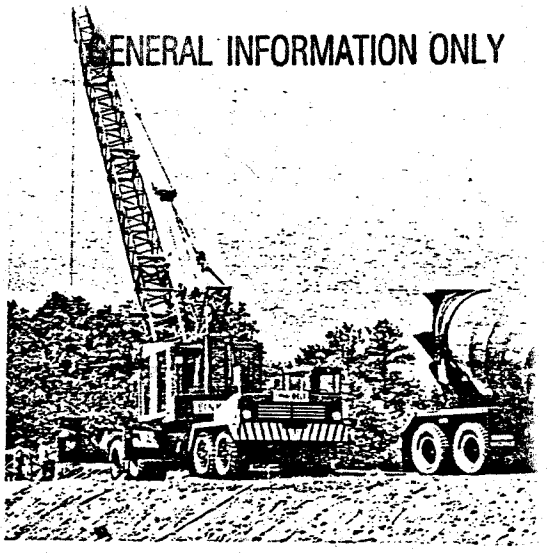
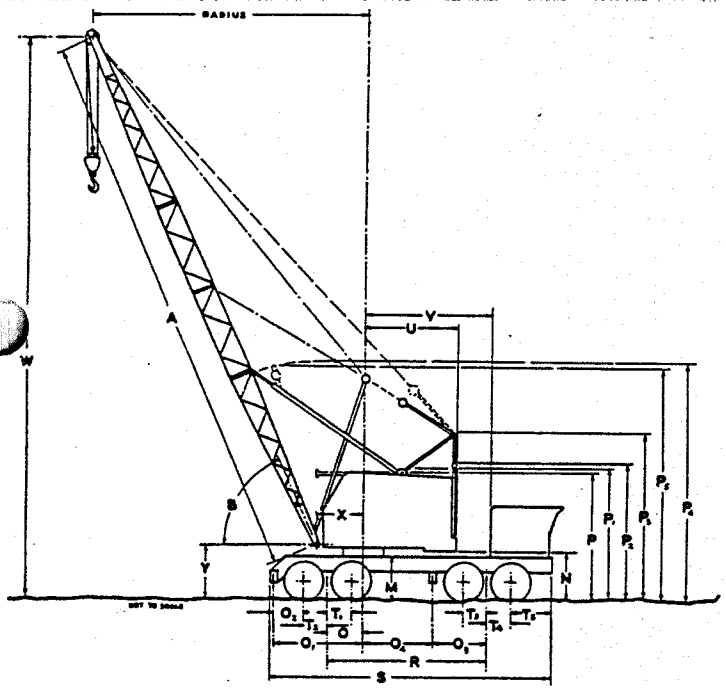
GENERAL INFORMATION ONLY

FLYSHEET
HC-108B
CARRIER MOUNTED CRANE



Dimensions
Working ranges
Lifting capacities
Specifications

DIMENSIONS AND WORKING RANGES



CARRIER — 8 x 4 11′ 0″ WIDE

Basic angle or tubuar boom length	A	40′ 0″
Boom angle	B	
Over-all hegiht top of ring gear plate	M	4′ 6″
Ground clearance under counterweight	N	5′ 0″
Centerline rotation to rear axle bogie	O	3′ 6″
Centerline rotation to rear outrigger center	O^1	9′ 1″
Center rear axle to rear outrigger center	O^2	3′ 2″
Centerline rotation to front outrigger center	O^4	8′ 11″
Overall height, low gantry	P^1	12′ 6″
Overall height, retractable gantry lowered	P^2	13′ 0″
Overall height, retractable gantry raised	P^3	16′ 4″
Overall height, tubular boom mast vertical	P^4	27′ 5″
Overall height, tubular boom mast with boom horizontal	P^5	18′ 6″
Wheelbase	R	18′ 8″
Overall length over rear outrigger box	S	31′ 5″
Center rear axle to pivot of bogie	T^1 & T^2	2′ 5″
Center front axle to pivot of bogie	T^3 & T^4	2′ 3″
Center front axle to front bumper	T^5	3′ 11″
Tailswing of counterweight (std.)	U	11′ 5″
Tailswing of counterweight (opt. 2-piece)	U	11′ 10″
Radius of boom hinge pin; angle boom	X	3′ 2″
Radius of boom hinge pin; tubular boom	X	4′ 1″
Height of boom hinge pin; angle boom	Y	7′ 0″
Height of boom hinge pin; tubular boom	Y	5′ 7″
Overall height boompeak, boom in travel position (over front) —		
Angle boom		11′ 7″
Tubular boom		14′ 11¼″
Minimum ground clearance		1′ 0″
Width, Outriggers retracted		11′ 0″
Width, Outriggers extended (c/l of jacks)		18′ 2″

DRUM ROPE CAPACITIES
LINE SPEEDS AND LINE PULL

Attachment	Wire Rope Dia.	FRONT DRUM Lagging Root Dia.	Lagging Groove	Line Pull and Speed F.P.M. 1st Layer	Line Pull and Speed Pull, lbs. 1st Layer	Drum Capacities 1st Layer Cap.	Drum Capacities Total Cap.	REAR DRUM Lagging Root Dia.	Lagging Groove	Line Pull and Speed F.P.M. 1st Layer	Line Pull and Speed Pull, lbs. 1st Layer	Drum Capacities 1st Layer Cap.	Drum Capacities Total Cap.	BOOMHOIST DRUM Lagging Root Dia.	Lagging Groove	Line Pull and Speed F.P.M. 1st Layer	Line Pull and Speed Pull, lbs. 1st Layer	Drum Capacities 1st Layer Cap.	Drum Capacities Total Cap.	Wire Rope Dia.
Crane	5/8″	13¼″	Smooth	145		66′	769′	13¼″	Smooth	145	22,500	66′	769′	9″	5/8″ dia.	120	27,100	22′	342′	5/8″
	3/4″	13¼″	Smooth	146	23,100	54′	481′	13¼″	Smooth	146	22,400	54′	481′	9″	3/4″ dia.	121	26,800	18′	183′	3/4″
Clamshell	5/8″	15¼″	3/4″ dia.	166	20,300	57′	495′	15¼″	3/4″ dia.	166	19,700	57′	495′							
	3/4″	15¼″	3/4″ dia.	167	20,200	58′	451′	15¼″	3/4″ dia.	167	19,600	58′	451′							
	7/8″	15¼″	3/4″ dia.	169	19-800	50′	304′													
Dragline	3/4″	13¼″	7/8″ dia.	146	23,100	43′	439′	15¼″	3/4″ dia.	167	19,600	58′	451′	THIRD DRUM						
	7/8″	13¼″	7/8″ dia.	148	22,800	44′	343′							9″ (std.)	5/8″ dia.	120	10,000	35.2′	297.1′	5/8″
														11″	5/8″ dia.	145	8,200	42.5′	208.5′	5/8″

Front drum is under-winding; rear drum is over-winding; third drum is under-winding. Line pull and speed are based on engine full load speed. For combination crane-clamshell or crane-dragline, the rear drum is furnished with 15¼″ diameter lagging. Only smooth laggings are interchangeable. On dragline operation, you must remove all cable from the third drum to prevent interference of inhaul rope with third drum brake. On lifting crane (front drum), to prevent interference of hoist line with third drum brake enclosure, quantity of line on front drum must be limited in certain cases.

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Printed in U.S.A.

HC-108B CAPACITIES WITH TUBULAR BOOM

PCSA Class 10-245

Refer to ALL notes on page 3

Capacities are based on machine equipped with retractable high gantry (fully raised), 8 x 4 drive carrier, 11′ 0″ wide, 14:00 x 20, 18-ply rating tires, front and rear power hydraulic outriggers.

BOOM				ON OUTRIGGERS		ON TIRES			
				Side or Rear		Rear		Side	
Length	Radius	Angle	Point Ht. W.	Ctwt. "A"	Ctwt. "AB"	Ctwt. "A"	Ctwt. "AB"	Ctwt. "A"	Ctwt. "AB"
40′	10′	82°	45′ 1″	90,000	90,000	63,130	80,000	61,400	66,950
	12′	79°	44′ 10″	85,000	85,000	53,790	67,410	45,910	54,460
	15′	74°	44′ 1″	69,520	72,000	43,260	49,170	33,000	39,270
	20′	67°	42′ 4″	53,110	54,500	29,390	33,510	22,070	26,410
	25′	59°	39′ 9″	42,200	42,200	21,970	25,130	16,290	19,510
	30′	50°	36′ 0″	32,920	34,200	17,350	19,920	12,710	15,390
	35′	39°	31′ 0″	26,110	29,200	14,200	16,360	10,270	12,530
	40′	26°	23′ 3″	21,490	24,670	11,910	13,770	8,510	10,450
50′	12′	81°	54′ 11″	80,000	80,000	53,340	67,180	45,690	54,240
	15′	77°	54′ 5″	69,180	71,600	43,030	48,950	32,780	39,050
	20′	71°	53′ 0″	52,790	54,100	29,170	33,290	21,850	26,200
	25′	65°	51′ 0″	41,900	41,900	21,750	24,910	16,070	19,930
	30′	59°	48′ 4″	32,760	33,820	17,130	19,700	12,490	15,180
	35′	52°	44′ 11″	25,940	28,870	13,980	16,140	10,060	12,310
	40′	44°	40′ 5″	21,310	24,490	11,690	13,550	8,290	10,240
	50′	23°	25′ 4″	15,450	17,850	8,590	10,050	5,910	7,440
60′	15′	80°	64′ 7″	68,840	71,200	42,810	48,720	32,560	38,830
	20′	75°	63′ 5″	52,470	53,700	28,950	33,070	21,640	25,980
	25′	70°	61′ 10″	41,400	41,400	21,530	24,690	15,850	19,170
	30′	64°	59′ 9″	32,600	33,440	16,910	19,480	12,270	14,960
	35′	59°	57′ 0″	25,760	28,440	13,760	15,920	9,840	12,100
	40′	53°	53′ 7″	21,130	24,310	11,480	13,340	8,080	10,020
	50′	40°	44′ 3″	15,260	17,670	8,380	9,840	5,700	7,220
	60′	21°	27′ 4″	11,690	13,630	6,370	7,580	4,160	5,420
70′	15′	81°	74′ 9″	68,500	70,800	42,590	48,500	32,340	38,610
	20′	77°	73′ 9″	52,150	53,300	28,730	32,850	21,420	25,760
	25′	73°	72′ 5″	41,000	41,000	21,310	24,480	15,640	18,960
	30′	68°	70′ 7″	32,430	33,060	16,700	19,260	12,060	14,750
	35′	64°	68′ 5″	25,590	28,060	13,550	15,710	9,630	11,880
	40′	59°	65′ 9″	20,960	24,140	11,260	13,210	7,860	9,810
	50′	49°	58′ 5″	15,080	17,480	8,160	9,620	5,480	7,010
	60′	37°	47′ 9″	11,500	13,440	6,160	7,360	3,950	5,200
	70′	20°	29′ 1″	9,100	10,720	4,760	5,780	2,880	3,940
80′	20′	79°	84′ 0″	51,830	52,900	28,510	32,630	21,200	25,540
	25′	75°	82′ 10″	40,600	40,600	21,100	24,260	15,420	18,740
	30′	71°	81′ 4″	32,270	32,680	16,480	19,050	11,840	14,530
	35′	67°	79′ 5″	25,420	27,680	13,330	15,490	9,410	11,670
	40′	63°	77′ 1″	20,780	23,960	11,040	12,910	7,650	9,600
	50′	55°	71′ 1″	14,890	17,290	7,950	9,410	5,270	6,790
	60′	46°	62′ 10″	11,310	13,240	5,940	7,150	3,730	4,990
	70′	35°	50′ 11″	8,910	10,520	4,540	5,570	2,660	3,730
	80′	18°	30′ 10″	7,180	8,570	3,510	4,400	1,870	2,800
90′	20′	80°	94′ 3″	51,510	52,500	28,290	32,410	20,990	25,330
	25′	77°	93′ 1″	40,200	40,200	20,880	24,040	15,210	18,530
	30′	73°	91′ 10″	32,110	32,300	16,260	18,830	11,630	14,320
	35′	70°	90′ 1″	25,250	27,300	13,110	15,270	9,200	11,450
	40′	67°	88′ 1″	20,600	23,780	10,830	12,690	7,430	9,380
	50′	59°	83′ 0″	14,700	17,110	7,730	9,190	5,050	6,580
	60′	52°	76′ 1″	11,120	13,050	5,730	6,930	3,520	4,770
	70′	43°	66′ 11″	8,710	10,330	4,330	5,350	2,450	3,510
	80′	33°	53′ 11″	6,980	8,370	3,300	4,190	1,660	2,580
	90′	17°	32′ 5″	5,680	6,890	2,500	3,290	1,050	1,870
100′	25′	78°	103′ 5″	39,800	39,800	20,660	23,820	14,990	18,310
	30′	75°	102′ 3″	31,920	31,920	16,050	18,610	11,410	14,100
	35′	72°	100′ 9″	25,070	26,920	12,900	15,060	8,980	11,240
	40′	69°	98′ 11″	20,420	23,600	10,610	12,480	7,220	9,170
	50′	63°	94′ 5″	14,510	16,920	7,520	8,980	4,840	6,370
	60′	56°	88′ 6″	10,930	12,860	5,510	6,720	3,310	4,560
	70′	49°	80′ 10″	8,510	10,130	4,120	5,140	2,240	3,300
	80′	41°	70′ 10″	6,780	8,170	3,080	3,970	1,450	2,370
	90′	31°	56′ 9″	5,480	6,690	2,290	3,080	840	1,660
	100′	16°	33′ 11″	4,460	5,540	1,660	2,360	360	1,090

BOOM				ON OUTRIGGERS		ON TIRES			
				Side or Rear		Rear		Side	
Length	Radius	Angle	Point Ht. W.	Ctwt. "A"	Ctwt. "AB"	Ctwt. "A"	Ctwt. "AB"	Ctwt. "A"	Ctwt. "AB"
110′	25′	79°	113′ 7″	39,400	39,400	20,440	23,600	14,770	18,090
	30′	76°	112′ 6″	31,540	31,540	15,830	18,390	11,200	13,890
	35′	74°	111′ 3″	24,900	26,540	12,680	14,840	8,770	11,020
	40′	71°	109′ 7″	20,240	23,420	10,400	12,260	7,010	8,950
	50′	65°	105′ 6″	14,330	16,730	7,300	8,760	4,630	6,150
	60′	60°	100′ 4″	10,730	12,670	5,300	6,500	3,090	4,350
	70′	53°	93′ 7″	8,320	9,930	3,900	4,920	2,020	3,090
	80′	46°	85′ 3″	6,580	7,970	2,870	3,760	1,230	2,160
	90′	39°	74 4″	5,280	6,490	2,070	2,860	630	1,440
	100′	29°	59′ 5″	4,260	5,340	1,450	2,150	150	880
	110′	16°	35′ 4″	3,440	4,420	930	1,570	—	420
120′	30	78°	122′ 10″	31,160	31,160	—	18,180	—	13,670
	35′	75°	121′ 6″	24,370	26,160	—	14,620	—	10,810
	40′	73°	120′ 1″	20,060	23,240	—	12,040	—	8,740
	50′	68°	116′ 6″	14,140	16,550	—	8,550	—	5,940
	60′	62°	111′ 10″	10,540	12,480	—	6,290	—	4,130
	70′	57°	105′ 11″	8,120	9,740	—	4,710	—	2,870
	80′	51°	98′ 6″	6,390	7,770	—	3,540	—	1,940
	90′	44°	89′ 5″	5,080	6,290	—	2,650	—	1,230
	100′	37°	77′ 9″	4,060	5,140	—	1,940	—	660
	110′	28°	62′ 1″	3,240	4,210	—	1,360	—	210
	120′	15°	36′ 7″	2,570	3,460	—	880	—	—
130′	[illegible]	80°	133′ 0″	30,780	30,780	—	17,960	—	13,460
	[illegible]	76°	131′ 11″	24,560	25,780	—	14,410	—	10,590
	[illegible]	74°	130′ 6″	19,880	23,060	—	11,830	—	8,520
	50′	69°	127′ 3″	13,950	16,360	—	8,330	—	5,720
	60′	65°	122′ 11″	10,350	12,280	—	6,070	—	3,920
	70′	60°	117′ 7″	7,930	9,540	—	4,500	—	2,660
	80′	54°	111′ 1″	6,190	7,580	—	3,330	—	1,730
	90′	49°	103′ 1″	4,880	6,100	—	2,430	—	1,020
	100′	43°	93′ 4″	3,860	4,940	—	1,720	—	450
	110′	35°	81′ 0″	3,040	4,010	—	1,140	—	—
	120′	27°	64′ 5″	2,360	3,250	—	670	—	—
	130′	14°	37′ 11″	1,800	2,620	—	260	—	—
140′	30′	79°	143′ 3″	30,400	30,400	—	13,240	—	17,740
	35′	77°	142′ 1″	24,380	25,400	—	10,380	—	14,190
	40′	75°	140′ 11″	19,700	22,880	—	8,310	—	11,610
	50′	71°	137′ 10″	13,770	16,170	—	5,510	—	8,120
	60′	67°	133′ 11″	10,160	12,090	—	3,700	—	5,860
	70′	62°	129′ 1″	7,730	9,350	—	2,450	—	4,280
	80′	57°	123′ 3″	5,990	7,380	—	1,520	—	3,120
	90′	52°	116′ 1″	4,680	5,900	—	800	—	2,220
	100′	47°	107′ 7″	3,650	4,740	—	240	—	1,510
	110′	41°	97′ 1″	2,830	3,810	—	—	—	930
	120′	34°	84′ 1″	2,160	3,050	—	—	—	450
	130′	26°	66′ 10″	1,600	2,410	—	—	—	50
	140′	14°	39′ 1″	1,120	1,870	—	—	—	—
150′	35′	78°	152′ 5″	24,210	25,020	—	13,970	—	10,160
	40′	76°	151′ 3″	19,520	22,700	—	11,390	—	8,090
	50′	72°	148′ 5″	13,580	15,980	—	7,400	—	5,300
	60′	68°	144′ 10″	9,970	11,900	—	5,640	—	3,490
	70′	64°	140′ 4″	7,540	9,150	—	4,070	—	2,230
	80′	60°	135′ 0″	5,790	7,180	—	2,900	—	1,300
	90′	55°	128′ 6″	4,480	5,700	—	2,000	—	590
	100′	50°	120′ 11″	3,450	4,540	—	1,290	—	30
	110′	45°	111′ 9″	2,630	3,610	—	720	—	—
	120′	39°	100′ 10″	1,960	2,850	—	240	—	—
	130′	33°	87′ 1″	1,390	2,210	—	—	—	—
	140′	25°	69′ 0″	920	1,670	—	—	—	—
	150′	13°	40′ 4″	510	1,210	—	—	—	—

HC-108B CAPACITIES WITH ANGLE BOOM

PCSA Class 10-250

Refer to ALL notes on page 3

Capacities are based on machine equipped with retractable high gantry (fully raised), 8 x 4 drive carrier, 11' 0" wide, 14:00 x 20, 18-ply rating tires, front and rear power hydraulic outriggers.

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

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

NOTES

Carrier—Capacities

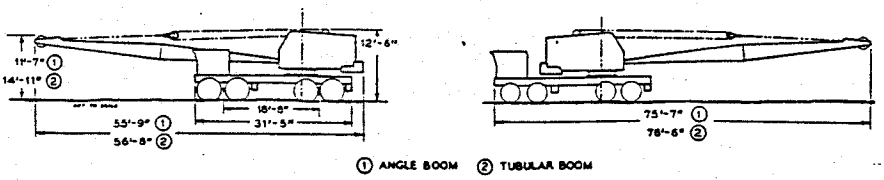
1. The carrier manufacturer certifies that this carrier has strength and stability equal to or greater than that required for the above lifting capacities and must not be exceeded.

Lifting Crane

1. For lifting 90,000 lbs., with 3/4" hoist rope, seven parts of line required.
2. All capacities are limited by strength and based on machine standing on firm, level ground. A deduction must be made from the capacities for weight of hook block, hook, sling, grapple, etc.
3. For tubular boom lengths exceeding 130', the boom mast with midpoint suspension pendants is required. When boom mast is used as a short boom, maximum lifting capacity is 26,000 lbs. from 9'-5" minimum to 20' maximum radius.

Dragline, clamshell and magnet

1. Dragline capacities are equal to 90% of the "On Tires — Over Side" with counterweight "A" lifting crane capacities except limited to a maximum of 11,800 pounds.
2. Clamshell and magnet capacities are equal to 80% of the "On Tires — Over Side" with counterweight "A" lifting crane capacities except limited to a maximum of 13,600 pounds.
3. All dragline, clamshell and magnet capacities are for ideal job conditions. The user must make allowances for rapid cycle operation, soft, or uneven supporting surfaces, etc.
4. Dragline, clamshell, and magnet capacities include weight of bucket or magnet plus load.
5. Boom length should not exceed 60 feet.



① ANGLE BOOM ② TUBULAR BOOM

AXLE LOADINGS

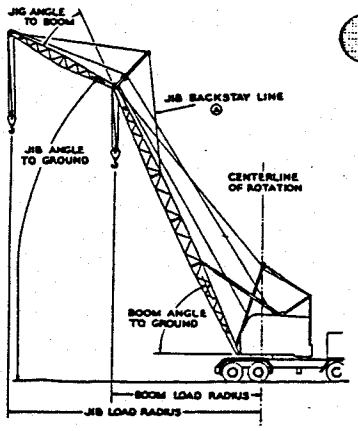
DESCRIPTIONS	Component Weight	Total Weight	Upper Facing Front		Upper Facing Rear	
			Front	Rear	Front	Rear
Truck crane complete with counterweight, hydraulic outriggers, main hoist line; bumper ctwt.						
With 40′ angle boom		95,110	21,905	73,205	37,955	57,155
with 40′ tubular boom		96,480	23,545	72,935	36,775	59,705
Removable Components						
40′ angle boom, pendants	— 3,300	91,810	15,821	75,984	42,815	48,995
Angle boom upper section only	— 1,920	93,190	17,927	75,263	41,227	51,963
40′ tubular boom, mast, pendants and boomfoot adapter	— 5,770	90,710	15,605	75,105	42,555	48,155
Tubular boom upper section only	— 1,775	94,705	19,272	75,433	40,449	54,256
Counterweight ("AB")	— 19,200		+ 6,380	— 25,580	— 13,600	— 5,600
Counterweight ("B")	— 6,200		+ 2,100	— 8,300	— 4,400	— 1,800
Counterweight ("A")	— 13,000		+ 4,280	— 17,280	— 9,200	— 3,800
Front bumper ctwt.	— 1,640		— 2,180	+ 550	— 2,190	+ 550
Front outrigger complete	— 4,480		— 2,980	— 1,500	— 2,980	— 1,500
Front outrigger beams only	— 2,780		— 1,850	— 930	— 1,850	— 930
Rear outrigger complete	— 4,480		+ 1,340	— 5,820	+ 1,340	— 5,820
Rear outrigger beams only	— 2,780		+ 830	— 3,610	+ 830	— 3,610
Pontoons	— 440		— 220	— 220	— 220	— 220
Added Components						
Third drum	+ 850		+ 210	+ 640	+ 210	+ 730
Front drum lowering clutch	+ 400		+ 60	+ 340	+ 100	+ 300
Rear drum lowering clutch	+ 500		+ 10	+ 490	+ 180	+ 320
Tubularm boom mast	+ 1,100		+ 1,040	+ 60	— 630	+ 1,730

HC-108B JIB CAPACITIES

Jib Angle To Ground	JIB LENGTH 20′		30′		40′*		50′**	
	Angle	Tube	Angle	Tube	Angle	Tube	Angle	Tube
80°	12,000	12,000	10,000	10,000	8,000	8,000	—	6,000
65°	10,000	10,000	8,000	8,000	6,000	6,000	—	4,000
50°	8,000	8,000	6,000	6,000	4,000	4,000	—	3,000
35°	7,500	7,500	5,500	5,500	3,500	3,500	—	2,000
20°	7,500	7,500	5,500	5,500	3,500	3,500	—	2,000

*40′ jib at 30° off centerline of boom not recommended for booms over 130′
**50′ jib at 30° off centerline of boom not recommended
**50′ jib at 15° off centerline of boom not recommended for booms over 130′

1. Capacities shown are in pounds and are based on Link-Belt Speeder jibs. Jib cross-section: Angle, 22¾″ wide by 18″ deep (bolted). Tube, 24″ wide by 24″ deep (bolted) or 24″ wide by 18″ deep (pin connected). Use jibs with a 10′ 0″ high jib mast in the proper working position.
2. To determine jib angle to ground, deduct jib angle to boom from the boom angle to ground.
3. The jib backstay line (A) is anchored to the boom upper section.
4. The jib angle to boom must not exceed 30°.
5. Determining machine jib capacities:
   a. Add the length of boom plus length of jib used.
   b. Determine the jib load radius.
   c. Refer to the lifting crane capacity chart and select the boom length that corresponds to the total length of boom and jib in (A) and the radius in (B).
   (1) The jib capacity is equal to the lifting crane capacity unless restricted by the maximum jib capacities shown above.
   d. If the total length of boom and jib exceeds the longest boom length listed in the lifting chart, deduct 300 lbs. from the angle and 200 lbs. from the tube capacity shown for the longest boom length for the radius required in (B).
   (1) The jib capacity is the resulting figure unless restricted by the maximum jib capacities shown above.



6. Determining lifting crane capacities with jib on the boom:
   a. When operating off the main boompeak sheaves with a jib on the boom, the following reductions in machine lifting capacities must be made:
   (1) 20′ jib .... 1,600 lbs.
   (2) 30′ jib .... 1,900 lbs.
   (3) 40′ jib .... 2,200 lbs.
   (4) 50′ jib .... 2,500 lbs.

MAXIMUM BOOM—JIB MACHINE CAN LIFT OFF GROUND UNASSISTED

*Reduced travel speeds are recommended with long booms; safe speeds depend on road conditions.
²With bumper counterweight installed.

	ANGLE BOOM				TUBULAR BOOM			
	Ctwt. "A"		Ctwt. "AB"		Ctwt. "A"		Ctwt. "AB"	
	Boom	Boom & Jib	Boom	Boom & Jib	Boom	Boom & Jib	Boom	Boom & Jib
On tires & travel*								
Over rear	100′	90′ + 30′	100′	90′ + 40′	110′	80′ + 50′	120′²	90′ + 50′
Over side	100′	70′ + 40′	100′	80′ + 40′	90′	70′ + 40′	100′	70′ + 50′
On outriggers								
Over rear	100′	100′ + 40′	100′	100′ + 40	150′	130′ + 50′	150′	150′ + 50′²
Over side	100′	100′ + 40′	100′	100′ + 40	140′	120′ + 40′	150′	130′ + 50′

GENERAL SPECIFICATIONS

CARRIER (8x4; Crane Carrier Corp.)

FRAME — Box section, high alloy, wide flange beam main members.

FRONT AXLES — Tandem, bogie beam mounted, Shuler Model FTKA tubular; 100" track.

REAR AXLES — Clark planetary Model BD50-70 double reduction, bogie beam mounted; 90" track.

WHEELS AND RIMS — Cast spoke type; integral with planetary hub; 10.00" x 20" diameter rims.

TIRES — Single tires front, dual tires rear.

Standard — 14:00 x 20, 18-ply rating, non-directional tread.

Optional — 14:00 x 20, 18-ply rating, rock type tread.

OUTRIGGERS — Full width, double-box front and rear, pin connected to carrier frame, hydraulically operated beam and jack cylinders are individually controlled from the ground. Check valve at each jack cylinder. Pontoons are alloy steel lightweight.

BRAKES — (Air)

Service — Eight-wheel air brakes standard. MAXI-BRAKE on rear wheels, and single diaphram air chambers on front wheels. Internal expanding.

Size and Area —

Rear Wheels — 16½ x 7", total effective lining area 868 sq. in.

Front Wheels — 17¼" x 4", total effective lining area 500 sq. in.

Digging — Eight-wheel service brake applied with air valve on carrier dash.

Parking — Four-wheel rear brakes applied with air valve on carrier dash.

Emergency — Brakes on four rear wheels apply when air pressure drops below 40-60 p.s.i. in the system. Emergency brake may be manually applied at any time by hand control of dash mounted air valve.

STEERING — Power hydraulic, Ross Model TE-71; 21" diameter wheel.

TURNING RADIUS — 58' 6" over outside of front bumper.

ENGINES — Diesel, 12-volt alternator or generator, starter, pressure lubrication, radiator, air cleaner, 12 c.f.m. air compressor, hydraulic pump.

Standard — GM 6-71 diesel engine, six cylinder, two cycle, 4¼" bore, 5" stroke, 425.6 cu. in displacement, 238 maximum brake horsepower at 2,100 r.p.m. full load speed. Peak torque 649 ft. lbs. at 1,400 r.p.m.

Optional — Cummins NH-230 diesel engine, six cylinder, four cycle, 5½" bore, 6" stroke, 855 cu. in. displacement, 230 maximum brake horsepower at 2,100 r.p.m. full load speed. Peak torque 638 ft. lbs. at 1,500 r.p.m.

CLUTCH — Lipe Rollway, 14" 2-plate.

TRANSMISSIONS —

Main — Fuller 5H740 with five speeds forward and one reverse.

Auxiliary — Fuller 3F92 3-speed.

UNIVERSALS — Mechanics needle bearing type.

CAB — One-man, fully enclosed.

ELECTRICAL SYSTEM — 12-volt system, including sealed beam headlights, directional signals, lighting of instrument panel, and headlight dimmer switch.

WEIGHT — Carrier with hydraulic outriggers, 8 x 4 drive, ring gear, front bumper ctwt., approximately 49,510 lbs.

STANDARD EQUIPMENT — Bus-type rear view mirrors, front tow hooks, lug wrench, tire gauge, and tire inflation hose. Instrument panel and dash includes speedometer, ammeter, fuel gauge, engine temperature gauge, air pressur gauge, oil pressure gauge, low air pressure warning buzzer, ignition switch, starter button, choke control, and hand throttle to supplement foot accelerator, a two-way reading bubble level, and windshield washer. High-pressure lube fittings at all bearing points; 60-gal. fuel tank mounted on right side of frame. Front bumper ctwt. Heater and defroster.

SPEEDS — TRANSMISSION RATIOS. All speeds given are for HC-108B with 14:00 x 20 tires and engines at governed full load speed. Speeds will vary with optional tires.

Gear	Main-Fuller 5H740 5-Speed	Auxiliary-Fuller 3F92 3-Speed GM6-71 or Cummins NH230 @ 2,100 r.p.m.		
		2.64 to 1.00	1.00 to 1.00	.75 to 1.00
High	.76 to 1.00	14.1 m.p.h.	37.3 m.p.h.	44.5 m.p.h.
Fourth	1.00 to 1.00	10.7 m.p.h.	28.4 m.p.h.	33.8 m.p.h.
Third	1.75 to 1.00	6.1 m.p.h.	16.2 m.p.h.	19.3 m.p.h.
Second	3.19 to 1.00	3.4 m.p.h.	8.9 m.p.h.	10.6 m.p.h.
First	5.83 to 1.00	1.8 m.p.h.	4.9 m.p.h.	5.8 m.p.h.
Reverse	5.75 to 1.00	1.8 m.p.h.	4.9 m.p.h.	6.5 m.p.h.

UPPER

UPPER FRAME — All-welded, stress-relieved, precision machine unit. Side housings bolted to upper frame.

TURNTABLE ROLLERS — Eight adjustable, heat-treated, conical, hook-type rollers mounted on tapered roller bearings. Two equalized pairs mounted both front and rear.

TRANSMISSION — Link-Belt quadruple roller chain enclosed in oil-tight chain case with integral sump. Pump-driven oil stream lubrication. Engine pinion and chain wheel have machine-cut teeth.

REDUCTION SHAFT — Two-piece shaft, joined by an involute splined coupling mounted in side housings on anti-friction bearings.

Two Drive Pinions — Heat-treated, machine-cut teeth involute splined to reduction shaft. Pinions mounted outside side housings.

CLUTCHES — Speed-o-Matic power hydraulic actuated for swing, operating drums, boomhoist and optional load lowering. Internal expanding two-shoe type, aluminum alloy shoes; 20" diameter, 5" face width. Third operating drum clutch 17¼" diameter, 4" face width. Load lowering clutches not available with gear-driven two-speed hoist or auxiliary, two-shoe rear drum brake.

Spiders — Involute splined to horizontal shafts.

DRUMS — Front, rear, and third operating (optional) drums.

Shafts — Mounted in line bores on anti-friction bearings. Front and rear drum shafts only extended to

accommodate optional load lowering clutches. Special shaft required to accommodate two-speed, planetary-driven drums.

Spur Gears — Machine-cut teeth; mounted on anti-friction bearings on shaft.

Clutch Drums — Bolted to spur gears.

Brakes — Two-piece, external contracting band, mechanically foot pedal operated, front and rear drum 27″ diameter 4″ face width, third drum 18″ diameter 3″ face width.

Brake Drums — Involute splined to drum shaft.

Drum Laggings — Two-piece, removable; bolted to brake drum.

DRUM ROTATION INDICATOR (Optional) — Mounted on control stand. Dial actuated by flexible shaft from front and rear main operating drum shafts.

TWO-SPEED FRONT AND REAR DRUMS (Optional) —

Gear-driven, hoist only — Intermediate gears in stalled in side housings convert two-shoe load lowering clutches to high-speed hoist clutches; hoist rope speed increased 100% over standard speeds.

Planetary-driven, hoist and lowering — Planetary unit mounts between spur gear and two-shoe clutch drum on extended shaft; available for 70% increase or 40% decrease of standard hoist and load lowering rope speeds. Not available for front drum rope lowering. Two-shoe clutch gives standard speed. Planetary controlled by external contracting band through push-button located on clutch control lever.

AUXILIARY TWO-SHOE REAR DRUM BRAKE (Optional)— Increases brake lining contact area by 212 sq. in. Pressure on mechanical brake pedal applies the standard rear drum brake band and the auxiliary two-shoe brake simultaneously. Mechanical linkage actuates the control mechanism of a variable pressure valve to direct hydraulic pressure to the brake cylinder. Lowering clutch, two-speed gear-driven hoist, or two-speed planetary drive unit on lowering side of rear drum not available. Internal expanding two-shoe Speed-o-Matic power hydraulic brake, 20″ diameter 5″ face, brake spider involute splined to shaft, and brake drum bolted to anchor plate on machinery side housing.

HORIZONTAL SWING SHAFT — Mounted in line bore on anti-friction bearings.

Spur Gears — Machine-cut teeth. Mounted on shaft on anti-friction bearings.

Bevel Gear — Involute splined to shaft, fully enclosed and running in oil.

INDEPENDENT BOOMHOIST — Spur gear driven with precision boom raising and lowering through a clutch. A rope drum locking pawl, manually controlled from operator's position, is provided.

Shaft — Mounted in line bore on anti-friction bearings.

Spur Gears — Machine-cut teeth mounted on anti-friction bearings on shaft.

Rope and Brake Drum — Involute splined to shaft. Ratchet wheel and 22″ diameter 3¼″ face width brake drum are cast integral.

Brake — External contracting band, 22″ diameter 3″ face width, spring applied and power hydraulically released.

BOOMHOIST LEVER KICK-OUT DEVICE — Special mechanism activated by boom at minimum radius "kicks out" boomhoist lever and disengages boom raising clutch. Boom must then be lowered before it can be raised again.

VERTICAL SWING SHAFT — Mounted in line bore on anti-friction bearings.

Bevel Gear — Involute splined to shaft; fully enclosed and running in oil.

Swing Pinion — Involute splined to shaft; teeth mesh with internal teeth of ring gear.

Swing Brake — Two-directional, external contracting band; spring-applied and power hydraulically released.

Brake Drum — Involute splined to swing shaft.

SWING LOCK — Mechanically controlled pawl engages with internal teeth of ring gear.

SWING SPEED — 4 r.p.m.

GANTRY — Retractable — Mounted to upper to support bail, boom suspension system and two boomhoist rope sheaves. Used with all booms. For tubular booms over 130′ boom mast is required. Also used for power lowering of counterweight in conjunction with boom lowering clutch.

Bail — Pinned to gantry frame. Contains three sheaves with bronze bushings for 8-part boomhoist with angle boom and four sheaves with anti-friction bearings for 10-part boomhoist with tubular boom; additional sheaves furnished for increased parts of line.

Speed-o-Matic Gantry Jack (Optional) — For power hydraulic raising and lowering of retractable high gantry. Controlled from rear of cab.

CAB — Operator's door, rear doors, and front window slide on ball bearing rollers. Full-vision operator's compartment with safety glass panels. Cat-walks on operator's side optional. Heater and defroster optional.

Elevated Operator Cabs (Optional) — Two or four ft. available. Upper portion of 4′ cab is hinged and equipped with quick disconnect fittings for easy removal of reduce overall height.

COUNTERWEIGHTS — Removable and held in position by "T"-bolts. Power raising and lowering with boomhoist clutches through retractable high gantry. Optional power hydraulic cylinder suspended between high gantry backstays to raise or lower counterweight.

Ctwt. "A" — Recommended for dragline, clamshell-magnet operation.

Ctwt. "AB" — One-piece is standard for lifting crane. Two-piece is optional, allowing for counterweight reduction to weight "A".

19,200 lb. ctwt. ("AB")	Waukesha F-554-G
13,000 lb. ctwt. ("A")	Waukesha 135GZU
6,200 lb. ctwt. ("B")	Cummins N495 GM 4030N & 4082
18,400 lb. ctwt. ("AB")	
12,200 lb. ctwt. ("AB")	Caterpillar D-333C-T
6,200 lb. ctwt. ("B")	

CONTROL SYSTEM — Speed-o-Matic power hydraulics; an open system. Operating pressure is transmitted through oil to all operating two-shoe clutch cylinders, swing brake and boomhoist drum brake cylinders. The system includes a pump to provide a constant flow of oil, an accumulator to maintain operating pressure and variable pressure operator-controlled valves to regulate this pressure to each clutch cylinder.

Pump — Vickers; rated at 4.7 g.p.m. at 1,200 r.p.m.

Oil Filter — Link-Belt Speeder; replaceable Skinner ribbon-type filter element.

Relief Valve — Link-Belt Speeder; set to operate at 1,250 p.s.i.

Unloader Valve — Link-Belt Speeder; set to unload pump at a maximum 1,050 p.s.i. and to load pump when pressure drops below 900 p.s.i.

Accumulator — Link-Belt Speeder; piston-type, precharged with nitrogen gas to 650 p.s.i.

Sump Tank — Link-Belt Speeder; 7 gal. capacity with filter and strainer assembly.

Control Valves — Link-Belt Speeder; variable pressure type.

ENGINES — Full pressure lubrication, oil filter, air cleaner, hour meter, hand and foot throttles, 60-gal. capacity fuel tank with fuel gauge.

	Waukesha F-554-G (1)	Waukesha 135GZU with torque converter (2)	Caterpillar D-333C-T	GM 4-71 Series (Model 4030N)	GM 4-71 Series (Model 4082) with torque converter (3)	Cummins N495
Number of cylinders	6	6	6	4	4	4
Bore and stroke (inches)	4⅝ x 5½	4⅜ x 5	4¾ x 6	4¼ x 5	4¼ x 5	5⅛ x 6
Piston displacement (cu. in.)	554	451	636	283.7	283.7	495
High idle speed, r.p.m.	1,880	1,880 @ pinion 2,135 @ crankshaft	1,990	1,990	1,207 @ pinion 1,670 @ crankshaft	1,880
Engine r.p.m. F.L.S.	1,710		1,890	1,850		1,700
Net engine H.P. @ F.L.S.	109	121	110	110	118	108
Peak torque; Lbs. Ft.	427	730	418	351	1,170	358
Peak torque; r.p.m.	800	(output stall)	1,250	1,200	(output stall)	1,500
Electrical system	12 volt	12 volt	12 volt	12 volt	24 volt	24 volt
Batteries	(4)	2 6-volt	1 12-volt	2 6-volt	2 12-volt	2 12-volt
Clutch — Type	Friction-Hyd. cplg.	Disconnect between engine-converter	Friction	Friction-Hyd. cplg.	Disconnect between engine-converter	Friction
Make	Twin Disc		Twin Disc	Twin Disc		Twin Disc
Model	SP111-HP-1		SP111-HP-1	SP111-HP-1		SP111-HP-1
Transmission —						
No. chain wheel teeth	161	161	161	161	161	161
No. engine pinion teeth	18	18	17	17	28	18

(1) Two-speed Cotta transmission available for lifting crane service; reduces operating speeds approximately 50%.
(2) 2.5 ratio Allison TCOA-377-119 converter. Single stage.
(3) 3.4 ratio Torqmatic TDCOA 435 Converter. Singel stage.
(4) Two 6-volt with friction clutch; one 12-volt with hydraulic coupling or two-speed Cotta transmission.

FRONT END CRANE BOOM EQUIPMENT

ANGLE BOOM — Two-piece 40′ total length, 20′ upper and lower sections; 34″ deep and 34″ wide at connections. Chord angles, alloy steel. Lower section 3½″ x 3½″ x ⅜″; upper section 3½″ x 3½″ x 5/16″.

Boomfoot — 15/8″ wide on 38″ centers.

Boompoint Machinery — Three 18″ root diameter sheaves mounted on anti-friction bearings on boompeak shaft. Two or four sheaves, or one wide-mouth sheave for dragline, optional.

Pin Connections — Permit easy removal and addition of extensions.

BOOM EXTENSIONS — Available in 5′, 10′ and 20′ lengths with proper length pendants.

BOOM BACKSTOPS — Dual, rigid type with spring-loaded bumpers.

BOOMHOIST BRIDLE — Serves as a connection between the pendants and live boomhoist rope. Bridle contains five, or six 9½″ root diameter sheaves mounted on non-metallic bushings for 10-part boomhoist, and bronze bushings for 12-part boomhoist.

JIB — 20′ two-piece with 10′ upper and lower sections; 10′ extensions available for 30′ or 40′ jib. Jib is 23″ wide and 18″ deep at the connections; chord angles, lower section 2″ x 2″ x ¼″, upper section and extensions 2″ x 2″ x 3/16″. Jib and extensions are bolted.

Jib Mast — 10′ high, mounted on jib base section; two deflector sheaves mounted on needle bearings for jib hoist line with in the mast; two equalizer sheaves for jib front stay and jib backstay lines mounted to top of mast.

Jib Backstop — Wire rope type.

Peak Sheave — Mounted on anti-friction bearings.

Peak Shaft — Anchor is provided at peak of jib for two-part jib hoist line. Jib stay line anchors are suspended from shaft.

"HI-LITE" TUBULAR BOOM — Two-piece 40′ total length, 20′ upper and lower sections, 44″ deep and 44″ wide at connections. Square tube chords, alloy steel, 2¼″ with bracing of round steel tubing.

Boomfoot — 2¼″ wide on 50″ centers.

Boomfoot Adapter — Required to adapt 38″ centers of revolving frame boomfoot lugs to 50″ centers of tubular boomfeet.

Boompoint Machinery — Three 18″ root diameter sheaves mounted on anti-friction bearings on boompeak shaft. Two and four sheaves optional.

Pin Connections — Permit easy removal and additions of extensions.

BOOM EXTENSIONS — Available in 10′, 15′, and 20′ lengths with proper length pendants.

BOOM BACKSTOPS — Dual, telescoping; spring cushioned.

BOOMHOIST BRIDLE — Serves as a connection between the pendants and live boomhoist rope. Bridle contains 12″ root diameter sheaves mounted on anti-friction bearings.

Without Boom Mast — Five sheaves for 10-part boomhoist and six sheaves for 12-part boomhoist.

With Boom Mast — Connected to gantry by a shaft. Six sheaves for 12-part boomhoist; also contains two 9½″ diameter sheaves mounted on non-metallic bushings enable mast to be used as a short boom.

BOOM MAST — Mounted on boomfoot adapter, supports boomhoist bridle and mid-point suspension pendants. Boom mast and mid-point boom suspension pendants required for all main boom lengths over 130′. Boom mast retracts to 20′ for use as a short boom. Hydraulic extending cylinders optional.

JIB — Bolted or pin-connected, two-piece with 10′ upper and lower sections, 10′ extensions available for 30′, 40′, or 50′ jib.

Bolted — 24″ wide and 24″ deep at connections. Tubular chords, alloy steel, 1½″ diameter.

Pin-connected — 24″ wide and 18″ deep at connections, tubular chords, alloy steel, 1¼″ diameter.

Jib Mast — 10′ high, mounted on jib base section. Two deflector sheaves mounted on anti-friction bearings for jib hoist line within the mast. Two equalizer sheaves for jib frontstay and jib backstay lines mounted to top of mast.

Jib Backstop — Wire rope type.

Peak Sheaves — Mount on anti-friction bearings.

Peak Shaft — Anchor is provided at peak of jib for two-part jib hoist line. Jib frontstay line anchors are suspended from shaft.

FAIRLEADER — Full-revolving type with barrel, sheaves and guide rollers mounted on anti-friction bearings.

TAGLINE WINDER — Rud-O-Matic Model 648; spring-wound drum type mounted on crane boom. Cable pull off drum — 60′ to 75′ from neutral.

BOOM ANGLE INDICATOR — Mounted on boom near base.

ROPE SUPPORTING ROLLERS — To deflect main hoist line over top of boom. Required when third drum rope passes over crane boom. Rollers mounted on anti-friction bearings, following numbers recommended:

Angle Boom — One through 45′; two through 65′; three through 85′; four through 100′.

Tubular Boom — One supplied as standard; two through 125′; three through 145′; four through 150′.

BOOM FOLDING EQUIPMENT (Optional) — To facilitate folding of pin-connected booms. Two folding links plus shorter pendants are inserted in boomhoist reeving. Eliminates need for "breaking" boomhoist reeving to fold boom.

Angle Boom — Extended head shaft for mounting of two 7:20 x 20, 8-ply rating heavy-duty express tires mounted on wheels.

Tubular "Hi-Lite" Boom — Two 4:00 x 18, 4-ply rating, grooved implement tires with spoked wheels mounted within a strut pinned to boom for folding.

WIRE ROPE—

TYPE AND SIZE USED

Live Boomhoist — Type "A", 5/8" dia., 3/4" dia.; Type "F", 5/8" dia., 3/4" dia.
Main hoist — Type "A", 3/4" dia.
Jib Hoistline — Type "K", 5/8" dia.
Dragline hoist — Type "A", 3/4" dia.
Dragline inhaul — Type "D", 7/8" dia.
Clamshell holding — Type "A", 3/4" dia.
Clamshell closing — Type "A", 3/4" dia.
Tagline — Type "A", 5/16" dia.
Jib staylines — Type "A", 5/8" dia.; Type "F", 5/8" dia.
Boom pendants — Type "N", 1 1/4" dia.
Mid-point suspension pendants (Boom mast) — Type "C", 1" dia.

WIRE ROPE TYPES

Type "A" — 6 x 25 (6 x 19 class), filler wire, improved plow steel, preformed, fiber center, right lay, regular lay.
Type "C" — 6 x 25 (6 x 19 class) filler wire, improved plow steel, preformed, independent wire rope center, right lay, regular lay.
Type "D" — 6 x 25 (6 x 19 class), filler wire, improved plow steel, preformed, independent wire rope center, right lay, lang lay.
Type "F" — 6 x 25 (6 x 19 class), filler wire, improved plow steel, preformed, independent wire rope center, right lay, regular lay.
Type "K" — 18 x 7 non-rotating, improved plow steel, fiber center.
Type "N" — 6 x 25 (6 x 19 class) filler wire, extra-high tensile strength steel, preformed, independent wire rope center, right lay, regular lay.

JIB MAST STAYLINES

ANGLE JIB

Backstay — For all boom lengths, 51' long. Rope length adjusted to fix jib angle to boom.
Frontstay — For all booms with 20' jib, 48' long; with 30' jib, 70'; with 40' jib, 100'.

TUBULAR JIB

Bolted connections, backstay — 45' 3 3/4" long (40' 11 3/4" plus two each 2' 2" long) for 30° jib to boom angle; removal of 2' 2" lengths allow 15° and in-line jib-to-boom angle.
Frontstay — For all booms with 20' jib, 55' long; with 30' jib, 75'; with 40' jib, 95'; with 50' jib, 115'.
Pin connections, backstay — 52' 5" long (43' 9" plus two each 4' 4" long) for 30° jib to boom angle: removal of 4' 4" lengths allow 15° and in-line jib to boom angle.
Frontstay — 20' jib basic pendant 43' 9" long. Two pendants 9' 6" long supplied with each 10' jib extension.

MAIN HOIST LINE LENGTH

Parts of Line	BOOM LENGTH											
	40'	50'	60'	70'	80'	90'	100'	110'	120'	130'	140'	150'
1	95	115	135	155	175	195	215	235	255	275	295	315
2	140	170	200	230	260	290	320	350	380	410	440	470
3	185	225	265	305	345	385	425	465	505	545	585	625
4	230	280	330	380	430	480	530	580	630	680	730	780
5	275	335	395	455	515	575	635	695	755	815		
6	320	390	460	530	600	670	740	810	880	950		

LIVE BOOMHOIST ROPE LENGTH

Parts of line	Angle Boom	Tubular Boom	Tubular Boom & Mast
8	255'	—	—
10	310'	310'	—
12	360'	360'	390'

shown in feet	Parts of Line	BOOM LENGTH (Angle or Tubular) 40'	50'	60'	70'	80'	90'	100'	110'*	120'*	130'*
20' Jib Tubular or Angle (except as noted)	1	135	155	175	195	215	235	255	275	295	315
	2	200	230	260	290	320	350	380	410	440	470
30' Jib Tubular or Angle (except as noted)	1	155	175	195	215	235	255	275	295	315	335
	2	230	260	290	320	350	380	410	440	470	500
40' Jib Tubular or Angle (except as noted)	1	175	195	215	235	255	275	295	315	335	355
	2	260	290	320	350	380	410	440	470	500	530
50' Jib Tubular or Angle (except as noted)	1	195	215	235	255	275	295	315	335	355	375
	2	290	320	350	380	410	440	470	500	530	560

*Tubular boom and jib only

DRAGLINE ROPE LENGTH

Rope lengths shown in feet	Parts of Line	BOOM LENGTH 40'	45'	50'	55'	60'
Hoist	1	95	105	115	125	135
Inhaul	1	52	58	64	70	76

CLAMSHELL ROPE LENGTH

Rope lengths shown in feet	Parts of Line	BOOM LENGTH 40'	45'	50'	55'	60'
Holding	1	105	115	125	135	145
Closing	1	140	150	160	170	180
Tagline		Furnished with Rud-O-Matic #648				

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