

HC 110 Hydraulic Crawler Crane



- 110 tons (100 mt) max lift capacity

- 40,640 lbs. (18 435 kg) max single line pull, 565 fpm (172 mpm) max
- · Quiet, comfortable operator's cab
- · Shockless stop system gradually retards operating speed to reduce shocks when crane approaches
- Two speed travel allows operator to select the best speed and power
- 99,400 lbs. (45 100 kg) transport weight including sideframes and boom inner. Transports with full boom and jib on only 4 trucks
- Hydraulic counterweight removal system simplifies installation and

THE ULTIMATE CRANE™

Machines shown may have optional equipment

AMERICAN HC 110

Hydraulic Crawler Crane Max. Lifting Capacity: 110 tons (80 mt)

230 ft. (70 m) MAXIMUM LIFT CRANE BOOM

- 59HI tubular chord boom, pin connected.
- 25 ft. (7.6 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 50 ft. (15.2 m) to 230 ft. (70 m).

ENVIRONMENTAL OPERATOR'S CAB

- Designed to provide excellent viewing range and quiet, comfortable operation.
- 37 in. (.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 features a shockless stop system. 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 swing circle and multiple pass hydraulic swivel joint.



Environmental operator's cab

- Crawlers have high alloy steel tumbler yokes and rigid fabricated structures with built-in sealed automatic lubrication system.
- 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 in. (25 mm) diameter rope. Max line speed is 513 fpm (156 m/min), max single line pull is 40,640 lbs. (18 435 kg). Rated single line pull is 29,500 lbs. (13 381 kg). Auxiliary drum is grooved for 7/8 in. (22.4 mm) diameter rope. Max line speed is 553 fpm (168 m/min), max single line pull is 37,670 lbs. (17 086 kg). Rated single line pull is 22,700 lbs. (10 297 kg). Freefall on main and auxiliary drums.
- Each drum, including optional third, has power up/down. 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.
- · 3.0 rpm swing speed.

For more information, product demonstration, or details on purchase, lease and rental plans, please contact your local Terex Cranes Distributor.

THE **ULTIMATE** CRANE[™]

Hydraulic removable counterweight system

HIGH CAPACITY, DEPENDABLE HYDRAULIC SYSTEM

- Open circuit system has 5 variable displacement piston pumps with system capacity of 183 gpm (692 lpm).
- Hydraulic reservoir with 79 gal. (300 l) capacity and 10 micron filtration.
- Component working range is between -4 and 203° F (-20 and 95° C).
- 230 HP (171 kW) @ 2000 RPM Cummins 6CTA 8.3 turbocharged diesel engine. Fuel tank capacity is 105 gal. (397 l).

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 four trucks with full boom and #9HL jib. At 17 ft. 0.5 in. (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.
- · Automotive type lights.
- Hydraulic power take off.
- · Jib and jib inserts.

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty applicable to the particular product and sale. We make no other warranty, expressed or implied.

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Model HC110 Crawler Crane - Ratings In Pounds 59HI Offset Tip Boom - 4 Sheave Tip 52,900 Pound Upper Counterweight 23,000 Pound Sideframe Counterweight Sideframes Fully Extended – w/ Extenders In Place

BOOM LENGTH	 RADIUS (FEET)	BOOM ANGLE (DEGREES)	360 DEGREE RATING (POUNDS)	FROM BOOM POINT TO GROUND (FEET)
50' BOOM	13 15 20 25 30 35 40 50	79.9 77.6 71.6 65.4 58.9 51.9 44.1 22.7	220,000 * 190,080 * 123,290 87,670 67,640 54,900 46,010 34,480	56 55 54 52 49 46 41 26
60' BOOM	14 15 20 25 30 35 40 50 60	80.7 79.7 74.8 69.7 64.5 59.1 53.3 40.0 20.6	203,570 * 189,950 * 123,100 87,490 67,430 54,700 45,790 34,250 27,130	66 65 64 63 61 58 54 45 27
70 ¹ BOOM	16 20 25 30 35 40 50 60 70	80.3 77.0 72.8 68.4 63.9 59.2 49.0 36.9 19.0	177,910 * 122,950 87,320 67,250 54,530 45,620 34,050 26,960 22,070	75 75 73 71 69 67 59 48 29
80' BOOM	17 20 25 30 55 40 50 60 70 80	80.8 78.7 75.0 71.2 67.4 63.4 55.0 45.7 34.4 17.7	161,850 122,740 87,130 67,020 54,310 45,380 33,810 26,730 21,840 18,300	85 85 84 82 80 78 72 64 52 31
90' BOOM	19 20 25 30 50 60 70 80 90	80.6 79.9 76.7 73.4 70.0 66.6 59.4 51.6 42.9 32.3 16.7	133,440 122,580 86,970 66,860 54,150 45,210 33,630 26,570 21,670 18,120 15,440	95 95 94 93 91 89 84 77 68 55 32

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Model HC110 Crawler Crane - Ratings In Pounds 59HI Offset Tip Boom - 4 Sheave Tip 52,900 Pound Upper Counterweight 23,000 Pound Sideframe Counterweight Sideframes Fully Extended – w/ Extenders In Place

BOOM LENGTH	RADIUS (FEET)	BOOM ANGLE (DEGREES)	360 DEGREE RATING (POUNDS)	FROM BOOM POINT TO GROUND (FEET)
100' BOOM	20 25 30 35 40 50 60 70 80 90 100	$\begin{array}{c} 80.9\\ 78.0\\ 75.1\\ 72.1\\ 69.0\\ 62.7\\ 56.0\\ 48.8\\ 40.6\\ 30.6\\ 15.8\end{array}$	122,380 86,760 66,630 53,930 44,980 33,380 26,340 21,430 17,880 15,190 13,090	$ \begin{array}{c} 105\\ 104\\ 103\\ 102\\ 100\\ 95\\ 89\\ 82\\ 71\\ 57\\ 34\\ \end{array} $
110' BOOM	22 25 30 35 40 50 60 70 80 90 100 110	80.7 79.1 76.5 73.8 71.0 65.4 59.5 53.2 46.4 38.6 29.1 15.1	105,050 86,580 66,410 53,720 44,760 33,160 26,130 21,220 17,650 14,960 12,860 11,180	115 114 113 112 110 106 101 94 86 75 60 35
120' BOOM	24 25 30 50 60 70 80 90 100 110 120	80.5 80.1 77.6 75.2 72.7 67.6 62.3 56.7 50.8 44.3 36.9 27.9 14.4	91,640 86,370 66,180 53,490 44,530 32,910 25,890 20,970 17,410 14,720 12,600 10,910 9,540	125 125 124 122 121 117 113 107 99 90 78 62 36
130' BOOM	25 30 35 40 50 60 70 80 90 100 110 120 130	80.8 78.6 76.3 74.0 69.4 64.6 59.6 54.3 48.6 42.4 35.4 26.7 13.8	86,180 65,990 53,300 44,340 32,700 25,690 20,770 17,210 14,510 12,400 10,700 9,310 8,160	135 134 133 131 128 124 118 112 104 94 82 65 37

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Model HC110 Crawler Crane - Ratings In Pounds 59HI Offset Tip Boom - 4 Sheave Tip 52,900 Pound Upper Counterweight 23,000 Pound Sideframe Counterweight Sideframes Fully Extended – w/ Extenders In Place

BOOM LENGTH	RADIUS (FEET)	BOOM ANGLE (DEGREES)	360 DEGREE RATING (POUNDS)	FROM BOOM POINT TO GROUND (FEET)
140' BOOM	27 30 35 40 60 70 80 90 100 110 120 130 140	80.7 79.4 77.3 75.2 70.9 66.5 62.0 57.2 52.2 46.8 40.8 34.0 25.7 13.3	76,660 $65,750$ $53,070$ $44,100$ $32,450$ $25,450$ $20,530$ $16,960$ $14,260$ $12,140$ $10,440$ $9,050$ $7,890$ $6,920$	$\begin{array}{c} 145\\ 144\\ 143\\ 142\\ 139\\ 135\\ 130\\ 124\\ 117\\ 108\\ 98\\ 85\\ 67\\ 39\end{array}$
150' BOOM	28 30 35 40 50 60 70 80 90 100 110 120 130 130 140 150	$\begin{array}{c} 80.9\\ 80.1\\ 78.2\\ 76.2\\ 72.2\\ 68.2\\ 64.0\\ 59.6\\ 55.1\\ 50.3\\ 45.1\\ 39.4\\ 32.8\\ 24.9\\ 12.8 \end{array}$	72,450 65,530 52,860 43,870 32,220 25,230 20,300 16,730 14,020 11,910 10,210 8,810 7,640 6,670 5,840	$ \begin{array}{c} 154\\ 154\\ 153\\ 152\\ 149\\ 146\\ 141\\ 136\\ 129\\ 122\\ 113\\ 102\\ 88\\ 69\\ 40\\ \end{array} $
160' BOOM	30 35 40 50 60 70 80 90 100 110 120 130 140 150 160	$\begin{array}{c} 80.7\\ 78.9\\ 77.1\\ 73.4\\ 69.6\\ 65.7\\ 61.7\\ 57.6\\ 53.2\\ 48.6\\ 43.6\\ 38.1\\ 31.8\\ 24.0\\ 12.4 \end{array}$	65,300 52,640 43,640 31,960 24,990 20,060 16,480 13,770 11,650 9,950 8,550 7,380 6,400 5,550 4,850	$ \begin{array}{c} 164\\ 163\\ 162\\ 160\\ 156\\ 152\\ 147\\ 141\\ 134\\ 126\\ 117\\ 105\\ 91\\ 72\\ 41\\ \end{array} $

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Model HC110 Crawler Crane - Ratings In Pounds 59HI Offset Tip Boom - 4 Sheave Tip 52,900 Pound Upper Counterweight 23,000 Pound Sideframe Counterweight Sideframes Fully Extended – w/ Extenders In Place

BOOM LENGTH	 RADIUS (FEET)	BOOM ANGLE (DEGREES)	360 DEGREE RATING (POUNDS)	FROM BOOM POINT TO GROUND (FEET)	
170' BOOM	31 35 40 50 60 70 80 90 100 110 120 130 140 150 160 170	$\begin{array}{c} 80.9\\ 79.6\\ 77.9\\ 74.4\\ 70.8\\ 67.2\\ 63.5\\ 59.7\\ 55.7\\ 51.5\\ 47.0\\ 42.2\\ 36.9\\ 30.8\\ 23.3\\ 12.1 \end{array}$	$\begin{array}{c} 62,050\\ 52,430\\ 43,420\\ 31,740\\ 24,780\\ 19,850\\ 16,270\\ 13,560\\ 11,430\\ 9,730\\ 8,320\\ 7,150\\ 6,160\\ 5,320\\ 4,600\\ 3,990 \end{array}$	174 174 173 170 167 163 159 153 147 139 131 121 108 93 74 42	
180' BOOM	33 35 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180	80.8 80.2 78.6 75.3 71.9 68.6 65.1 61.5 57.8 54.0 49.9 45.6 41.0 35.8 29.9 22.6 11.7	56,790 $52,200$ $43,200$ $31,490$ $24,560$ $19,600$ $16,020$ $13,310$ $11,180$ $9,470$ $8,070$ $6,890$ $5,900$ $5,900$ $5,900$ $5,960$ $4,330$ $3,690$ $3,150$	$\begin{array}{c} 184\\ 184\\ 183\\ 183\\ 180\\ 178\\ 174\\ 170\\ 165\\ 159\\ 152\\ 144\\ 135\\ 124\\ 112\\ 96\\ 76\\ 43\\ \end{array}$	
190' BOOM	34 35 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190	$\begin{array}{c} 81.0\\ 80.7\\ 79.2\\ 76.1\\ 72.9\\ 69.7\\ 66.5\\ 63.2\\ 59.7\\ 56.2\\ 52.4\\ 48.5\\ 44.3\\ 39.8\\ 34.8\\ 29.1\\ 22.0\\ 11.4 \end{array}$	52,440 * 51,980 42,970 31,260 24,330 19,370 15,790 13,070 10,940 9,230 7,820 6,650 5,660 4,810 4,070 3,430 2,880 2,410	$ 194 \\ 194 \\ 193 \\ 191 \\ 188 \\ 185 \\ 181 \\ 176 \\ 170 \\ 164 \\ 157 \\ 149 \\ 139 \\ 128 \\ 115 \\ 99 \\ 78 \\ 44 \\ $	

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Model HC110 Crawler Crane - Ratings In Pounds 59HI Offset Tip Boom - 4 Sheave Tip 52,900 Pound Upper Counterweight 23,000 Pound Sideframe Counterweight Sideframes Fully Extended – w/ Extenders In Place

BOOM LENGTH	 RADIUS (FEET)	BOOM ANGLE (DEGREES)	360 DEGREE RATING (POUNDS)	FROM BOOM POINT TO GROUND (FEET)
2001 BOOM	36 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200	80.9 79.7 76.8 73.8 70.8 67.7 64.6 61.4 58.0 54.6 51.0 47.2 43.1 38.8 33.9 28.3 21.5 11.1	46,580 * 42,730 31,010 24,090 19,130 15,540 12,820 10,690 8,980 7,570 6,390 5,390 4,540 3,800 3,170 2,610 2,120 1,700	204 203 201 198 195 191 187 182 176 169 162 153 143 132 118 101 80 45
210' BOOM	38 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190	$\begin{array}{c} 80.8\\ 80.2\\ 77.4\\ 74.6\\ 71.7\\ 68.8\\ 65.9\\ 62.9\\ 59.7\\ 56.5\\ 53.2\\ 49.7\\ 46.0\\ 42.0\\ 37.8\\ 33.0\\ 27.6\\ \end{array}$	41,260 * 40,530 * 30,780 23,870 18,910 15,320 12,600 10,470 8,750 7,340 6,160 5,170 4,310 3,570 2,920 2,360 1,860	214 213 211 209 206 202 198 193 188 182 174 166 157 147 135 121 104

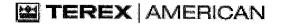
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BOOM LENGTH	RADIUS (FEET)	BOOM ANGLE (DEGREES)	360 DEGREE RATING (POUNDS)	FROM BOOM POINT TO GROUND (FEET)
	39	80.9	36,220 *	224
220'	40	80.7	35,920 *	223
BOOM	50	78.0	30,530	222
	60	75.3	23,640	219
	70	72.6	18,670	216
	80	69.8	15,080	213
	90	67.1	12,350	209
	100	64.2	10,220	204
	110	61.3	8,490	199
	120	58.2	7,090	193
	130	55.1	5,900	187
	140	51.9	4,900	179
	150	48.5	4,050	171
	160	44.9	3,300	162
	170	41.0	2,650	151
	180	36.9	2,090	138
	190	32.3	1,590	124
	41	80,8	31,600 *	233
230'	50	78.5	27,960 *	232
BOOM	60	76.0	23,410	230
	70	73,4	18,440	227
	80	70.8	14,840	224
	90	68.1	12,110	220
	100	65.4	9,970	215
	110	62.6	8,250	211
	120	59.8	6,830	205
	130	56.8	5,660	199
	140	53,8	4,660	192
	150	50.6	3,800	184
	160	47.3	3,060	175
	170	43.8	2,410	166
	180	40.1	1,840	154

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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.

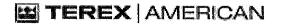
Blocks, slings, buckets and other load carrying devices are considered part of the load. The weight of standard hoisting ropes for the rating at a given radius has been calculated as part of the boom point load and need not be considered in determining net allowable loads. See Appendix A.

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.

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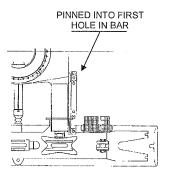
BOOM HOIST LINE – 12 parts of 3/4 inch diameter IPS wire rope with a minimum breaking strength of 51,200 pounds

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

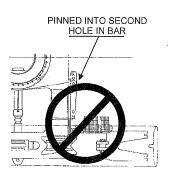
MAIN LOAD LINE – 1.000 inch diameter EIPS wire rope with a minimum breaking strength of 103,400 pounds 0.875 inch diameter EIPS wire rope with a minimum breaking strength of 79,600 pounds

SIDEFRAME POSITION DEFINITIONS

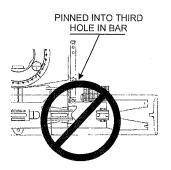
These ratings are valid for the sideframe positions as indicated below. Refer to the *HC110 Operator's Manual* for additional information.



SIDEFRAMES FULLY EXTENDED (EXTENDERS IN PLACE)



SIDEFRAMES MID-EXTENDED



or

SIDEFRAMES FULLY RETRACTED

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ERECTION

Erection "OVER-THE-END BLOCKED" is with the boom over the <u>idler</u> end with idler tumblers blocked (See *HC110 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.

59HI OFFSET TIP BOOM MAXIMUM BOOM & JIB SELF-ERECTION DATA						
			OVER-THE-SIDE SIDEFRAMES FULLY-EXTENDED			
	OVER-THE-EN	ID BLOCKED				
			(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		

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Model HC110 Crawler Crane - Ratings In Pounds 59HI Offset Tip Boom - 4 Sheave Tip 52,900 Pound Upper Counterweight 23,000 Pound Sideframe Counterweight Sideframes Fully Extended – w/ Extenders In Place

LOAD HOISTING INFORMATION - 1.00" diameter EIPS wire rope						
MAXIMUM LIFTING	MINIMUM	MAXIMUM HOISTING DISTANCE - FEET				
CAPACITY - LBS.	PARTS OF LINE	MAIN HOIST	AUX HOIST			
220,000 206,800 177,250 147,700 118,150 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" diameter EIPS wire rope							
G DISTANCE - FEET	MAXIMUM HOISTING	MINIMUM	MAXIMUM LIFTING				
AUX HOIST	MAIN HOIST	PARTS OF LINE	CAPACITY - LBS.				
78	· · · · · · · · · · · · · · · · · · ·	8	181,900				
89		7	159,200				
104		6	136,450				
125	NOT	5	113,700				
156	APPLICABLE	4	90,950				
208		3	68,200				
313		2	45,450				
626		1	22,700				

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Model HC110 Crawler Crane - Ratings In Pounds 59HI Offset Tip Boom - 4 Sheave Tip 52,900 Pound Upper Counterweight 23,000 Pound Sideframe Counterweight Sideframes Fully Extended – w/ Extenders In Place

	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	0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0	0 0 0 1 1 1 2 2 2 2 3 3 3 3 3 4 4 4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			

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