

# LS-218H Tube Boom Lift Crane/Clamshell/Dragline Capacities

**Boom — Tube:** 60" (1.52 m) wide, 50" (1.27 m) deep with open throat top section and 26' (7.92 m) live mast. "H" wall boom extensions.

**Jib — Tube:** 32" (.81 m) wide, 24" (.61m) deep.

**Mounting — crawler:**  
overall length: 21' 0" (6.40 m)  
retracted gauge: 9' 0" (2.74 m)  
extended gauge: 13' 5" (4.08 m)

**Counterweights:**

Cwt. A - 24,409 lbs. (11 072 kg)  
Cwt. AB - 46,962 lbs. (21 302 kg)

PCSA Class 12-413  
Refer to notes page 6

Maximum tubular boom or boom + jib<sup>①</sup> machine can lift off ground unassisted, without load.

	Counterweight "A"				Counterweight "AB"			
	Boom		Boom + Jib		Boom		Boom + Jib	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters
<b>Over End</b>								
Side frames extended	190	57.91	160 + 60	48.77 + 18.29	200	60.96	180 + 60	54.86 + 18.29
Side frames retracted	190	57.91	160 + 60	48.77 + 18.29	②		②	
<b>Over Sides</b>								
Side frames extended	170	51.82	140 + 60	42.67 + 18.29	200	60.96	180 + 60	54.86 + 18.29
Side frames retracted	150	45.72	120 + 60	36.58 + 18.29	②		②	

① With boom live mast and 1-3/8" (35 mm) diameter pendants and hook blocks on ground.

Maximum tubular boom or boom + jib machine can lift off ground unassisted and travel without load with boom horizontal<sup>②</sup> - minimum travel speed on firm level supporting surface.

	Counterweight "A"				Counterweight "AB"			
	Boom		Boom + Jib		Boom		Boom + Jib	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters
<b>Over End</b>								
Side frames extended	150	45.72	110 + 60	33.53 + 18.29	180	54.86	140 + 60	42.67 + 18.29
Side frames retracted	150	45.72	110 + 60	33.53 + 18.29	②		②	
<b>Over Sides</b>								
Side frames extended	150	45.72	110 + 60	33.53 + 18.29	180	54.86	140 + 60	42.67 + 18.29
Side frames retracted	130	39.62	90 + 60	27.43 + 18.29	②		②	

② With counterweight "AB", machine must not be operated with side frames retracted.

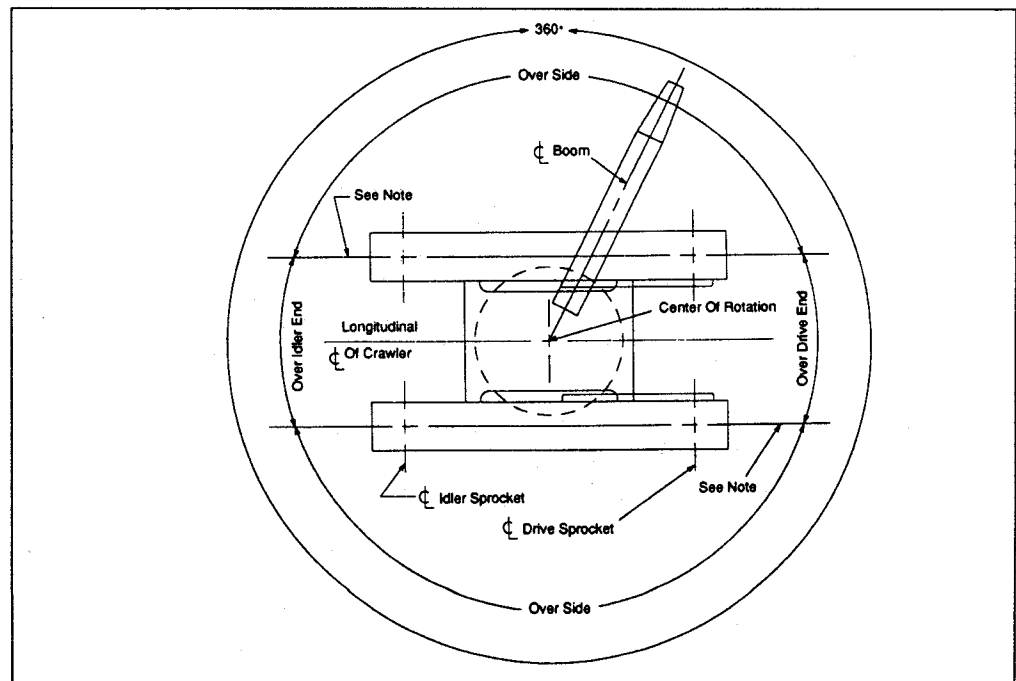
③ Hook blocks carried at boom and jib points. Based on 100-ton (90.7 metric ton) three sheave hook block.

## Working Areas

1. These lines determine the limiting position of any load for operation within working areas indicated.

**GENERAL INFORMATION ONLY**

**Caution:** This material is for reference only. Operator must refer to in-cab capacity plate to determine allowable machine lifting capacities and operating procedures.



# LS-218H Tube Boom Lift Crane/Clamshell/Dragline Capacities

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (deg.)	Capacities				
			Extended Side Frames Cwt. A	Extended Side Frames Cwt. AB	Retracted Side Frames Cwt. A	Extended Side Frames	
						Dragline	Clamshell & Magnet
40	12	79.3	200,000*	200,000*	117,000	--	20,600
40	13	77.9	180,000	187,300*	102,500	--	20,600
40	14	76.4	154,000	176,200*	91,100	--	20,600
40	15	74.9	134,500	166,100*	81,900	--	20,600
40	16	73.4	119,300	157,300*	74,400	--	20,600
40	17	71.9	107,100	143,900	68,000	--	20,600
40	18	70.4	97,100	130,600	62,700	--	20,600
40	19	68.9	88,700	119,500	58,000	--	20,600
40	20	67.3	81,700	110,100	54,000	--	20,600
40	25	59.3	58,000	78,600	39,800	20,600	20,600
40	30	50.6	44,600	60,700	31,200	20,600	20,600
40	35	40.5	36,000	49,200	25,400	20,600	20,600
40	40	27.7	29,900	41,100	21,200	--	20,600
50	12	81.5	197,000*	197,000*	117,300	--	20,600
50	13	80.3	180,600	186,900*	102,800	--	20,600
50	14	79.2	154,600	175,800*	91,400	--	20,600
50	15	78.0	135,000	165,800*	82,200	--	20,600
50	16	76.8	119,700	156,900*	74,600	--	20,600
50	17	75.6	107,400	144,300	68,200	--	20,600
50	18	74.4	97,400	130,900	62,800	--	20,600
50	19	73.3	89,000	119,800	58,200	--	20,600
50	20	72.1	81,900	110,300	54,200	--	20,600
50	25	65.9	58,200	78,800	39,900	--	20,600
50	30	59.5	44,800	60,900	31,300	20,600	20,600
50	35	52.5	36,100	49,300	25,500	20,600	20,600
50	40	44.9	30,100	41,300	21,300	20,600	20,600
50	50	24.8	22,100	30,700	15,700	--	19,800
60	13	81.9	181,600	182,400*	103,000	--	20,600
60	14	81.0	155,400	175,600*	91,900	--	20,600
60	15	80.0	135,700	165,600*	82,600	--	20,600
60	16	79.0	120,300	156,800*	75,000	--	20,600
60	17	78.1	108,000	144,800	68,600	--	20,600
60	18	77.1	97,900	131,400	63,200	--	20,600
60	19	76.1	89,500	120,200	58,500	--	20,600
60	20	75.1	82,300	110,700	54,400	--	20,600
60	25	70.1	58,500	79,000	40,100	--	20,600
60	30	64.9	45,000	61,100	31,400	--	20,600
60	35	59.6	36,300	49,500	25,600	20,600	20,600
60	40	53.8	30,200	41,400	21,400	20,600	20,600
60	50	40.8	22,200	30,800	15,800	20,600	19,900
60	60	22.6	17,200	24,200	12,200	--	15,400
70	15	81.5	135,900	160,000*	82,600	--	20,600
70	16	80.6	120,500	155,600*	75,000	--	20,600
70	17	79.8	108,100	145,000	68,600	--	20,600
70	18	79.0	98,000	131,500	63,100	--	20,600
70	19	78.1	89,600	120,300	58,500	--	20,600
70	20	77.3	82,400	110,800	54,400	--	20,600
70	25	73.1	58,500	79,000	40,000	--	20,600
70	30	68.7	44,900	61,000	31,400	--	20,600
70	35	64.3	36,200	49,400	25,500	--	20,600
70	40	59.6	30,100	41,300	21,400	20,600	20,600
70	50	49.6	22,100	30,800	15,700	17,800	19,800
70	60	37.7	17,100	24,100	12,100	14,000	15,300
70	70	20.9	13,700	19,600	9,600	--	12,300
80	17	81.1	108,200	141,600*	68,500	--	20,600
80	18	80.4	98,000	131,500	63,100	--	20,600
80	19	79.6	89,600	120,300	58,400	--	20,600
80	20	78.9	82,400	110,800	54,300	--	20,600
80	25	75.2	58,400	79,000	39,900	--	20,600
80	30	71.5	44,900	60,900	31,200	--	20,600
80	35	67.7	36,100	49,300	25,400	--	20,600

GENERAL INFORMATION ONLY

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (deg.)	Capacities			Extended Side Frames	
			Extended Side Frames Cwt. A	Extended Side Frames Cwt. AB	Retracted Side Frames Cwt. A	Extended Side Frames	
						Dragline	Clamshell & Magnet
80	40	63.7	30,000	41,200	21,200	--	20,600
80	50	55.4	22,000	30,600	15,600	17,500	19,800
80	60	46.2	17,000	24,000	12,000	13,700	15,300
80	70	35.2	13,600	19,500	9,500	10,700	12,200
80	80	19.5	11,100	16,100	7,600	--	9,900
90	18	81.4	98,000	127,700*	63,000		
90	19	80.8	89,600	120,300	58,300		
90	20	80.1	82,400	110,800	54,200		
90	25	76.9	58,400	78,900	39,800		
90	30	73.6	44,800	60,800	31,100		
90	35	70.3	36,000	49,200	25,300		
90	40	66.8	29,900	41,100	21,100		
90	50	59.7	21,900	30,500	15,500		
90	60	52.0	16,900	23,900	11,900		
90	70	43.4	13,500	19,300	9,400		
90	80	33.1	11,000	16,000	7,500		
90	90	18.4	9,000	13,500	6,000		
100	20	81.1	82,300	110,700	54,100		
100	25	78.2	58,300	78,800	39,700		
100	30	75.3	44,700	60,700	30,900		
100	35	72.3	35,800	49,100	25,100		
100	40	69.3	29,700	40,900	20,900		
100	50	63.0	21,700	30,300	15,300		
100	60	56.4	16,700	23,700	11,700		
100	70	49.2	13,300	19,200	9,200		
100	80	41.1	10,800	15,900	7,300		
100	90	31.3	8,900	13,300	5,900		
100	100	17.4	7,400	11,300	4,700		
110	25	79.3	58,200	78,700	39,500		
110	30	76.6	44,600	60,600	30,800		
110	35	74.0	35,700	48,900	25,000		
110	40	71.2	29,600	40,800	20,800		
110	50	65.6	21,600	30,200	15,100		
110	60	59.8	16,600	23,600	11,600		
110	70	53.5	13,200	19,000	9,000		
110	80	46.7	10,700	15,700	7,200		
110	90	39.1	8,800	13,200	5,800		
110	100	29.8	7,300	11,200	4,600		
110	110	16.6	6,200	9,600	3,700		
120	25	80.2	58,100	78,600	--		
120	30	77.8	44,400	60,400	--		
120	35	75.3	35,500	48,700	--		
120	40	72.8	29,400	40,600	--		
120	50	67.8	21,400	29,900	--		
120	60	62.5	16,400	23,300	--		
120	70	57.0	13,000	18,800	--		
120	80	51.1	10,500	15,500	--		
120	90	44.6	8,600	12,900	--		
120	100	37.3	7,100	11,000	--		
120	110	28.6	6,000	9,400	--		
120	120	15.9	4,900	8,000	--		
130	25	81.0	57,900	78,400	--		
130	30	78.7	44,300	60,300	--		
130	35	76.5	35,400	48,600	--		
130	40	74.2	29,300	40,500	--		
130	50	69.6	21,300	29,800	--		
130	60	64.8	16,300	23,100	--		
130	70	59.8	12,900	18,600	--		

GENERAL INFORMATION ONLY

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (deg.)	Capacities		
			Extended Side Frames	Extended Side Frames	Retracted Side Frames
			Cwt. A	Cwt. AB	Cwt. A
130	80	54.5	10,400	15,300	--
130	90	48.9	8,500	12,800	--
130	100	42.8	7,000	10,800	--
130	110	35.8	5,800	9,200	--
130	120	27.4	4,800	7,900	--
130	130	15.3	3,900	6,700	--
140	30	79.5	44,100	60,200	--
140	35	77.5	35,200	48,500	--
140	40	75.4	29,100	40,300	--
140	50	71.1	21,100	29,700	--
140	60	66.7	16,100	23,100	--
140	70	62.1	12,700	18,500	--
140	80	57.4	10,200	15,200	--
140	90	52.4	8,300	12,700	--
140	100	47.0	6,800	10,800	--
140	110	41.2	5,600	9,100	--
140	120	34.5	4,600	7,700	--
140	130	26.4	3,700	6,600	--
140	140	14.7	3,000	5,700	--
150	30	80.2	43,900	60,000	--
150	35	78.3	35,100	48,300	--
150	40	76.3	28,900	40,200	--
150	50	72.4	20,900	29,500	--
150	60	68.3	15,900	22,900	--
150	70	64.1	12,500	18,400	--
150	80	59.8	10,000	15,100	--
150	90	55.3	8,100	12,600	--
150	100	50.5	6,600	10,600	--
150	110	45.4	5,400	9,000	--
150	120	39.7	4,400	7,700	--
150	130	33.3	3,500	6,600	--
150	140	25.5	2,700	5,600	--
150	150	14.2	2,100	4,800	--
160	30	80.9	43,800	58,200*	--
160	35	79.0	34,900	48,100	--
160	40	77.2	28,700	39,900	--
160	50	73.5	20,600	29,200	--
160	60	69.7	15,600	22,600	--
160	70	65.9	12,200	18,000	--
160	80	61.9	9,700	14,700	--
160	90	57.7	7,800	12,200	--
160	100	53.4	6,300	10,200	--
160	110	48.8	5,100	8,700	--
160	120	43.8	4,100	7,300	--
160	130	38.4	3,200	6,200	--
160	140	32.2	2,500	5,300	--
160	150	24.7	--	4,500	--
160	160	13.8	--	3,700	--
170	35	79.7	34,700	48,000	--
170	40	78.0	28,600	39,800	--
170	50	74.5	20,500	29,100	--
170	60	71.0	15,500	22,400	--
170	70	67.4	12,000	17,900	--
170	80	63.7	9,500	14,600	--
170	90	59.8	7,600	12,000	--
170	100	55.9	6,100	10,100	--
170	110	51.7	4,900	8,500	--
170	120	47.2	3,900	7,200	--
170	130	42.5	3,100	6,000	--
170	140	37.2	2,300	5,100	--
170	150	31.2	--	4,300	--

GENERAL INFORMATION ONLY

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (deg.)	Capacities		
			Extended Side Frames Cwt. A	Extended Side Frames Cwt. AB	Retracted Side Frames Cwt. A
170	160	23.9	--	3,600	--
170	170	13.3	--	2,900	--
180	35	80.3	34,600	42,900*	--
180	40	78.7	28,400	39,100*	--
180	50	75.4	20,300	28,900	--
180	60	72.1	15,200	22,200	--
180	70	68.7	11,800	17,700	--
180	80	65.2	9,300	14,400	--
180	90	61.7	7,400	11,800	--
180	100	58.0	5,900	9,800	--
180	110	54.2	4,700	8,200	--
180	120	50.1	3,700	6,900	--
180	130	45.8	2,800	5,800	--
180	140	41.2	2,100	4,800	--
180	150	36.1	--	4,000	--
180	160	30.3	--	3,300	--
180	170	23.2	--	2,700	--
180	180	13.0	--	2,100	--
190	35	80.8	--	38,700*	--
190	40	79.3	--	36,000*	--
190	50	76.2	--	28,700	--
190	60	73.0	--	22,000	--
190	70	69.9	--	17,400	--
190	80	66.6	--	14,100	--
190	90	63.3	--	11,600	--
190	100	59.9	--	9,600	--
190	110	56.3	--	8,000	--
190	120	52.6	--	6,700	--
190	130	48.7	--	5,600	--
190	140	44.5	--	4,600	--
190	150	40.1	--	3,800	--
190	160	35.1	--	3,100	--
190	170	29.5	--	2,500	--
190	180	22.6	--	--	--
190	190	12.6	--	--	--
200	35	81.3	--	34,900*	--
200	40	79.8	--	32,700*	--
200	50	76.9	--	27,300*	--
200	60	73.9	--	20,500*	--
200	70	70.9	--	17,200*	--
200	80	67.8	--	13,900	--
200	90	64.7	--	11,400	--
200	100	61.5	--	9,400	--
200	110	58.2	--	7,800	--
200	120	54.8	--	6,500	--
200	130	51.2	--	5,400	--
200	140	47.4	--	4,400	--
200	150	43.4	--	3,600	--
200	160	39.0	--	2,900	--
200	170	34.2	--	2,300	--
200	180	28.7	--	--	--
200	190	22.0	--	--	--
200	200	12.3	--	--	--

GENERAL INFORMATION ONLY

# LS-218H Tube Boom Lift Crane/Clamshell/Dragline Notes

**General:**

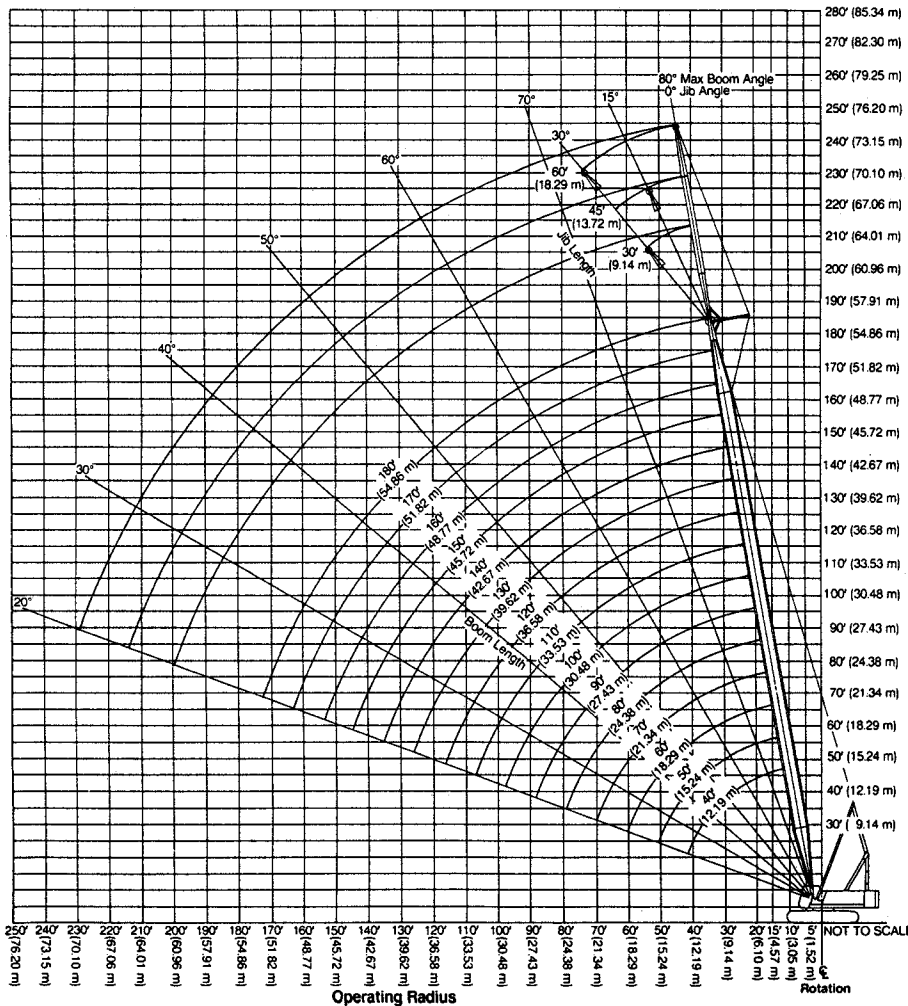
1. Rated lifting capacities in pounds as shown on lift charts pertain to the crane as originally manufactured and normally equipped. Modifications to the crane or use of optional equipment other than that specified can result in a reduction of capacity.
2. Construction equipment can be dangerous if improperly operated or maintained. Operation and maintenance of the crane must be in compliance with the information in the Operator's, Parts and Safety Manuals supplied with the crane. If these manuals are missing, order replacements through the distributor.
3. The operator and other personnel associated with the crane shall read and fully understand the latest applicable American National Standards Institute (ANSI) safety standards for cranes.
4. The maximum allowable lifting capacities are based on crane standing level on firm supporting surface.

**Lift Crane Operation:**

1. Capacities shown are in pounds and are not more than 75% of the tipping loads with the crane standing level on firm supporting surface. A deduction must be made from these capacities for weight of hook block, hook, sling, grapple, load weighing device, etc. When using main hook while jib is attached, reduce capacities by values shown in Crane Rating Manual. See Operator's Manual for all limitations when raising or lowering attachment.
2. The capacities marked with an asterisk (\*) are based on factors other than those which would cause a tipping condition.
3. For recommended reeving, parts of line, wire rope type and wire rope inspection, see wire rope strength chart, Operator's Manual and Parts Manual.
4. Load ratings are based on freely suspended loads and make no allowances for such factors as the effect of the wind, ground conditions, and operating speeds. The operator shall therefore reduce load ratings in order to take these conditions into account.

5. Machine with "AB" counterweight - do not swing over side until side frames are extended.
6. For boom length exceeding 150' (45.72 m), the midpoint suspension pendants are required.
7. When machine is not equipped with carbody jack cylinders, lower counterweights must be used.
8. The 26' (7.92 m) live mast must be used for all capacities listed.
9. Retractable high gantry must be used in the elevated position for all capacities on this chart.
10. The least stable rated condition is over the side.
11. Boom lengths exceeding 120' (36.58 m) must be erected and lowered over the end. Adequate blocking must be placed under the tread member sprockets to prevent the machine from rocking.
12. All boom extensions are "H" chord thickness.
13. These capacities apply only to the crane as originally manufactured and normally equipped by Link-Belt Construction Equipment Company.

## Working Range



**Dragline, Clamshell and Magnet Notes:**

1. All dragline, clamshell and lifting magnet capacities are maximum recommended by PCSA Standard No. 4 and should be considered as applicable for ideal job conditions. The user must make allowances for soft or uneven supporting surfaces, rapid cycle operation, bucket suction or other unfavorable conditions which may require smaller buckets or magnets for most efficient operation. For dragline, clamshell, lifting magnet or similar work, weight of bucket or magnet plus load should not exceed these capacities and boom length should not exceed 80 ft. (24.38 m) with "A" counterweight.
2. Dragline operation with boom angle less than 35 degrees is not recommended.

**GENERAL INFORMATION ONLY**