

Link-Belt® UC-108B lifting crane capacities

PCSA Class 10-256
Refer to Notes below.

Boom — angle: 34" x 34" (0.86 x 0.86 m) with open throat top section, retractable high gantry, 1 1/4" (32 mm) diameter boom pendants.

Carrier — FMC 8 x 4 drive, 126" (3.20 m) wheelbase, 11' 1" (3.38 m) wide.

Counterweights — Upper counterweight 'A' 13,000 lbs. (5 897 kg) or "AB" 19,200 lbs. (8 709 kg).

Notes - lifting crane capacities

Length	Boom			Capacities ①													
	Radius	Angle	Boom point height ②	On outriggers 360° swing				On tires side or front				On tires over rear					
				Cwt. "A"		Cwt. "AB"		Cwt. "A"		Cwt. "AB"		Cwt. "A"		Cwt. "AB"			
	Feet	mtrs.	Feet	mtrs.	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg	
40' (12.19 m)	10	3.05	80.2°	46' 3"	14.10	90.0°	40' 8"	90.0°	40' 8"	61.2°	27.7°	64.2°	29.1°	72.9	33.0	84.5°	38.3°
	12	3.66	77.2°	45' 10"	13.97	86.0°	39' 0"	86.8°	39' 3"	52.9°	23.9°	55.5°	25.1°	54.2	24.5	83.2°	28.6°
	15	4.57	72.8°	45' 0"	13.72	70.6°	32' 0"	73.3°	33' 2"	38.7°	17.5°	45.5°	20.6°	39.0	17.6	45.5°	20.6°
	20	6.10	65.1°	43' 2"	13.16	54.2°	24' 5"	56.3°	25' 5"	25.9°	11.7°	30.5°	13.8°	26.2	11.8	30.7°	13.9°
	25	7.62	56.9°	40' 5"	12.32	42.5°	19' 2"	45.6°	20' 6"	19.3°	8.7°	22.8°	10.3°	19.6	8.8	23.0°	10.4°
	30	9.14	47.9°	36' 6"	11.13	34.3°	15' 5"	37.1°	16' 8"	15.2°	6.8°	18.0°	8.1°	15.5	7.0	18.2°	8.2°
	35	10.67	37.3°	31' 2"	9.50	27.4°	12' 4"	31.1°	14' 1"	12.5°	5.6°	14.8°	6.7°	12.7	5.7	15.0°	6.8°
40	12.19	22.9°	22' 8"	6.86	22.7°	10' 2"	25.8°	11' 7"	10.5°	4.7°	12.5°	5.6°	10.7	4.8	12.7°	5.7°	
50' (15.24 m)	12	3.66	79.8°	56' 1"	17.09	85.5°	38' 7"	86.2°	39' 1"	52.4°	23.7°	55.0°	24.9°	54.0	24.4	62.9°	28.5°
	15	4.57	76.3°	55' 5"	16.89	70.1°	31' 7"	72.8°	33' 0"	38.5°	17.4°	45.2°	20.5°	38.7	17.5	45.2°	20.5°
	20	6.10	70.3°	53' 11"	16.43	53.7°	24' 3"	55.9°	25' 3"	25.7°	11.6°	30.3°	13.7°	26.0	11.7	30.4°	13.7°
	25	7.62	64.1°	51' 10"	15.80	42.1°	19' 0"	45.1°	20' 4"	19.0°	8.6°	22.5°	10.2°	19.3	8.7	22.7°	10.2°
	30	9.14	57.5°	49' 1"	14.96	34.0°	15' 4"	36.7°	16' 6"	14.9°	6.7°	17.7°	8.0°	15.2	6.8	17.9°	8.1°
	35	10.67	50.4°	45' 5"	13.84	27.1°	12' 2"	30.8°	13' 9"	12.2°	5.5°	14.5°	6.5°	12.4	5.6	14.7°	6.6°
	40	12.19	42.5°	40' 8"	12.40	22.4°	10' 1"	25.6°	11' 6"	10.2°	4.6°	12.2°	5.5°	10.4	4.7	12.4°	5.6°
50	15.24	20.5°	24' 5"	7.44	16.5°	7' 4"	18.8°	8' 5"	7.5°	3.4°	8.1°	4.1°	7.7	3.4	9.2°	4.1°	
60' (18.29 m)	15	4.57	78.6°	65' 8"	20.02	69.6°	31' 5"	72.3°	32' 7"	38.2°	17.3°	45.0°	20.4°	38.4	17.4	45.0°	20.4°
	20	6.10	73.7°	64' 5"	19.63	53.3°	24' 1"	55.4°	25' 1"	25.4°	11.5°	30.0°	13.6°	25.7	11.6	30.2°	13.6°
	25	7.62	68.7°	62' 9"	19.13	41.7°	18' 9"	44.7°	20' 2"	18.7°	8.4°	22.2°	10.0°	19.0	8.6	22.4°	10.1°
	30	9.14	63.4°	60' 6"	18.44	33.7°	15' 2"	36.3°	16' 4"	14.7°	6.6°	17.4°	7.8°	14.9	6.7	17.6°	7.9°
	35	10.67	57.9°	57' 8"	17.58	26.9°	12' 2"	30.4°	13' 7"	11.9°	5.3°	14.2°	6.4°	12.1	5.4	14.4°	6.5°
	40	12.19	52.1°	54' 3"	16.54	22.2°	10' 0"	25.3°	11' 4"	9.9°	4.4°	11.9°	5.3°	10.1	4.5	12.1°	5.4°
	50	15.24	38.7°	44' 6"	13.56	16.2°	7' 3"	18.5°	8' 3"	7.2°	3.2°	8.8°	3.9°	7.4	3.3	8.9°	4.0°
60	18.29	18.7°	26' 1"	7.95	12.6°	5' 7"	14.5°	6' 5"	5.5°	2.4°	6.8°	3.0°	5.6	2.5	6.9°	3.1°	
70' (21.34 m)	15	4.57	80.3°	75' 10"	23.11	66.3°	30' 0"	66.3°	30' 0"	38.0°	17.2°	44.6°	20.2°	38.2	17.3	44.7°	20.2°
	20	6.10	76.1°	74' 10"	22.81	52.8°	23' 9"	54.9°	24' 9"	25.1°	11.3°	29.7°	13.4°	25.4	11.5	29.9°	13.5°
	25	7.62	71.8°	73' 4"	22.35	41.3°	18' 7"	44.2°	20' 0"	18.4°	8.3°	21.9°	9.8°	18.7	8.4	22.1°	10.0°
	30	9.14	67.5°	71' 5"	21.77	33.4°	15' 1"	35.9°	16' 2"	14.4°	6.5°	17.1°	7.7°	14.6	6.6	17.3°	7.8°
	35	10.67	62.9°	69' 2"	21.08	26.6°	12' 0"	30.0°	13' 6"	11.6°	5.2°	13.9°	6.3°	11.8	5.3	14.1°	6.3°
	40	12.19	58.2°	66' 4"	20.22	21.9°	9' 9"	25.1°	11' 3"	9.6°	4.3°	11.6°	5.2°	9.8	4.4	11.8°	5.3°
	50	15.24	48.0°	58' 10"	17.93	15.9°	7' 2"	18.3°	8' 3"	6.9°	3.1°	8.5°	3.8°	7.1	3.2	8.6°	3.9°
60	18.29	35.7°	47' 7"	14.50	12.3°	5' 5"	14.2°	6' 4"	5.2°	2.3°	6.5°	2.9°	5.3	2.4	6.6°	2.9°	
70	21.34	17.3°	27' 6"	8.38	9.8°	4' 4"	11.4°	5' 1"	4.0°	1.8°	5.1°	2.3°	4.1	1.8	5.2°	2.3°	
80' (24.38 m)	20	6.10	77.8°	85' 1"	25.93	51.9°	23' 5"	51.9°	23' 5"	24.9°	11.2°	29.5°	13.3°	25.2	11.4	29.6°	13.4°
	25	7.62	74.2°	83' 10"	25.55	41.0°	18' 5"	43.2°	19' 5"	18.1°	8.2°	21.6°	9.7°	18.4	8.3	21.8°	9.8°
	30	9.14	70.4°	82' 2"	25.04	33.0°	14' 9"	35.6°	16' 1"	14.1°	6.3°	16.8°	7.6°	14.3	6.4	17.0°	7.7°
	35	10.67	66.5°	80' 4"	24.49	26.4°	11' 9"	29.6°	13' 4"	11.3°	5.1°	13.7°	6.2°	11.5	5.2	13.8°	6.2°
	40	12.19	62.6°	77' 10"	23.72	21.6°	9' 7"	24.8°	11' 2"	9.3°	4.2°	11.3°	5.1°	9.5	4.3	11.5°	5.2°
	50	15.24	54.2°	71' 9"	21.87	15.7°	7' 1"	18.0°	8' 1"	6.6°	2.9°	8.2°	3.7°	6.8	3.0	8.3°	3.7°
	60	18.29	44.7°	63' 2"	19.25	12.0°	5' 4"	13.9°	6' 3"	4.9°	2.2°	6.2°	2.8°	5.0	2.2	6.3°	2.8°
70	21.34	33.3°	50' 10"	15.49	9.5°	4' 3"	11.1°	5' 0"	3.7°	1.6°	4.8°	2.1°	3.8	1.7	4.9°	2.2°	
80	24.38	16.2°	29' 3"	8.92	7.8°	3' 5"	8.0°	3' 6"	2.8°	1.2°	3.7°	1.6°	2.9	1.3	3.8°	1.7°	
90' (27.43 m)	20	6.10	79.2°	95' 3"	29.03	45.5°	20' 6"	45.5°	20' 6"	24.6°	11.1°	29.2°	13.2°	24.9	11.2	29.4°	13.3°
	25	7.62	76.0°	94' 2"	28.70	38.4°	17' 4"	38.4°	17' 4"	17.9°	8.1°	21.3°	9.6°	18.1	8.2	21.5°	9.7°
	30	9.14	72.6°	92' 9"	28.27	31.9°	14' 4"	31.9°	14' 4"	13.8°	6.2°	16.6°	7.5°	14.1	6.3	16.7°	7.5°
	35	10.67	69.3°	91' 0"	27.74	26.2°	11' 8"	27.3°	12' 3"	11.0°	4.9°	13.4°	6.0°	11.2	5.0	13.6°	6.1°
	40	12.19	65.8°	88' 11"	27.10	21.4°	9' 7"	23.6°	10' 7"	9.0°	4.0°	11.0°	4.9°	9.2	4.1	11.2°	5.0°
	50	15.24	58.6°	83' 8"	25.50	15.4°	6' 9"	17.7°	8' 0"	6.3°	2.8°	7.9°	3.5°	6.5	2.9	8.0°	3.6°
	60	18.29	50.8°	76' 7"	23.34	11.7°	5' 3"	13.1°	5' 9"	4.6°	2.0°	5.9°	2.6°	4.7	2.1	6.0°	2.7°
70	21.34	42.0°	67' 1"	20.45	9.2°	4' 1"	10.1°	4' 5"	3.4°	1.5°	4.5°	2.0°	3.5	1.5	4.6°	2.0°	
80	24.38	31.4°	53' 8"	16.36	7.5°	3' 4"	7.7°	3' 4"	2.5°	1.1°	3.4°	1.5°	2.6	1.1	3.5°	1.5°	
90	27.43	15.2°	30' 6"	9.30	5.5°	2' 4"	5.5°	2' 4"	1.8°	0.8°	2.6°	1.1°	1.9	0.8	2.7°	1.2°	
100' (30.48 m)	25	7.62	77.4°	104' 5"	31.83	34.3°	15' 5"	34.3°	15' 5"	17.6°	7.9°	21.1°	9.5°	17.8	8.0	21.3°	9.6°
	30	9.14	74.4°	103' 2"	31.45	28.5°	12' 9"	28.5°	12' 9"	13.5°	6.1°	16.3°	7.3°	13.8	6.2	16.5°	7.4°
	35	10.67	71.4°	101' 8"	30.99	24.4°	11' 0"	24.4°	11' 0"	10.7°	4.8°	13.1°	5.9°	11.0	4.9	13.3°	6.0°
	40	12.19	68.4°	99' 10"	30.43	21.0°	9' 5"	21.0°	9' 5"	8.7°	3.9°	10.7°	4.8°	8.9	4.0	10.9°	4.9°
	50	15.24	62.1°	95' 2"	29.01	15.1°	6' 8"	15.1°	6' 8"	6.0°	2.7°	7.6°	3.4°	6.2	2.8	7.7°	3.4°
	60	18.29	55.4°	89' 1"	27.15	11.5°	5' 2"	11.6°	5' 2"	4.3°	1.9°	5.6°	2.5°	4.4	1.9	5.7°	2.5°
	70	21.34	48.1°	81' 3"	24.77	9.0°	4' 0"	9.0°	4' 0"	3.0°	1.3	4.1°	1.8°	3.2	1.4	4.3°	1.9°
80	24.38	39.8°	70' 3"	21.59	7.0°	3' 1"	7.0°	3' 1"	2.2°	0.9	3.1°	1.4°	2.3	1.0	3.2°	1.4°	
90	27.43	29.7°	56' 5"	17.20	5.3°	2' 4"	5.8°	2' 4"	1.5°	0.6	2.3°	1.0°	1.6	0.7	2.4°	1.0°	
100	30.48	14.4°	31' 10"	9.70	3.7°	1' 6"	3.7°	1' 6"	—	—	1.7°	0.7	1.0	0.4	1.8°	0.8°	

① Measured from center of boom head sheave to ground—machine standing on tires.

② Capacities shown in thousand pounds and thousand kilograms.

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

GENERAL INFORMATION CAN

UC-108B dragline/clamshell/magnet & jib capacities

Boom — angle; 34" x 34" (0.86 x 0.86 m) with open throat top section, retractable high gantry 1 1/4" (32 mm) diameter boom per inch.

Carrier — FMC 8 x 4 drive, 126" (3.20 m) wheelbase, 11' 1" (3.38 m) wide.

Counterweight — Upper counterweight "A" 13,000# (5 897 kg).

Jib — angle; 23" x 18" (0.58 x 0.46 m).

Counterweight — Upper counterweight "AB" 19,200 lbs. (8 709 kg).

Length	Boom					Dragline		Clamshell/Magnet	
	Radius		Angle	Boom Point Height					
	Feet	meters	Degree	Feet	meters	Lbs.	kg	Lbs.	kg
40' (12.19 m)	10	3.05	80.2	46' 3"	14.10			13,600	6 168
	12	3.66	77.2	45' 10"	13.97				
	15	4.57	72.8	45' 0"	13.72				
	20	6.10	65.1	43' 2"	13.16				
	25	7.62	56.9	40' 5"	12.32	11,800	5 352	13,600	6 168
	30	9.14	47.9	36' 6"	11.13	11,800	5 352	12,100	5 488
	35	10.67	37.3	31' 2"	9.50	11,200	5 080	10,000	4 536
50' (15.24 m)	40	12.19	22.9	22' 6"	6.86			8,400	3 810
	12	3.66	79.8	56' 1"	17.09			13,600	6 168
	15	4.57	76.3	55' 5"	16.89				
	20	6.10	70.3	53' 11"	16.43				
	25	7.62	64.1	51' 10"	15.80			13,600	6 168
	30	9.14	57.5	49' 1"	14.96	11,800	5 352	11,900	5 397
	35	10.67	50.4	45' 5"	13.84	10,900	4 944	9,700	4 399
60' (18.29 m)	40	12.19	42.5	40' 8"	12.40	9,100	4 127	8,100	3 674
	50	15.24	20.5	24' 5"	7.44			6,000	2 721
	15	4.57	78.6	65' 8"	20.02			13,600	6 168
	20	6.10	73.7	64' 5"	19.63			13,600	6 168
	25	7.62	68.7	62' 9"	19.13			13,600	6 168
	30	9.14	63.4	60' 6"	18.44			11,700	5 307
	35	10.67	57.9	57' 8"	17.58	10,700	4 853	9,500	4 309
60' (18.29 m)	40	12.19	52.1	54' 3"	16.54	8,900	4 037	7,900	3 583
	50	15.24	38.7	44' 6"	13.56	6,400	2 903	5,700	2 585
	60	18.29	18.7	26' 1"	7.95			4,400	1 995

⊙ Measured from center of boom head sheave to ground.

Jib Angle To Ground	Jib Lengths					
	20' (6.10 m)		30' (9.14 m)		40' (12.19 m)	
	Lbs.	kg	Lbs.	kg	Lbs.	kg
80°	12,000	5 443	10,000	4 536	8,000	3 629
65°	10,000	4 536	8,000	3 629	6,000	2 722
50°	8,000	3 629	6,000	2 722	4,000	1 814
35°	7,500	3 402	5,500	2 495	3,500	1 588
20°	7,500	3 402	5,000	2 495	3,500	1 588

Notes — angle jib capacities

- Capacities shown are maximum allowable.
- Use jib with 10' 0" (3.05 m) high jib mast in proper working position.
- To determine jib angle to ground, deduct jib angle to boom from the boom angle to ground.
- Jib backstay line is anchored at base of boom top section.
- Jib angle to boom must not exceed 30°.
- Determining machine jib capacities:
 - Add length of boom plus length of jib being used.
 - Determine jib load radius.
 - Refer to lifting crane capacity chart and select boom length that corresponds to combined boom/jib length (6-a) and radius (6-b).
 - Jib capacity is equal to the lifting crane capacity for the boom length (6-c) and radius (6-c) — unless restricted by the maximum jib capacities shown in above chart.
 - If total boom/jib length (6-c) exceeds the longest boom length listed in lifting crane capacity chart, deduct 300# (136 kg) from the longest boom length shown for the required radius (6-b).
 - Jib capacity is the resulting figure unless restricted by the maximum jib capacities shown in above chart.
- Refer also to Notes — lifting crane capacities.

Notes — dragline/clamshell/magnet capacities

- Capacities shown are maximum allowable, based on 360° swing, with machine standing level on firm surface under ideal job conditions.
- Capacities are based on not more than 75% of minimum tipping loads for dragline; 68% for clamshell/magnet.
- Capacities are maximum recommended by Commercial Standard CS90-58 and PCSA Standard #1. User must make allowances for soft or uneven supporting surfaces, rapid cycle operations, bucket suction or other unfavorable conditions which may require smaller buckets or magnets for more efficient operation.
- Weight of bucket or magnet, plus load, should not exceed these capacities.
- Dragline operation with boom angle less than 35° is not recommended.
- Boom length for dragline/clamshell/magnet operation should not exceed 60' (18.29 m).
- Use of ctwt. "AB" is not recommended for dragline, clamshell, or magnet service.
- Refer also to Notes — lifting crane capacities.
- These capacities apply only to the machine as originally manufactured and normally equipped by FMC Corporation Construction Equipment Group.

Note: Use upper counterweight "A" only for dragline/clamshell/magnet capacities use upper counterweight "AB" only for jib capacities.

We are constantly improving our products and therefore reserve the right to change designs and specifications.

FMC Corporation Construction Equipment Group Cedar Rapids Iowa 52406

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