



LS-408 Lifting Crane and Hoe Flysheet

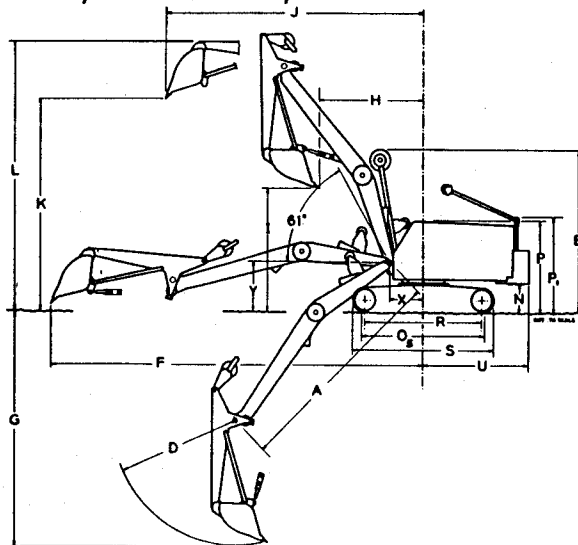
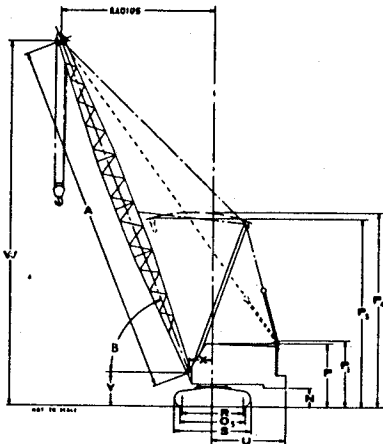
101.5 TON CRAWLER MOUNTED CRANE (PCSA CLASS 13-370)

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	3' 11"
Ground clearance under counterweight "A"	N	3' 5"
Ground clearance under counterweight "AB"	N	3' 1"
Over-all height boom gantry vertical	P4	39' 1"
Over-all height boom gantry with 50' boom horizontal	P5	23' 6"
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	PI	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.

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

Cedar Rapids, Iowa

Woodstock, Ontario, Canada



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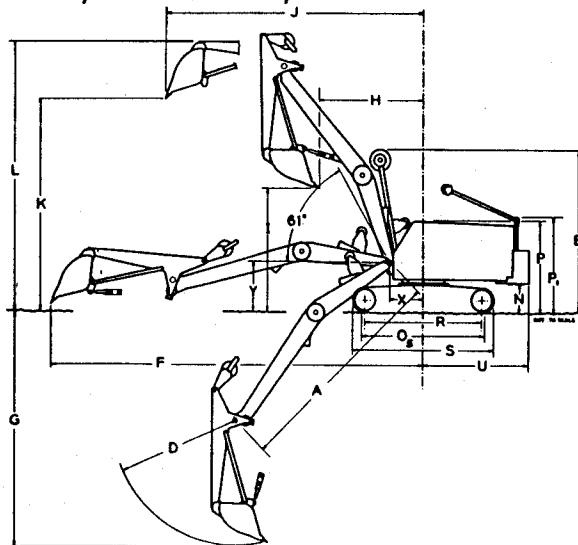
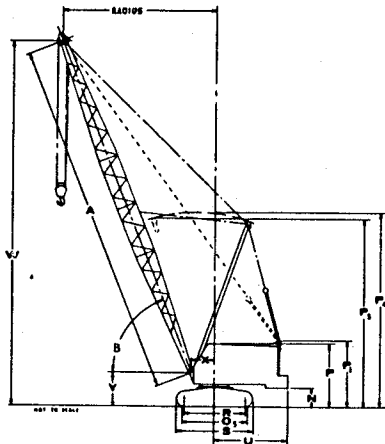
GENERAL INFORMATION ONLY

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)



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"
Tailswing 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 RADIUS②	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.

Flysheet CRF12026-3-68

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**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	With Boom Gantry	
Length	Radius	Angle			With Cwt. A ^②	With Cwt. AB
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
	50'	41°	45' 11"	19,970	19,970	26,940
	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*	90,530*
	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	With Boom Gantry	
Length	Radius	Angle			With Cwt. A ^②	With Cwt. AB
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	69,440
	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' ② ③	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 1/4" 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 ②.

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^⑤ With Tubular "Hi-Lite" Boom, 1 1/4" Diameter Extender Cables^⑥ and Boom Gantry^⑦

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

FOR DRAGLINE, CLAMSHELL AND MAGNET CAPACITIES SEE NOTE ④

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	7,960
	30'	59°	49' 10"	41,600	54,460		100'	30°	61' 6"	7,080	10,330		120'	47°	131' 7"	4,070	6,750
	35'	53°	46' 5"	33,630	44,240		110'	17°	38' 2"	5,870	8,800		130'	43°	121' 6"	3,260	5,730
60'	45'	42' 1"	27,990	37,030		120'	25'	80°	125' 0"	53,810	70,110	180'	140'	37°	109' 6"	2,570	4,850
	50'	25°	27' 8"	20,490	27,460		30'	78°	124' 0"	41,600	54,460		150'	31°	94' 10"	1,970	4,090
							35'	75°	122' 10"	33,630	44,240		160'	24°	75' 8"	1,440	3,420
	14'	81°	66' 0"	136,470	176,160		40'	73°	121' 5"	27,990	37,030		170'	13°	46' 0"	---	2,800
	15'	80°	65' 10"	120,300	155,410		50'	68°	117' 10"	20,490	27,460						
	16'	79°	65' 8"	107,480	138,960		60'	63°	113' 2"	15,810	21,480		35'	80°	184' 2"	32,860	43,480
	17'	78°	65' 5"	97,050	125,590		70'	57°	107' 4"	12,580	17,360		40'	79°	183' 3"	27,130	36,170
	18'	77°	65' 2"	88,410	114,500		80'	51°	100' 1"	10,210	14,350		50'	75°	180' 11"	19,590	26,560
	19'	76°	64' 11"	81,130	105,160		90'	45°	91' 0"	8,400	12,040		60'	72°	178' 0"	14,860	20,530
	20'	75°	64' 9"	74,920	97,180		100'	37°	79' 6"	6,970	10,220		70'	69°	174' 5"	11,610	16,390
	25'	70°	63' 2"	53,810	70,110		110'	29°	64' 1"	5,790	8,730		80'	65°	170' 2"	9,240	13,380
70'	30'	65°	61' 1"	41,600	54,460	130'	120'	16°	39' 7"	4,780	7,460	190'	90'	62°	165' 2"	7,440	11,070
	35'	60°	58' 6"	33,630	44,240		25'	81°	135' 2"	53,810	70,110		100'	58°	159' 5"	6,010	9,260
	40'	54°	55' 2"	27,990	37,030		30'	79°	134' 3"	41,600	54,460		110'	54°	152' 8"	4,860	7,800
	45'	41°	45' 11"	20,490	27,460		35'	77°	133' 2"	33,550	44,170		120'	50°	144' 10"	3,910	6,580
	50'	23°	29' 9"	16,020	21,690		40'	74°	131' 10"	27,850	36,890		130'	46°	135' 10"	3,100	5,560
							50'	70°	128' 7"	20,370	27,340		140'	41°	125' 4"	2,420	4,690
	16'	81°	75' 11"	107,480	138,960		60'	65°	124' 4"	15,660	21,330		150'	36°	112' 10"	1,820	3,940
	17'	80°	75' 8"	97,050	125,590		70'	60°	119' 1"	12,430	17,210		160'	30°	97' 7"	1,290	3,270
	18'	79°	75' 5"	88,410	114,500		80'	55°	112' 8"	10,060	14,200		170'	23°	77' 9"	---	2,680
	19'	78°	75' 3"	81,130	105,160		90'	49°	104' 9"	8,260	11,900		180'	13°	47' 1"	---	2,130
	20'	77°	75' 0"	74,920	97,180		100'	43°	95' 0"	6,830	10,010						
80'	25'	73°	73' 8"	53,810	70,110	140'	110'	36°	82' 10"	5,660	8,600	200'	40'	80°	194' 4"	---	43,340
	30'	68°	71' 11"	41,600	54,460		120'	27°	66' 7"	4,690	7,360		50'	79°	193' 5"	---	36,020
	35'	64°	69' 9"	33,630	44,240		130'	15°	41' 0"	3,830	6,290		60'	76°	191' 3"	---	26,410
	40'	60°	67' 1"	27,990	37,030		30'	80°	144' 7"	41,530	54,390		70'	73°	188' 7"	---	20,370
	45'	50°	60' 0"	20,490	27,460		35'	77°	143' 5"	33,410	44,030		80'	70°	185' 1"	---	16,230
	50'	38°	49' 6"	16,020	21,690		40'	75°	142' 3"	27,710	36,750		90'	67°	181' 2"	---	13,210
	55'	31°	31' 8"	12,870	17,650		50'	71°	137' 4"	20,210	27,180		100'	63°	176' 6"	---	10,910
							60'	67°	135' 4"	15,500	22,180		110'	60°	171' 0"	---	9,090
	17'	81°	85' 9"	97,050	125,590		70'	62°	130' 6"	12,270	17,050		120'	53°	157' 8"	---	7,630
	18'	80°	85' 6"	88,410	114,500		80'	57°	124' 8"	9,900	14,030		130'	49°	149' 5"	---	6,420
	19'	79.5°	85' 5"	81,130	105,160		90'	52°	117' 8"	8,100	11,740		140'	45°	140' 0"	---	5,400
90'	20'	79°	85' 3"	74,920	97,180	150'	100'	47°	109' 2"	6,670	9,920	210'	150'	40°	129' 0"	---	4,530
	25'	75°	84' 1"	53,810	70,110		110'	41°	98' 11"	5,510	8,450		160'	35°	116' 0"	---	3,780
	30'	72°	82' 7"	41,600	54,460		120'	35°	86' 0"	4,540	7,220		170'	30°	100' 2"	---	3,120
	35'	68°	80' 9"	33,630	44,240		130'	26°	68' 11"	3,720	6,180		180'	23°	79' 9"	---	2,530
	40'	64°	78' 6"	27,990	37,030		140'	15°	42' 3"	2,990	5,270		190'	13°	48' 3"	---	2,010
	45'	55°	72' 7"	20,490	27,460		30'	80°	154' 7"	41,400	54,260						
	50'	46°	64' 5"	16,020	21,690		35'	78°	153' 8"	33,270	43,890		40'	80°	203' 7"	---	35,870
	55'	35°	52' 9"	12,870	17,650		40'	76°	152' 6"	27,560	36,600		50'	77°	201' 6"	---	26,240
	60'	33°	55' 10"	10,500	14,640		50'	72°	149' 9"	20,050	27,020		60'	74°	198' 11"	---	20,200
	65'	18°	33' 5"	10,500	14,640		60'	68°	146' 2"	15,340	22,010		70'	71°	195' 9"	---	16,060
							70'	64°	141' 9"	12,100	16,880		80'	68°	192' 0"	---	13,040
100'	70'	67°	89' 6"	27,990	37,030	160'	80'	60°	136' 5"	9,730	13,830	220'	90'	65°	187' 7"	---	10,730
	75'	60°	84' 5"	20,490	27,460		90'	55°	130' 1"	7,930	11,560		100'	61°	182' 6"	---	8,920
	80'	52°	77' 8"	16,020	21,690		100'	51°	122' 6"	6,500	9,750		110'	58°	176' 8"	---	7,450
	85'	43°	68' 7"	12,870	17,650		110'	45°	113' 6"	5,340	8,280		120'	55°	170' 1"	---	6,240
	90'	33°	55' 10"	10,500	14,640		120'	40°	102' 7"	4,380	7,060		130'	51°	162' 6"	---	5,230
	95'	18°	35' 1"	8,650	12,290		130'	33°	89' 0"	3,570	6,030		140'	47°	153' 11"	---	4,360
							140'	26°	71' 3"	2,860	5,140		150'	43°	144' 1"	---	3,610
	20'	81°	105' 7"	74,920	97,180		150'	14°	43' 6"	2,230	4,350		160'	39°	132' 8"	---	2,950
	25'	78°	104' 8"	53,810	70,110		30'	81°	164' 9"	41,280	54,140		170'	34°	119' 2"	---	2,370
	30'	75°	103' 6"	41,600	54,460		35'	79°	163' 10"	33,140	43,760		180'	29°	102' 10"	---	1,850
	35'	72°	102' 0"	33,630	44,240		40'	77°	162' 9"	27,420	36,460		190'	22°	81' 9"	---	1,380

NOTE: Eight parts hoist line 1" cable required for maximum lifts with "Hi-Lite" boom.

⑤ 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.

⑥ If machine is equipped with optional 1 1/2" diameter extender cables, all lifting capacities must be reduced by 400 pounds.

⑦ When using the boom gantry as a short boom for dismantling operations, maximum lifting capacity of the gantry is 47,000 pounds from 13' minimum radius to 20' maximum radius. For tubular "Hi-Lite" boom capacities without boom gantry, see page 4.

GENERAL INFORMATION ONLY



GENERAL INFORMATION ONLY

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"	20,490
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
80'	15'	82°	86' 0"	116,270
	20'	77°	85' 0"	72,630
	25'	73°	83' 8"	52,360
	30'	68°	81' 11"	40,650
	35'	64°	79' 9"	33,030
	40'	60°	77' 1"	27,670
	50'	50°	70' 0"	20,380
90'	15'	82°	96' 0"	116,160
	20'	77°	95' 0"	72,520
	25'	73°	93' 8"	52,250
	30'	68°	91' 11"	40,540
	35'	64°	89' 9"	32,920
	40'	60°	87' 1"	27,560
	50'	50°	80' 0"	20,270
100'	15'	82°	106' 0"	116,050
	20'	77°	105' 0"	72,410
	25'	73°	103' 8"	52,140
	30'	68°	101' 11"	40,430
	35'	64°	99' 9"	32,810
	40'	60°	97' 1"	27,450
	50'	50°	90' 0"	20,160
110'	15'	82°	116' 0"	115,940
	20'	77°	115' 0"	72,300
	25'	73°	113' 8"	52,030
	30'	68°	111' 11"	40,320
	35'	64°	109' 9"	32,700
	40'	60°	107' 1"	27,340
	50'	50°	100' 0"	20,050
120'	15'	82°	126' 0"	115,830
	20'	77°	125' 0"	72,190
	25'	73°	123' 8"	51,920
	30'	68°	121' 11"	40,210
	35'	64°	119' 9"	32,590
	40'	60°	117' 1"	27,230
	50'	50°	110' 0"	19,940

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
90'	20'	80°	95' 5"	72,420
	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
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
110'	20'	82°	115' 7"	72,160
	25'	79°	114' 8"	51,810
	30'	76°	113' 6"	40,060
	35'	73°	112' 0"	32,410
	40'	70°	110' 3"	27,030
	50'	63°	105' 10"	20,000
	60'	56°	100' 0"	15,570
120'	20'	83°	125' 7"	71,950
	25'	80°	124' 8"	51,600
	30'	77°	123' 6"	39,850
	35'	74°	122' 0"	32,200
	40'	71°	120' 3"	26,820
	50'	64°	115' 10"	19,750
	60'	57°	110' 0"	15,320

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
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
130'	25'	81°	135' 0"	51,450
	30'	79°	134' 0"	39,670
	35'	76°	132' 10"	32,000
	40'	74°	131' 5"	26,610
	50'	69°	127' 10"	19,520
	60'	64°	123' 2"	15,080
	70'	58°	117' 4"	12,020

- 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	
	Ctwt. "A"	Ctwt. "AB"	Ctwt. "A"	Ctwt. "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

- 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	
	Ctwt. "A"	Ctwt. "AB"	Ctwt. "A"	Ctwt. "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	130' + 40' jib	130' + 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.



GENERAL INFORMATION ONLY

LS-408 Dragline, Clamshell and Magnet Lifting Capacities^⑥

WITH COUNTERWEIGHT "A"

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

BOOM			W Boom Point Height	Angle Boom		"Hi-Lite" Boom	
Length	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†	---
70'	60'	23°	29' 9"	14,520†	13,070	14,950†	13,460
	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
70'	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			W Boom Point Height	Angle Boom		"Hi-Lite" Boom	
Length	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.

⑥ 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 1½" 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. 1½" 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 ASSISTANCE ^⑦	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 1½" 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' + 40' 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, 1½" 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**

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		Cwt. "A"③	Cwt. "AB"④
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
60' ④	50'	25°	27' 8"	19,400	26,350
	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
70' ④	50'	41°	45' 11"	19,220	26,170
	60'	23°	29' 9"	14,950	20,610
	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
80' ④	40'	60°	67' 1"	25,840	34,860
	50'	50°	60' 0"	19,040	25,990
	60'	38°	49' 6"	14,770	20,430
	70'	21°	31' 8"	11,840	16,610
	20'	79°	85' 3"	69,140	91,360
	25'	75°	84' 1"	49,540	65,810
	30'	72°	82' 7"	38,220	51,050
90' ④	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
	100' ④	20'	80°	95' 5"	68,980
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
110' ④	70'	43°	68' 7"	11,480	16,250
	80'	33°	55' 10"	9,340	13,470
	90'	18°	35' 1"	7,720	11,350
	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
120' ④	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
130' ④	20'	79°	114' 10"	49,030	65,300
	25'	77°	113' 9"	37,700	50,530
	30'	74°	112' 5"	30,320	40,910
	35'	71°	110' 11"	25,130	34,150
	40'	65°	106' 11"	18,320	25,270
	50'	60°	101' 9"	14,050	19,700
	60'	54°	95' 2"	11,110	15,880
140' ④	70'	47°	86' 10"	8,980	13,100
	80'	39°	76' 1"	7,350	10,980
	90'	30°	61' 6"	6,080	9,320
	100'	17°	38' 2"	5,040	7,970



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 PAGE 4

GENERAL INFORMATION ONLY

BOOM			W Boom Point Height	LIFTING CRANE	
Length	Radius	Angle		Cwt. "A" ^②	Cwt. "AB" ^②
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
60' ②	50'	25°	27' 8"	19,040	25,990
	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
70' ②	50'	41°	45' 11"	18,790	25,740
	60'	23°	29' 9"	14,520	20,180
	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
80' ②	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
	20'	79°	85' 3"	68,620	90,840
	25'	75°	84' 1"	49,000	65,270
	30'	72°	82' 7"	37,660	50,500
90' ②	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
	20'	80°	95' 5"	68,390	90,610
100' ②	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
110' ②	80'	33°	55' 10"	8,690	12,810
	90'	18°	35' 1"	7,060	10,690
	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
120' ②	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
	25'	79°	114' 10"	48,280	64,550
130' ②	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
140' ②	90'	39°	76' 1"	6,550	10,180
	100'	30°	61' 6"	5,270	8,510
	110'	17°	38' 2"	4,230	7,160
	25'	80°	144' 7"	36,200	49,040
	30'	77°	143' 5"	28,800	39,400
	40'	75°	142' 3"	23,600	32,620
	50'	71°	137' 4"	16,770	23,730
150' ②	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
160' ②	130'	26°	68' 11"	1,890	4,350
	140'	15°	42' 3"	1,280	3,560
	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
170' ②	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
180' ②	140'	26°	71' 3"	1,030	3,300
	150'	14°	43' 6"	---	2,620
	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

BOOM			W Boom Point Height	LIFTING CRANE	
Length	Radius	Angle		Cwt. "A" ^②	Cwt. "AB" ^②
120' ②	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
130' ②	80'	51°	100' 1"	7,920	12,040
	90'	45°	91' 0"	6,290	9,920
	100'	37°	79' 6"	5,010	8,250
	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
140' ②	35'	77°	133' 2"	29,050	39,650
	40'	74°	131' 10"	23,850	32,870
	50'	70°	128' 7"	17,020	23,980
	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
150' ②	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
160' ②	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
170' ②	120'	35°	86' 0"	2,610	5,280
	130'	26°	68' 11"	1,890	4,350
	140'	15°	42' 3"	1,280	3,560
	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
180' ②	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
190' ②	130'	33°	89' 0"	1,630	4,090
	140'	26°	71' 3"	1,030	3,300
	150'	14°	43' 6"	---	2,620
	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

- 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 1/4" diameter extender cables or on machine equipped with no boom gantry and 1 1/2" diameter extender cables. For machine equipped with boom gantry and optional 1 1/2" diameter extender cables, a deduction of 400 pounds must be made from the lifting capacities shown. 1 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".

* 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.

**LINK-BELT
SPEEDER****LS-408 Lifting Crane and Hoe Flysheet**

GENERAL INFORMATION ONLY

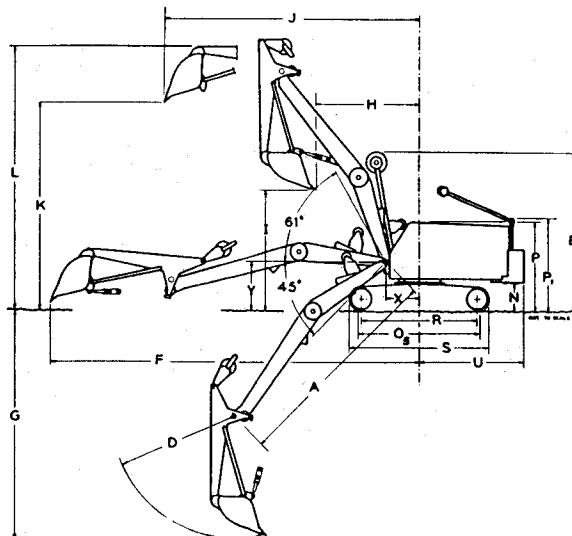
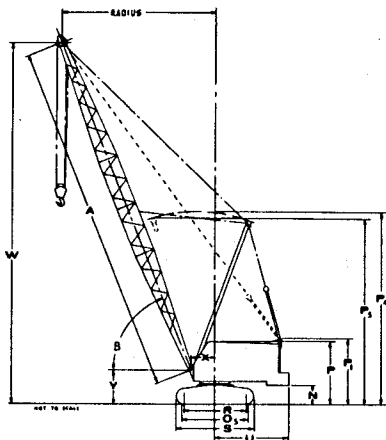
100 TON CRAWLER MOUNTED CRANE (PCSA CLASS 12-352)

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"

BRIEF SPECIFICATIONS**LIFTING CRANE, CLAMSHELL AND DRAGLINE**

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

gully, bar no. 4000 black of bucket	"A" and 50' angle boom	147,660 lbs.
Lifting Crane with counterweight "A" and 50' angle boom	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 3/4" front (crane hoist) (dragline inhaul)	35,700 lbs.	@ 147 f.p.m.
24 3/4" 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.

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 depth①	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

Approximate working weight with 38" wide track shoes, low gantry, counterweight "A"

gantry, counterweight "A"	162,300 lbs.	
Swing speed	3.09 r.p.m.	
Lagging	Line Pull	Line Speed
24 3/4" inhaul (front)	35,700 lbs.	@ 147 f.p.m.
24 3/4" hoist (rear)	34,600 lbs.	@ 147 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 6030-C) diesel engine with hydraulic coupling, 6 cylinder, 190 net h.p. at 2060 r.p.m. full load speed.

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