



Link-Belt® HC-218A Performance Specifications

Boom live mast — lifting capacities when used as short boom^①

Extended mast only		Upper without counterweight				Upper with "A" or "AB" counterweight	
Load radius		On tires		On outriggers		On outriggers only	
Feet	meters	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms
10' to 14'	3.05 to 4.27	33,000	14 969	33,000	14 969	33,000	14 969
14' to 25'	4.27 to 8.23	13,500	6 123	33,000	14 969	33,000	14 969

① Boom live mast must be fixed in extended 24' (7.32 m) long position when used as short boom. Use of live mast as short boom is intended for machine assembly or disassembly only. It should not be used for general crane service. Lifting maximum 33,000 lbs. (14 969 kg) capacity requires 3-parts 7/8" (22 mm) diameter Type "N" wire rope.

Wire rope and rope drum data

Main load hoist wire rope length — for tubular booms using 7/8" (22 mm) diameter wire rope^{①②③}

Parts of line	Boom length															
	30' (9.14 m) ^④		40' (12.19 m)		50' (15.24 m)		60' (18.29 m)		70' (21.34 m)		80' (24.38 m)		90' (27.43 m)		100' (30.48 m)	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
1	85	25.96	125	38.10	145	44.20	165	50.29	185	56.39	205	62.48	225	68.58	245	74.68
2	120	36.58	170	51.82	200	60.96	230	70.10	260	79.25	290	88.39	320	97.54	350	106.68
3	155	47.24	215	65.53	255	77.72	295	89.92	335	102.11	375	114.30	415	126.49	455	138.68
4	190	57.91	260	79.25	310	94.49	360	109.73	410	124.97	460	140.21	510	155.45	560	170.69
5	225	68.58	305	92.96	365	111.25	425	129.54	485	147.83	545	166.12	605	184.40	665	202.69
6	260	79.25	350	106.68	420	128.02	490	149.35	560	170.69	630	192.02	700	213.36	770	234.70
7	295	89.92	395	120.40	475	144.78	555	169.16	635	193.55	715	217.93	795	242.32	875	266.70
8	330	100.58	440	134.11	530	161.54	620	188.98	710	216.41	800	243.84	890	271.27		
9	365	111.25	485	147.83	585	178.31	685	208.79	785	239.27	885	269.75				
10	400	121.92	530	161.54	640	195.07	750	228.60	860	262.13						

Parts of line	Boom length															
	110' (33.53 m)		120' (36.58 m)		130' (39.62 m)		140' (42.67 m)		150' (45.72 m)		160' (48.77 m)		170' (51.82 m)		180' (54.86 m)	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
1	255	80.77	285	86.87	305	92.96	325	99.06	345	105.16	365	111.25	385	117.35	405	123.44
2	380	115.82	410	124.97	440	134.11	470	143.26	500	152.40	530	161.54	560	170.69	590	179.83
3	495	150.88	535	163.07	575	175.26	615	187.45	655	199.64	695	211.84	735	224.03	775	236.22
4	610	185.93	660	201.17	710	216.41	760	231.65	810	246.89	860	262.13				
5	725	220.98	785	239.27	845	257.56										
6	840	256.03														

Parts of line	Boom length									
	190' (57.91 m)		200' (60.96 m)		210' (64.01 m)		220' (67.06 m)		230' (70.10 m)	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
1	425	129.54	445	135.64	465	141.73	485	147.83	505	153.92
2	620	188.98	650	198.12	680	207.26	710	216.41	740	225.55
3	815	248.41	855	260.60						

① Hammerhead boom lengths: 30' to 230' (9.14 to 70.10 m).

② Open throat boom lengths: 40' to 230' (12.19 to 70.10 m).

③ Tapered boom lengths: 90' to 230' (27.43 to 70.10 m).

④ Hammerhead boom only.

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HC-218A performance specifications

Wire rope and rope drum data — (continued)

Jib load hoist rope lengths (whipline) — using 3/4" (19 mm) diameter wire rope.

Jib length	Parts of line	Boom length															
		40' (12.19 m)		50' (15.24 m)		60' (18.29 m)		70' (21.34 m)		80' (24.38 m)		90' (27.43 m)		100' (30.48 m)		110' (33.53 m)	
		Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
30' (9.14 m)	1	185	56.39	205	62.48	225	68.58	245	74.68	265	80.77	285	86.87	305	92.96	325	99.06
	2	260	79.25	290	88.39	320	97.54	350	106.68	380	115.82	410	124.97	440	134.11	470	143.26
45' (13.72 m)	1	215	65.53	235	71.63	255	77.72	275	83.82	295	89.92	315	96.01	335	102.11	355	108.20
	2	305	92.96	335	102.11	365	111.25	395	120.40	425	129.54	455	138.68	485	147.83	515	156.97
60' (18.29 m)	1	245	74.68	265	80.77	285	86.87	305	92.96	325	99.06	345	105.16	365	111.25	385	117.35
	2	350	106.68	380	115.82	410	124.97	440	134.11	470	143.26	500	152.40	530	161.54	560	170.69

Jib length	Parts of line	Boom length															
		120' (36.58 m)		130' (39.62 m)		140' (42.67 m)		150' (45.72 m)		160' (48.77 m)		170' (51.82 m)		180' (54.86 m)		190' (57.91 m)	
		Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
30' (9.14 m)	1	345	105.16	365	111.25	385	117.35	405	123.44	425	129.54	445	135.64	465	141.73	485	147.83
	2	500	152.40	530	161.54	560	170.69	590	179.83	620	188.98	650	198.12	680	207.26	710	216.41
45' (13.72 m)	1	375	114.30	395	120.40	415	126.49	435	132.59	455	138.68	475	144.78	495	150.88	515	156.97
	2	545	166.12	575	175.26	605	184.40	635	193.55	665	202.69	695	211.84	725	220.98	755	230.12
60' (18.29 m)	1	405	123.44	425	129.54	445	135.64	465	141.73	485	147.83	505	153.92	525	160.02	545	166.12
	2	590	179.83	620	188.98	650	198.12	680	207.26	710	216.41	740	225.55	770	234.70	800	243.84

Jib length	Parts of line	Boom length			
		200' (60.96 m)		210' (64.01 m)	
		Feet	meters	Feet	meters
30' (9.14 m)	1	505	153.92	525	160.02
	2	740	225.55	770	234.70
45' (13.72 m)	1	535	163.07	555	169.16
	2	785	239.27	805	245.36
60' (18.29 m)	1	565	172.21	585	178.31
	2	830	252.98	860	262.13

Drum wire rope capacities

Wire rope layer	Front or rear drum — 17 1/4" (0.50 m) root diameter smooth lagging								Third or boomhoist drum — 11 1/4" (0.29 m) root diameter smooth lagging			
	3/4" (19 mm) wire rope				5/8" (22 mm) wire rope				3/4" (19 mm) wire rope			
	Rope per layer		Total wire rope		Rope per layer		Total wire rope		Rope per layer		Total wire rope	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
1	118	35.97	118	35.97	102	31.09	102	31.09	81	24.69	81	24.69
2	127	38.71	245	74.68	110	33.53	212	64.62	90	27.43	171	51.12
3	136	41.45	381	116.13	120	36.58	332	101.19	99	30.18	270	82.30
4	144	43.89	525	160.02	128	39.01	460	140.21	108	32.92	378	115.21
5	153	46.63	678	206.65	136	41.45	596	181.66	117	35.66	495	150.88
6	161	49.07	839	255.73	144	43.89	740	225.55				
7	169	51.51	1,008	307.24	152	46.33	892	271.88				

Rope size and type

Wire rope application	Size and type used
Boomhoist	3/4" (19 mm) diameter, Type "T"
Main load hoist	5/8" (22 mm) diameter, Type "N"
Jib load hoist (1-part)	3/4" (19 mm) diameter, Type "K"
Jib load hoist (2-part)	3/4" (19 mm) diameter, Type "N"
Third drum	3/4" (19 mm) diameter, Type "N"
Boom pendants	1 1/4" (35 mm) diameter, Type "N"
Boom midpoint suspension pendants	5/8" (22 mm) diameter, Type "N"
Jib frontstay line	3/4" (19 mm) diameter, Type "N"
Jib backstay line	3/4" (19 mm) diameter, Type "N"

Wire rope types
Type "N" — 6 x 25 (6 x 19 class), filler wire, extra improved plow steel; preformed, independent wire rope center, right lay, regular lay.
Type "K" — 19 x 7 non-rotating improved plow steel, preformed, wire rope center core.
Type "T" — 6 x 30 flattened strand, extra improved plow steel, preformed independent wire rope center, right lay, lang lay.

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HC-218A performance specifications

Wire rope and rope drum data — (continued)

Available line speed and line pull^① — based on GM 6-71N diesel engine with Allison single stage torque converter developing maximum net horsepower as defined by P.C.S.A. Standard No. 1.

Attachment	Root diameter	Front or rear drum						Third drum						
		Wire rope diameter		Line speed — first layer		Line pull — first layer		Root diameter	Wire rope diameter		Line speed — first layer		Line pull — first layer	
		Inches	mm	Fp.m.	m/min	Pounds	kilograms		Inches	mm	Fp.m.	m/min	Pounds	kilograms
Crane	17¼"	¾"	19	159	48.46	25,150	11 408	11¼"	¾"	19	117	35.66	31,200	14 152
	(0.44 m)	⅞"	22	160	48.77	25,000	11 340	(0.29 m)						

Permissible line speed and pull^① — based on Type "N" wire rope strength, single part line.

Attachment	Root diameter	Front or rear drum						Third drum						
		Wire rope diameter		Line speed — first layer		Line pull — first layer		Root diameter	Wire rope diameter		Line speed — first layer		Line pull — first layer	
		Inches	mm	F.p.m.	m/min	Pounds	kilograms		Inches	mm	F.p.m.	m/min	Pounds	kilograms
Crane	17¼"	¾"	19	215	65.53	16,800	7 620	11¼"	¾"	19	174	53.04	16,800	7 620
	(0.44 m)	⅞"	22	177	53.95	22,700	10 297	(0.29 m)						

Load hoisting performance — line speeds are maximum for full throttle operation (1,800 r.p.m. full load speed) with GM 6-71N diesel engine equipped with Allison single stage torque converter.

Single line load ^①		Front or rear drum — 17¼" (0.44 m) root diameter smooth laggings — using ⅞" (22 mm) rope											
		Line speed											
		First layer rope				Fourth layer rope				Seventh layer rope			
		Standard		High speed ^②		Standard		High speed ^②		Standard		High speed ^②	
		Pounds	kilograms	Fp.m.	m/min	Fp.m.	m/min	Fp.m.	m/min	Fp.m.	m/min	Fp.m.	m/min
1,000	454			334	101.80	554	168.86	428	130.45	706	215.19	521	158.80
5,000	2 268			302	92.05	458	139.59	375	114.30	545	166.12	441	134.41
10,000	4 536			263	80.16	352	107.28	312	95.08	377	114.91	353	107.59
13,000	5 897			241	73.46	290	88.39	279	85.04			302	92.05
15,000	6 804			229	69.80			257	78.33				
20,000	9 072			195	59.44								
22,700	10 297			177	53.95								

Single line load ^①		Third drum — 11¼" (0.29 m) root diameter smooth lagging — using ¾" (19 mm) wire rope					
		Line speed					
		First layer		Third layer		Fifth layer	
		Pounds	kilograms	Fp.m.	m/min	Fp.m.	m/min
1,000	454			244	74.37	304	92.66
5,000	2 268			226	68.89	276	84.13
10,000	4 536			203	61.87	239	72.85
15,000	6 804			180	54.86	208	63.40
16,800	7 620			174	53.04	197	60.04

^{①②} — see page 5.

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**HC-218A performance specifications****Wire rope and rope drum data — (continued)**

Load hoisting performance — line speeds are maximum for full throttle operation (1,800 r.p.m. full load speed) with GM 6-71 diesel engine equipped with Allison single stage torque converter.

Front or rear drum — 17 1/4" (0.44 m) root diameter smooth laggings — using 3/4" (19 mm) rope													
Single line load ^①		Line speed											
		First layer rope				Fourth layer rope				Seventh layer rope			
		Standard		High speed ^②		Standard		High speed ^②		Standard		High speed ^②	
Pounds	kilograms	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min
1,000	454	331	100.89	551	167.94	412	125.58	681	207.57	492	149.96	808	246.28
5,000	2 268	301	91.74	455	138.68	363	110.64	532	162.15	421	128.32	601	183.18
10,000	4 536	261	79.55	351	106.98	304	92.66	375	114.30	342	104.24		
13,000	5 897	240	73.15	290	88.39	274	83.52			296	90.22		
15,000	6 804	228	69.49			253	77.11						
20,000	9 072	194	59.13										
22,700	10 297	176	53.64										

Load hoisting performance — line speeds are maximum for full throttle operation (1,800 r.p.m. full load speed) with GM 6-71 diesel engine equipped with Twin Disc 3 stage torque converter.

Front or rear drum — 17 1/4" (0.44 m) root diameter smooth laggings — using 3/4" (22 mm) rope													
Single line load ^①		Line speed											
		First layer rope				Fourth layer rope				Seventh layer rope			
		Standard		High speed ^②		Standard		High speed ^②		Standard		High speed ^②	
Pounds	kilograms	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min
1,000	454	304	92.66	514	156.67	392	119.48	662	201.78	480	146.30	810	246.89
5,000	2 268	275	83.82	411	125.27	348	106.07	485	147.83	408	124.36	561	170.99
10,000	4 536	235	71.63	336	102.41	276	84.12	358	109.12	324	98.76		
13,000	5 897	214	65.23	277	84.43	261	79.55			290	88.39		
15,000	6 804	208	63.40			246	74.98						
20,000	9 072	187	56.99										
22,700	10 297	167	50.90										

Load hoisting performance — line speeds are maximum for full throttle operation (1,800 r.p.m. full load speed) with GM 6-71 diesel engine equipped with Twin Disc 3 stage torque converter.

Front or rear drum — 17 1/4" (0.44 m) root diameter smooth laggings — using 3/4" (19 mm) rope													
Single line load ^①		Line speed											
		First layer rope				Fourth layer rope				Seventh layer rope			
		Standard		High speed ^②		Standard		High speed ^②		Standard		High speed ^②	
Pounds	kilograms	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min
1,000	454	302	92.05	510	155.45	378	115.21	637	194.16	453	138.07	764	232.87
5,000	2 268	274	83.52	404	124.66	336	102.41	474	144.48	396	120.70	535	163.07
10,000	4 536	234	71.32	334	101.80	268	81.69	357	108.81	310	94.49		
13,000	5 897	212	64.62	276	84.12	254	77.42			284	86.56		
15,000	6 804	207	63.09			242	73.76						
20,000	9 072	186	56.69										
22,700	10 297	167	50.90										

①② — see page 5.

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**HC-218A performance specifications****Wire rope and rope drum data — (continued)**

Load hoisting performance — line speeds are maximum for full throttle operation (1,800 r.p.m. full load speed) with Cummins N855C220 diesel engine equipped with Twin Disc 3 stage torque converter.

Single line load ^①		Front or rear drum — 17¼" (0.44 m) root diameter smooth laggings — using ¾" (22 mm) rope											
		Line speed											
		First layer rope				Fourth layer rope				Seventh layer rope			
		Standard		High speed ^②		Standard		High speed ^②		Standard		High speed ^②	
Pounds	kilograms	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min
1,000	454	301	91.74	502	153.01	387	117.96	642	195.68	471	143.56	779	237.44
5,000	2 268	280	85.34	437	133.20	352	107.29	530	161.54	418	127.41	604	184.10
10,000	4 536	253	77.11	340	103.63	303	92.35	369	112.47	341	103.94		
13,000	5 897	234	71.32	284	86.56	270	82.30			294	89.61		
15,000	6 804	221	67.36			249	75.90						
20,000	9 072	189	57.61										
22,700	10 297	172	52.43										

Load hoisting performance — line speeds are maximum for full throttle operation (1,800 r.p.m. full load speed) with Cummins N855C220 diesel engine equipped with Twin Disc 3 stage torque converter.

Single line load ^①		Front or rear drum — 17¼" (0.44 m) root diameter smooth laggings — using ¾" (19 mm) rope											
		Line speed											
		First layer rope				Fourth layer rope				Seventh layer rope			
		Standard		High speed ^②		Standard		High speed ^②		Standard		High speed ^②	
Pounds	kilograms	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min	F.p.m.	m/min
1,000	454	299	91.14	499	152.10	372	113.39	619	188.67	445	135.64	737	224.64
5,000	2 268	279	85.04	434	132.28	340	103.63	515	156.97	398	121.31	584	178.00
10,000	4 536	251	76.50	339	103.33	295	89.92	367	111.86	330	100.58		
13,000	5 897	233	71.02	284	86.56	265	80.77			288	87.78		
15,000	6 804	220	67.06			245	74.68						
20,000	9 072	189	57.61										
22,700	10 297	172	52.43										

①Maximum permissible load on single part of line: 16,800 lbs. (7 620 kg) for ¾" (19 mm) Type "N" wire rope; 9,900 lbs. (4 491 kg) for ¾" (19 mm) Type "K" wire rope; 22,700 lbs. (10 297 kg) for ¾" (22 mm) Type "N" wire rope.

②Machine equipped with optional planetary drive unit.

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

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Link-Belt® cranes & excavators
manufactured in: Cedar Rapids Iowa
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