

# Link-Belt® LS-338 lifting crane capacities

PCSA Class 12-410  
Refer to **Notes** page 4.

**Boom** — angle: 48" (1.22 m) wide, 48" (1.22 m) deep with open throat top section; with or without boom live mast.

**Jib** — angle: 20" x 24" (0.51 m x 0.61 m).

**Counterweights** — Refer to charts below.

**Mounting** — crawler: 13' 6" (4.11 m) gauge, 20' 0" (6.10 m) overall length.

Counterweights			
"A"		"AB"	
Pounds	kilograms	Pounds	kilograms
25,000	11 340	52,500	23 814

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

Standard machine equipped with appropriate counterweights	Counterweight "A"				Counterweight "AB"			
	Boom		Boom + jib		Boom		Boom + jib	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters
Over ends	150	45.72	100 + 40	30.48 + 12.19	150	45.72	150 + 40	45.72 + 12.19
Over sides	150	45.72	120 + 40	36.58 + 12.19	150	45.72	150 + 40	45.72 + 12.19

①With boom live mast and 1¼" (31.75 mm) diameter pendants, and hook blocks on ground.

Maximum angle boom and boom + jib machine can lift off ground<sup>①</sup> unassisted and travel with, without load. Based on boom horizontal<sup>②</sup> and minimum travel speed on firm, level supporting surface.

Standard machine equipped with appropriate counterweights	Counterweight "A"				Counterweight "AB"			
	Boom		Boom + jib		Boom		Boom + jib	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters
Over ends	130	39.62	100 + 40	30.48 + 12.19	150	45.72	130 + 40	39.62 + 12.19
Over sides	120	39.62	90 + 40	27.43 + 12.19	150	45.72	120 + 40	39.62 + 12.19

①With boom live mast and 1¼" (31.75 mm) diameter pendants, and hook blocks on ground.

②Hook blocks carried at boom and jib points. Based on 100-ton (90.76 metric ton) 5-sheave, 2,425 lbs. (1 100 kg) hook block and 15-ton (13.6 metric ton) single sheave, 435 lbs. (197 kg) ball with swivel hook.

# LS-338 lifting crane capacities

Refer to Notes page 4.

**Boom** — angle: 48" (1.22 m) wide, 48" (1.22 m) deep with open throat top section; with or without boom live mast.

**Mounting** — crawler: 13' 6" (4.11 m) gauge, 20' 0" (6.10 m) overall length.

**Counterweights** — Refer to charts page 1.

Boom						With boom live mast and 1¼" (32 mm) diameter boom pendants.				Without boom live mast and with 1½" (38 mm) diameter boom pendants.	
Length	Radius		Angle Degree	Boom point height ①		Counterweight "A"		Counterweight "AB"		Counterweight "A" only	
	Feet	meters		Feet	meters	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms
50' (15.24 m)	12	3.66	81.5	55' 4"	16.86	160,000*	72 576*	160,000*	72 576*	140,100*	63 549*
	13	3.96	80.3	55' 3"	16.84	157,100*	71 261*	157,100*	71 261*	136,300*	61 826*
	14	4.27	79.1	55' 1"	16.79	149,800	67 949	154,700*	70 172*	132,000*	59 875*
	15	4.57	78.0	54' 10"	16.71	130,400	59 149	152,300*	69 083*	127,700	57 925
	16	4.88	76.8	54' 7"	16.64	115,300	52 300	149,900*	67 995*	113,000	51 257
	17	5.18	75.6	54' 4"	16.56	103,300	46 857	145,800*	66 135*	101,200	45 904
	18	5.49	74.4	54' 1"	16.48	93,500	42 412	132,100	59 921	91,600	41 550
	19	5.79	73.2	53' 9"	16.38	85,300	38 692	120,600	54 704	83,700	37 966
	20	6.10	72.0	53' 5"	16.28	78,400	35 562	111,000	50 350	76,900	34 882
	25	7.62	65.9	51' 7"	15.72	55,400	25 129	78,900	35 789	54,500	24 721
	30	9.14	59.4	48' 11"	14.91	42,400	19 233	60,800	27 579	41,900	19 006
	35	10.67	52.5	45' 7"	13.89	34,100	15 468	49,200	22 317	33,800	15 332
40	12.19	44.9	41' 3"	12.57	28,300	12 837	41,000	18 598	28,100	12 746	
50	15.24	24.7	26' 10"	8.18	20,700	9 390	30,400	13 789	20,800	9 435	
60' (18.29 m)	14	4.27	81.0	65' 2"	19.86	138,700*	62 914*	138,700*	62 914*	123,300*	55 929*
	15	4.57	80.0	65' 1"	19.84	130,700	59 286	136,600*	61 962*	119,900*	54 387*
	16	4.88	79.0	64' 10"	19.76	115,500	52 391	134,400*	60 964*	112,800	51 166
	17	5.18	78.1	64' 8"	19.71	103,500	46 948	132,300*	60 011*	101,000	45 814
	18	5.49	77.1	64' 4"	19.61	93,600	42 457	130,200*	59 059*	91,400	41 459
	19	5.79	76.1	64' 2"	19.56	85,500	38 783	120,800	54 795	83,500	37 876
	20	6.10	75.1	63' 10"	19.46	78,500	35 608	111,100	50 395	76,700	34 791
	25	7.62	70.1	62' 4"	19.00	55,400	25 129	79,000	35 834	54,300	24 630
	30	9.14	64.9	60' 3"	18.36	42,500	19 278	60,800	27 579	41,600	18 870
	35	10.67	59.5	57' 8"	17.58	34,100	15 468	49,200	22 317	33,500	15 196
	40	12.19	53.8	54' 4"	16.56	28,200	12 792	41,000	18 598	27,800	12 610
	50	15.24	40.8	45' 2"	13.77	20,700	9 390	30,500	13 835	20,500	9 299
60	18.29	22.5	28' 11"	8.81	15,900	7 212	23,800	10 796	15,900	7 212	
70' (21.34 m)	16	4.88	80.6	74' 11"	22.84	115,600	52 436	123,400	55 974*	108,200*	49 080*
	17	5.18	79.8	74' 10"	22.81	103,600	46 993	121,500*	55 112*	100,900	45 768
	18	5.49	78.9	74' 8"	22.76	93,600	42 457	117,200*	53 162*	91,200	41 368
	19	5.79	78.1	74' 5"	22.68	85,500	38 783	115,800*	52 527*	83,300	37 785
	20	6.10	77.3	74' 2"	22.61	78,500	35 608	111,200	50 440	76,500	34 700
	25	7.62	73.0	72' 10"	22.20	55,400	25 129	78,900	35 789	54,000	24 494
	30	9.14	68.7	71' 2"	21.69	42,400	19 233	60,800	27 579	41,400	18 779
	35	10.67	64.2	69' 0"	21.03	34,000	15 422	49,100	22 272	33,200	15 060
	40	12.19	59.6	66' 3"	20.19	28,100	12 746	41,000	18 598	27,500	12 474
	50	15.24	49.5	59' 2"	18.04	20,600	9 344	30,400	13 789	20,200	9 163
	60	18.29	37.7	42' 8"	13.01	15,800	7 167	23,800	10 796	15,600	7 076
	70	21.34	20.8	30' 10"	9.40	12,500	5 670	19,200	8 709	12,500	5 670
80' (24.38 m)	17	5.18	81.1	84' 11"	25.88	103,500	46 948	109,800*	49 805*	98,800*	44 816*
	18	5.49	80.3	84' 9"	25.83	93,600	42 457	108,100*	49 034*	91,000	41 278
	19	5.79	79.6	84' 8"	25.81	85,400	38 737	106,800*	48 444*	83,100	37 694
	20	6.10	78.9	84' 5"	25.73	78,400	35 562	105,200*	47 719*	76,300	34 610
	25	7.62	75.2	83' 2"	25.35	55,300	25 084	78,900	35 789	53,700	24 358
	30	9.14	71.5	81' 9"	24.92	42,300	19 187	60,700	27 534	41,100	18 643
	35	10.67	67.7	79' 9"	24.31	33,800	15 332	49,000	22 227	32,900	14 923
	40	12.19	63.7	77' 8"	23.67	28,000	12 701	40,800	18 507	27,200	12 338
	50	15.24	55.4	71' 9"	21.87	20,400	9 253	30,200	13 699	19,900	9 027
	60	18.29	46.2	63' 8"	19.41	15,700	7 122	23,600	10 705	15,300	6 940
	70	21.34	35.1	51' 11"	15.83	12,400	5 625	19,100	8 664	12,100	5 489
	80	24.38	19.5	32' 8"	9.96	10,000	4 536	15,800	7 167	9,900	4 491
90' (27.43 m)	19	5.79	80.8	94' 9"	28.88	85,300	38 692	98,400*	44 634*	82,800	37 558
	20	6.10	80.1	94' 7"	28.83	78,300	35 517	97,200*	44 090*	76,000	34 474
	25	7.62	76.9	93' 6"	28.50	55,100	24 993	78,800	35 744	53,500	24 282
	30	9.14	73.6	92' 3"	28.12	42,100	19 097	60,500	27 443	40,800	18 537
	35	10.67	70.2	90' 6"	27.58	33,700	15 286	48,800	22 136	32,600	14 787
	40	12.19	66.8	88' 8"	27.03	27,800	12 610	40,700	18 462	26,900	12 202
	50	15.24	59.7	83' 8"	25.50	20,200	9 163	30,100	13 653	19,600	8 891
	60	18.29	52.0	76' 10"	23.42	15,500	7 031	23,400	10 614	15,000	6 804
	70	21.34	43.4	67' 9"	20.65	12,200	5 534	18,900	8 573	11,800	5 352
	80	24.38	33.1	55' 1"	16.79	9,800	4 445	15,600	7 076	9,500	4 322
	90	27.43	18.4	34' 3"	10.44	8,000	3 629	13,100	5 942	7,800	3 522

① Measured vertically from center of boom head sheave to ground.

(continued)



# LS-338 lifting crane capacities

Refer to Notes page 4.

Boom						With boom live mast and 1 1/4" (32 mm) diameter boom pendants.				Without boom live mast and with 1 1/2" (38 mm) diameter boom pendants.	
Length	Radius		Angle Degree	Boom point height ①		Counterweight "A"		Counterweight "AB"		Counterweight "A" only	
	Feet	meters		Feet	meters	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms
100' (30.48 m)	20	6.10	81.1	104' 9"	31.93	78,200	35 472	87,700*	39 781*	75,800	34 383
	25	7.62	78.2	103' 10"	31.65	55,000	29 948	78,600	35 653	53,200	24 132
	30	9.14	75.3	102' 8"	31.29	41,900	19 006	60,400	27 397	40,500	18 371
	35	10.67	72.3	101' 2"	30.84	33,500	15 196	48,600	22 045	32,300	14 651
	40	12.19	69.3	99' 5"	30.30	27,600	12 519	40,500	18 371	26,600	12 066
	50	15.24	63.0	95' 1"	28.98	20,000	9 072	29,900	13 563	19,300	8 754
	60	18.29	56.3	89' 2"	27.18	15,200	6 895	23,200	10 524	14,600	6 623
	70	21.34	49.1	81' 7"	24.87	12,000	5 443	18,700	8 482	11,500	5 216
	80	24.38	41.0	71' 7"	21.82	9,600	4 355	15,400	6 985	9,200	4 173
	90	27.43	31.3	57' 11"	17.65	7,800	3 538	12,900	5 851	7,500	3 402
	100	30.48	17.4	35' 10"	10.92	6,400	2 903	10,900	4 944	6,100	2 767
110' (33.53 m)	25	7.62	79.3	114' 1"	34.77	54,800	24 857	75,500*	34 247*		
	30	9.14	76.6	112' 11"	34.42	41,700	18 915	60,200	27 307		
	35	10.67	73.9	111' 7"	34.01	33,200	15 060	48,500	22 000		
	40	12.19	71.2	110' 1"	33.55	27,300	12 383	40,300	18 280		
	50	15.24	65.6	106' 2"	32.36	19,800	8 981	29,700	13 472		
	60	18.29	59.7	100' 11"	30.53	15,000	6 804	23,000	10 433		
	70	21.34	53.5	94' 4"	28.75	11,700	5 307	18,500	8 392		
	80	24.38	46.7	85' 11"	26.19	9,400	4 264	15,200	6 895		
	90	27.43	39.1	75' 3"	22.94	7,600	3 447	12,700	5 761		
	100	30.48	29.8	60' 7"	18.46	6,200	2 812	10,700	4 854		
	110	33.53	16.6	37' 4"	11.38	5,000	2 268	9,100	4 128		
120' (36.58 m)	25	7.62	80.2	124' 2"	37.85	54,600	24 767	69,500*	31 525*		
	30	9.14	77.8	123' 2"	37.54	41,500	18 824	60,000	27 216		
	35	10.67	75.3	121' 11"	37.16	33,000	14 969	48,300	21 909		
	40	12.19	72.8	120' 7"	36.75	27,100	12 293	40,100	18 189		
	50	15.24	67.8	116' 11"	35.64	19,500	8 845	29,400	13 336		
	60	18.29	62.5	112' 4"	34.24	14,800	6 713	22,800	10 342		
	70	21.34	57.0	106' 7"	32.49	11,500	5 216	18,300	8 301		
	80	24.38	51.1	99' 3"	30.25	9,100	4 128	15,000	6 804		
	90	27.43	44.6	90' 2"	27.48	7,300	3 311	12,500	5 670		
	100	30.48	37.2	78' 8"	23.98	5,900	2 676	10,500	4 763		
	110	33.53	28.5	63' 3"	19.28	4,800	2 177	8,900	4 037		
120	36.58	15.9	38' 9"	11.81	3,800	1 724	7,600	3 447			
130' (39.62 m)	25	7.62	81.0	134' 4"	40.94	54,400	24 676	63,900*	28 985*		
	30	9.14	78.7	133' 5"	40.67	41,300	18 734	56,400*	25 583*		
	35	10.67	76.5	132' 4"	40.33	32,800	14 878	48,100	21 818		
	40	12.19	74.2	130' 11"	39.90	26,900	12 202	39,900	18 099		
	50	15.24	69.6	127' 9"	38.94	19,300	8 754	29,200	13 245		
	60	18.29	64.8	123' 6"	37.64	14,500	6 577	22,600	10 251		
	70	21.34	59.8	118' 3"	36.04	11,200	5 080	18,000	8 165		
	80	24.38	54.5	112' 10"	37.13	8,900	4 037	14,800	6 713		
	90	27.43	48.9	103' 11"	31.67	7,100	3 221	12,200	5 534		
	100	30.48	42.8	94' 3"	28.73	5,600	2 540	10,300	4 672		
	110	33.53	35.8	81' 11"	24.97	4,500	2 041	8,700	3 946		
120	36.58	27.4	65' 9"	20.04	3,500	1 588	7,400	3 357			
130	39.62	15.3	40' 2"	12.24	2,800	1 270	6,200	2 812			
140' (42.67 m)	30	9.14	79.5	143' 7"	43.76	41,000	18 598	51,900*	23 542*		
	35	10.67	77.5	142' 7"	43.46	32,500	14 742	46,500*	21 092*		
	40	12.19	75.3	141' 4"	43.08	26,600	12 066	39,600	17 963		
	50	15.24	71.1	138' 4"	42.16	19,000	8 618	29,000	13 154		
	60	18.29	66.7	134' 5"	40.97	14,200	6 441	22,300	10 115		
	70	21.34	62.1	129' 8"	39.52	11,000	4 990	17,800	8 074		
	80	24.38	57.4	123' 10"	37.74	8,600	3 901	14,500	6 577		
	90	27.43	52.4	116' 10"	35.61	6,800	3 084	12,000	5 443		
	100	30.48	47.0	108' 4"	33.02	5,400	2 449	10,000	4 536		
	110	33.53	41.2	98' 1"	29.89	4,200	1 905	8,400	3 810		
	120	36.58	34.5	85' 2"	25.96	3,300	1 497	7,100	3 221		
130	39.62	26.4	68' 2"	20.78	2,500	1 134	6,000	2 722			
140	42.67	14.7	41' 5"	12.62	1,800	816	5,100	2 313			
150' (45.72 m)	30	9.14	80.2	153' 9"	46.86	40,800	18 507	47,800*	21 682*		
	35	10.67	78.3	152' 9"	46.56	32,300	14 651	43,000*	19 505*		
	40	12.19	76.3	151' 8"	46.23	26,300	11 930	38,400*	17 418*		
	50	15.24	72.4	148' 10"	45.36	18,800	8 528	28,700	13 018		
	60	18.29	68.3	145' 4"	44.30	14,000	6 350	22,100	10 025		
	70	21.34	64.1	140' 10"	42.92	10,700	4 854	17,500	7 938		
	80	24.38	59.8	135' 7"	41.32	8,300	3 765	14,300	6 486		
	90	27.43	55.3	129' 3"	39.40	6,500	2 948	11,700	5 307		
	100	30.48	50.2	121' 8"	37.09	5,100	2 313	9,800	4 445		
	110	33.53	45.3	112' 8"	34.34	3,900	1 769	8,200	3 720		
	120	36.58	39.7	101' 9"	31.01	3,000	1 361	6,900	3 130		
130	39.62	33.3	88' 2"	26.87	2,200	998	5,800	2 631			
140	42.67	25.5	70' 5"	21.46	1,500	680	4,800	2 177			
150	45.72	14.2	42' 9"	13.03	1,000	454	4,000	1 814			

Not applicable

① Measured vertically from center of boom head sheave to ground.

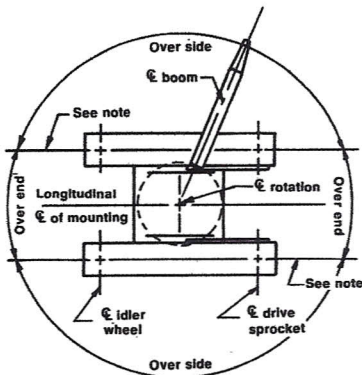
# LS-338 lifting crane capacities

## Notes — lifting crane capacities

1. The capacities included in this chart are the maximum allowable, and are based on machine standing level on firm supporting surface under ideal job conditions.
2. Capacities are based on 75% of minimum tipping loads unless marked with an asterisk (\*).
  - a. Asterisk indicates capacities are based on factors other than those which would cause a tipping condition.
3. Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, and operating speeds. Operator must reduce load ratings to take such conditions into account. Deduction from rated capacities must be made for weight of jib, hook block, weighted ball/hook, sling, spreader bar, or other suspended gear.
4. Lifting capacities shown are based on machine equipped as follows:
  - a. Boom live mast and 1 1/4" (32 mm) diameter pendants for all boom lengths.
  - b. Without boom live mast but with 1 1/2" (38 mm) diameter pendants — for booms up to 100' (30.48 m) long.
  - c. 1 1/4" (32 mm) diameter pendants must not be used unless machine is equipped with a boom live mast.
5. When LS-338 is equipped with boom live mast and 1 1/2" (38 mm) diameter pendants instead of 1 1/4" (32 mm) diameter pendants, reduce all lifting capacities shown 400 lbs. (181 kg).
6. For lifting 160,000 lbs. (72 576 kg) with 7/8" (22 mm) diameter rope, eight parts of 7/8" (22 mm) Type "N" hoist rope are required. Check parts of line required for all capacities.
7. Boom live mast is required for all main boom lengths exceeding 100' (30.48 m), and for boom exceeding 50' (15.24 m) when equipped with jib.
8. When using boom live mast as a short boom, maximum lifting capacity of the boom live mast is 47,000 lbs. (21 319 kg) at 13' (3.96 m) minimum radius, 23,000 lbs. (10 434 kg) at 28' 0" (8.53 m) maximum radius.
9. Main boom length, without jib, must not exceed 150' (45.72 m).
10. Jib must not be mounted on boom longer than 150' (45.72 m).
11. When handling loads on main load hoist line with jib mounted on boom, reduce rated boom lifting capacities as follows:
 

20' (6.10 m) jib —	2,000 lbs. (907 kg)
30' (9.14 m) jib —	2,400 lbs. (1 089 kg)
40' (12.19 m) jib —	2,800 lbs. (1 270 kg)
12. Least stable position is over side.
13. These capacities apply only to the machine as originally manufactured and normally equipped by FMC Corporation, Cable Crane & Excavator Division.

## LS-338 working areas



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



# LS-338 boom/jib working ranges

**Boom** — angle: 48" (1.22 m) wide, 48" (1.22 m) deep with open throat top section; with or without boom live mast.

**Jib** — angle: 20" x 24" (0.51 m x 0.61 m).

**Counterweight** — 52,500 lbs. (23 814 kg) "AB" only.

**Mounting** — crawler: 13' 6" (4.11 m) gauge, 20' 0" (6.10 m) overall length.

