

**AMERICAN HOIST & DERRICK CO.**  
**ST. PAUL, MINNESOTA 55107**

**4450 TRUCK CRANE RATINGS IN POUNDS**  
**47" STD. TUBULAR BOOM**  
**15,700 # CTWT.**

Boom Length in Feet	Radius In Feet	Boom Angle Degrees	Free Over Side	Free Over Rear	Outriggers Extended
40°	12	78	46,100	58,350	70,000
	15	75	34,050	42,700	70,000
	20	67	23,500	29,250	52,500
	25	59	17,750	22,050	40,000
	30	50	14,150	17,600	*33,000
	35	39	11,700	14,550	*26,600
	40	26	9,900	12,300	*22,000
50°	13	80	41,050	51,800	70,000
	15	78	33,800	42,450	70,000
	20	72	23,250	29,000	52,250
	25	66	17,500	21,800	39,750
	30	59	13,900	17,350	32,750
	35	52	11,450	14,300	26,350
	40	44	9,650	12,050	21,750
50	23	7,200	9,150	*16,200	
60°	14	80	36,850	46,400	70,000
	15	79	33,550	42,200	70,000
	20	75	23,000	28,750	52,000
	25	70	17,250	21,550	39,500
	30	65	13,650	17,100	32,500
	35	59	11,200	14,050	26,100
	40	53	9,400	11,800	21,500
50	40	6,950	8,900	15,950	
60	21	5,400	7,000	*12,500	
70°	15	81	33,350	41,950	70,000
	20	77	22,750	28,500	51,750
	25	73	17,000	21,300	39,250
	30	68	13,400	16,850	32,250
	35	64	10,950	13,800	25,850
	40	59	9,150	11,550	21,250
	50	49	6,700	8,650	15,700
60	37	5,150	6,750	12,250	
70	19	4,100	5,400	*9,900	
80°	16	81	30,400	38,150	67,000
	20	80	22,500	28,250	51,500
	25	75	16,750	21,050	39,000
	30	71	13,150	16,600	32,000
	35	68	10,700	13,550	25,600
	40	64	8,900	11,300	21,000
	50	55	6,450	8,400	15,450
60	46	4,900	6,500	12,000	
70	35	3,850	5,150	9,650	
80	18	3,050	4,200	*8,000	
90°	18	81	25,600	32,250	57,750
	20	80	22,250	28,000	51,250
	25	77	16,500	20,800	38,750
	30	73	12,900	16,350	31,750
	35	70	10,450	13,300	25,350
	40	67	8,650	11,050	20,750
	50	59	6,200	8,150	15,200
	60	52	4,650	6,250	11,750
	70	43	3,600	4,900	9,400
80	32	2,800	3,950	7,750	
90	17	2,200	3,200	*6,500	
100°	20	81	22,000	27,750	51,000
	25	77	16,250	20,550	38,500
	30	75	12,650	16,100	31,500
	35	72	10,200	13,050	25,100
	40	69	8,400	10,800	20,500
	50	63	5,950	7,900	14,950
	60	56	4,400	6,000	11,500
	70	49	3,350	4,650	9,150
	80	41	2,550	3,700	7,500
90	31	1,950	2,950	6,250	
100	16		2,400	*5,300	

Boom Length in Feet	*Radius in Feet	Boom Angle Degrees	Free Over Side	Free Over Rear	Outriggers Extended
*110°	22	81	19,100	24,150	45,250
	25	79	16,000	20,300	38,250
	30	77	12,400	15,850	31,250
	35	74	9,950	12,800	24,850
	40	71	8,150	10,550	20,250
	50	65	5,700	7,650	14,700
	60	60	4,150	5,750	11,250
	70	53	3,100	4,400	8,900
	80	46	2,300	3,450	7,250
	90	39	1,700	2,700	6,000
	100	29		2,150	5,050
110	15		1,700	4,300	
*120°	23	81	17,700	22,500	42,700
	25	80	15,750	20,050	38,000
	30	78	12,150	15,600	31,000
	35	75	9,700	12,550	24,600
	40	73	7,900	10,300	20,000
	50	68	5,450	7,400	14,450
	60	62	3,900	5,500	11,000
	70	57	2,850	4,150	8,650
	80	51	2,050	3,200	7,000
	90	44	1,450	2,450	5,750
	100	37		1,900	4,800
110	28			4,050	
120	14			3,450	
*130°	25	82	15,500	19,800	37,750
	30	79	11,900	15,350	30,750
	35	76	9,450	12,300	24,350
	40	74	7,650	10,050	19,750
	50	69	5,200	7,150	14,200
	60	65	3,650	5,250	10,750
	70	60	2,600	3,900	8,400
	80	54	1,800	2,950	6,750
	90	49		2,200	5,500
	100	43		1,650	4,550
	110	35			3,800
120	27			3,200	
130	14			2,700	
*140°	26	81	14,400	18,500	36,400
	30	79	11,650	15,100	30,500
	35	77	9,200	12,050	24,100
	40	75	7,400	9,800	19,500
	50	71	4,950	6,900	13,950
	60	67	3,400	5,000	10,500
	70	62	2,350	3,650	8,150
	80	57	1,550	2,700	6,500
	90	52		1,950	5,250
	100	47			4,300
	110	41			3,550
120	34			2,950	
130	26			2,450	
140	13			2,000	
*150°	28	81	12,650	16,400	33,500
	30	80	11,400	14,850	30,250
	35	78	8,950	11,800	23,850
	40	76	7,150	9,550	19,250
	50	72	4,700	6,650	13,700
	60	68	3,150	4,750	10,250
	70	64	2,100	3,400	7,900
	80	60	1,300	2,450	6,250
	90	55		1,700	5,000
	100	50			4,050
	110	45			3,300
120	39			2,700	
130	33			2,200	
140	25			1,750	

Load ratings do not exceed 85% of tipping with crane standing level on firm, uniformly supporting surface. Outrigger ratings at radii of 28 feet or less are based on strength, not stability. Safe loads depend on ground conditions, boom length, radius of operation, condition and inflation (100 psi) of tires, and proper handling, all of which must be taken into consideration by user.

"Radius in feet" is the horizontal distance at ground level from center pin to a vertical line through the center of gravity of the suspended load. Blocks, slings, buckets and other load-carrying devices are considered part of the load. Ratings marked (\*) require retractable "A" frame fully raised. Crane will self-erect 150 ft. boom plus 50 ft. No. 7HL Jib or 40 ft. of No. 6 Jib, with tackle not suspended. For Jib Ratings See Sheet-454.02 or 14.02 - Sheet 454.35 or 14.35.

In duty cycle work (dragline, clamshell, grapple, magnet, etc.) the combined weight of bucket and load must not exceed either 8,700 lbs. or 50% of the rating (outriggers set) at the boom tip radius. This rating should be reduced by an additional 10% when working under unfavorable conditions, in sticky material, or when the machine does not stand on firm level ground.