	Rating (Pounds)
0	30	80.7	22,540*	-	-	-	-		38	80.7	22,470*	-	-	-	-
	35	78.6	22,540*		-	-	-		40	80.1	22,470*		-	-	-
	40 50	76.6 72.3	22,420* 21,780*	79.3 75.0	21,270* 20,710*	- 77.5	- 19.820*		50 60	77.1 74.0	22,470* 21,980*	79.1 75.9	21,150* 20,700*	80.9 77.8	20,080* 19,800*
100'	60	68.0	21,120*	70.7	20,150*	73.1	19,470*		70	70.8	20,490	72.8	20,350*	74.6	19,510*
(30.5 m)	70	63.5	20,520*	66.1	19,710*	68.5	18,290*	4=01	80	67.6	16,920	69.5	16,920	71.3	16,920
	80 90	58.9 53.9	18,220 15.520	61.4 56.5	18,220 15,520	63.7 58.7	16,950* 15,520	150' (45.7 m)	90 100	64.3 60.9	14,200 12.070	66.2 62.8	14,200 12,080	67.9 64.5	14,200 12,080
	100	48.7	13,390	51.1	13,390	53.2	13,400	, , ,	110	57.4	10,360	59.3	10,360	60.9	10,370
									120	53.7	8,950	55.6	8,960	57.1	8,960
	31	80.9	22,530*	_	-	_	-		130 140	49.9 45.8	7,770 6,780	51.7 47.5	7,780 6,780	53.2 49.0	7,780 6,780
	35	79.4	22,530*	-	-	-	-		150	41.4	5,930	43.1	5,940	44.4	5,940
	40	77.5	22,530*	80.0	21,320*	-	-								
110'	50 60	73.5 69.5	21,900* 21,300*	76.0 72.0	20,820* 20,320*	78.4 74.3	19,920* 19,550*		39	80.9	22,460*	-	-	-	-
(33.5 m)	70	65.4	20,770*	67.9	19,840*	70.1	18,820*		40	80.6	22,460*	-	-	-	-
	80	61.1	17,960	63.6	17,970	65.7	17,500*		50	77.7	22,460*	79.6	21,240*	-	-
	90	56.7 52.0	15,250 13,130	59.1 54.3	15,250 13,130	61.2 56.3	15,260 13,140		60 70	74.8	22,100* 20,230	76.7 73.7	20,780*	78.4 75.4	19,810* 19,510*
	110	46.9	11,430	49.2	11,430	51.1	11,430		80	68.8	16,640	70.6	16,650	72.3	16,650
	00	00.0	00 500*					160' (48.8 m)	90	65.7	13,930	67.5	13,930	69.2	13,940
	33 35	80.8 80.1	22,520* 22,520*	-	-	-	-	(46.6 111)	100 110	62.5 59.2	11,800 10,090	64.3 61.0	11,800 10,090	65.9 62.6	11,800
	40	78.2	22,520*	80.6	21,470*	-	-		120	55.8	8,680	57.6	8,680	59.1	8,680
100'	50	74.6	22,040*	76.9	20,920*	79.2	19,950*		130	52.3	7,500	54.0	7,500	55.5	7,500
120' (36.6 m)	60 70	70.9 67.0	21,450* 20,970*	73.2 69.3	20,470* 20,010*	75.4 71.5	19,620* 19,310*		140 150	48.5 44.5	6,510 5,650	50.2 46.2	6,510 5,650	51.6 47.5	6,510 5,660
	80	63.1	17,680	65.4	17,680	67.4	17,680		160	40.3	4,910	41.9	4,910	43.1	4,920
	90	59.0	14,980	61.3	14,980	63.2	14,980		41	00.0	00.450*				
	100 110	54.7 50.2	12,850 11,140	56.9 52.3	12,850 11,140	58.8 54.2	12,850 11,140		41 50	80.8 78.3	22,450* 22,450*	80.1	21,260*	-	-
	120	45.3	9,740	47.4	9,740	49.1	9,750		60	75.5	22,170*	77.3	20,850*	79.0	19,890*
										72.7 69.8	19,990 16,410	74.5 71.6	20,000 16,410	76.1 73.2	19,610* 16,410
	34	81.0	22,500*	-	-	-	-		90	66.9	13,690	68.6	13,690	70.2	13,690
	35	80.6	22,500*	-	-	-	-	170'	100	63.9	11,560	65.6	11,560	67.2	11,570
	40 50	78.9 75.5	22,500* 22,190*	- 77.7	20,980*	- 79.8	- 20,010*	(51.8 m)	110 120	60.8 57.6	9,840 8,440	62.5 59.3	9,840 8,440	64.0 60.8	9,840 8,440
130'	60	72.0	21,610*	74.2	20,560*	76.3	19,630*		130	54.3	7,260	56.0	7,260	57.4	7,260
(39.6 m)	70	68.5	21,010	70.6	20,130*	72.6	19,330*		140	50.9	6,260	52.5	6,260	53.9	6,270
	80 90	64.8 61.0	17,440 14,730	66.9 63.1	17,440 14,730	68.9 65.0	17,450 14,730		150 160	47.3 43.4	5,400 4,670	48.9 45.0	5,400 4,670	50.2 46.2	5,410 4,670
	100	57.1	12,610	59.2	12,610	61.0	12,610		170	39.2	4,010	40.8	4,020	41.9	4,020
	110	52.9	10,900	55.0	10,900	56.8	10,900		4.0	000	00.400				
	120 130	48.6 43.9	9,490 8,320	50.6 45.8	9,490 8,330	52.3 47.4	9,500 8,330		42 50	80.9 78.8	22,430* 22,430*	- 80.6	- 21,360*	-	-
	130	+0.0	,	70.0	0,000	77.7	0,000		60	76.2	22,300*		20,920*	79.5	19,910*
	36	80.8	22,490*	-	-	-	-		70	73.5	19,730	75.2	19,730	76.8	19,610*
	40 50	79.6 76.3	22,490* 22,330*	78.4	21,060*	80.4	20,060*		80 90	70.8 68.0	16,140 13,420	72.5 69.7	16,150 13,420	74.0 71.2	16,150 13,420
	60	73.0	21,760*		20,620*		19,710*	180'	100	65.2	11,290	66.8	11,290	68.3	11,290
140'	70	69.7	20,750	71.8	20,210*	73.7	19,420*	(54.9 m)	110	62.3	9,570	63.9	9,580	65.4	9,580
(42.7 m)	80 90	66.3 62.8	17,170 14,450	68.3 64.8	17,170 14,450	70.2 66.6	17,170 14,460		120 130	59.3 56.2	8,160 6,980	60.9 57.8	8,160 6,980	62.3 59.2	8,170 6,990
	100	59.1	12,330	61.1	12,330	62.9	12,340		140	53.0	5,990	54.6	5,990	55.9	6,000
	110	55.3	10,620	57.3	10,620	59.0	10,630		150	49.6	5,130	51.2	5,140	52.5	5,140
	120 130	51.3 47.1	9,210 8,040	53.3 49.0	9,210 8,050	54.9 50.5	9,220 8,050		160 170	46.1 42.3	4,390 3,740	47.6 43.8	4,390 3,740	48.9 45.0	4,390 3,750
	140	42.6	7,050	44.4	7,050	45.8	7,060		180	38.3	3,740	39.7	3,740	40.8	3,750
							,						,		



^{*} see page 17 "Notes to lifting capacity"

5	52,900 lb + 23,000 lb SC 360° ANSI B 30.5															
40' (12.	2 m)Jil	b lengt	:h													
Boom length	Jib Radius (Feet)	Boom	(Pounds)	Boom	Deg offset Rating (Pounds)	Boom	Deg offset Rating (Pounds)		Boom length	Jib Radius (Feet)	Boom	eg offset Rating (Pounds)	Boom	Deg offset Rating (Pounds)	Boom	Deg offset Rating (Pounds)
	44 50	80.8 79.3	21,930* 21,270*	- 81.0	- 19,700*	-	-			47 50	80.9 80.2	16,340* 16,030*	-	-	-	-
	60 70	76.8 74.2	20,090* 18,990*	78.4 75.9	18,900* 18,040*	80.0 77.4	17,680* 17,090*			60 70	77.9 75.5	14,900* 13,870*	79.4 77.0	14,170* 13,330*	80.8 78.4	13,290* 12,720*
	80 90	71.6 69.0	15,890 13,170	73.3 70.6	15,890 13,180	74.7 72.1	15,890 13,180			80 90	73.1 70.7	12,940* 12,040*	74.6 72.2	12,510* 11,700*	76.0 73.6	12,040* 11,330*
190' (57.9 m)	100 110	66.3 63.6	11,030 9,320	67.9 65.1	11,030 9,320	69.3 66.5	11,040 9,320		210' (64.0 m)	100 110	68.3 65.8	10,530 8,810	69.8 67.3	10,530 8,810	71.1 68.6	10,530 8,810
	120 130	60.7 57.8	7,910 6,720	62.3 59.4	7,910 6,730	63.7 60.7	7,910 6,730			120 130	63.3 60.7	7,390 6,210	64.7 62.1	7,390 6,210	66.0 63.4	7,400 6,220
	140 150	54.8 51.7	5,720 4,870	56.4 53.2	5,730 4,880	57.7 54.5	5,730 4,880			140 150	58.0 55.3	5,210 4,350	59.4 56.7	5,210 4,350	60.7 57.9	5,210 4,350
	160 170	48.5 45.0	4,130 3,480	50.0 46.5	4,130 3,480	51.2 47.6	4,130 3,490			160 170	52.4 49.5	3,610 2,950	53.8 50.8	3,610 2,950	55.0 51.9	3,620 2,960
	180 190	41.4 37.4	2,910 2,400	42.8 38.8	2,910 2,410	43.9 39.7	2,910 2,410			180 190	46.4 43.1	2,380 1,870	47.7 44.4	2,390 1,870	48.8 45.4	2,390 1,880
	45	81.0	19,010*	-	-	-	-									
	50 60	79.8 77.3	18,430* 17,300*	78.9	16,380*	80.4	15,320*									
	70 80	74.9	16,270* 15,250*	76.5 74.0	15,530* 14,680*	77.9 75.4	14,730* 14,040*									
	90 100 110	69.9 67.4 64.7	12,910	71.5 68.9 66.3	12,910	72.9 70.3 67.6	12,910									
200' (61.0 m)	120 130	62.1 59.3	9,050 7,640 6,460	63.6 60.8	9,050 7,640 6,460	64.9 62.1	9,060 7,640 6,460									
	140 150	56.5 53.6	5,460 4,600	58.0 55.1	5,460 4,600	59.3 56.3	5,460 4,600									
	160 170	50.6 47.4	3,860 3,200	52.0 48.8	3,860 3,200	53.2 49.9	3,860 3,210									
	180 190	44.0 40.4	2,620 2,120	45.4 41.8	2,630 2,120	46.5 42.8	2,630 2,130									
	200	36.6	1,670	37.9	1,670	38.8	1,680									

50' (15.5	50' (15.2 m) Jib length												
Boom length	Jib Radius (Feet)	5.0 D Boom Angle	eg offset Rating (Pounds)	Boom	Deg offset Rating (Pounds)	25.0 Deg offse Boom Rating Angle (Pounds							
	37	80.8	20,630*	-	-	-	-						
	40	79.8	20,390*	-	-	-	-						
	50	76.6	19,660*	79.2	17,950*	-	-						
	60	73.3	18,970*	75.9	17,500*	78.4	16,210*						
130'	70	70.0	18,390*	72.6	16,990*	75.0	15,910*						
(39.6 m)	80	66.5	17,560	69.1	16,550*	71.5	15,560*						
	90	63.0	14,840	65.6	14,840	67.9	14,570*						
	100	59.4	12,720	61.9	12,720	64.1	12,730						
	110	55.6	11,010	58.1	11,010	60.2	11,020						
	120	51.6	9,600	54.0	9,600	56.1	9,610						
	130	47.4	8,430	49.8	8,440	51.8	8,440						

Boom length	Jib Radius (Feet)	Boom	eg offset Rating (Pounds)	Boom	Deg offset Rating (Pounds)	Boom	Deg offset Rating (Pounds)
	38	81.0	20,560*	-	-	-	-
	40	80.4	20,410*	-	-	-	-
	50	77.3	19,780*	79.8	17,960*	-	-
	60	74.2	19,140*	76.7	17,560*	79.0	16,250*
140'	70	71.1	18,490*	73.5	17,100*	75.8	15,920*
(42.7 m)	80	67.9	17,290	70.3	16,690*	72.5	15,630*
	90	64.6	14,580	67.0	14,580	69.2	14,580
	100	61.2	12,440	63.6	12,450	65.7	12,450
	110	57.6	10,730	60.0	10,740	62.1	10,740
	120	54.0	9,320	56.3	9,330	58.3	9,330
	130	50.1	8,150	52.4	8,160	54.4	8,160
	140	46.0	7,160	48.3	7,160	50.1	7,170

^{*} see page 17 "Notes to lifting capacity"

LOAD CHART

With 59HI Offset Tip Boom - 4 Sheave Tip, #9HL Jib

5	2,900	lb + 2	23,000 lk	SC			;	36	0°					Δ	NSI	B 30.5
50' (15.:	2 m)Jil	b lengt	th													
	Jib		eg offset	15.0 [Deg offset	25.0 [Deg offset			Jib	5.0 D	eg offset	15.0 Г	Deg offset	25.0 [Deg offset
Boom	Radius	Boom		Boom	Rating	Boom	Rating		Boom	Radius	Boom	Rating	Boom	Rating	Boom	Rating
length	(Feet)	Angle	(Pounds)		(Pounds)		(Pounds)		length	(Feet)		(Pounds)		(Pounds)		(Pounds)
	40	80.9	20,440*	-	-	-	-			46	80.9	19,870*	-	-	-	-
	50	78.0	19,840*	80.3	17,990*	-	-			50	80.0	19,680*	-	-	-	-
	60	75.0	19,230*		17,540*	79.6	16,160*			60	77.6	19,240*	79.5	17,430*	-	-
	70	72.0	18,650*	74.4	17,150*	76.6	15,930*			70	75.1	18,190*	77.1	16,950*	78.9	15,670*
150'	80	69.0	17,030	71.3	16,750*	73.5	15,700*			80	72.6	16,000	74.6	16,010	76.4	15,180*
(45.7 m)	90	65.9	14,310	68.2	14,310	70.3	14,320		1007	90	70.1	13,280	72.1	13,280	73.8	13,280
	100	62.7 59.4	12,190	65.0	12,190	67.1 63.7	12,190 10,480		190' (57.9 m)	100 110	67.6 64.9	11,150 9,430	69.5 66.9	11,150 9,430	71.2 68.6	11,150 9,440
	120	56.0	10,480 9,070	61.7 58.3	10,480 9,070	60.2	9,070		(37.3 111)	120	62.3	8,020	64.2	8,020	65.9	8,020
	130	52.5	7,890	54.7	7,890	56.6	7,890			130	59.5	6,840	61.4	6,840	63.1	6,840
	140	48.8	6,890	50.9	6,890	52.7	6,900			140	56.7	5,840	58.6	5,840	60.2	5,840
	150	44.8	6,040	46.9	6,040	48.6	6,050			150	53.8	4,980	55.6	4,980	57.2	4,980
			-1		-,		-,			160	50.8	4,230	52.6	4,230	54.1	4,230
	42	80.7	20,290*	-	-	-	-			170	47.6	3,580	49.4	3,580	50.8	3,590
	50	78.5	19,850*	80.8	17,920*	-	-			180	44.2	3,000	46.0	3,010	47.4	3,010
	60	75.7	19,320*		17,590*	80.1	16,150*			190	40.6	2,500	42.3	2,500	43.6	2,510
	70	72.9	18,740*	75.2	17,180*	77.2	15,930*									
	80	70.1	16,770	72.3	16,770	74.3	15,700*			48	80.8	17,880*	-	-	-	-
400	90	67.1	14,050	69.3	14,050	71.3	14,050			50	80.4	17,660*	-	- 45.050*	-	-
160' (48.8 m)	100	64.1	11,910	66.3	11,910	68.3	11,920			60 70	78.1	16,610*	80.0	15,350* 14,620*	70.4	- 10 E70*
(40.0 111)	110 120	61.0 57.9	10,200 8,790	63.2	10,200 8,790	65.1 61.9	10,210 8,790			80	75.7 73.3	15,590* 14,650*	77.6 75.2	13,910*	79.4 77.0	13,570* 13,060*
	130	54.6	7,610	56.7	7,610	58.5	7,610			90	70.9	13,010	72.8	13,910	74.5	12,530*
	140	51.1	6,610	53.2	6,610	55.0	6,620			100	68.5	10,880	70.3	10,880	72.0	10,890
	150	47.5	5,760	49.5	5,760	51.2	5,770			110	66.0	9,160	67.9	9,160	69.5	9,160
	160	43.6	5,020	45.6	5,020	47.2	5,020		200'	120	63.5	7,740	65.3	7,740	66.9	7,750
									(61.0 m)	130	60.9	6,570	62.7	6,570	64.3	6,580
										140	58.2	5,560	60.0	5,560	61.6	5,570
	43	80.9	20,220*	-	-	-	-			150	55.5	4,710	57.2	4,710	58.8	4,720
	50	79.1	19,890*	-	-	-	-			160	52.6	3,960	54.4	3,960	55.8	3,970
	60	76.4	19,340*		17,580*	80.6	16,110*			170	49.7	3,310	51.4	3,310	52.8	3,320
	70	73.7	18,760*	75.9	17,230*	77.9	15,880*			180	46.6	2,730	48.3	2,740	49.6	2,740
	80 90	71.0 68.2	16,520 13.800	73.1 70.3	16,530 13,800	75.1 72.3	15,660* 13,810			190 200	43.3 39.8	2,220 1,780	44.9 41.4	2,220 1,780	46.2 42.6	2,230 1,780
170'	100	65.4	11,670	67.5	11,670	69.4	11,670			200	0.60	1,700	41.4	1,700	42.0	1,700
(51.8 m)	110	62.5	9,950	64.6	9,960	66.4	9,960			45. 11		· · ·	. "			
	120	59.5	8,540	61.5	8,540	63.4	8,550		see pag	e 17 "No	ites to l	fting capac	city"			
	130	56.4	7,360	58.4	7,360	60.2	7,370									
	140	53.2	6,370	55.2	6,370	56.9	6,380									
	150	49.9	5,510	51.8	5,520	53.5	5,520									
	160	46.3	4,770	48.3	4,770	49.8	4,770									
	170	42.6	4,120	44.5	4,120	45.9	4,130									
	45	000	00.000*													
	45 50	80.8 79.5	20,090* 19,810*	-		-										
	60	77.0	19,810		17,500*	-	-									
	70	74.4	18,840*		17,200*		15,850*									
	80	71.8	16,260	73.9	16,260	75.8	15,670*									
	90	69.2	13,530	71.2	13,540	73.1	13,540									
180'	100	66.5	11,400	68.5	11,400	70.3	11,410									
(54.9 m)	110	63.8	9,690	65.8	9,690	67.5	9,690									
	120	610	9 290	62 0	8 280	647	9 9 9 0									



120

130

140

160

170

180

150

61.0

58.1

55.1

51.9

48.7

45.2

41.6

8,280 62.9

7,090 60.0

6,090 57.0

5,230 53.8

4,500 50.6

3,840 47.1 3,280 43.4 8,280 64.7

5,240 55.4

61.7

58.6

52.1

48.5

7,100

6,100

4,500

3,840

3,280

8,280

7,100

6,100

5,240

4,500

3,850

3,280

= 5	2,900	lb + 2	23,000 lb	SC			3	860°						A	NSI	B 30.5
60' (18.3	m) Jib	lengtl	h													
_	Jib		eg offset		Deg offset		Deg offset			Jib		eg offset		Deg offset		Deg offset
Boom	Radius (Feet)	Boom Angle	Rating (Pounds)	Boom Angle	Rating (Pounds)	Boom Angle	Rating (Pounds)		oom ngth	Radius (Feet)	Boom Angle	Rating (Pounds)	Boom Angle	Rating (Pounds)	Boom Angle	Rating (Pounds)
_	42	81.0	15,360*	-	-	-	-			47	80.9	15,170*	-	-	-	-
	50	78.8	14,930*	-	-	-	-			50	80.2	15,030*	-	-	-	-
	60 70	76.0 73.2	14,330* 13,790*	78.7 75.9	12,880* 12,470*	78.4	- 11,300*			60 70	77.8 75.3	14,540* 14,050*	80.1 77.7	12,970* 12,640*	79.9	11,460*
150'	80	70.3	13,300*	73.0	11,980*		10,950*			80	72.8	13,640*	75.2	12,320*	77.4	11,130*
(45.7 m)	90	67.4	12,800*	70.0	11,530*		10,620*			90	70.3	13,200*	72.7	11,890*	74.8	10,840*
	100	64.4	12,230*	67.0	11,170*		10,320*	180		100	67.8	11,510	70.1	11,510	72.2	10,560*
	110	61.3	10,570	63.9	10,570	66.2	10,080*	(54	4.9 m)	110	65.2	9,790	67.5	9,790	69.5	9,800
	120 130	58.1 54.8	9,170 7,990	60.7 57.4	9,170 7,990	63.0 59.6	9,180 8,000			120 130	62.5 59.7	8,380 7,200	64.8 62.0	8,380 7,200	66.8 64.0	8,390 7,200
	140	51.4	6,990	53.9	6,990	56.0	7,000			140	56.9	6,200	59.2	6,200	61.1	6,200
	150	47.7	6,130	50.2	6,140	52.3	6,140			150	54.0	5,340	56.2	5,340	58.1	5,340
		î	,							160	51.0	4,590	53.2	4,590	55.0	4,600
	44	80.9	15,280*	-	-	-	-			170	47.8	3,940	49.9	3,940	51.7	3,950
	50	79.3	14,940*	- 70.0	- 10.010*	-	-			180	44.4	3,370	46.5	3,370	48.2	3,370
	60 70	76.6 73.9	14,400* 13,890*	79.2 76.5	12,910* 12,570*	78.9	- 11,360*									
	80	71.2	13,440*	73.8	12,090*		11,010*			49	80.8	15,040*	-	-	_	-
	90	68.4	12,970*	71.0	11,690*		10,660*			50	80.6	14,990*	-	-	_	-
160'	100	65.6	12,020	68.1	11,280*		10,400*			60	78.3	14,550*	80.5	12,920*	-	-
(48.8 m)	110	62.7	10,30	65.2	10,310	67.5	10,140*			70	75.9	14,080*	78.2	12,620*	80.3	11,440*
	120	59.7	8,890	62.2	8,890	64.4	8,900			80	73.5	13,650*	75.8	12,330*	77.9	11,180*
	130 140	56.6 53.4	7,710 6,710	59.1 55.8	7,710 6,710	61.2 57.9	7,720 6,720	190	o,	90	71.1 68.7	13,290* 11,250	73.4 70.9	12,000* 11,250	75.5 73.0	10,870* 10,610*
	150	50.1	5,850	52.5	5,860	54.5	5,860		7.9 m)	110	66.2	9,530	68.4	9,530	70.4	9,530
	160	46.5	5,120	48.9	5,120	50.8	5,120			120	63.7	8,110	65.9	8,120	67.9	8,120
			<u> </u>		<u>'</u>		,			130	61.1	6,940	63.3	6,940	65.2	6,950
			. =							140	58.4	5,930	60.6	5,930	62.5	5,940
	46	80.8	15,200*	-	-	-	-			150	55.7	5,080	57.8	5,080	59.7	5,090
	50 60	79.8 77.2	15,010* 14,470*	79.7	12,920*	-				160 170	52.8 49.9	4,330 3,680	54.9 51.9	4,330 3,680	56.7 53.7	4,340 3,690
	70	74.7	13,970*	77.1	12,610*		11,390*			180	46.8	3,100	48.8	3,110	50.5	3,110
	80	72.1	13,510*	74.5	12,210*		11,070*			190	43.5	2,600	45.5	2,600	47.1	2,610
	90	69.4	13,120*	71.9	11,790*		10,760*									
170' (51.8 m)	100	66.7	11,770	69.2	11,380*		10,470*			50	80.9	15,000*	-	-	-	-
(31.6 111)	110 120	64.0	10,060 8,650	66.4 63.5	10,060 8,650	68.6 65.7	10,060 8,650			60 70	78.7 76.5	14,550* 14,090*	80.9 78.7	12,920* 12,660*	80.7	11,200*
	130	58.3	7.460	60.6	7,470	62.7	7,470			80	74.2	13,710*	76.4	12,380*	78.4	11,200*
	140	55.3	6,460	57.6	6,470	59.6	6,470			90	71.9	13,120	74.1	12,090*	76.1	10,940*
	150	52.2	5,600	54.5	5,610	56.4	5,610			100	69.6	10,980	71.7	10,990	73.7	10,650*
	160	48.9	4,870	51.2	4,870	53.1	4,870	20		110	67.2	9,260	69.3	9,260	71.3	9,270
	170	45.5	4,220	47.7	4,220	49.5	4,230	(61	1.0 m)	120	64.8	7,850	66.9	7,850	68.8	7,850
* see pag	e 17 "No	tes to I	ifting capac	city"						130 140	62.3 59.8	6,660 5,660	64.4 61.8	6,670 5,660	66.3 63.7	6,670 5,670
										150	57.2	4,800	59.2	4,800	61.0	4,810
										160	54.5	4,060	56.5	4,060	58.3	4,070
										170	51.7	3,400	53.7	3,410	55.4	3,410
										180	48.8	2,830	50.8	2,830	52.5	2,830
										190	45.8	2,320	47.7	2,320	49.3	2,330
										200	42.6	1,860	44.5	1,870	46.0	1,870

ANSI B 30.5

LOAD CHART

52	2,900	lb + 2	3,000 lb	SC			;	36	0°		
70' (21.3	3 m) Jik	lengt	h								
	Jib Radius (Feet)	Boom	eg offset Rating (Pounds)	Boom	Deg offset Rating (Pounds)	Boom	Deg offset Rating (Pounds)		Boom length	Jib Radius (Feet)	Boo
length	, ,					Angle	(Fourius)		lengin		Ang
	50 60	80.8 78.5	11,850* 11,380*	-	-	-	-			53 60	80 79
	70 80	76.1 73.7	10,940* 10,510*	78.8 76.4	9,530* 9,140*	- 78.9	- 8,120*			70 80	77 75
	90	71.3	10,010*	74.0	8,790*	76.4	7,860*			90	72
	100	68.9	9,590*	71.5	8,450*	73.9	7,650*			100	70
180'	110	66.4	9,160*	69.0	8,180*	71.4	7,430*		200'	110	68
(54.9 m)	120	63.9	8,450	66.4	7,900*	68.8	7,250*		(61.0 m)	120	65
	130	61.3	7,270	63.8	7,270	66.1	7,060*			130	63
	140	58.6	6,270	61.1	6,270	63.4	6,280			140	61
	150	55.9	5,420	58.4	5,420	60.6	5,430			150	58
	160	53.0	4,670	55.5	4,670	57.6	4,680			160	56
	170	50.0	4,020	52.5	4,020	54.6	4,030			170	53
	180	46.9	3,440	49.4	3,450	51.4	3,450			180	50
										190	48
	51	80.9	11,820*	-	-	-	-			200	45
	60	78.9	11,450*	-	-	-	-		*	- 17 N-	
	70	76.7	11,030*	79.2	9,580*	-	-		* see pag	e 17 "INC	nes
	80	74.4	10,640*	76.9	9,220*	79.3	8,160*				
	90	72.1	10,130*	74.6	8,870*	77.0	7,920*				
	100	69.7	9,710*	72.3	8,540*	74.6	7,690*				
190'	110	67.4	9,300*	69.9	8,250*	72.2	7,490*				
(57.9 m)	120	65.0	8,200	67.4	8,000*	69.7	7,310*				
	130	62.5	7,010	64.9	7,020	67.2	7,020				
	140	60.0	6,010	62.4	6,020	64.6	6,020				
	150	57.4	5,150	59.8	5,150	61.9	5,160				
	160	54.7	4,410	57.1	4,410	59.2	4,420				
	170	51.9	3,750	54.3	3,760	56.3	3,760				
	180	49.0	3,190	51.3	3,190	53.3	3,190				
	190	46.0	2,670	48.3	2,670	50.2	2,680				

Boom length			eg offset Rating (Pounds)	15.0 E Boom Angle	Deg offset Rating (Pounds)	25.0 Deg offset Boom Rating Angle (Pounds)		
	53 60	80.8 79.3	11,750* 11,490*	-	-	-	-	
	70	77.2	11,070*	79.6	9,620*	-	-	
	80	75.0	10,680*	77.4	9,260*	79.7	8,200*	
	90	72.8	10,280*	75.2	8,950*	77.5	7,940*	
	100	70.5	9,820*	73.0	8,630*	75.2	7,740*	
200'	110	68.3	9,340	70.7	8,340*	72.9	7,540*	
(61.0 m)	120	65.9	7,930	68.3	7,930	70.5	7,350*	
	130	63.6	6,750	66.0	6,750	68.1	6,760	
	140	61.2	5,750	63.5	5,750	65.7	5,750	
	150	58.7	4,880	61.1	4,890	63.1	4,890	
	160	56.2	4,130	58.5	4,140	60.5	4,140	
	170	53.6	3,480	55.9	3,490	57.8	3,490	
	180	50.8	2,910	53.1	2,910	55.0	2,920	
	190	48.0	2,400	50.3	2,400	52.1	2,410	
	200	45.0	1,940	47.3	1,950	49.0	1,950	

to lifting capacity"



NOTES TO LIFTING CAPACITY

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.

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 that 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. See Appendix A.

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. See Appendix A.

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. See Appendix A.

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 judgment 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 - 12 parts of 3/4 inch diameter IPS wire rope with a minimum breaking strength of 51,200 pounds.

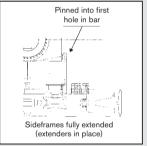
PENDANT SUSPENSION LINE - 2 parts of 1-3/8 inch diameter EEIPS wire rope with a minimum breaking strength of 211,000 pounds.

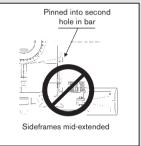
JIB BACKSTAY AND FRONTSTAY LINES - 2 parts of 0.875 inch diameter IPS wire rope with a minimum breaking strength of 69,200 pounds.

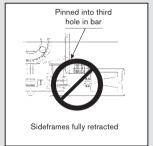
JIB WHIP LINE – 7/8 inch diameter EIPS wire rope with a minimum breaking strength of 79,600 pounds.

SIDEFRAME POSITION DEFINITIONS

These ratings are valid for the sideframe positions as indicated below. Refer to the HC 110 Operator's Manual for additional information.







ERECTION

Erection "OVER-THE-END BLOCKED"

is with the boom over the idler end with idler tumblers blocked (See HC 110 Operator's Manual for blocking instructions). Erection "OVER-THE-SIDE" is with the boom 90° to the sideframes. Blocks, slings and other load carrying devices must be on the ground during erection.

59HL OFFSET TIP BOOM MAXIMUM BOOM & JIB SELF-ERECTION DATA								
			OVER-TI	HE-SIDE				
	OVER-THE-EN	ID BLOCKED	SIDEFRAMES FULLY-EXTENDED (WITH EXTENDERS IN PLACE)					
JIB	BOOM LENGTH (FEET)	JIB LENGTH (FEET)	BOOM LENGTH (FEET)	JIB LENGTH (FEET)				
9HL	230 220 210 200	0 0 40 70	210 200 190 180	0 0 40 70				

LOAD HOISTING INFORMATION - 7/8" diameter EIPS wire rope								
MAXIMUM LIFTING	MINIMUM	MAXIMUM HOISTING DISTANCE - FEET						
CAPACITY - LBS.	PARTS OF LINE	MAIN HOIST	AUX HOIST					
22,550	1	N/A	626					

	воом со	MPOSITION CH	HART - 59HI O	FFSET TIP					
		BOOM SECTIONS							
BOOM LENGTH (FEET)	25' 59HI INNER	10' 59H CENTER	20' 59H CENTER	40' 59H CENTER	25' 59HI OUTER				
100 110 120 130 140 150 160 170 180 190 200 210	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 0 1 0 1 0 1 0 1 0 1 0	0 1 1 0 0 1 1 0 0	1 1 1 2 2 2 2 2 3 3 3 3 4	1 1 1 1 1 1 1 1 1 1 1 1 1				

	9HL JIB COMPOSITION CHART									
JiB LENGTH	20' 10'		20'	20'	EFF. JIB WEIGHT	"A" I	JIB OFFSET N FEET & INC	HES		
(FEET)	INNER	CENTER	CENTER		(POUNDS)	5°	15°	25°		
40 50 60 70	1 1 1	0 1 0 1	0 0 1 1	1 1 1	1,850 2.350 2,750 3,700	4' 9" 5' 6" 6' 1" 6' 8"	9' 9" 11' 8" 13' 6" 15' 6"	14' 8" 17' 9" 20' 9" 24' 0"		

Hydraulic Crawler Crane

Maximum lifting capacity

110 tons (100 mt).

Boom systems

59HI Tubular Chord Boom, pin connected - with 4 Sheave Tip

- 230 ft maximum boom length.
- 270 ft maximum boom and jib combination length.
- 25 ft (7.6 m) inner and 25 ft (7.6 m) outer and 10 ft / 20 ft / 40 ft available inserts provide boom compositions in 10 ft (3 m) increments from 50 ft (15.2 m) to 230 ft (70 m).

Robust engine

Cummins Model QSB 6.7 Turbocharged, after cooler, diesel engine, 4 cycle, 6 cylinders, direct fuel injection, 409 cubic inch displacement,
 6.7 liters, 240 BHP@ 2000 rpm, 105 gallons fuel tank capacity.

Environmental operator's cab

- Designed to provide excellent viewing range and quiet, comfortable operation.
- 37 inch (0.91 m) wide cab has wide curved windows on both top and bottom.
- Easy-to-operate modular and ergonomically designed controls reduce operator fatigue and increase productivity.
- Load Moment Indicator with interactive screen. Operator can select from three display modes: loaded condition diagram, rated lifting curve or rated lifting load table.
- Adjustable operator's seat, radio, air conditioner, overhead window, sun visor, fan, overhead and front wipers and drum rotation indicators are 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 swing circle and multiple pass hydraulic swivel joint.
- Crawlers have high alloy steel tumbler yokes and rigid fabricated structures with sealed rollers.
- 36" (914 mm) crawler shoes.
- Travel mechanism is set within shoe width.
- Side frames extended or retracted by cylinders inside the carbody.
- Two travel speed settings 0.60 / 0.87 mph (0.96 / 1.4 km/h).
- 30 % (17°) gradeability.

Powerful, high-speed hoist system

- Independent main and auxiliary load hoisting drums. Main drum is grooved for 1 inch (25 mm) diameter rope. Max line speed is 513 fpm (156 m/min), max single line pull is 40,640 lb (18 435 kg). Rated single line pull is 29,500 lb (13 381 kg). Auxiliary drum is grooved for 7/8 inch (22.4 mm) diameter rope. Max line speed is 553 fpm (168 m/min), max single line pull is 37,670 lb (17 086 kg). Rated single line pull is 22,700 lb (10 297 kg).
 - Freefall on main and auxiliary drums.
- 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 the drums allows easy access for cable installation and maintenance.
- External contracting brake.
- Internal expanding band clutch.
- 3.0 rpm swing speed.

High capacity, dependable hydraulic system

- Open circuit system has 2 variable displacement piston pumps with system capacity of 183 gpm (692 lpm).
- Hydraulic reservoir with 79 gallons (300 I) capacity and 10 micron filtration.
- Component working range is between -4 and 203° F (-20 and 95° C).

Four piece removable counterweight

- Four piece pin connected counterweight can be assembled or disassembled easily within minutes.
- Hydraulic counterweight removal system is standard and makes the HC 110 one of the most transportable cranes in its class.
- Moves on five trucks with full boom and #9HL jib. At 17 ft, 0.5 inch (5.2 m) wide and 11 ft (3.35 m) high, the basic HC 110 will transport on a standard lowboy trailer.

Options include

- Third drum
- Third drum with free spooling
- Automotive type lights
- Hydraulic power take off
- Jib and jib inserts
- Single sheave extension
- Transportation package
- Single sheave extension
- Tagline winder



TRANSPORT EXAMPLE FOR HC 110

With 200 ft 59"H Boom & 70 ft Jib and 3rd Drum

Loads required as follows (weights shown do not include blocking or tie-down material):	
LOAD NO. 1 – Step Deck	
2 x crawler side frame counterweights (11,500 each) 40' boom center section with pendants 20 ft jib inner 1 x upper counterweight TOTAL LOAD	23,000 lbs 2,670 lbs 890 lbs 4,400 lbs 30,960 lbs
LOAD NO. 2 – Step Deck	
Middle portion of counterweight 40' boom center section 20 ft jib outer 1 x upper counterweight TOTAL LOAD	12,100 lbs 2,670 lbs 480 lbs 4,400 lbs 19,650 lbs
LOAD NO. 3 – Step Deck	
Lower portion of counterweight 25 ft boom outer section 20' boom center section Main load block Overhaul ball TOTAL LOAD	32,000 lbs 4,200 lbs 1,975 lbs 1,500 lbs 650 lbs 40,325 lbs
LOAD NO. 4 - Step Deck	
1 x 10' boom center section 1 x 40' boom center sections 10' jib center section 20' jib center section TOTAL LOAD	1,060 lbs 2,670 lbs 190 lbs 385 lbs 4,305 lbs
LOAD NO. 5	
Basic Crane: a) Complete upper structure b) Carbody and sideframes c) Retractable A-frame d) Boom inner section and boom stops e) Third drum	
TOTAL WEIGHT OF BASIC CRANE, etc.)	105,000 lbs

Effective Date: May 2014.

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