



GENERAL INFORMATION ONLY LS-408 Lifting Crane and Hoe Flysheet

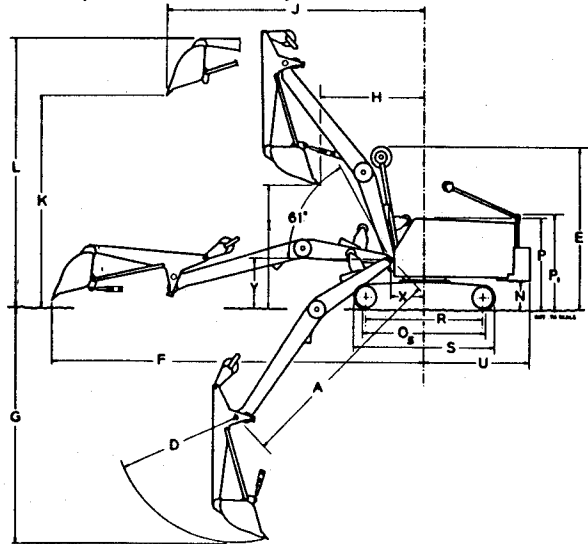
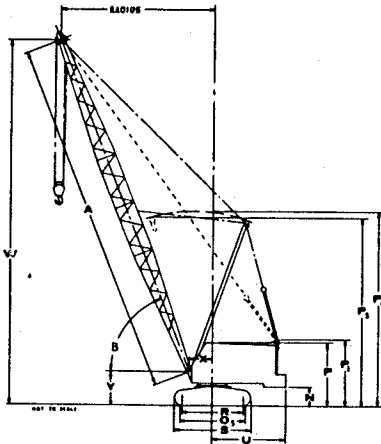
101.5 TON CRAWLER MOUNTED CRANE (PCSA CLASS 13-370)

LONG-WIDE LOWER 12'0" GAUGE X 19'5" LONG OVER-ALL

(Supersedes Flysheet CRF12023-1-67)



These specifications comply with the recommended Commercial Standard CS90-58, developed under the National Bureau of Standards and issued by the United States Department of Commerce.



CRANE DIMENSIONS

Basic angle or tubular "Hi-Lite" boom length	A	50' 0"
Boom angle	B	
Ground clearance under counterweight "A"	N	3' 11"
Ground clearance under counterweight "AB"	N	3' 5"
Over-all height boom gantry vertical	P4	39' 1"
Over-all height boom gantry with 50' boom horizontal	P5	23' 6"
Tailsing of counterweight "A"	U	14' 6"
Tailsing of counterweight "AB"	U	15' 0"

GENERAL DIMENSIONS COMMON TO BOTH CRANE AND HOE

Crawler ground bearing length	O5	17' 4"
Over-all cab height	P	12' 5"
Over-all gantry height	P1	13' 0"
Center to center of wheels	R	16' 2"
Over-all crawler length	S	19' 5"
Radius of boom hinge pin	X	4' 7"
Height of boom hinge pin	Y	6' 9"
Over-all width with 38" wide track shoes		15' 2"
Over-all cab width		11' 0"
Minimum ground clearance		1' 2"
Over-all cab height without side frames		11' 3"
Over-all shipping width without side frames		11' 0"

BRIEF SPECIFICATIONS

LIFTING CRANE, CLAMSHELL AND DRAGLINE

Approximate working weight with 38" wide track shoes, low gantry, but no hook block or bucket:
 Lifting Crane with counterweight "A" and 50' angle boom 147,770 lbs.
 with counterweight "AB" and 50' angle boom 168,770 lbs.
 with counterweight "A" and 50' "Hi-Lite" boom 147,150 lbs.
 with counterweight "AB" and 50' "Hi-Lite" boom 168,150 lbs.
 Clamshell with counterweight "A" and 50' angle boom 147,470 lbs.
 Dragline with counterweight "A" and 50' angle boom 148,800 lbs.
 Swing speed 2.90 r.p.m.
 Lagging Line Pull Line Speed
 24% front (crane hoist) (dragline inhaul) 37,600 lbs. @ 148 f.p.m.
 24% rear (crane hoist) 36,500 lbs. @ 148 f.p.m.
 27% front (clamshell closing) 33,900 lbs. @ 164 f.p.m.
 27% rear (clamshell holding) (dragline hoist) 32,800 lbs. @ 164 f.p.m.

CRAWLER

38" wide track shoes standard, 44" wide track shoes optional at extra cost.
 Travel speed .98 m.p.h. Independent travel with choice of travel speed is optional at extra cost.

HOE WORKING RANGES

Bucket capacity, cubic yards		2 1/2
Bucket cutting width (standard)		60"
Boom length	A	30' 0"
Average sweep radius	D	17' 0"
Height of hoe mast	E	23' 10"
Maximum digging radius	F	51' 2"
Maximum digging depth ①	G	34' 10"
Radius beginning of dump	H	14' 4"
Ground clearance beginning of dump	I	16' 7"
Clearance radius end of dump	J	35' 9"
Ground clearance end of dump	K	28' 4"
Over-all height end of dump	L	36' 2"
Ground clearance, counterweight "A"	N	3' 11"
Tailsing of counterweight "A"	U	14' 6"

① Dimension "G" shows maximum digging depth with 55° boom. The digging depth with 45° boom per U.S. Department of Commerce Standards is 31' 5". The maximum "effective" digging depth will vary with the type of soil and excavation.

HOE LIFTING CAPACITIES

These are maximum lifting capacities (based on cable strength) for the hoe when used for laying pipe. Three part hoist line used.

BOOM RADIUS ②	LIFTING CAPACITIES
20' to 25'	32,700 lbs.
20' to 30'	29,200 lbs.
20' to 34'	22,300 lbs.

② Radius is measured from machine centerline of rotation to centerline of boom peak shaft. Capacities are based upon the hoe arm being in a vertical position.

BRIEF SPECIFICATIONS

Approximate working weight with 38" wide track shoes, low gantry, counterweight "A" 162,300 lbs.
 Swing speed 2.90 r.p.m.
 Lagging Line Pull Line Speed
 24% inhaul (front) 37,600 lbs. @ 148 f.p.m.
 24% hoist (rear) 36,500 lbs. @ 148 f.p.m.

POWER UNITS

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

Standard—General Motors Series 6-71 (Model 6030N) diesel engine with hydraulic coupling, 6 cylinder, 190 net h.p. at 2060 r.p.m. full load speed.

Optional at extra cost—Diesel—General Motors and Cummins with torque converter and Caterpillar with hydraulic coupling.

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

For Certified Dimensions, Consult Factory

LINK-BELT SPEEDER

DIVISION OF FMC CORPORATION



Printed in U.S.A.

Flysheet CRF12026-3-68

Cedar Rapids, Iowa

Woodstock, Ontario, Canada

77B68-24
6-5-68

LS-408 Lifting Capacities^① With Angle Boom

LONG-WIDE LOWER 12'0" GAUGE X 19'5" LONG OVER-ALL

FOR DRAGLINE, CLAMSHELL AND MAGNET CAPACITIES SEE NOTE ③

BOOM			W Boom Point Height	Without Boom Gantry With Cwt. A ^③	With Boom Gantry	
Length	Radius	Angle			With Cwt. A ^③	With Cwt. AB ^②
50' ②	13'	80°	56' 0"	127,860*	127,860*	157,000*
	14'	79°	55' 10"	116,010*	116,010*	145,310*
	15'	78°	55' 8"	106,080*	111,510*	133,000*
	16'	77°	55' 6"	97,670*	97,670*	122,550*
	17'	76°	55' 3"	90,410*	90,410*	113,560*
	18'	74°	54' 10"	84,110*	84,110*	105,740*
	19'	73°	54' 7"	78,310	78,590*	98,900*
	20'	72°	54' 4"	72,350	73,700*	92,830*
	25'	66°	52' 5"	52,130	53,320	69,620
	30'	59°	49' 10"	40,440	41,100	53,960
	35'	53°	46' 5"	32,840	33,120	43,730
	40'	45°	42' 1"	27,480	27,480	36,520
50'	25°	27' 8"	19,970	19,970	26,940	
60' ②	14'	81°	66' 0"	116,010*	116,010*	139,190*
	15'	80°	65' 10"	106,080*	111,300*	133,000*
	16'	79°	65' 8"	97,670*	97,670*	122,550*
	17'	78°	65' 5"	90,410*	90,410*	113,560*
	18'	77°	65' 2"	84,110*	84,110*	105,740*
	19'	76°	64' 11"	78,090*	78,590*	98,900*
	20'	75°	64' 9"	72,120	73,700*	92,830*
	25'	70°	63' 2"	51,860	53,320	69,620
	30'	65°	61' 1"	40,150	41,100	53,960
	35'	60°	58' 6"	32,530	33,120	43,730
	40'	54°	55' 2"	27,170	27,480	36,520
	60'	23°	29' 9"	15,410	15,410	21,080
70' ②	16'	81°	75' 11"	97,670*	97,670*	122,550*
	17'	80°	75' 8"	90,410*	90,410*	113,560*
	18'	79°	75' 5"	84,110*	84,110*	105,740*
	19'	78°	75' 3"	77,870	78,590*	98,900*
	20'	77°	75' 0"	71,890	73,700*	92,830*
	25'	73°	73' 8"	51,590	53,320	69,620
	30'	68°	71' 11"	39,870	41,100	53,960
	35'	64°	69' 9"	32,240	33,120	43,730
	40'	60°	67' 1"	26,870	27,480	36,520
	50'	50°	60' 0"	19,820	19,970	26,940
	60'	38°	49' 6"	15,390	15,410	21,080
	70'	21°	31' 8"	12,170	12,170	16,950
80' ②	17'	81°	85' 9"	90,400*	90,410*	110,140*
	18'	80°	85' 6"	83,800*	84,110*	105,740*
	19'	79.5°	85' 5"	77,660	78,590*	98,900*
	20'	79°	85' 3"	71,670	73,680*	92,800*
	25'	75°	84' 1"	51,340	53,320	69,620
	30'	72°	82' 7"	39,600	41,100	53,960
	35'	68°	80' 9"	31,950	33,120	43,730
	40'	64°	78' 6"	26,570	27,480	36,520
	50'	55°	72' 7"	19,500	19,970	26,940
	60'	46°	64' 5"	15,070	15,410	21,080
	70'	35°	52' 9"	12,030	12,170	16,950
	80'	20°	33' 5"	9,730	9,730	13,860
90' ②	19'	81°	95' 8"	77,450	78,400*	98,700*
	20'	80°	95' 5"	71,450	73,470*	92,620*
	25'	77°	94' 5"	51,080	53,320	69,620
	30'	74°	93' 1"	39,320	41,100	53,960
	35'	70°	91' 5"	31,660	33,120	43,730
	40'	67°	89' 6"	26,270	27,480	36,520
	50'	60°	84' 5"	19,200	19,970	26,940
	60'	52°	77' 8"	14,750	15,300	20,970
	70'	43°	68' 7"	11,700	12,050	16,830
	80'	33°	55' 10"	9,480	9,660	13,790
	90'	18°	35' 1"	7,780	7,780	11,420
	100' ②	20'	81°	105' 7"	71,230	73,240*
25'		78°	104' 8"	50,830	53,320	69,620
30'		75°	103' 6"	39,050	41,040	53,890
35'		72°	102' 0"	31,370	32,970	43,590
40'		69°	100' 3"	25,970	27,290	36,330
50'		63°	95' 10"	18,890	19,830	26,790
60'		56°	90' 0"	14,440	15,130	20,800
70'		49°	82' 4"	11,380	11,890	16,670
80'		41°	72' 5"	9,150	9,510	13,640
90'		31°	58' 9"	7,460	7,680	11,310
100'		17°	36' 8"	6,120	6,190	9,430

* 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 1" cable or eight parts hoist line 7/8" cable required for maximum lifts with angle boom.

BOOM			W Boom Point Height	Without Boom Gantry With Cwt. A ^③	With Boom Gantry	
Length	Radius	Angle			With Cwt. A ^③	With Cwt. AB ^②
110' ②	25'	79°	114' 10"	50,580	53,290	69,590
	30'	77°	113' 9"	38,770	40,880	53,740
	35'	74°	112' 5"	31,090	32,800	43,410
	40'	71°	110' 11"	25,680	27,110	36,150
	50'	65°	106' 11"	18,580	19,630	26,600
	60'	60°	101' 9"	14,120	14,930	20,600
	70'	54°	95' 2"	11,060	11,680	16,470
	80'	47°	86' 10"	8,830	9,320	13,450
	90'	39°	76' 1"	7,130	7,500	11,140
	100'	30°	61' 6"	5,790	6,050	9,300
	110'	17°	38' 2"	4,710	4,830	7,770
	120' ② ③	25'	80°	125' 0"	—	53,140
30'		78°	124' 0"	—	40,710	53,560
35'		75°	122' 10"	—	32,610	43,220
40'		73°	121' 5"	—	26,910	35,950
50'		68°	117' 10"	—	19,420	26,390
60'		63°	113' 2"	—	14,710	20,380
70'		57°	107' 4"	—	11,470	16,250
80'		51°	100' 1"	—	9,100	13,240
90'		45°	91' 0"	—	7,290	10,930
100'		37°	79' 6"	—	5,850	9,100
110'		29°	64' 1"	—	4,670	7,610
120'		16°	39' 7"	—	3,660	6,340
130' ③ ④	25'	81°	135' 2"	—	52,970	65,310*
	30'	79°	134' 3"	—	40,520	53,370
	35'	77°	133' 2"	—	32,400	43,020
	40'	74°	131' 10"	—	26,700	35,730
	50'	70°	128' 7"	—	19,190	26,160
	60'	65°	124' 4"	—	14,480	20,150
	70'	60°	119' 1"	—	11,240	16,020
	80'	55°	112' 8"	—	8,870	13,000
	90'	49°	104' 9"	—	7,060	10,700
	100'	43°	95' 0"	—	5,630	8,880
	110'	36°	82' 10"	—	4,460	7,400
	120'	27°	66' 7"	—	3,480	6,160
130'	15°	41' 0"	—	2,630	5,090	
140' ② ③	30'	80°	144' 7"	—	40,320	53,170
	35'	77°	143' 5"	—	32,190	42,800
	40'	75°	142' 3"	—	26,470	35,510
	50'	71°	137' 4"	—	18,960	25,930
	60'	67°	135' 4"	—	14,240	19,910
	70'	62°	130' 6"	—	11,000	15,780
	80'	57°	124' 8"	—	8,630	12,760
	90'	52°	117' 8"	—	6,820	10,450
	100'	47°	109' 2"	—	5,390	8,640
	110'	41°	98' 11"	—	4,230	7,160
	120'	35°	86' 0"	—	3,260	5,940
	130'	26°	68' 11"	—	2,430	4,890
140'	15°	42' 3"	—	1,700	3,980	
150' ② ③	30'	80°	154' 7"	—	40,110	50,110*
	35'	78°	153' 8"	—	31,970	42,580
	40'	76°	152' 6"	—	26,240	35,280
	50'	72°	149' 9"	—	18,720	25,690
	60'	68°	146' 2"	—	13,990	19,660
	70'	64°	141' 9"	—	10,740	15,520
	80'	60°	136' 5"	—	8,370	12,500
	90'	55°	130' 1"	—	6,560	10,200
	100'	51°	122' 6"	—	5,130	8,380
	110'	45°	113' 6"	—	3,980	6,910
	120'	40°	102' 7"	—	3,010	5,690
	130'	33°	89' 0"	—	2,200	4,660
140'	26°	71' 3"	—	1,490	3,770	
150'	14°	43' 6"	—	—	2,970	

① Lifting capacities are in pounds and are not more than 75% of the minimum tipping loads with machine standing on firm level ground. A deduction must be made from the lifting capacities shown for weight of hook, hook block, sling, grapple, etc. Lifting capacities shown are based on machine equipped with boom gantry and 1/4" diameter extender cables or on machine equipped with no boom gantry and 1/2" diameter extender cables. For machines equipped with boom gantry and optional 1/2" diameter extender cables, a deduction of 400 pounds must be made from the lifting capacities shown. 1/4" diameter extender cables may not be used on machine unless it is equipped with boom gantry.

② Boom gantry required for all angle boom lengths on machines equipped with counterweight "AB". See Note ①.

③ Boom gantry required for all angle boom lengths over 110' on machine equipped with counterweight "A". See Note ①.

④ Dragline capacities are equal to the crane capacities with counterweight "A" except limited to a maximum of 19,000 pounds. Clamshell and magnet capacities are equal to 90% of the crane capacities with counterweight "A" except limited to a maximum of 22,500 pounds. All dragline, clamshell and magnet capacities are maximum recommended by Commercial Standard CS90-58 and should be considered as applicable for ideal job conditions. The 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 most efficient operation. For dragline, clamshell, magnet or similar work, weight of bucket or magnet plus load should not exceed these capacities and boom length should not exceed 90 feet. Dragline operation with boom angle less than 35° is seldom advisable.

LS-408 Lifting Capacities[Ⓢ] With Tubular "Hi-Lite" Boom, 1 1/4" Diameter Extender Cables[Ⓢ] and Boom Gantry[Ⓢ]

LONG-WIDE LOWER 12'0" GAUGE X 19'5" LONG OVER-ALL

FOR DRAGLINE, CLAMSHELL AND MAGNET CAPACITIES SEE NOTE ①

BOOM			W Boom Point Height	Ctwt. "A"	Ctwt. "AB"	BOOM			W Boom Point Height	Ctwt. "A"	Ctwt. "AB"	BOOM			W Boom Point Height	Ctwt. "A"	Ctwt. "AB"
Length	Radius	Angle				Length	Radius	Angle				Length	Radius	Angle			
50'	13'	80°	56' 0"	157,490	203,130	110'	25'	79°	114' 10"	53,810	70,110	170'	35'	80°	174' 0"	33,010	43,620
	14'	79°	55' 10"	136,470	176,160		30'	77°	113' 9"	41,600	54,460		40'	78°	173' 0"	27,280	36,320
	15'	78°	55' 8"	120,300	155,410		35'	74°	112' 5"	33,630	44,240		50'	75°	170' 7"	19,750	26,720
	16'	77°	55' 6"	107,480	138,960		40'	71°	110' 11"	27,990	37,030		60'	71°	169' 6"	15,020	20,700
	17'	76°	55' 3"	97,050	125,590		50'	65°	106' 11"	20,490	27,460		70'	67°	163' 8"	11,780	16,560
	18'	74°	54' 10"	88,410	114,500		60'	60°	101' 9"	15,950	21,620		80'	64°	159' 1"	9,410	13,540
	19'	73°	54' 7"	81,130	105,160		70'	54°	95' 2"	12,710	17,500		90'	60°	153' 9"	7,600	11,240
	20'	72°	54' 4"	74,920	97,180		80'	47°	88' 10"	10,350	14,480		100'	56°	147' 5"	6,180	9,430
	25'	66°	52' 5"	53,810	70,110		90'	39°	76' 1"	8,530	12,170		110'	51°	140' 1"	5,020	7,900
	30'	59°	49' 10"	41,600	54,460		100'	30°	61' 6"	7,080	10,330		120'	47°	131' 7"	4,070	6,750
	40'	45°	42' 1"	27,990	37,030		110'	17°	38' 2"	5,870	8,800		130'	43°	121' 6"	3,260	5,730
50'	25°	27' 8"	20,490	27,460						140'	37°	109' 6"	2,570	4,850			
										150'	31°	94' 10"	1,970	4,090			
										160'	24°	75' 8"	1,440	3,420			
										170'	13°	46' 0"	-----	2,800			
60'	14'	81°	66' 0"	136,470	176,160	120'	25'	80°	125' 0"	53,810	70,110	180'	35'	80°	184' 2"	32,860	43,480
	15'	80°	65' 10"	120,300	155,410		30'	78°	124' 0"	41,600	54,460		40'	79°	183' 3"	27,130	36,170
	16'	79°	65' 8"	107,480	138,960		35'	75°	122' 10"	33,630	44,240		50'	75°	180' 11"	19,590	26,560
	17'	78°	65' 5"	97,050	125,590		40'	68°	117' 10"	20,490	27,460		60'	72°	178' 0"	14,800	20,530
	18'	77°	65' 2"	88,410	114,500		50'	57°	107' 4"	12,580	17,360		70'	69°	174' 5"	11,610	16,390
	19'	76°	64' 11"	81,130	105,160		60'	51°	100' 1"	10,210	14,350		80'	65°	170' 2"	9,240	13,380
	20'	75°	64' 9"	74,920	97,180		70'	45°	91' 0"	8,400	12,040		90'	62°	165' 2"	7,440	11,070
	25'	70°	63' 2"	53,810	70,110		80'	37°	79' 6"	6,970	10,220		100'	58°	159' 5"	6,010	9,260
	30'	65°	61' 1"	41,600	54,460		90'	29°	64' 1"	5,790	8,730		110'	54°	152' 8"	4,860	7,800
	40'	54°	55' 2"	27,990	37,030		100'	16°	39' 7"	4,780	7,460		120'	50°	144' 10"	3,910	6,580
	50'	41°	45' 11"	20,490	27,460								130'	46°	135' 10"	3,100	5,560
60'	23°	29' 9"	16,020	21,690						140'	41°	125' 4"	2,420	4,690			
70'	16'	81°	75' 11"	107,480	138,960	130'	25'	81°	135' 2"	53,810	70,110	190'	35'	80°	194' 4"	-----	43,340
	17'	80°	75' 8"	97,050	125,590		30'	79°	134' 3"	41,600	54,460		40'	79°	193' 5"	-----	36,020
	18'	79°	75' 5"	88,410	114,500		35'	77°	133' 2"	33,550	44,170		50'	76°	191' 3"	-----	26,410
	19'	78°	75' 3"	81,130	105,160		40'	74°	131' 10"	27,850	36,890		60'	73°	188' 7"	-----	20,370
	20'	77°	75' 0"	74,920	97,180		50'	70°	128' 7"	20,370	27,340		70'	70°	185' 1"	-----	16,230
	25'	73°	73' 8"	53,810	70,110		60'	65°	124' 4"	15,660	21,330		80'	67°	181' 2"	-----	13,210
	30'	68°	71' 11"	41,600	54,460		70'	60°	119' 1"	12,430	17,210		90'	63°	176' 6"	-----	10,910
	35'	64°	69' 9"	33,630	44,240		80'	55°	112' 8"	10,060	14,200		100'	60°	171' 0"	-----	9,090
	40'	60°	67' 1"	27,990	37,030		90'	49°	104' 9"	8,260	11,900		110'	56°	164' 10"	-----	7,630
	50'	50°	60' 0"	20,490	27,460		100'	43°	95' 0"	6,830	10,010		120'	53°	157' 8"	-----	6,420
	60'	38°	49' 6"	16,020	21,690		110'	36°	82' 10"	5,660	8,600		130'	49°	149' 5"	-----	5,400
70'	21°	31' 8"	12,870	17,650	120'	27°	66' 7"	4,690	7,360	140'	45°	140' 0"	-----	4,530			
80'	17'	81°	85' 9"	97,050	125,590	140'	30'	80°	144' 7"	41,530	54,390	200'	40'	80°	203' 7"	-----	35,870
	18'	80°	85' 6"	88,410	114,500		35'	77°	143' 5"	33,410	44,030		50'	77°	201' 6"	-----	26,240
	19'	79.5°	85' 5"	81,130	105,160		40'	75°	142' 3"	27,710	36,750		60'	74°	198' 11"	-----	20,200
	20'	79°	85' 3"	74,920	97,180		50'	71°	137' 4"	20,210	27,180		70'	71°	195' 9"	-----	16,060
	25'	75°	84' 1"	53,810	70,110		60'	67°	135' 4"	15,500	21,180		80'	68°	192' 0"	-----	13,040
	30'	72°	82' 7"	41,600	54,460		70'	62°	130' 6"	12,270	17,050		90'	65°	187' 7"	-----	10,730
	35'	68°	80' 9"	33,630	44,240		80'	57°	124' 8"	9,900	14,030		100'	61°	182' 6"	-----	8,920
	40'	64°	78' 6"	27,990	37,030		90'	52°	117' 8"	8,100	11,740		110'	58°	176' 8"	-----	7,450
	50'	55°	72' 7"	20,490	27,460		100'	47°	109' 2"	6,670	9,920		120'	55°	170' 1"	-----	6,240
	60'	46°	64' 5"	16,020	21,690		110'	41°	98' 11"	5,510	8,450		130'	51°	162' 6"	-----	5,230
	70'	35°	52' 9"	12,870	17,650		120'	35°	86' 0"	4,540	7,220		140'	47°	153' 11"	-----	4,360
80'	20°	33' 5"	10,500	14,640	130'	26°	68' 11"	3,720	6,180	150'	43°	144' 1"	-----	3,610			
					140'	15°	42' 3"	2,990	5,270	160'	39°	132' 8"	-----	2,950			
90'	19'	81°	95' 8"	81,130	105,160	150'	30'	80°	154' 7"	41,400	54,260	200'	40'	80°	203' 7"	-----	35,870
	20'	80°	95' 5"	74,920	97,180		35'	78°	153' 8"	33,270	43,890		50'	77°	201' 6"	-----	26,240
	25'	77°	94' 5"	53,810	70,110		40'	76°	152' 6"	27,560	36,600		60'	74°	198' 11"	-----	20,200
	30'	74°	93' 1"	41,600	54,460		50'	72°	149' 9"	20,050	27,020		70'	71°	195' 9"	-----	16,060
	35'	70°	91' 5"	33,630	44,240		60'	68°	146' 2"	15,340	21,010		80'	68°	192' 0"	-----	13,040
	40'	67°	89' 6"	27,990	37,030		70'	64°	141' 9"	12,100	16,880		90'	65°	187' 7"	-----	10,730
	50'	60°	84' 5"	20,490	27,460		80'	60°	136' 5"	9,730	13,830		100'	61°	182' 6"	-----	8,920
	60'	52°	77' 8"	16,020	21,690		90'	55°	130' 1"	7,930	11,560		110'	58°	176' 8"	-----	7,450
	70'	43°	68' 7"	12,870	17,650		100'	51°	122' 6"	6,500	9,750		120'	55°	170' 1"	-----	6,240
	80'	33°	55' 10"	10,500	14,640		110'	45°	113' 6"	5,340	8,280		130'	51°	162' 6"	-----	5,230
	90'	18°	35' 1"	8,650	12,290		120'	40°	102' 7"	4,380	7,060		140'	47°	153' 11"	-----	4,360
100'	20'	81°	105' 7"	74,920	97,180	160'	30'	81°	164' 9"	41,280	54,140	200'	40'	80°	203' 7"	-----	35,870
	25'	78°	104' 8"	53,810	70,110		35'	79°	163' 10"	33,140	43,760		50'	77°	201' 6"	-----	26,240
	30'	75°	103' 6"	41,600	54,460		40'	77°	162' 9"	27,420	36,460		60'	74°	198' 11"	-----	20,200
	35'	72°	102' 0"	33,630	44,240		50'	74°	160' 2"	19,900	26,870		70'	71°	195' 9"	-----	16,060
	40'	69°	100' 3"	27,990	37,030		60'	70°	156' 10"	15,180	20,850		80'	68°	192' 0"	-----	13,040
	50'	63°	95' 10"	20,490	27,460		70'	66°	152' 9"	11,930	16,720		90'	65°	187' 7"	-----	10,730
	60'	56°	90' 0"	16,020	21,690		80'	62°	147' 10"	9,570	13,700		100'	61°	182' 6"	-----	8,920
	70'	49°	82' 4"	12,830	17,610		90'	58°	142' 0"	7,760	11,400		110'	58°	176' 8"	-----	7,450
	80'	41°	72' 5"	10,460	14,590		100'	53°	135' 2"	6,340	9,590		120'	55°	170' 1"	-----	6,240
	90'	31°	58' 9"	8,620	12,260		110'	49°	127' 1"	5,180	8,120		130'	51°	162' 6"	-----	5,230
	100'	17°	36' 8"	7,130	10,380		120'	44°	117' 7"								

LS-408 Lifting Capacities^① With Tubular "Hi-Lite" Boom, Counterweight "A", 1½" Diameter Extender Cables, But No Boom Gantry

LONG-WIDE LOWER 12'0" GAUGE X 19'5" LONG OVER-ALL

FOR DRAGLINE, CLAMSHELL AND MAGNET CAPACITIES SEE NOTE ②

BOOM			W Boom Point Height	Lifting Crane
Length	Radius	Angle		
50'	12'	82°	56' 2"	179,590
	15'	78°	55' 8"	116,610
	20'	72°	54' 4"	73,070
	25'	66°	52' 5"	52,850
	30'	59°	49' 10"	41,180
	35'	53°	46' 5"	33,570
	40'	45°	42' 1"	27,990
60'	15'	80°	65' 10"	116,490
	20'	75°	64' 9"	72,900
	25'	70°	63' 2"	52,660
	30'	65°	61' 1"	40,970
	35'	60°	58' 6"	33,350
	40'	54°	55' 2"	27,990
	50'	41°	45' 11"	20,498
70'	15'	82°	76' 0"	116,380
	20'	77°	75' 0"	72,740
	25'	73°	73' 8"	52,470
	30'	68°	71' 11"	40,760
	35'	64°	69' 9"	33,140
	40'	60°	67' 1"	27,780
	50'	50°	60' 0"	20,490

BOOM			W Boom Point Height	Lifting Crane
Length	Radius	Angle		
80'	20'	79°	85' 3"	72,850
	25'	75°	84' 1"	52,290
	30'	72°	82' 7"	40,650
	35'	68°	80' 9"	32,930
	40'	64°	78' 6"	27,560
	50'	55°	72' 7"	20,490
	60'	46°	64' 5"	16,020
	70'	35°	52' 9"	12,870
	80'	20°	33' 5"	10,500
	90'	20'	80°	95' 5"
25'		77°	94' 5"	52,100
30'		74°	93' 1"	40,370
35'		70°	91' 5"	32,720
40'		67°	89' 6"	27,350
50'		60°	84' 5"	20,290
60'		52°	77' 8"	15,860
70'		43°	68' 7"	12,820
80'		33°	55' 10"	10,500
90'		18°	35' 1"	8,650
100'	20'	81°	105' 7"	72,270
	25'	78°	104' 8"	51,920
	30'	75°	103' 6"	40,170
	35'	72°	102' 0"	32,520
	40'	69°	100' 3"	27,140
	50'	63°	95' 10"	20,070
	60'	56°	90' 0"	15,640
	70'	49°	82' 4"	12,590
	80'	41°	72' 5"	10,370
	90'	31°	58' 9"	8,620

BOOM			W Boom Point Height	Lifting Crane
Length	Radius	Angle		
110'	25'	79°	114' 10"	51,750
	30'	77°	113' 9"	39,980
	35'	74°	112' 5"	32,320
	40'	71°	110' 11"	26,930
	50'	65°	106' 11"	19,850
	60'	60°	101' 9"	15,410
	70'	54°	95' 2"	12,360
	80'	47°	86' 10"	10,140
	90'	39°	76' 1"	8,450
	100'	30°	61' 6"	7,080
120'	25'	80°	125' 0"	51,570
	30'	78°	124' 0"	39,790
	35'	75°	122' 10"	32,110
	40'	73°	121' 5"	26,720
	50'	68°	117' 10"	19,630
	60'	63°	113' 2"	15,190
	70'	57°	107' 4"	12,130
	80'	51°	100' 1"	9,910
	90'	45°	91' 0"	8,220
	100'	37°	79' 6"	6,880

- ① Lifting capacities shown are in pounds and are not more than 75% of the minimum tipping loads with machine standing on firm level ground. A deduction must be made from the above lifting capacities for weight of hook block, hook, sling, grapple, etc.
- ② Dragline capacities are equal to the crane capacities except limited to a maximum of 19,000 pounds. Clamshell and magnet capacities are equal to 90% of the crane capacities except limited to a maximum of 22,500 pounds. All dragline, clamshell and magnet capacities are maximum recommended

by Commercial Standard CS90-58 and should be considered as applicable for ideal job conditions. The 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 most efficient operation. For dragline, clamshell, magnet or similar work, weight of bucket or magnet plus load should not exceed these capacities and boom length should not exceed 90 feet. Dragline operation with boom angle less than 35° is seldom advisable.

MAXIMUM BOOM LENGTHS MACHINE WILL HANDLE WITHOUT ASSISTANCE ^③	ANGLE BOOM		"HI-LITE" BOOM	
	Cwt. "A"	Cwt. "AB"	Cwt. "A"	Cwt. "AB"
Machine will pick off ground over ends -----	150'	150'	180'	200'
Machine will pick off ground over sides -----	140'	150'	160'	200'
Machine will pick off ground over ends -----	140' + 20' jib	150' + 40' jib	150' + 30' jib	180' + 30' jib
Machine will pick off ground over sides -----	130' + 40' jib		140' + 60' jib	170' + 60' jib
Machine will pick off ground over ends -----	130' + 20' jib	150' + 20' jib	140' + 30' jib	170' + 30' jib
Machine will pick off ground over sides -----	120' + 40' jib	140' + 40' jib	120' + 60' jib	150' + 60' jib

③ Equipped with boom gantry and 1¼" diameter extender cables. If 1½" diameter extender cables are used on machine equipped with boom gantry, a decreased maximum boom length may be necessary due to increased weight.

MAXIMUM BOOM LENGTHS FOR SAFE TRAVEL (BOOM HORIZONTAL) ^④	ANGLE BOOM		"HI-LITE" BOOM	
	Cwt. "A"	Cwt. "AB"	Cwt. "A"	Cwt. "AB"
Boom over ends machine will travel with -----	130'	150'	140'	170'
Boom over sides machine will travel with -----	120'	140'	130'	150'
Boom over ends machine will travel with -----	110' + 40' jib	140' + 20' jib	110' + 30' jib	140' + 30' jib
Boom over ends machine will travel with -----		130' + 40' jib	100' + 60' jib	130' + 60' jib
Boom over sides machine will travel with -----	100' + 20' jib	120' + 20' jib	100' + 30' jib	120' + 30' jib
Boom over sides machine will travel with -----	90' + 40' jib	110' + 40' jib	90' + 60' jib	110' + 60' jib

④ Equipped with boom gantry, 1¼" diameter extender cables and hook blocks on both the main hoist line and jib whipline capable of handling maximum machine capacity. If 1½" diameter extender cables are used on machine equipped with boom gantry, a decreased maximum boom length may be necessary due to increased weight.

WEIGHT DEDUCTIONS FOR TRANSPORTING

Both side frames with standard 38" wide track shoes -----	39,810 lbs.
Both side frames with optional 44" wide track shoes -----	40,860 lbs.
Counterweight "A" -----	24,000 lbs.
Counterweight "AB" -----	45,000 lbs.
50' angle lifting crane boom and extender cables -----	6,470 lbs.
50' "Hi-Lite" lifting crane boom and extender cables -----	5,200 lbs.
50' angle clamshell or dragline boom and extender cables -----	6,190 lbs.
Hoe attachment and standard bucket -----	23,230 lbs.

NOTE: See price list for weights of other optional components.

LS-408 Dragline, Clamshell and Magnet Lifting Capacities

WITH COUNTERWEIGHT "A"
LONG-WIDE LOWER 12'0" GAUGE X 19'5" LONG OVER-ALL

BOOM Length	BOOM		W Boom Point Height	Angle Boom		"Hi-Lite" Boom	
	Radius	Angle		Drag-line	Clam-shell Magnet	Drag-line	Clam-shell Magnet
50'	12'	82°	56' 2"	---	19,000	---	19,000
	15'	78°	55' 8"	---	19,000	---	19,000
	20'	72°	54' 4"	---	19,000	---	19,000
	25'	66°	52' 5"	---	19,000	---	19,000
	30'	59°	49' 10"	16,000	19,000	16,000	19,000
	35'	53°	46' 5"	16,000	19,000	16,000	19,000
	40'	45°	42' 1"	16,000	19,000	16,000	19,000
	45'	36°	36' 2"	16,000	19,000	16,000	19,000
	48'	30°	---	16,000‡	---	16,000‡	---
50'	25°	27' 8"	16,000‡	17,140	16,000‡	17,460	
60'	15'	80°	65' 10"	---	19,000	---	19,000
	20'	75°	64' 9"	---	19,000	---	19,000
	25'	70°	63' 2"	---	19,000	---	19,000
	30'	65°	61' 1"	---	19,000	---	19,000
	35'	60°	58' 6"	16,000	19,000	16,000	19,000
	40'	54°	55' 2"	16,000	19,000	16,000	19,000
	45'	48°	51' 1"	16,000	19,000	16,000	19,000
	50'	41°	45' 11"	16,000	16,910	16,000	17,300
	55'	33°	39' 3"	16,000‡	14,790	16,000‡	15,180
57'	30°	---	16,000‡	---	16,000‡	---	
60'	23°	29' 9"	14,520‡	13,070	14,950‡	13,460	
70'	15'	82°	76' 0"	---	19,000	---	19,000
	20'	77°	75' 0"	---	19,000	---	19,000
	25'	73°	73' 8"	---	19,000	---	19,000
	30'	68°	71' 11"	---	19,000	---	19,000
	35'	64°	69' 9"	---	19,000	---	19,000
	40'	60°	67' 1"	16,000	19,000	16,000	19,000
	45'	55°	64' 9"	16,000	19,000	16,000	19,000
	50'	50°	60' 0"	16,000	16,680	16,000	17,140
	55'	44°	55' 4"	16,000	14,560	16,000	15,020
	60'	38°	49' 6"	14,260	12,830	14,770	13,290
	65'	30°	42' 1"	12,670‡	11,400	13,180‡	11,860
70'	21°	31' 8"	11,330‡	10,200	11,840‡	10,660	

BOOM Length	BOOM		W Boom Point Height	Angle Boom		"Hi-Lite" Boom	
	Angle	Radius		Drag-line	Clam-shell Magnet	Drag-line	Clam-shell Magnet
80'	20'	79°	85' 3"	---	19,000	---	19,000
	25'	75°	84' 1"	---	19,000	---	19,000
	30'	72°	82' 7"	---	19,000	---	19,000
	35'	68°	80' 9"	---	19,000	---	19,000
	40'	64°	78' 6"	---	19,000	---	19,000
	45'	60°	75' 9"	16,000	19,000	16,000	19,000
	50'	55°	72' 7"	16,000	16,450	16,000	16,970
	55'	51°	68' 10"	15,930	14,340	16,000	14,850
	60'	46°	64' 5"	14,010	12,610	14,590	13,130
	65'	41°	59' 2"	12,420	11,180	13,000	11,700
	70'	35°	52' 9"	11,080	9,970	11,660	10,490
	74'	30°	---	10,160‡	9,140	10,750‡	9,680
	75'	28°	44' 9"	9,930‡	8,940	10,520‡	9,470
80'	20°	33' 5"	8,940‡	8,050	9,530‡	8,580	
90'	20'	80°	95' 5"	---	19,000	---	19,000
	25'	77°	94' 5"	---	19,000	---	19,000
	30'	74°	93' 1"	---	19,000	---	19,000
	35'	70°	91' 5"	---	19,000	---	19,000
	40'	67°	89' 6"	---	19,000	---	19,000
	45'	63°	87' 2"	---	18,900	---	19,000
	50'	60°	84' 5"	16,000	16,230	16,000	16,800
	55'	56°	81' 4"	15,670	14,100	16,000	14,690
	60'	52°	77' 8"	13,760	12,380	14,410	12,970
	65'	48°	73' 5"	12,160	10,940	12,820	11,540
	70'	43°	68' 7"	10,820	9,740	11,480	10,330
	75'	39°	62' 10"	9,680	8,710	10,330	9,300
	80'	33°	55' 10"	8,690‡	7,820	9,340‡	8,410
82'	30°	---	8,340‡	7,510	9,000‡	8,100	
85'	27°	47' 2"	7,820‡	7,040	8,480‡	7,630	
90'	18°	35' 1"	7,060‡	6,350	7,720‡	6,950	

‡ Dragline operation with boom angle less than 35° is seldom advisable.

① Lifting capacities shown are in pounds and are not more than 75% of the minimum tipping loads for dragline and not more than 67½% of the minimum tipping loads for clamshell-magnet with machine standing on firm level ground. Lifting capacities shown are based on machine equipped with boom gantry and 1¼" diameter extender cables or on machine equipped with no boom gantry and 1½" diameter extender cables. For machine equipped with boom gantry and optional 1½" diameter extender cables, a deduction of 400 pounds must be made from the lifting capacities shown. 1¼" diameter extender cables may not be used on machine unless it is equipped with boom gantry. 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 90 feet.

MAXIMUM BOOM LENGTHS MACHINE WILL HANDLE WITHOUT ASSISTANCE⑦	ANGLE BOOM		"HI-LITE" BOOM	
	Cwt. "A"	Cwt. "AB"	Cwt. "A"	Cwt. "AB"
Machine will pick off ground over ends	150'	150'	180'	200'
Machine will pick off ground over sides	140'	150'	160'	200'
Machine will pick off ground over ends	140' + 20' jib	150' + 40' jib	150' + 30' jib	180' + 30' jib
Machine will pick off ground over ends	130' + 40' jib	140' + 60' jib	140' + 60' jib	170' + 60' jib
Machine will pick off ground over sides	130' + 20' jib	150' + 20' jib	140' + 30' jib	170' + 30' jib
Machine will pick off ground over sides	120' + 40' jib	140' + 40' jib	120' + 60' jib	150' + 60' jib

⑦ Equipped with boom gantry and 1¼" diameter extender cables. If 1½" diameter extender cables are used on machine equipped with boom gantry, a decreased maximum boom length may be necessary due to increased weight.

MAXIMUM BOOM LENGTHS FOR SAFE TRAVEL (BOOM HORIZONTAL)⑧	ANGLE BOOM		"HI-LITE" BOOM	
	Cwt. "A"	Cwt. "AB"	Cwt. "A"	Cwt. "AB"
Boom over ends machine will travel with	130'	150'	140'	170'
Boom over sides machine will travel with	120'	140'	130'	150'
Boom over ends machine will travel with	110' + 40' jib	140' + 20' jib	110' + 30' jib	140' + 30' jib
Boom over ends machine will travel with	130' + 20' jib	130' + 40' jib	100' + 60' jib	130' + 60' jib
Boom over sides machine will travel with	100' + 20' jib	120' + 20' jib	100' + 30' jib	120' + 30' jib
Boom over sides machine will travel with	90' + 40' jib	110' + 40' jib	90' + 60' jib	110' + 60' jib

⑧ Equipped with boom gantry, 1¼" diameter extender cables and hook blocks on both the main hoist line and jib whipline capable of handling maximum machine capacity. If 1½" diameter extender cables are used on machine equipped with boom gantry, a decreased maximum boom length may be necessary due to increased weight.

WEIGHT DEDUCTIONS FOR TRANSPORTING

Both side frames with standard 38" wide track shoes	39,810 lbs.
Both side frames with optional 44" wide track shoes	40,860 lbs.
Counterweight "A"	24,000 lbs.
Counterweight "AB"	45,000 lbs.
50' angle lifting crane boom and extender cables	6,470 lbs.
50' "Hi-Lite" lifting crane boom and extender cables	5,200 lbs.
50' angle clamshell or dragline boom and extender cables	6,190 lbs.
Hoe attachment and standard bucket	23,230 lbs.

NOTE: See price list for weights of other optional components.

LS-408 Lifting Capacities^① With Tubular "Hi-Lite" Boom

GENERAL INFORMATION ONLY

LONG-WIDE LOWER 12'0" GAUGE X 19'5" LONG OVER-ALL

FOR DRAGLINE, CLAMSHELL AND MAGNET CAPACITIES SEE PAGE 4

BOOM			W Boom Point Height	LIFTING CRANE	
Length	Radius	Angle		Ctwt. "A" ^②	Ctwt. "AB" ^③
50' ④	12'	82°	56' 2"	172,810	200,000*
	15'	78°	55' 8"	111,810	146,840
	20'	72°	54' 4"	69,630	91,850
	25'	66°	52' 5"	50,050	66,320
	30'	59°	49' 10"	38,740	51,570
	35'	53°	46' 5"	31,370	41,970
	40'	45°	42' 1"	26,200	35,200
	50'	25°	27' 8"	19,400	26,350
60' ④	15'	80°	65' 10"	111,660	146,690
	20'	75°	64' 9"	69,470	91,960
	25'	70°	63' 2"	49,880	66,150
	30'	65°	61' 1"	38,570	51,400
	35'	60°	58' 6"	31,200	41,790
	40'	54°	55' 2"	26,020	35,040
	50'	41°	45' 11"	19,220	26,170
60'	23°	29' 9"	14,950	20,610	
70' ④	15'	82°	76' 0"	111,510	146,540
	20'	77°	75' 0"	69,310	91,530
	25'	73°	73' 8"	49,710	65,980
	30'	68°	71' 11"	38,390	51,230
	35'	64°	69' 9"	31,020	41,620
	40'	60°	67' 1"	25,840	34,860
	50'	50°	60' 0"	19,040	25,990
70'	21°	31' 8"	11,840	16,610	
80' ④	20'	79°	85' 3"	69,140	91,360
	25'	75°	84' 1"	49,540	65,810
	30'	72°	82' 7"	38,220	51,050
	35'	68°	80' 9"	30,850	41,440
	40'	64°	78' 6"	25,660	34,680
	50'	55°	72' 7"	18,860	25,810
	60'	46°	64' 5"	14,590	20,250
70'	35°	52' 9"	11,660	16,430	
80'	20°	33' 5"	9,530	13,650	
90' ④	20'	80°	95' 5"	68,980	91,200
	25'	77°	94' 5"	49,370	65,640
	30'	74°	93' 1"	38,050	50,880
	35'	70°	91' 5"	30,670	41,260
	40'	67°	89' 6"	25,490	34,510
	50'	60°	84' 5"	18,680	25,630
	60'	52°	77' 8"	14,410	20,070
70'	43°	68' 7"	11,480	16,250	
80'	33°	55' 10"	9,340	13,470	
90'	18°	35' 1"	7,720	11,350	
100' ④	20'	81°	105' 7"	68,820	91,040
	25'	78°	104' 8"	49,200	65,470
	30'	75°	103' 6"	37,870	50,700
	35'	72°	102' 0"	30,490	41,090
	40'	69°	100' 3"	25,310	34,330
	50'	63°	95' 10"	18,500	25,450
	60'	56°	90' 0"	14,230	19,890
70'	49°	82' 4"	11,300	16,070	
80'	41°	72' 5"	9,160	13,280	
90'	31°	58' 9"	7,540	11,170	
100'	17°	36' 8"	6,260	9,500	
110' ④	25'	79°	114' 10"	49,030	65,300
	30'	77°	113' 9"	37,700	50,530
	35'	74°	112' 5"	30,320	40,910
	40'	71°	110' 11"	25,130	34,150
	50'	65°	106' 11"	18,320	25,270
	60'	60°	101' 9"	14,050	19,700
	70'	54°	95' 2"	11,110	15,880
80'	47°	86' 10"	8,980	13,100	
90'	39°	76' 1"	7,350	10,980	
100'	30°	61' 6"	6,080	9,320	
110'	17°	38' 2"	5,040	7,970	

BOOM			W Boom Point Height	LIFTING CRANE	
Length	Radius	Angle		Ctwt. "A" ^②	Ctwt. "AB" ^③
120' ④	25'	80°	125' 0"	48,860	65,130
	30'	78°	124' 0"	37,520	50,360
	35'	75°	122' 10"	30,140	40,740
	40'	73°	121' 5"	24,950	33,970
	50'	68°	117' 10"	18,140	25,090
	60'	63°	113' 2"	13,860	19,520
	70'	57°	107' 4"	10,930	15,700
	80'	51°	100' 1"	8,800	12,920
	90'	45°	91' 0"	7,170	10,800
	100'	37°	79' 6"	5,890	9,130
110'	29°	64' 1"	4,860	7,790	
120'	16°	39' 7"	4,010	6,680	
130' ④	25'	81°	135' 2"	48,690	64,960
	30'	79°	134' 3"	37,350	50,180
	35'	77°	133' 2"	29,970	40,560
	40'	74°	131' 10"	24,770	33,800
	50'	70°	128' 7"	17,960	24,910
	60'	65°	124' 4"	13,680	19,340
	70'	60°	119' 1"	10,750	15,520
	80'	55°	112' 8"	8,610	12,740
	90'	49°	104' 9"	6,990	10,620
	100'	43°	95' 0"	5,710	8,950
110'	36°	82' 10"	4,680	7,610	
120'	27°	66' 7"	3,830	6,500	
130'	15°	41' 0"	3,110	5,570	
140' ④	30'	80°	144' 7"	37,180	50,010
	35'	77°	143' 5"	29,790	40,380
	40'	75°	142' 3"	24,600	33,620
	50'	71°	137' 4"	17,780	24,730
	60'	67°	135' 4"	13,500	19,160
	70'	62°	130' 6"	10,570	15,340
	80'	57°	124' 8"	8,430	12,550
	90'	52°	117' 8"	6,800	10,430
	100'	47°	109' 2"	5,520	8,770
	110'	41°	98' 11"	4,490	7,420
120'	35°	86' 0"	3,640	6,310	
130'	26°	68' 11"	2,930	5,380	
140'	15°	42' 3"	2,320	4,590	
150' ④	30'	80°	154' 7"	37,000	49,840
	35'	78°	153' 8"	29,610	40,210
	40'	76°	152' 6"	24,420	33,440
	50'	72°	149' 9"	17,600	24,550
	60'	68°	146' 2"	13,320	18,980
	70'	64°	141' 9"	10,380	15,160
	80'	60°	136' 5"	8,250	12,370
	90'	55°	130' 1"	6,620	10,250
	100'	51°	122' 6"	5,340	8,580
	110'	45°	113' 6"	4,310	7,240
120'	40°	102' 7"	3,460	6,130	
130'	33°	89' 0"	2,740	5,200	
140'	26°	71' 3"	2,140	4,410	
150'	14°	43' 6"	1,610	3,730	
160' ④	30'	81°	164' 9"	36,830	49,660
	35'	79°	163' 10"	29,440	40,030
	40'	77°	162' 9"	24,240	33,260
	50'	74°	160' 2"	17,420	24,370
	60'	70°	156' 10"	13,140	18,800
	70'	66°	152' 9"	10,200	14,970
	80'	62°	147' 10"	8,060	12,190
	90'	58°	142' 0"	6,440	10,070
	100'	53°	135' 2"	5,160	8,400
	110'	49°	127' 1"	4,120	7,050
120'	44°	117' 7"	3,270	5,940	
130'	38°	106' 1"	2,560	5,010	
140'	32°	92' 0"	1,950	4,220	
150'	25°	73' 6"	1,430	3,540	
160'	14°	44' 9"	1,000	2,950	

BOOM			W Boom Point Height	LIFTING CRANE	
Length	Radius	Angle		Ctwt. "A" ^②	Ctwt. "AB" ^③
170' ④	30'	81°	174' 10"	36,660	49,490
	35'	80°	174' 0"	29,260	39,860
	40'	78°	173' 0"	24,060	33,080
	50'	75°	170' 7"	17,240	24,190
	60'	71°	169' 6"	12,960	18,620
	70'	67°	163' 8"	10,020	14,790
	80'	64°	159' 1"	7,880	12,000
	90'	60°	153' 9"	6,250	9,880
	100'	56°	147' 5"	4,970	8,210
	110'	51°	140' 1"	3,940	6,870
120'	47°	131' 7"	3,090	5,760	
130'	43°	121' 6"	2,370	4,830	
140'	37°	109' 6"	1,770	4,040	
150'	31°	94' 10"	1,240	3,360	
160'	24°	75' 8"	-----	2,770	
170'	13°	46' 0"	-----	2,240	
180' ④	35'	80°	184' 2"	29,090	39,680
	40'	79°	183' 3"	23,890	32,910
	50'	75°	180' 11"	17,060	24,010
	60'	72°	178' 0"	12,780	18,430
	70'	69°	174' 5"	9,840	14,610
	80'	65°	170' 2"	7,700	11,820
	90'	60°	165' 2"	6,070	9,700
	100'	58°	159' 5"	4,790	8,030
	110'	54°	152' 8"	3,750	6,680
	120'	50°	144' 10"	2,900	5,570
130'	46°	135' 10"	2,190	4,640	
140'	41°	125' 4"	1,580	3,850	
150'	36°	112' 10"	1,060	3,170	
160'	30°	97' 7"	-----	2,580	
170'	23°	77' 9"	-----	2,060	
180'	13°	47' 1"	-----	1,600	
190' ④	35'	80°	194' 4"	28,910	39,500
	40'	79°	193' 5"	23,710	32,730
	50'	76°	191' 3"	16,880	23,830
	60'	73°	188' 7"	12,590	18,250
	70'	70°	185' 1"	9,650	14,430
	80'	67°	181' 2"	7,510	11,640
	90'	63°	176' 6"	5,890	9,520
	100'	60°	171' 0"	4,600	7,850
	110'	56°	164' 10"	3,570	6,500
	120'	53°	157' 8"	2,720	5,390
130'	49°	149' 5"	2,000	4,460	
140'	45°	140' 0"	1,400	3,670	
150'	40°	129' 0"	-----	2,990	
160'	35°	116' 0"	-----	2,390	
170'	30°	100' 2"	-----	1,870	
180'	23°	79' 9"	-----	1,410	
190'	13°	48' 3"	-----	1,000	
200' ④	40'	80°	203' 7"	-----	32,550
	50'	77°	201' 6"	-----	23,650
	60'	74°	198' 11"	-----	18,070
	70'	71°	195' 9"	-----	14,240
	80'	68°	192' 0"	-----	11,450
	90'	65°	187' 7"	-----	9,330
	100'	61°	182' 6"	-----	7,660
	110'	58°	176' 8"	-----	6,320
	120'	55°	170' 1"	-----	5,210
	130'	51°	162' 6"	-----	4,270
140'	47°	153' 11"	-----	3,480	
150'	43°	144' 1"	-----	2,800	
160'	39°	132' 8"	-----	2,210	

LS-408 Lifting Capacities^① With Angle Boom

GENERAL INFORMATION ONLY

LONG-WIDE LOWER 12'0" GAUGE X 19'5" LONG OVER-ALL

FOR DRAGLINE, CLAMSHELL AND MAGNET CAPACITIES SEE PAGE 4

Length	BOOM		W Boom Point Height	LIFTING CRANE	
	Radius	Angle		Cwt. "A" ^②	Cwt. "AB" ^③
50' ②	12'	82°	56' 2"	123,000*	140,000*
	15'	78°	55' 8"	111,510	133,000*
	20'	72°	54' 4"	69,310	91,530
	25'	66°	52' 5"	49,710	65,980
	30'	59°	49' 10"	38,390	51,230
	35'	53°	46' 5"	31,020	41,620
	40'	45°	42' 1"	25,840	34,860
50'	25°	27' 8"	19,040	25,990	
60' ②	15'	80°	65' 10"	111,300	127,000*
	20'	75°	64' 9"	69,080	91,300
	25'	70°	63' 2"	49,470	65,740
	30'	65°	61' 1"	38,150	50,980
	35'	60°	58' 6"	30,780	41,370
	40'	54°	55' 2"	25,590	34,610
50'	41°	45' 11"	18,790	25,740	
60'	23°	29' 9"	14,520	20,180	
70' ②	15'	82°	76' 0"	111,090	120,000*
	20'	77°	75' 0"	68,850	91,070
	25'	73°	73' 8"	49,230	65,500
	30'	68°	71' 11"	37,910	50,740
	35'	64°	69' 9"	30,530	41,120
	40'	60°	67' 1"	25,340	34,360
	50'	50°	60' 0"	18,530	25,490
60'	38°	49' 6"	14,260	19,920	
70'	21°	31' 8"	11,330	16,100	
80' ②	20'	79°	85' 3"	68,620	90,840
	25'	75°	84' 1"	49,000	65,270
	30'	72°	82' 7"	37,660	50,500
	35'	68°	80' 9"	30,280	40,880
	40'	64°	78' 6"	25,100	34,120
	50'	55°	72' 7"	18,280	25,240
	60'	46°	64' 5"	14,010	19,670
	70'	35°	52' 9"	11,080	15,850
80'	20°	33' 5"	8,940	13,070	
90' ②	20'	80°	95' 5"	68,390	90,610
	25'	77°	94' 5"	48,760	65,030
	30'	74°	93' 1"	37,420	50,250
	35'	70°	91' 5"	30,040	40,630
	40'	67°	89' 6"	24,850	33,870
	50'	60°	84' 5"	18,030	24,990
	60'	52°	77' 8"	13,760	19,410
70'	43°	68' 7"	10,820	15,590	
80'	33°	55' 10"	8,690	12,810	
90'	18°	35' 1"	7,060	10,690	
100' ②	20'	81°	105' 7"	68,160	90,380
	25'	78°	104' 8"	48,520	64,790
	30'	75°	103' 6"	37,180	50,010
	35'	72°	102' 0"	29,790	40,380
	40'	69°	100' 3"	24,600	33,620
	50'	63°	95' 10"	17,780	24,730
	60'	56°	90' 0"	13,500	19,160
	70'	49°	82' 4"	10,570	15,340
	80'	41°	72' 5"	8,430	12,550
	90'	31°	58' 9"	6,800	10,430
100'	17°	36' 8"	5,520	8,770	
110' ②	25'	79°	114' 10"	48,280	64,550
	30'	77°	113' 9"	36,930	49,770
	35'	74°	112' 5"	29,540	40,140
	40'	71°	110' 11"	24,350	33,370
	50'	65°	106' 11"	17,530	24,480
	60'	60°	101' 9"	13,250	18,910
	70'	54°	95' 2"	10,310	15,080
	80'	47°	86' 10"	8,170	12,300
	90'	39°	76' 1"	6,550	10,180
	100'	30°	61' 6"	5,270	8,510
110'	17°	38' 2"	4,230	7,160	

* 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 1" cable or eight parts hoist line 7/8" cable required for maximum lifts with angle boom.

Length	BOOM		W Boom Point Height	LIFTING CRANE	
	Radius	Angle		Cwt. "A" ^②	Cwt. "AB" ^③
120' ② ③	25'	80°	125' 0"	48,050	64,310
	30'	78°	124' 0"	36,690	49,520
	35'	75°	122' 10"	29,300	39,890
	40'	73°	121' 5"	24,100	33,120
	50'	68°	117' 10"	17,270	24,230
	60'	63°	113' 2"	12,990	18,650
	70'	57°	107' 4"	10,060	14,830
	80'	51°	100' 1"	7,920	12,040
	90'	45°	91' 0"	6,290	9,920
	100'	37°	79' 6"	5,010	8,250
130' ② ③	110'	29°	64' 1"	3,980	6,900
	120'	16°	39' 7"	3,120	5,800
	25'	81°	135' 2"	47,810	64,080
	30'	79°	134' 3"	36,450	49,280
	35'	77°	133' 2"	29,050	39,650
	40'	74°	131' 10"	23,850	32,870
	50'	70°	128' 7"	17,020	23,980
140' ② ③	60'	65°	124' 4"	12,740	18,400
	70'	60°	119' 1"	9,800	14,570
	80'	55°	112' 8"	7,660	11,780
	90'	49°	104' 9"	6,030	9,660
	100'	43°	95' 0"	4,750	7,990
	110'	36°	82' 10"	3,720	6,650
	120'	27°	66' 7"	2,870	5,540
	130'	15°	41' 0"	2,150	4,610
	30'	80°	144' 7"	36,200	49,040
	35'	77°	143' 5"	28,800	39,400
40'	75°	142' 3"	23,600	32,620	
50'	71°	137' 4"	16,770	23,730	
60'	67°	135' 4"	12,490	18,140	
70'	62°	130' 6"	9,550	14,320	
80'	57°	124' 8"	7,400	11,530	
90'	52°	117' 8"	5,780	9,410	
100'	47°	109' 2"	4,490	7,740	
110'	41°	98' 11"	3,460	6,390	
120'	35°	86' 0"	2,610	5,280	
130'	26°	68' 11"	1,890	4,350	
140'	15°	42' 3"	1,280	3,560	
150' ② ③	30'	80°	154' 7"	35,960	48,790
	35'	78°	153' 8"	28,560	39,150
	40'	76°	152' 6"	23,350	32,370
	50'	72°	149' 9"	16,520	23,470
	60'	68°	146' 2"	12,230	17,890
	70'	64°	141' 9"	9,290	14,060
	80'	60°	136' 5"	7,150	11,270
	90'	55°	130' 1"	5,520	9,150
	100'	51°	122' 6"	4,240	7,480
	110'	45°	113' 6"	3,200	6,130
120'	40°	102' 7"	2,350	5,020	
130'	33°	89' 0"	1,630	4,090	
140'	26°	71' 3"	1,030	3,300	
150'	14°	43' 6"	---	2,620	

① Lifting capacities shown are in pounds and are not more than 75% of the minimum tipping loads with machine standing on firm level ground. A deduction must be made from the lifting capacities shown for weight of hook, hook block, sling, grapple, etc. Lifting capacities shown are based on machine equipped with boom gantry and 1/4" diameter extender cables or on machine equipped with no boom gantry and 1/2" diameter extender cables. For machine equipped with boom gantry and optional 1/2" diameter extender cables, a deduction of 400 pounds must be made from the lifting capacities shown. 1/4" diameter extender cables may not be used on machine unless it is equipped with boom gantry.

② Boom gantry required for all angle boom lengths on machine equipped with counterweight "AB".

③ Boom gantry required for all angle boom lengths over 110' on machine equipped with counterweight "A".

LS-408 Lifting Crane and Hoe Flysheet

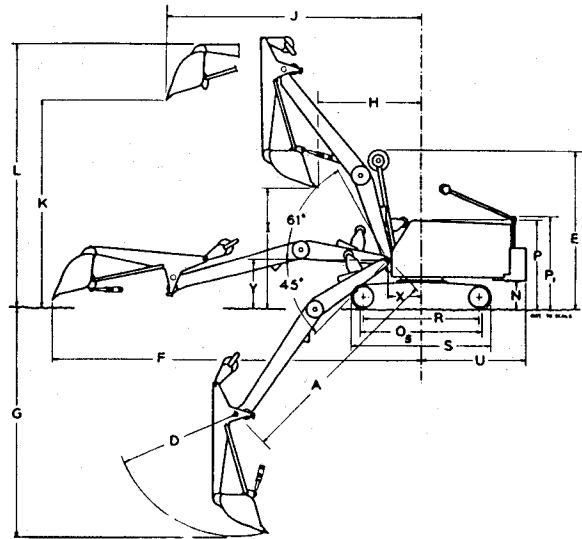
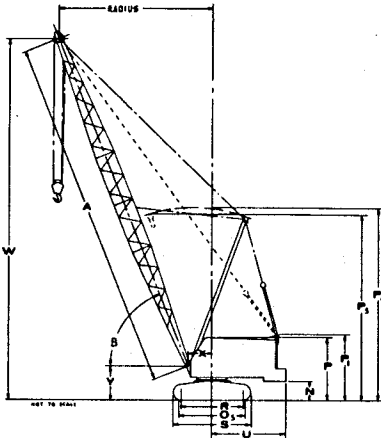
**LINK-BELT
SPEEDER**

100 TON CRAWLER MOUNTED CRANE (PCSA CLASS 12-352)
LONG-WIDE LOWER 12'0" GAUGE X 19'5" LONG OVER-ALL

(Supersedes Flysheet CRF12013-4-64)



These specifications comply with the recommended Commercial Standard CS90-58, developed under the National Bureau of Standards and issued by the United States Department of Commerce.



CRANE DIMENSIONS		
Basic angle or tubular "Hi-Lite" boom length	A	50' 0"
Boom angle	B	
Ground clearance under counterweight "A"	N	3' 11"
Ground clearance under counterweight "AB"	N	3' 5"
Over-all height boom gantry vertical	P4	38' 1"
Over-all height boom gantry with boom horizontal	P5	29' 1"
Tailswing of counterweight "A"	U	14' 6"
Tailswing of counterweight "AB"	U	15' 0"
GENERAL DIMENSIONS COMMON TO BOTH CRANE AND HOE		
Crawler ground bearing length	O5	17' 4"
Over-all cab height	P	12' 5"
Over-all gantry height	P1	13' 0"
Center to center of wheels	R	16' 2"
Over-all crawler length	S	19' 5"
Radius of boom hinge pin	X	4' 7"
Height of boom hinge pin	Y	6' 9"
Over-all width with 38" wide track shoes		15' 2"
Over-all cab width		11' 0"
Minimum ground clearance		1' 2"
Over-all cab height without side frames		11' 3"
Over-all shipping width without side frames		11' 0"

HOE WORKING RANGES		
Bucket capacity, cubic yards		2 1/2
Bucket cutting width (standard)		60"
Boom length	A	30' 0"
Average sweep radius	D	17' 0"
Height of hoe mast	E	23' 10"
Maximum digging radius	F	51' 2"
Maximum digging depth ^①	G	31' 5"
Radius beginning of dump	H	14' 4"
Ground clearance beginning of dump	I	16' 7"
Clearance radius end of dump	J	35' 9"
Ground clearance end of dump	K	28' 4"
Over-all height end of dump	L	36' 2"
Ground clearance, counterweight "A"	N	3' 11"
Tailswing of counterweight "A"	U	14' 6"

① Dimension "G" shows maximum digging depth with 45° boom conforming to U.S. Dept. of Commerce Standards. The maximum "effective" digging depth will vary according to the type of soil and excavation.

HOE LIFTING CAPACITIES

These are maximum lifting capacities (based on cable strength) for the hoe when used for laying pipe. Three part hoist line used.

BOOM RADIUS ^②	LIFTING CAPACITIES
20' to 25'	32,700 lbs.
20' to 30'	29,200 lbs.
20' to 34'	22,300 lbs.

② Radius is measured from machine centerline of rotation to centerline of boom peak shaft. Capacities are based upon the hoe arm being in a vertical position.

BRIEF SPECIFICATIONS

LIFTING CRANE, CLAMSHELL AND DRAGLINE

Approximate working weight with 38" wide track shoes, low gantry, but no hook block or bucket:

- Lifting Crane with counterweight "A" and 50' angle boom --- 147,660 lbs.
- with counterweight "AB" and 50' angle boom --- 168,660 lbs.
- with counterweight "A" and 50' "Hi-Lite" boom --- 146,910 lbs.
- with counterweight "AB" and 50' "Hi-Lite" boom --- 167,910 lbs.
- Clamshell with counterweight "A" and 50' angle boom --- 146,330 lbs.
- Dragline with counterweight "A" and 50' angle boom --- 147,500 lbs.

Swing speed --- 3.09 r.p.m.

Lagging --- Line Pull --- Line Speed

- 24 3/8" front (crane hoist) (dragline inhaul) --- 35,700 lbs. --- @ 147 f.p.m.
- 24 3/8" rear (crane hoist) --- 34,600 lbs. --- @ 147 f.p.m.
- 27" front (clamshell closing) --- 32,200 lbs. --- @ 163 f.p.m.
- 27" rear (clamshell holding) (dragline hoist) --- 31,200 lbs. --- @ 163 f.p.m.

CRAWLER

38" wide track shoes standard. 44" wide track shoes optional at extra cost. Travel speed .97 m.p.h. Independent travel optional at extra cost.

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

For Certified Dimensions, Consult Factory

LINK-BELT SPEEDER

Link-Belt Speeder
Cedar Rapids, Iowa

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

Printed in U.S.A.

864-66-11-13-64