

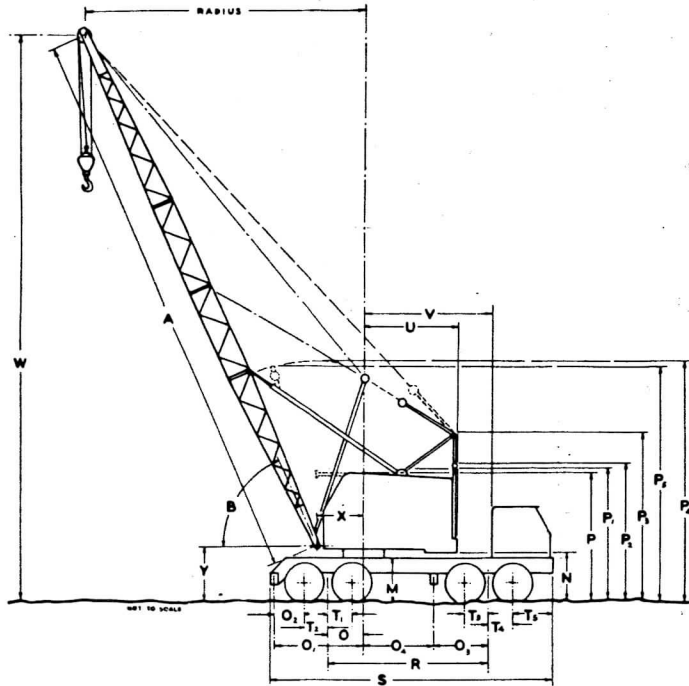
**LINK-BELT
SPEEDER**

HC-108B 45-Ton Zephyrcrane Flysheet

4-AXLE CARRIER

45 TON TRUCK MOUNTED CRANE (PCSA CLASS 10-250)

(Supersedes Flysheet CRF5097—11-63)



111

S/N 9-LGH-3175

GENERAL DIMENSIONS

Basic angle or tubular "Hi-Lite" boom length	A	40' 0"	Over-all height at "Hi-Lite" boom peak, boom in travel position		16' 1"
Boom angle	B		Wheel base	R	18' 8"
Over-all height top of ring gear plate	M	4' 6"	Over-all length over rear outrigger box	S	30' 7"
Ground clearance under standard and clamshell-dragline counterweight	N	5' 0"	Centerline rear axle to pivot of bogie	T1	2' 5"
Ground clearance under optional two-piece counterweight	N	4' 11"	Centerline rear axle to pivot of bogie	T2	2' 5"
Centerline rotation to rear axle bogie	O	3' 6"	Centerline front axle to pivot of bogie	T3	2' 3"
Centerline rotation to rear outrigger center	O1	9' 0"	Centerline front axle to pivot of bogie	T4	2' 3"
Centerline rear axle to rear outrigger center	O2	3' 1"	Centerline front axle to front bumper	T5	3' 7"
Pivot of bogie to front outrigger center	O3	6' 3"	Tailswing with standard and clamshell-dragline counterweight	U	11' 5"
Centerline rotation to front outrigger center	O4	8' 11"	Tailswing with optional two-piece counterweight	U	11' 10"
Over-all cab height	P	12' 1"	Centerline rotation to back of truck cab	V	16' 0"
Over-all height low gantry ^①	P1	12' 6"	Radius of boom hinge pin—angle boom	X	3' 2"
Over-all height retractable gantry lowered ^②	P2	13' 0"	Radius of boom hinge pin—tubular "Hi-Lite" boom	X	4' 1"
Over-all height retractable gantry raised	P3	16' 4"	Height of boom hinge pin—angle boom	Y	7' 0"
Over-all height "Hi-Lite" boom gantry vertical	P4	27' 5"	Height of boom hinge pin—tubular "Hi-Lite" boom	Y	5' 7"
Over-all height "Hi-Lite" boom gantry with boom horizontal	P5	18' 6"	Minimum ground clearance		1' 0"
Over-all height at angle boom peak, boom in travel position		11' 7"	Over-all cab width		8' 0"
			Over-all width outriggers retracted		10' 3"
			Over-all width outriggers extended		18' 6"

CARRIER BRIEF SPECIFICATIONS

Heavy duty all-welded frame; 14:00 x 20, 18-ply rating tires—dual tires on rear tandem axles, single tires on front axles; front axles on equalizer beams; 8-wheel air brakes. Hydraulic power steering; 8 x 4 drive; 69'10" turning radius; planetary rear axles. Standard Engine—Waukesha 145GZ gasoline, 247 maximum brake h.p. @ 2250 r.p.m. full-load speed. 12 speeds forward, 3 reverse. Road speeds up to 40 m.p.h..

- ① Low gantry available at a reduction in price for angle booms only up to and including 60°. Consult factory if capacities are required.
 ② With boom suspension slack. When boom is supported by the mast, over-all height of the mast bail is 13'4".

LINK-BELT SPEEDER

Flysheet CRF5105—4-65

Link-Belt Speeder
Cedar Rapids, Iowa

Link-Belt Speeder (Canada), Ltd.
Woodstock, Ontario

Printed in U.S.A.

HC-108B LIFTING CRANE CAPACITIES^① WITH RETRACTABLE HIGH GANTRY

III

4-AXLE CARRIER

— ANGLE BOOM —

FOR DRAGLINE, CLAMSHELL AND MAGNET CAPACITIES SEE PAGE 4

BOOM ^②			W ③	WITH OUTRIGGERS		ON TIRES			
L	R	A		Side or Rear		Side		Rear	
				Cwt A	Cwt AB	Cwt A	Cwt AB	Cwt A	Cwt AB
40'	10'	80°	46' 5"	90,000*	90,000*	62,360	68,260*	64,440*	80,000
	12'	77°	46' 0"	85,000*	85,000*	46,790	55,340	55,020*	68,300
	15'	73°	45' 2"	70,660*	72,000*	33,810	40,080	44,080	49,990
	20'	65°	43' 4"	54,160*	54,500*	22,830	27,170	30,150	34,280
	25'	57°	40' 7"	42,200*	42,200*	17,020	20,340	22,170	25,870
	30'	48°	36' 8"	33,490	34,200*	13,420	16,110	18,070	20,630
	35'	37°	31' 4"	26,690	29,200*	10,970	13,230	14,900	17,060
40'	23°	22' 8"	22,090	25,270	9,200	11,150	12,600	14,470	
50'	12'	80°	56' 3"	80,000*	80,000*	46,490	55,040	54,510*	67,990
	15'	76°	55' 7"	70,170*	71,600*	33,510	39,780	43,770	49,680
	20'	70°	54' 1"	53,700*	54,100*	22,520	26,860	29,840	33,960
	25'	64°	52' 0"	41,800*	41,800*	16,710	20,030	22,390	25,560
	30'	58°	49' 3"	33,270	33,820*	13,110	15,790	17,750	20,320
	35'	51°	45' 7"	26,450	28,820*	10,660	12,920	14,590	16,750
	40'	43°	40' 10"	21,830	25,010	8,890	10,830	12,290	14,150
45'	33°	34' 6"	18,490	21,230	7,540	9,250	10,540	12,180	
50'	21°	24' 7"	15,970	18,370	6,490	8,020	9,170	10,640	
60'	15'	79°	65' 10"	69,680*	71,200*	33,210	39,480	43,460	49,370
	20'	74°	64' 7"	53,230*	53,700*	22,220	26,560	29,530	33,650
	25'	69°	62' 11"	41,400*	41,400*	16,400	19,720	22,080	25,240
	30'	64°	60' 8"	33,040	33,440*	12,800	15,480	17,440	20,000
	35'	58°	57' 10"	26,200	28,440*	10,350	12,600	14,270	16,430
	40'	52°	54' 5"	21,570	24,750	8,570	10,520	11,970	13,840
	45'	46°	50' 0"	18,220	20,960	7,230	8,940	10,230	11,870
50'	39°	44' 8"	15,700	18,100	6,180	7,700	8,860	10,320	
55'	30°	37' 4"	13,720	15,860	5,330	6,700	7,750	9,070	
60'	19°	26' 3"	12,130	14,060	4,630	5,890	6,840	8,050	
70'	15'	80°	76' 0"	69,190*	70,800*	32,900	39,170	43,150	49,070
	20'	76°	75' 0"	52,770*	53,300*	21,910	26,250	29,220	33,340
	25'	72°	73' 6"	41,000*	41,000*	16,090	19,410	21,760	24,930
	30'	68°	71' 7"	32,800	33,060*	12,480	15,170	17,120	19,690
	35'	63°	69' 4"	25,950	28,060*	10,030	12,290	13,960	16,110
	40'	58°	66' 6"	21,310	24,490	8,260	10,200	11,660	13,520
	45'	53°	63' 1"	17,960	20,700	6,910	8,620	9,910	11,550
50'	48°	59' 0"	15,420	17,830	5,860	7,390	8,540	10,000	
55'	42°	54' 0"	13,440	15,580	5,010	6,390	7,440	8,760	
60'	36°	47' 9"	11,840	13,780	4,320	5,570	6,530	7,730	
65'	28°	39' 10"	10,530	12,290	3,730	4,880	5,770	6,870	
70'	17°	27' 8"	9,440	11,050	3,240	4,300	5,120	6,140	

BOOM ^②			W ③	WITH OUTRIGGERS		ON TIRES			
L	R	A		Side or Rear		Side		Rear	
				Cwt A	Cwt AB	Cwt A	Cwt AB	Cwt A	Cwt AB
80'	20'	78°	85' 3"	52,310*	52,900*	21,600	25,940	28,910	33,030
	25'	74°	84' 0"	40,600*	40,600*	15,780	19,100	21,450	24,610
	30'	70°	82' 4"	32,570	32,680*	12,170	14,860	16,810	19,380
	35'	67°	80' 6"	25,700	27,680*	9,720	11,980	13,640	15,800
	40'	63°	78' 0"	21,050	24,230*	7,950	9,890	11,640	13,200
	45'	59°	75' 3"	17,690	20,430	6,600	8,310	9,600	11,230
	50'	54°	71' 11"	15,150	17,550	5,550	7,070	8,220	9,690
	55'	50°	68' 0"	13,160	15,300	4,700	6,070	7,120	8,440
	60'	45°	63' 4"	11,560	13,490	4,000	5,250	6,210	7,420
	65'	39°	57' 10"	10,250	12,010	3,420	4,570	5,450	6,560
70'	33°	51' 0"	9,150	10,770	2,920	3,990	4,800	5,830	
75'	26°	42' 3"	8,220	9,710	2,500	3,490	4,250	5,200	
80'	16°	29' 5"	7,420	8,800*	2,120	3,050	3,760	4,650	
90'	20'	79°	95' 5"	51,840*	52,500*	21,290	25,640	28,590	32,710
	25'	76°	94' 4"	40,200*	40,200*	15,470	18,790	21,140	24,300
	30'	73°	92' 11"	32,300*	32,300*	11,860	14,550	16,490	19,060
	35'	69°	91' 2"	25,460	27,300*	9,410	11,670	13,330	15,480
	40'	66°	89' 1"	20,790	23,970	7,630	9,580	11,030	12,890
	45'	62°	86' 8"	17,420	20,160	6,290	8,000	9,280	10,920
	50'	59°	83' 10"	14,870	17,280	5,230	6,760	7,910	9,370
	55'	55°	80' 7"	12,880	15,020	4,380	5,760	6,800	8,120
	60'	51°	76' 9"	11,280	13,210	3,690	4,940	5,890	7,100
	65'	47°	72' 5"	9,960	11,720	3,100	4,250	5,130	6,240
70'	42°	67' 3"	8,860	10,480	2,610	3,670	4,490	5,510	
75'	37°	61' 3"	7,930	9,420	2,180	3,170	3,930	4,880	
80'	31°	53' 10"	7,120	8,510	1,810	2,730	3,450	4,340	
85'	25°	44' 6"	6,430	7,720	1,480	2,350	3,020	3,860	
90'	15°	30' 8"	5,820	7,030	1,200	2,020	2,650	3,430	
100'	20'	80°	105' 7"	51,380*	52,100*	20,990	25,330	28,280	32,400
	25'	77°	104' 7"	39,800*	39,800*	15,160	18,480	20,820	23,990
	30'	74°	103' 4"	31,920*	31,920*	11,550	14,240	16,180	18,750
	35'	71°	101' 10"	25,210	26,920*	9,100	11,350	13,010	15,170
	40'	68°	100' 0"	20,530	23,710	7,320	9,260	10,710	12,570
	45'	65°	97' 10"	17,160	19,890	5,970	7,680	8,960	10,600
	50'	62°	95' 4"	14,600	17,010	4,920	6,440	7,590	9,050
	55'	59°	92' 6"	12,600	14,750	4,070	5,440	6,490	7,810
	60'	55°	89' 3"	11,000	12,930	3,370	4,620	5,580	6,780
	65'	52°	85' 7"	9,680	11,440	2,790	3,940	4,820	5,920
70'	48°	81' 5"	8,570	10,190	2,290	3,350	4,170	5,190	
75'	44°	76' 7"	7,640	9,130	1,860	2,850	3,610	4,560	
80'	40°	71' 0"	6,830	8,220	1,490	2,420	3,130	4,020	
85'	35°	64' 6"	6,130	7,430	1,170	2,040	2,710	3,540	
90'	30°	56' 7"	5,520	6,740	880	1,700	2,330	3,120	
95'	23°	46' 7"	4,980	6,130	620	1,400	2,000	2,740	
100'	15°	32' 0"	4,500	5,580	400	1,130	1,700	2,400	

BRIEF SPECIFICATIONS

LIFTING CRANE

Approximate working weight with retractable high gantry, gasoline engine, but no hookblock

With 40' angle boom 87,370 lbs.
 With 40' tubular "Hi-Lite" boom 88,450 lbs.

Swing speed 4 r.p.m.

Lagging	Line Pull	Line Speed
13 1/4" hoist (front)	23,100 lbs.	@ 146 f.p.m.
13 1/4" hoist (rear)	22,400 lbs.	@ 146 f.p.m.

① Lifting capacities shown are in pounds and are not more than 85% of minimum tipping loads with machine standing on firm level ground. Lifting capacities with counterweight "A" are based on machine equipped with only the optional counterweight normally used for clamshell-dragline operations. Lifting capacities with counterweight "AB" are based on machine equipped with the standard counterweight or the optional counterweight which includes the normal clamshell-dragline counterweight plus 6,200 pound counterweight "B". A deduction must be made from the lifting capacities for weight of hook block, hook, sling, grapple, etc.

② L—boom length; R—radius of load; A—boom angle; W—boom point height.

③ The "Hi-Lite" boom gantry with mid-point suspension cables is required for all main boom lengths exceeding 130 feet, but may be used throughout the entire range of boom lengths. When using the "Hi-Lite" boom gantry as a short boom for dismantling operations, maximum lifting capacity of the gantry is 26,000 pounds at 9'5" radius.

* Indicates these lifting capacities are based on factors other than those which would cause a tipping condition. See Note ①.

NOTE: Six parts hoist line 3/4" cable required for maximum lifts.

POWER UNITS

Suitable for operation up to 4,000' above sea level. For operation at higher altitudes consult factory.

Standard—Waukesha 140GZ gasoline engine with friction clutch, 6 cylinder, 109 net h.p. @ 1710 r.p.m. full load speed.

Optional at extra cost—Gasoline: Waukesha with hydraulic coupling or torque converter or two speed Cotta transmission.

Diesel: Caterpillar, Cummins or General Motors.



These specifications comply with the recommended Commercial Standard C590-58, developed under the National Bureau of Standards and issued by the United States Department of Commerce.

#111 HC-108B DRAGLINE, CLAMSHELL AND MAGNET LIFTING CAPACITIES^①

4-AXLE CARRIER

ANGLE BOOM

BOOM			W Boom Point Height	Dragline ^②	Clamshell-Magnet ^②
Length	Radius	Angle			
40'	10'	80°	46' 5"	---	10,000
	12'	77°	46' 0"	---	10,000
	15'	73°	45' 2"	---	10,000
	20'	65°	43' 4"	---	10,000
	25'	57°	40' 7"	8,500	10,000
	30'	48°	36' 8"	8,500	9,610
	35'	37°	31' 4"	8,500	7,800
	38'	30°	26' 1"	7,920‡	7,130
40'	23°	22' 8"	‡	6,500	
50'	12'	80°	56' 3"	---	10,000
	15'	76°	55' 7"	---	10,000
	20'	70°	54' 1"	---	10,000
	25'	64°	52' 0"	---	10,000
	30'	58°	49' 3"	8,500	9,440
	35'	51°	45' 7"	8,450	7,600
	40'	43°	40' 10"	7,010	6,300
	45'	33°	34' 6"	5,940‡	5,340
	47'	30°	30' 6"	5,730‡	5,160
	50'	21°	24' 7"	‡	4,570
60'	15'	79°	65' 10"	---	10,000
	20'	74°	64' 7"	---	10,000
	25'	69°	62' 11"	---	10,000
	30'	64°	60' 8"	---	9,250
	35'	58°	57' 10"	8,260	7,420
	40'	52°	54' 5"	6,800	6,110
	45'	46°	50' 0"	5,740	5,140
	50'	39°	44' 8"	4,890	4,390
	55'	30°	37' 4"	4,210‡	3,780
	60'	19°	26' 3"	‡	3,300

TUBULAR "HI-LITE" BOOM

BOOM			W Boom Point Height	Dragline ^②	Clamshell-Magnet ^②
Length	Radius	Angle			
40'	10'	82°	45' 1"	---	10,000
	12'	79°	44' 9"	---	10,000
	15'	74°	44' 1"	---	10,000
	20'	67°	42' 3"	---	10,000
	25'	59°	39' 8"	8,500	10,000
	30'	50°	36' 1"	8,500	9,200
	35'	39°	30' 11"	8,200	7,390
	39'	30°	24' 7"	7,200‡	6,480
	40'	26°	23' 2"	‡	6,080
	50'	12'	81°	54' 11"	---
15'		77°	54' 4"	---	10,000
20'		71°	53' 0"	---	10,000
25'		65°	51' 0"	---	10,000
30'		58°	48' 4"	8,500	9,050
35'		52°	44' 10"	8,050	7,250
40'		44°	40' 4"	6,600	5,950
45'		36°	34' 4"	5,520	5,000
47'		30°	30' 8"	5,140‡	4,630
50'		23°	25' 4"	‡	4,230
60'	15'	80°	64' 7"	---	10,000
	20'	75°	63' 5"	---	10,000
	25'	70°	61' 10"	---	10,000
	30'	64°	59' 8"	---	8,950
	35'	59°	57' 0"	7,900	7,110
	40'	53°	53' 8"	6,450	5,820
	45'	47°	49' 5"	5,400	4,850
	50'	40°	44' 3"	4,550	4,100
	55'	32°	37' 4"	3,880‡	3,500
	56'	30°	36' 4"	3,780‡	3,000
60'	21°	27' 4"	‡	3,070	

Lifting capacities shown are in pounds and are not more than 75% of minimum tipping loads on tires side for dragline and are not more than 67 1/2% of minimum tipping loads on tires side for clamshell-magnet. For normal dragline, clamshell, lifting magnet or similar work, weight of bucket or magnet plus load should not exceed capacities shown in dragline or clamshell-magnet chart with machine standing on firm level ground. These are values for normal conditions and exceptions may be made for above average conditions. However, allowances must be made for soft or uneven footing, bucket suction and other unfavorable conditions. Boom length for average dragline, clamshell, magnet or similar work should not exceed 60 feet.

- ② Capacities are based on 13,000 pound counterweight which is maximum recommended for dragline, clamshell, magnet or similar work.
‡ Dragline operation with boom angle less than 35° is seldom advisable.

BRIEF SPECIFICATIONS

CLAMSHELL			DRAGLINE		
Approximate working weight with retractable high gantry, gasoline engine, but no bucket or tagline winder			Approximate working weight with retractable high gantry, gasoline engine, but no bucket		
With 40' angle boom			With 40' angle boom		
With 40' tubular "Hi-Lite" boom			With 40' tubular "Hi-Lite" boom		
Swing speed			Swing speed		
Lagging			Lagging		
Line Pull			Line Pull		
Line Speed			Line Speed		
15 1/4" closing (front)			13 1/4" inhaul (front)		
15 1/4" holding (rear)			15 1/4" hoist (rear)		

MAXIMUM BOOM LENGTHS MACHINE CAN HANDLE WITHOUT ASSISTANCE

	Angle Boom		Tubular Boom	
	Cwt "A"	Cwt "AB"	Cwt "A"	Cwt "AB"
Maximum boom machine can pick clear of ground over rear and travel ^③	100'	100'	110'	120'
Maximum boom plus jib machine can pick clear of ground over rear and travel ^③	90' + 30' jib	90' + 40' jib	80' + 50' jib	90' + 50' jib
Maximum boom machine can pick clear of ground on outriggers, over rear	100'	100'	150'	150'
over side	100'	100'	140'	150'
Maximum boom plus jib machine can pick clear of ground on outriggers, over rear	100' + 40' jib	100' + 40' jib	130' + 50' jib	150' + 50' jib
over side	100' + 40' jib	100' + 40' jib	120' + 40' jib	130' + 50' jib

③ Reduced travel speeds are recommended with maximum booms with safe speeds dependent on road conditions.

WE ARE CONSTANTLY IMPROVING OUR PRODUCTS AND THEREFORE RESERVE THE RIGHT TO CHANGE DESIGNS AND SPECIFICATIONS

LINK-BELT SPEEDER

Link-Belt Speeder
Cedar Rapids, Iowa

Link-Belt Speeder (Canada), Ltd.
Woodstock, Ontario