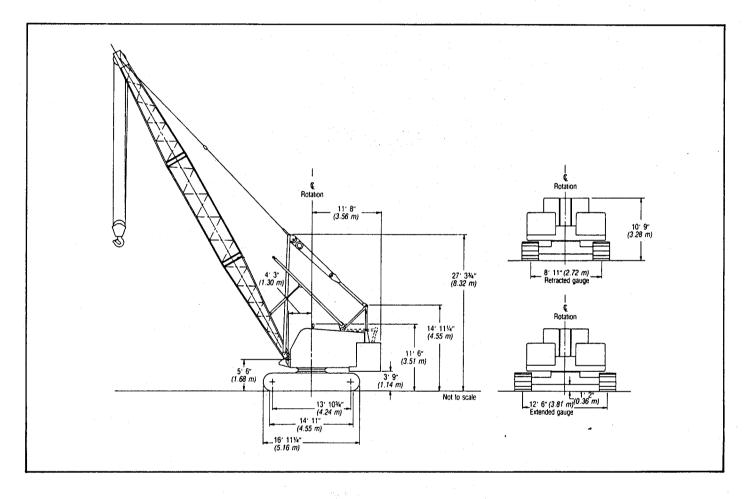


# **General Specifications**

Link-Belt® 60-ton (54.42 metric ton)

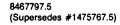
# Wire rope crawler crane





General dimensions	Feet	meters
Basic boom length — angle and tubular booms	 40′ 0″	 12.19
Overall width with 30" (0.76 m) shoes side frames extended side frames retracted	 15′ 0″ 11′ 5″	 4.57 3.48
Overall width with 36" (0.91 m) shoes  — side frames extended  — side frames retracted	 15′ 6″ 11′ 11″	4.72 3.63
Overall width less side frames, counterweight, and catwalk	 11′ 5″	 3.48
Overall width for transport, less counterweight, less side frames and catwalks, axles in line with revolving upperstructure	  9′ 10″	— 3.00

General dimensions	Feet	meters
Minimum ground clearance	1′ 17⁄8″	0.35
Width of cab — less catwalks — with catwalks	8′ 0″ 13′ 9½″	 2.44 4.19
Height, boom live mast for travel with basic 40' (12.19 m) boom horizontal	18′ 0″	  5.49
Overall height for transport  — basic machine less crawler side frames  — basic revolving upperstructure only	— 10′ 4″ 7′ 4″	3.15 2.24



## Machine working weights — approximate

Based on standard machine including GM6-71N diesel engine with Allison torque converter, 8 conical hook rollers, independent boomhoist with lowering clutch, power load lowering clutch on front and rear drum shafts, independent swing/travel, swing brake, respective counterweight with hydraulic removal device, folding catwalks along both sides, hydraulic retractable high gantry, necessary drum laggings, 30" (0.76 m) wide track shoes and the following:	Counter	weight "A"		veight "AB"	
	Founds	kilograms	Pounds	Kilograms	
Lifting Crane — includes five head sheaves, boom backstops, hoist line deflector roller, twelve-part boomhoist, pendants, 131/4" (0.34 m) front and				-	
rear smooth laggings, boom live mast, mid-point suspension pendants (as required), 680' (297.26 m) 3/4" (19 mm) hoist line, but no hook					
block, and the following:					
— 40' (12.19 m) angle boom	86,655	39 307	120,455	54 638	
— 40' (12.19 m) tubular boom	86,845	39 393	120,645	54 725	
— 160' (48.77 m) angle boom — 160' (48.77 m) tubular boom	-		128,115	58 113	
			126,345	57 310	
Dragline — includes dragline single head sheave, fairlead, necessary hoist and inhaul wire ropes, but no bucket, and the following:				Î	
— 60' (18.29 m) angle boom	87,945	39 892			
— 60' (18.29 m) tubular boom	87,770	39 812		١	
Clamshell — Includes necessary holding (hoist) and closing wire ropes, but no bucket, and the following:			Not ap	oplicable 	
— 60' (18.29 m) angle boom	88,050	39 939			
— 60' (18.29 m) tubular boom	88,875	39 860	,	ļ	

# Weight deductions for transporting — approximate

Deduct for removal of the following:	Pounds	kilograms
Crawler side frames — with 30" (0.76 m) shoes	25,450	11 544
— with 36" (0.91 m) shoes	26,800	12 156
Counterweight — "A"	12,200	5 534
— "AB"	46,000	20 866
Basic 40' (12.19 m) angle boom	5,740	2 604
Basic 40' (12.19 m) tubular boom	5,020	2 277
Basic revolving upperstructure (less counterweight) Catwalks (folding)	22,200 730	10 070 331
Live mast with machinery	1,850	839

## **General specifications**

### Mounting — crawler



Lower frame

All-welded, stress relieved, precision machined; line bored for traction shaft.



Hook roller path

Double-flanged, welded to lower frame; precision machined to accommodate hook roller mounting of revolving upperstructure on lower frame. Integral, internal swing (ring) gear with which swing pinion meshes.



Crawler side frames

Removable and retractable, leaving drive chains connected. Hydraulic cylinders assist side frame extend/retract.



Track drive sprockets

Cast steel, heat treated; one per side frame. Track/drive sprocket assembly involute splined to shaft, mounted on bronze bushings, chain driven from sprocket on outer traction shaft. Track drive sprocket lugs mesh with shoe lugs.



Track idler wheels

Cast steel, heat treated; mounted on anti-friction bearings. One track idler wheel per side frame.



Track rollers

Eleven rollers per side frame; heat treated, mounted on bronze bushings, sealed for lifetime lubrication.

# GENERAL INFORMATION ONLY





Track carrier rollers

Four cast iron track carrier rollers per side frame.



Tracks

Heat treated, self-cleaning, multiple hinged track shoes joined by two-piece full floating pins. 47 shoes per side frame. Standard; 30" (0.76 m) wide. Optional; 36" (0.91 m) wide.

Track/chain adjustment — Track drive chain adjusted by positioning axle of chain drive sprocket with jack screw and shims. Track adjusted with threaded adjusting bolt attached to track idler (wheel) axle; polyurethane shock absorber located behind track take-up bolt.



#### Independent travel

Standard. Four-piece traction shaft; joined with splined, jaw-type couplings, mounted on bronze bushings in precision bored lower frame; powered by bevel gear drive enclosed in oil within lower frame.

Power hydraulic travel/steer — Travel/steer jaw clutches hydraulically engaged, spring-applied travel/steer/digging brakes simultaneously released by inter-connecting mechanical linkage.

Non-independent travel — Optional.

Power hydraulic travel/steer — Operator must manually shift swing/travel gears in upper deck gear compartment from swing to travel position prior to actuating combination swing/travel Speed-o-Matic® power hydraulic two-shoe clutches, to control travel/steer jaw clutches.

Travel speeds — Low; .92 m.p.h. (1.48 km/hr). High; 2.1 m.p.h. (3.38 km/hr).

Gradeability - 30% permissible.

Ground contact area and ground bearing pressure — based on machine equipped with 40' (12.19 m) tubular boom.

Counterweight	Track	shoes	Ground conta	ct area	Ground bearing pressure		
	Inches	meters	Square inches	m²	P.s.i.	kPa	
"A" — 12,200 lbs.	30"	0.76	10,760	6.94	8.1	55.85	
(5 534 kg)	36"	0.91	12,910	8.33	6.8	47.09	
"AB" — 46,000 lbs.	30"	0.76	10,760	6.94	11.2	77.22	
(20 866 kg)	36"	0.91	12,910	8.33	9.4	64.81	

### Revolving upperstructure



**Frame** 

All-welded, stress relieved, precision machined; machinery side housings bolted on frame.



**Hook rollers** 

Eight; adjustable, heat treated, conical; mounted on tapered roller bearings. Two equalized pairs mounted both front and rear.



**Engines** 

Full pressure lubrication, oil filter, oil cooler, air cleaner, fuel filter, hour meter, foot and hand throttles, and optional hand throttle (lever type on swing control lever).



Fuel tank

58 gallon (220 L) capacity fuel tank equipped with fuel gauge, flame arrester, and filler pipe cap with locking eye for padlock.

Engine specifications	GM6-71N with single stage torque converter	GM4-71N with single stage torque converter
Number of cylinders Bore and stroke — inches (mm) Piston displacement — cu. in. — (cm³)	6 4½ x 5 (108 x 127) 426 (6 982)	4 4½ x 5 (108 x 127) 284 (4 654)
High idle speed — r.p.m. Engine r.p.m. @ full load speed	2,250 2,100	2,150 2,000
Net engine h.p. @ full load speed —  — (W)  Peak torque — ft. lbs. — (J)  Peak torque — r.p.m.	178 (132 735) 531 (720) 1,200	125 (93 213) 372 (504) 1,200
Electrical system Batteries	12 volt One 12-volt	12 volt One 12-volt
Clutch or power take-off	Disconnect clutch between engine and converter	Disconnect clutch between engine and converter
Transmission — Number chain wheel teeth Number engine pinion teeth	161 28	161 28

### Power train





#### Transmission

FMC quadruple roller chain enclosed in oil tight chain case; pump driven oil stream lubrication with independent oil sump. Machine-cut teeth on engine pinion and chain wheel.



#### Machinery gear train

"Full-Function" design, two-directional power available to all operating shafts; shafts mounted on anti-friction bearings in precision bored machinery side-housings. All operating functions independent of one another. Components such as drum gears, pinions, chain wheels, brake drums and clutch spiders — involute splined to shafts. Drum gear/clutch drum assemblies bolted together and mounted on shafts on anti-friction bearings. Machine-cut teeth on drum gears, pinions, spur gears and chain wheel.

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

Drive pinions — Two; heat-treated, machine-cut teeth, involute splined to shaft. Pinions mounted on shaft outside of machinery side housings.

# Principal operating functions



Control system

Speed-o-Matic® power hydraulic control system; a variable pressure system requiring no bleeding. Operating pressure transmitted to all two-shoe clutch cylinders, and other hydraulic cylinders as required. System includes constant displacement, engine driven, vane type hydraulic pump to provide flow of oil; accumulator to maintain system operating pressure, unloader valve to control pressure in accumulator, relief valve to limit maximum pressure buildup in system, full-flow filter with 40 micron disposable filter element, and variable pressure control valves to control drum clutches and other operating cylinders.



#### Independent travel

Standard. Spur gear driven; single bevel gear splined to horizontal travel shaft, single bevel gear splined to vertical travel shaft. Bevel gears enclosed in lubrication case.

Clutches — Speed-o-Matic power hydraulic two-shoe lined type; clutch drum 20" (0.51 m) diameter, 5" (0.13 m) wide.

Travel non-independent of swing — Optional. Operator must manually shift swing/travel gears in horizontal deck gear compartment from swing to travel position prior to actuating combination swing/travel Speed-o-Matic power hydraulic two-shoe clutches to engage travel/steer gear jaw clutches.

Clutches — Speed-o-Matic power hydraulic two-shoe lined type; clutch drum 20" (0.51 m) diameter, 5" (0.13 m) wide.



# Load hoisting and lowering

"Full-Function", spur gear driven drums; tandem wire rope drums (third drum optional) fixed to shafts. Speed-o-Matic power hydraulic clutch control of all load hoisting/lowering functions.



#### Load hoist drums

Front and rear main operating drums — Two-piece, removable, smooth or grooved lagging (depending on job application) bolted to brake drum and clamped to shaft. Shafts mounted in in-line bores on anti-friction bearings. Special extended length shafts required for, and supplied with, optional planetary drive units for drums.

Third operating drum — Optional; mounts forward of front operating drum. Functions as third operating drum with design and control similar to front and rear main operating drums. Two-piece, removable, 9" (0.23 m) or 11" (0.28 m) root diameter grooved lagging bolted to brake drum and clamped to shaft. Shaft mounted in in-line bores on anti-friction bearings.

Note: For dragline operation all wire rope and the lagging must be removed from third drum to avoid interference with inhaul rope (front drum). Minimum four wraps of inhaul rope must be left on anchor end of front drum to avoid inhaul

rope interference with third drum brake enclosure. For crane/clamshell operations, quantity of front drum wire rope must be limited in some cases to avoid interference between front drum rope and third drum brake enclosure.



Drum clutches

Speed-o-Matic power hydraulic two-shoe clutches for control of all principal operating functions (except engine master clutch). Internal expanding, aluminum alloy lined shoes. Clutch drums bolted to drum spur gears. Front and rear main operating drum clutches, swing clutches, travel clutches, boom hoist clutch, and boom lowering clutch are all interchangeable.

Load hoist clutches — Front and rear main operating drums. Clutch drum 20" (0.51 m) diameter, 5" (0.13 m) wide; effective lining area 212 square inches (1 368 cm²). Optional third drum clutch drum 17¼" (0.44 m) diameter, 4" (0.10 m) wide; effective lining area 118 square inches (761 cm²).

Load lowering clutches — Standard on front and rear main operating drums. Clutches identical to load hoist clutches. Not available on optional third operating drum.

Two-speed front & rear drums — Optional; gear driven, for load hoist only. Intermediate gears, installed on stub shafts in machinery side housings, convert Speed-o-Matic power hydraulic two-shoe load lowering clutches to high speed hoist clutches; includes required special extended drum shafts. Main load and jib load hoist wire rope speeds increased 100% over standard speeds. Note: Front and rear drum power load lowering clutches not available with two-speed drums. See note A.

Planetary drive units for front and rear drums — Optional. Planetary drive units available for load hoisting on either or both drums and for load lowering on rear drum only; includes special extended drum shafts. Planetary drive units mount between spur gears and two-shoe clutch drums — available for increased or decreased load hoist or lowering rope speeds. Standard two-shoe hoist and power load lowering clutches provide standard rope speeds. Planetaries controlled by external contracting band brakes through push buttons mounted on clutch control levers. See note A.

# GENERAL INFORMATION ONLY





Auxiliary two-shoe rear drum brake ---Optional. Internal expanding, Speed-o-Matic power hydraulic two-shoe brake; 20" (0.51 m) diameter, 5" (0.13 m) wide. Brake spider involute splined to shaft and brake drum bolted to anchor plate on machinery side housing. Auxiliary brake increases lining contact area by 212 square inches (1 368 cm2). Pressure on rear drum brake foot pedal applies the standard mechanical brake and the auxiliary brake simultaneously. Mechanical linkage, in standard brake mechanism, actuates control mechanism of variable pressure valve to direct hydraulic pressure to the auxiliary brake cylinder. See note (A).

Note (A): Only one item — two-speed gear driven drum, planetary drive unit, or auxiliary two-shoe rear drum brake — can be mounted on the same shaft.



Drum brakes

Front and rear main, and optional third, operating drums — external contracting band; mechanically foot pedal applied. Foot pedals equipped with latch to permit locking brakes in "on" position. Brake drums involute splined to shafts.

Front and rear main drums — Brakes 27" (0.69 m) diameter,  $4\frac{1}{2}$ " (0.11 m) face width; effective lining area 270 square inches (1 742 cm<sup>2</sup>).

Optional third drum — Brake 18" (0.46 m) diameter, 3" (0.08 m) face width; effective lining area 136 square inches (878 cm²).



Drum rotation indicators

Standard for front and rear main operating drums; mounted on control stand. Dials actuated by flexible shafts from front and rear main operating drum shafts.



Swing system

Swing independent of travel standard. Spur gear driven; single bevel gears (enclosed and running in oil) on horizontal and vertical swing shafts. Swing pinion, involute splined to vertical swing shaft, meshes with internal teeth of swing gear which is integral with hook roller path.

Swing clutches — Speed-o-Matic power hydraulic two-shoe lined type; clutch drum 20" (0.51 m) diameter, 5" (0.13 m) wide.

Swing brake — Operator controlled, external contracting band; spring applied, power hydraulically released. Brake drum splined to vertical swing shaft.

Swing lock — Mechanically controlled pawl engages teeth of swing gear which is integral with hook roller path.

Swing speed — 4 r.p.m.



Boom hoist/lowering system

Independent, spur gear driven; single wire rope drum splined to shaft. Rope drum equipped with mechanical locking pawl.



**Boomhoist drum** 

9" (0.23 m) root diamter, grooved; involute splined to shaft.



Boomhoist drum locking pawl

Operator controlled; spring applied, mechanically released. Fixes boom at desired operating angle.



Boom hoist clutch

Speed-o-Matic power hydraulic two-shoe lined type; clutch drum 20" (0.51 m) diameter, 5" (0.13 m) face width.



Boom lowering clutch

Speed-o-Matic power hydraulic two-shoe lined type; clutch drum 20" (0.51 m) diameter, 5" (0.13 m) face width.



Boom hoist/ lowering brake

External contracting band; spring applied hydraulically released as hoist clutch or lowering clutch is engaged. Brake drum involute splined to shaft; brake drum 22" (0.56 m) diameter, 3" (0.08 m) face width.

Boomhoist limiting device — Provided to restrict hoisting boom beyond recommended minimum radius; located on exterior right-hand side of operator's cab. As boom approaches minimum radius, it actuates a diverter valve, releasing the boom hoist clutch and automatically applying the spring applied boomhoist brake.



Electrical system

Battery; one 12-volt. Optional; battery lighting system, including two sealed beam automotive type adjustable headlights on front of cab roof, one interior cab light and necessary wiring. Optional; extra sealed beam automotive type adjustable headlight mounted on boom. Optional: Onan independent light plant with single cylinder, four-cycle, air-cooled, diesel engine with remote electric starting; 3,000 watt, 120-volt, three wire single phase, 60 cycles A.C.; including wiring in conduit, three interior cab lights, trouble lamp with cord and two 300 watt adjustable floodlights on front of cab roof. Additional cab-mounted and boom-mounted floodlights available. Note: Independent light plant cannot be furnished in conjunction with third drum or magnet generator.



Operator's cab

Full-vision, equipped with safety glass panels. Operator's door is hinged. Front window rolls up to overhead storage area. Standard equipment includes dry chemical fire extinguisher, machinery guards, and bubble-type level. Steel window covers, sound reduction material, electric windshield wiper, cab heater and defroster fan are optional.



Machinery cab

Hinged doors for machinery access, roof-top access ladder, skid-resistant finish on roof, and electric horn warning device.



Catwalks

Standard along both sides. Equipped with hand railings; hinged to provide vertical folding along cab sides to reduce overall width for transporting.



Gantry

Mounted to revolving upperstructure frame to support boom suspension system. Retractable; used with all booms. Gantry raised or lowered by hydraulic cylinder which is also used for counterweight lowering or raising.





Gantry bail

Contains five sheaves mounted on anti-friction bearings for 12-part boom hoist.



#### Counterweight

Removable and held in position by "T"-bolts. Counterweight "A", 12,000 lbs. (5 534 kg); used for lifting crane, dragline and clamshell service. Counterweight "AB", 46,000 lbs. (20 866 kg); used for lifting crane service only, two-piece to permit counterweight reduction to "A".

Counterweight removal device — Power hydraulic cylinder suspended between high gantry backstays to raise or lower counterweight.

### Booms and jibs



**Tubular boom** 

Two-piece, 40' (12.19 m) basic length; 54" (1.37 m) wide, 44" (1.12 m) deep at centerline of connections. Alloy steel, round tubular main chords 3" (76 mm) outside diameter. Maximum boom length 160' (48.77 m) with live mast.

Boom base section — 20' (6.10 m) long; boomfeet 2%" (60 mm) wide on 54" (1.37 m) centers.

Boom extensions — Available in 10' (3.05 m), 15' (4.57 m), 20' (6.10 m) and 30' (9.14 m) lengths with appropriate length pendants.

Boom connections — In-line pin connected.

Boom top section — Open throat; 20' (6.10 m) long.

Boompoint machinery — Five 18" (0.46 m) root diameter head sheaves mounted on anti-friction bearings.



#### Angle boom

Two piece, 40' (12.19 m) basic length; 42'' x 42'' (1.07 x 1.07 m) wide at connections. Main chord angles high strength, low alloy steel, 4'' x 4'' x 3'' (102 x 102 x 10 mm) for base section; 4'' x 4'' x 5/16'' (102 x 102 x 8 mm) for top section and extensions. Maximum boom length 160' (48.77 m) with live mast.

Boom base section — 20' (6.10 m) long; boomfeet 2%" (60 mm) wide on 54" (1.37 m) centers.

Boom extensions — Available in 10' (3.05 m), 20' (6.10 m) and 30' (9.14 m) lengths with appropriate length pendants.

Boom connections — In-line pin connected.

Boom top section — Open throat; 20' (6.10 m) long.

Boompoint machinery — Five 18" (0.46 m) root diameter head sheaves mounted on anti-friction bearings. Two or three sheaves are optional. Single head sheave available for dragline operation.



Jib

Tubular; two piece, 20' (6.10 m) basic length; 30" (0.76 m) wide, 24" (0.61 m) deep at connections. Main tubular chords alloy steel, 11/2" (38 mm) outside diameter.

Base section — 10' (3.05 m) long; mounted to bracket on top section of boom.

Jib extensions — Available in 10' (3.05 m) lengths.

Jib connections — In-line pin connected.

Tip section — 10' (3.05 m) long; equipped with 1514" (0.39 m) root diameter sheave mounted on anti-friction bearings.



Jib Mast

10' (3.05 m) high, mounted on jib base section. Two deflector sheaves, mounted on anti-friction bearings, mounted within mast to guide whipline. Two equalizer sheaves mounted on top of mast — one for jib frontstay line, one for jib backstay line.

Jib staylines — Front staylines are attached between top of jib mast and peak of jib. Appropriate length pendants are added to front staylines as jib length increases. Rear staylines are attached between top of jib mast and base of boom top section. Adjustment of rear stayline length determines jib angle to boom.

Jib stops — Telescoping type; pinned from jib mast to boom top section and from jib mast to jib base section.

# Items applicable to both booms



**Boom stops** 

Dual tubular, retractrable type with spring-cushioned bumpers. Main members raised or lowered by telescoping strut pin connected to lower side of each main member, and to top side of boom base section.



#### **Boomhoist bridle**

Serves as connection between boom pendants and boomhoist wire rope reeving. Equipped with 12¼" (0.31 m) root diameter sheaves mounted on anti-friction bearings; 6 sheaves required for standard 12-part boomhoist reeving.

Spreader bar — All welded high strength, steel plate construction; mounts to boom live mast head shaft. Spreads pendants for clearance with hoist ropes. Required on all boom lengths.

Boom midpoint suspension pendants — Required for tubular and angle boom lengths exceeding 140' (42.67 m). Connected to boom 80' (24.38 m) from boomfeet.



**Boom live mast** 

20' 6" (6.25 m) long from center of head shaft to mounting pin; mounts on front of frame near boomfeet. Supports boomhoist bridle and boom midpoint suspension pendants. Required for angle boom lengths exceeding 100' (30.48 m) and tubular boom lengths exceeding 120' (36.58 m) when used with "A" counterweight. Also required for all angle or tubular boom lengths when used with "AB" counterweight. Mast can be used as short boom for machine assembly or disassembly, but is not intended for general crane service. Mast equipped with 9½" (0.24 m) root diameter sheaves.

Live mast stops — Welded to inside of boom stops; needed when using live mast as short boom.



Boom carrying equipment — For carrying boom with boom live mast at approximate 11′ 10½" (3.62 m) overall clearance height from ground, when boom is horizontal. Tubular booms 40′ (12.19 m) through 110′ (33.53 m) and angle boom 40′ (12.19 m) through 90′ (27.43 m), may be carried with this reduced boom live mast height. Booms must not be used to handle loads when in this position. Boom suspension system includes two links connecting pendants to mast spreader bar. Links can be "scissored" to shorten total pendant length, pulling the mast to reduced overall height.

**Boompoint sheave guards** — Fabricated round steel guards for standard 5-sheave boompoint. Roller type guards for two or three boompoint sheaves and for optional single boompoint sheave for dragline.

Hoist line deflector rollers — To deflect main drum load hoist line over top side of boom; also required when third drum load hoist line passes over top side of boom. Rollers mounted on anti-friction bearings.

— Angle and tubular booms. Boom lengths through 100′ (30.48 m) require one roller; lengths through 110′ (33.53 m) require two rollers; lengths through 130′ (39.62 m) require three rollers; lengths through 150′ (45.72 m) require four rollers; lengths through 160′ (48.77 m) require five rollers. When using third drum rope over boom head, roller requirements are increased by one on boom lengths of 50′ (15.24 m) through 160′ (48.77 m).

### Auxiliary equipment



Boom angle indicator

Standard with either crane boom. Pendulum type mounted on left side of boom base section.



**Fairlead** 

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



**Tagline** 

Optional; spring wound drum type mounted on crane boom. Rud-o-Matic model 648, single barrel with 20" (0.51 m) reel for 60' (18.29 m) boom using 1 yd. (0.76 m³) to 1-½ yd. (1.15 m³) clamshell buckets. Also available — Morin Tagmaster, Model BR.







# Link-Belt<sub>®</sub> LS-118 lifting crane capacities

PCSA Class 10-232 Refer to Notes page 3

Boom — tubular; 44" x 54" (1.11 m x 1.37 m) with open throat top section, 11/4" (31.75 mm) dia. boom pendants, hydraulic retractable high gantry, boom live mast, and with boom midpoint suspension pendants (as required). Crawler — 12' 6" (3.81 m) gauge extended, 8' 11" (2.72 m) retracted; 17' 0" (5.18 m) Counterweights — 12,200# (5.534 kg) ctwt. "A" or 46,000# (20,866 kg) ctwt. "A" over-all length.

ctwt. "A" or 46,000# (20,866 kg) ctwt. "AB".

		Вс	oom				Side Frame	es Extended			Frames racted
	Ra	adius	Angie	Boom Heigh		Ctw	t. "A"	Ctwt.	"AB"	<u> </u>	'A" Only
Length	Feet	Meters	Degree	Feet	Meters	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms
	10 ~	3.05	81.7	45′ 1″	13.74	98.900*	44.861*	120,000°	54,432*	65,700	29,802
	11	3.35	80.2	45′ 0″	13.72	91,000*	41,278*	110,700*	50,214*	55,200	25,039
	12	3.66	78.8	44' 9"	13.64	80,100	36,333	102,600	46,539*	47,500	21,546
	13	3.96	77.3	44′ 7″	13.59	67,800	30,754	95,500*	43,319*	41,700	18,915
40′	14	4.27	75.8	44′ 3″	13.49	58,700	26,626	89,400*	40.552*	37,000	16,783
(12.19 m)	15	4.57	74.4	44' 1"	13.44	51,700	23,451	83,900*	38,057*	33,200	15,060
	20	6.10	66.7	42' 3"	12.88	31,900	14,470	61,200	27,760	21,600	9,798
	25	7.62	58.7	39' 8"	12.09	22,600	10,251	44,200	20,049	15,700	7,122
	30	9.14	49.9	36′ 1″	11.00	17,200	7,802	34,200	15.513	12,000	5,443
	35	10.67	39.7	31′ 1″	9.47	13.700	6,214	27,800	12,610	9,600	4,355
	40	12.19	26.5	23′ 4″	7.11	11,200	5,080	23,200	10.524	7,800	
	12			<del></del>	<del></del>	H		<del></del>		<del>  </del>	3,538
		3.66 3.96	81.0	54′ 10″	16.71	80,400	36,469	102,500*	46,494*	47,700	21,637
	13 14		79.9	54′ 9″	16.69	68,000	30,845	95,400*	43,273*	41,800	18,960
		4.27	78.7	54' 7"	16.64	58,900	26,717	89,200*	40,461*	37,100	16,829
50′	15	4.57	77.5	54′ 4″	16.56	51,800	23,496	83,800*	38,012*	33,300	15,105
	20	6.10	71.6	53′ 0″	16.15	32,000	14,515	61,300	27,806	21,700	9,843
(15.24 m)	25	7.62	65.4	51' 0"	15.54	22,700	10,297	44,200	20,049	15,700	7,122
	30	9.14	58.9	48′ 4″	14.73	17,300	7,847	34,300	15,558	12,100	5,489
	35	10.67	52.0	45′ 0″	13.72	13,800	6,260	27,800	12,610	9,600	4,355
	40 50	12.19	44.3	40′ 6″	12.34	11,300	5,126	23,200	10,524	7,800	3,538
	50	15.24	23.7	25′ 7″	7.80	8,000	3,629	17,200	7,802	5,400	2,449
	15	4.57	79.6	64' 7"	19.68	51,900	23.542	83.600*	37.921*	33,300	15,105
-	20	6.10	74.7	63′ 4″	19.30	32,000	14,515	61:400	27,851	21,600	9,798
	25	7.62	69.7	61′ 9″	18.82	22,700	10,297	44,200	20,049	15,700	7,122
60′	30	9.14	64.5	59′ 8″	18.19	17,300	7,847	34,300	15.558	12,000	5,443
(18.29 m)	35	10.67	59.1	57' 1"	17.40	13,700	6,214	27,800	12,610	9,500	4,309
,	40	12.19	53.4	53′ 8″	16.36	11,200	5,080	23,200	10,524	7,800	3,538
	50	15.24	40.3	44' 3"	13.49	8,000	3,629	17,200	7.802	5.400	2,449
	60	18.29	21.6	25' 7"	7.80	5,900	2,676	13,400	6,078	3,800	1,724
	20	6.10	77.0	73' 9"	22.48	<del> </del>	<del></del>	<del></del>	:	<del> </del>	· · · · · · · · · · · · · · · · · · ·
	25	7.62	72.7	72' 4"	22.46	31,900	14,470	61,300	27,806	21,600	9,798
	30	9.14	68.4	70' 7"		22,600	10,251	44,200	20,049	15,600	7,076
70'	35	10.67	63.9	68' 4"	21.51	17,200	7,802	34,200	15,513	11,900	5,398
(21.34 m)	40	12.19	59.3	65' 8"	20.83	13,700	6,214	27,700	12,565	9,500	4,309
(21.3÷ III)	50	15.24	49.1		20.02	11,200	5,080	23,100	10,478	7,700	3,493
	60	18.29		58′ 8″ 47′ 9″	17.88	7,900	3,583	17,100	7,757	5,300	2,404
	70	21.34	37.2 20.0		14.55	5,800	2,631	13,300	6,033	3,800	1,724
				29′ 6″	8.99	4,400	1,996	10,700	4,854	2,700	1.225
	20	6.10	78.6	84′ 0″	25.60	31,900	14,470	61,300	27,806	21,500	9.752
	25	7.62	74.9	-82′ 9″	25.22	22,500	10,206	44,100	20,004	15,500	7,031
	30	9.14	71.2	81′ 3″	24.77	17,100	7,757	34,100	15,468	11,800	5,352
80′	35	10.67	67.4	79′ 4″	24.18	13,600	6,169	27,600	12,519	9,300	4,218
(24.38 m)	40	12.19	63.4	77′ 1″	23.49	11,100	5,035	23,000	10,433	7,600	3,447
	50	15.24	55.1	71′ 2″	21.69	7,800	3,538	17,000	7,711	5,200	2,359
	60	18.29	45.8	63′ 10″	19.46	5,700	2,586	13,200	5,988	3,700	1,678
	70	21.34	34.7	51′ 1″	15.57	4,300	1,950	10,600	4,808	2,600	1,179
	80	24.38	18.7	31′ 2″	9.50	3,200	1,452	8,700	3,946	1,800	816
	20	6.10	79.9	94' 2"	28.70	31,800	14,424	61,200	27,760	21,400	9,707
	25	7.62	76.6	93′ 1″	28.37	22,400	10,161	44,000	19,958	15,400	6,985
	30	9.14	73.3	91′ 9″	27.97	17,000	7,711	34,000	15,422	11,700	5,307
	35	10.67	70.0	90′ 1″	27.46	13,500	6,124	27,500	12,474	9,200	4,173
90 <sup>,</sup>	40	12.19	66.6	88′ 1″	26.85	11,000	4,990	22,900			
(27.43 m)	50	15.24	59.4	83′ 0″	25.30	7,700		16,900	10,387	7,400	3,357
(=1.70 111)	60	18.29	51.7	76′ 2″	23.22	5,600	3,493		7,666	5,100	2,313
l	70	21.34	43.0	67′ 0″	20.42	4,200	2,540	13,100	5,942	3,500	1,588
	80	24.38	32.6	54′ 1″	16.48		1,905	10,500	4,763	2,500	1,134
	90			32' 9"		3,100	1,406	8,600	3,901	1,700	771
	<b>5</b> ∪	27.43	17.6	ა∠ ყ <sup>ო</sup>	9.98	2,300	1,043	7,100	3,221	1,000	454

 $^{\mbox{\scriptsize $0$}}\mbox{\scriptsize Measured from center of boom head sheave to ground.}$ 

(continued)

GENERAL INFORMATION ONLY

# LS-118 lifting crane capacities

Refer to Notes page 3

	<del></del>	Во	om	· · · · · · · · · · · · · · · · · · ·			Side Frame	s Extended	į	Side Frames Retracted	
	Ra	adius	Angle	Boom Heigh		Ctw	L "A"	Ctwt.	"AB"	Ctwt. "	A" Only
Length	Feet	Meters	Degree	Feet	Meters	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms
100' (30.48 m)	25 30 35 40 50 60 70 80 90	7.62 9.14 10.67 12.19 15.24 18.29 21.34 24.38 27.43 30.48	78.0 75.1 72.1 69.0 62.7 56.1 48.9 40.7 30.9 16.7	103' 4" 102' 2" 100' 8" 98' 10" 95' 6" 88' 7" 80' 10" 70' 9" 56' 10" 34' 3"	31.49 31.14 30.68 30.12 29.11 27.00 24.64 21.56 17.32 10.44	22,300 16,900 13,300 10,800 7,500 5,500 4,000 3,000 2,200 1,500	10,115 7,666 6,033 4,899 3,402 2,495 1,814 1,361 998 680	43,900 33,900 27,400 22,800 16,800 13,000 10,400 8,500 7,000 5,900	19,913 15,377 12,429 10,342 7,620 5,897 4,717 3,856 3,175 2,676	15,200 11,600 9,100 7,300 4,900 3,400 2,300 1,500	6,895 5,262 4,128 3,311 2,223 1,542 1,043 680
110′ (33.53 m)	25 30 35 40 50 60 70 80 90 100	7.62 9.14 10.67 12.19 15.24 18.29 21.34 24.38 27.43 30.48 33.53	79.1 76.4 73.7 71.0 65.4 59.5 53.3 46.4 38.7 29.4 15.9	113' 7" 112' 6" 111' 2" 109' 7" 105' 7" 100' 4" 93' 8" 85' 3" 74' 4" 59' 7" 35' 8"	34.62 34.29 33.88 33.40 32.18 30.58 28.55 25.98 22.66 18.16 10.87	22,200 16,800 13,200 10,700 7,400 5,300 3,900 2,900 2,100 1,400	10,070 7,620 5,988 4,854 3,357 2,404 1,769 1,315 953 635	43,800 33,800 27,300 22,700 16,600 12,900 10,200 8,300 6,900 5,700 4,800	19.868 15.332 12.383 10.297 7,530 5,851 4,627 3,765 3,130 2,586 2,177	15,100 11,400 9,000 7,200 4,800 3,200 2,200 1,400	6,849 5,171 4,082 3,266 2,177 1,452 998 635
120' (36.58 m)	30 35 40 50 60 70 80 90 100 110 120	9.14 10.67 12.19 15.24 18.29 21.34 24.38 27.43 30.48 33.53 36.58	77.6 75.1 72.6 67.6 62.3 56.8 50.8 44.4 37.0 28.2 15.2	122' 9" 121' 6" 120' 1" 116' 6" 111' 9" 105' 10" 98' 7" 89' 6" 77' 9" 62' 2" 37' 1"	37.41 37.03 36.60 35.51 34.06 32.26 30.05 27.28 23.70 18.95 11.30	16,600 13,100 10,600 7,200 5,200 3,800 2,700 1,900 1,300	7,530 5,942 4,808 3,266 2,359 1,724 1,225 862 590	33,700 27,100 22,500 16,500 12,700 10,100 8,200 6,700 5,600 4,700 3,900	15,286 12,293 10,206 7,484 5,761 4,581 3,720 3,039 2,540 2,132 1,769	11,300 8,800 7,000 4,600 3,100 2,000 1,200 — —	5,126 3,992 3,175 2,087 1,406 907 544 —
130 <sup>7</sup> (39.62 m)	30 35 40 50 60 70 80 90 100 110 120	9.14 10.67 12.19 15.24 18.29 21.34 24.38 27.43 30.48 33.53 36.58 39.62	78.6 76.3 74.0 69.4 64.6 59.6 54.3 48.7 42.5 35.5 27.0	133' 0" 132' 10" 130' 6" 127' 2" 123' 0" 117' 8" 111' 2" 103' 2" 93' 4" 81' 1" 64' 8" 38' 4"	40.54 40.49 39.78 38.76 37.49 35.87 33.88 31.45 28.45 24.71 19.71 11.68			33,500 27,000 22,400 16,400 12,600 9,900 8,000 6,600 5,400 4,500 3,700 3,100	15,196 12,247 10,161 7,439 5,715 4,491 3,629 2,994 2,449 2,041 1,678 1,406		
140′ (42.67 m)	30 35 40 50 60 70 80 90 100 110 120 130 140	9.14 10.67 12.19 15.24 18.29 21.34 24.38 27.43 30.48 33.53 36.58 39.62 42.67	79.4 77.3 75.2 70.9 66.5 62.0 57.2 52.2 46.8 40.9 34.2 26.0 14.1	143' 2" 142' 1" 140' 10" 137' 10" 134' 0" 129' 1" 123' 3" 116' 2" 107' 8" 97' 3" 84' 3" 67' 0" 39' 7"	43.64 43.31 42.92 42.01 40.84 39.34 37.57 35.41 32.82 29.64 25.68 20.42 12.06	Not Ap	plicable	33,400 15,150 26,900 12,202 22,300 10,115 16,200 7,348 12,400 5,625 9,800 4,445	Not Ap	plicable	
150′ (45.72 m)	35 40 50 60 70 80 90 100 110 120 130 140	10.67 12.19 15.24 18.29 21.34 24.38 27.43 30.48 33.53 36.58 39.62 42.67 45.72	78.2 76.2 72.2 68.2 64.0 59.7 55.1 50.3 45.1 39.5 33.0 25.1 13.6	152' 4" 151' 2" 148' 4" 144' 9" 140' 4" 135' 0" 128' 7" 121' 0" 111' 10" 100' 10" 87' 3" 69' 3" 40' 9"	46.43 46.08 45.21 44.12 42.77 41.15 39.19 36.88 34.09 30.73 26.59 21.11 12.42			26,700 22,100 16,000 12,200 9,600 7,700 6,300 5,100 4,200 3,400 2,800 2,200 1,700	12,111 10,025 7,258 5,534 4,355 3,493 2,858 2,313 1,905 1,542 1,270 998 771		

①Measured from center of boom head sheave to ground.

(continued)

### LS-118 lifting crane capacities

Refer to Note:

Boom						Side Frame	s Extended							
Radius		Angle	Boom Point Height <sup>©</sup>		Ctwt	Ctwt. "A"		Ctwt. "AB"		AT DES				
Feet	Meters	Degree	Feet	Meters	Pounds	Kilograms	Pounds	Kilograms	Pounds	Political Process				
35 40	10.67 12.19	78.9 77.1	162' 7" 161' 6"	49.55 49.23		İ	1				26,600 22,200	12,066 10,070	*21	
50	15.24	73.4	158′ 10″	48.41 47.40		15,900 12,100	7,212 5,489		,					
70	21.34	65.7	151′ 4″	46.13			9,500 7,600	4,309 3.447						
90	27.43	57.6	140′ 7″	42.85	Not Ap	l plicable	6,100 5,000	2,767 2,268	Not Ap	CHCHRAN				
110	33.53	48.6	125' 7"	38.28			4,000 3,300	1,814 1,497		-,				
130	39.62	38.2	104' 4"	31.80			2,600	1,179						
150	45.72	24.3	71′ 6″	21.79			1,600	726						
	70 80 90 100 110 120 130 140	Radius           Feet         Meters           35         10.67           40         12.19           50         15.24           60         18.29           70         21.34           80         24.38           90         27.43           100         30.48           110         33.53           120         36.58           130         39.62           140         42.67           150         45.72	Radius         Angle           Feet         Meters         Degree           35         10.67         78.9           40         12.19         77.1           50         15.24         73.4           60         18.29         69.6           70         21.34         65.7           80         24.38         61.7           90         27.43         57.6           100         30.48         53.2           110         33.53         48.6           120         36.58         43.6           130         39.62         38.2           140         42.67         31.9           150         45.72         24.3	Radius         Angle         Boom Height Height           Feet         Meters         Degree         Feet           35         10.67         78.9         162' 7'           40         12.19         77.1         161' 6'           50         15.24         73.4         158' 10'           60         18.29         69.6         155' 6'           70         21.34         65.7         151' 4'           80         24.38         61.7         146' 6'           90         27.43         57.6         140' 7'           100         30.48         53.2         133' 8'           110         33.53         48.6         125' 7''           120         36.58         43.6         116' 0''           130         39.62         38.2         104' 4''           140         42.67         31.9         90' 2'           150         45.72         24.3         71' 6''	Radius         Angle         Boom Point Height ⊕           Feet         Meters         Degree         Feet         Meters           35         10.67         78.9         162′ 7″         49.55           40         12.19         77.1         161′ 6″         49.23           50         15.24         73.4         158′ 10″         48.41           60         18.29         69.6         155′ 6″         47.40           70         21.34         65.7         151′ 4″         46.13           80         24.38         61.7         146′ 6″         44.65           90         27.43         57.6         140′ 7″         42.85           100         30.48         53.2         133′ 8″         40.74           110         33.53         48.6         125′ 7″         38.28           120         36.58         43.6         116′ 0″         35.36           130         39.62         38.2         104′ 4″         31.80           140         42.67         31.9         90′ 2″         27.48           150         45.72         24.3         71′ 6″         21.79	Radius         Angle         Boom Point Height ⊕         Ctwt           Feet         Meters         Degree         Feet         Meters         Pounds           35         10.67         78.9         162' 7"         49.55         49.23           50         15.24         77.1         161' 6"         49.23           50         15.24         73.4         158' 10"         48.41           60         18.29         69.6         155' 6"         47.40           70         21.34         65.7         151' 4"         46.13           80         24.38         61.7         146' 6"         44.65           90         27.43         57.6         140' 7"         42.85           100         30.48         53.2         133' 8"         40.74           110         33.53         48.6         125' 7"         38.28           120         36.58         43.6         116' 0"         35.36           130         39.62         38.2         104' 4"         31.80           140         42.67         31.9         90' 2"         27.48           150         45.72         24.3         71' 6"         21.79	Radius         Angle         Boom Point Height ⊕         Ctwt. "A"           Feet         Meters         Pounds         Kilograms           35         10.67         78.9         162′ 7°         49.55           40         12.19         77.1         161′ 6″         49.23           50         15.24         73.4         158′ 10″         48.41           60         18.29         69.6         155′ 6°         47.40           70         21.34         65.7         151′ 4″         46.13           80         24.38         61.7         146′ 6″         44.65           90         27.43         57.6         140′ 7″         42.85         Not Applicable           110         33.53         48.6         125′ 7″         38.28         125′ 7″         38.28           120         36.58         43.6         116′ 0″         35.36         13.8         126′ 4″         31.80         126′ 4″         27.48         140′ 4″         27.48         150′ 45.72         24.3         71′ 6″         21.79         21.79         21.79         21.79         21.79         21.79         21.79         21.79         21.79         21.79         21.79         21.79         21.79 <td>Radius         Angle         Boom Point Height ⊕         Ctwl. "A"         Ctwl. "A"         Ctwl. "A"           35         10.67         78.9         162′ 7"         49.55         26,600           40         12.19         77.1         161′ 6"         49.23         22,200           50         15.24         73.4         158′ 10"         48.41         15,900           60         18.29         69.6         155′ 6"         47.40         12,100           70         21.34         65.7         151′ 4"         46.13         9,500           80         24.38         61.7         146′ 6"         44.65         7,600           90         27.43         57.6         140′ 7"         42.85         Not Applicable         5,000           110         33.53         48.6         125′ 7"         38.28         4,000         3,300           120         36.58         43.6         116′ 0"         35.36         3,300         2,600           130         39.62         38.2         104′ 4"         31.80         2,600         2,100           150         45.72         24.3         71′ 6"         21.79         1,600</td> <td>Radius         Angle         Boom Point Height ⊕         Ctwt. "A"         Ctwt. "AB"           Feet         Meters         Degree         Feet         Meters         Pounds         Kilograms           35         10.67         78.9         162′ 7"         49.55         26,600         12,066           40         12.19         77.1         161′ 6"         49.23         22,200         10,070           50         15.24         73.4         158′ 10"         48.41         15,900         7,212           60         18.29         69.6         155′ 6"         47.40         12,100         5,489           70         21.34         65.7         151′ 4"         46.13         9,500         4,309           80         24.38         61.7         146′ 6"         44.65         7,600         3,447           90         27.43         57.6         140′ 7"         42.85         Not Applicable         5,000         2,268           110         33.53         48.6         125′ 7"         38.28         4,000         1,814           120         36.58         43.6         116′ 0"         35.36         3,300         1,497           130         39.62</td> <td>Radius         Angle         Boom Point Height ⊕         Ctwt. "A"         Ctwt. "AB"         Ctwt. "AB"           Feet         Meters         Degree         Feet         Meters         Pounds         Kilograms         Pounds         Kilograms         Pounds           35         10.67         78.9         162′ 7"         49.55         26,600         12.066         12.066           40         12.19         77.1         161′ 6"         49.23         22.200         10,070         7.212           50         15.24         73.4         158′ 10"         48.41         15,900         7.212         15,900         7.212         12,100         5,489         9.500         4,309         7.600         3,447         6,100         2,767         9,500         4,309         7,600         3,447         6,100         2,767         6,100         2,767         100         30,48         53.2         133′ 8"         40,74         40,74         5,000         2,268         4,000         1,814         1,497         1,497         3,300         1,497         2,600         1,179         2,600         1,179         2,600         1,179         2,600         1,179         2,600         1,179         2,600         1,179</td>	Radius         Angle         Boom Point Height ⊕         Ctwl. "A"         Ctwl. "A"         Ctwl. "A"           35         10.67         78.9         162′ 7"         49.55         26,600           40         12.19         77.1         161′ 6"         49.23         22,200           50         15.24         73.4         158′ 10"         48.41         15,900           60         18.29         69.6         155′ 6"         47.40         12,100           70         21.34         65.7         151′ 4"         46.13         9,500           80         24.38         61.7         146′ 6"         44.65         7,600           90         27.43         57.6         140′ 7"         42.85         Not Applicable         5,000           110         33.53         48.6         125′ 7"         38.28         4,000         3,300           120         36.58         43.6         116′ 0"         35.36         3,300         2,600           130         39.62         38.2         104′ 4"         31.80         2,600         2,100           150         45.72         24.3         71′ 6"         21.79         1,600	Radius         Angle         Boom Point Height ⊕         Ctwt. "A"         Ctwt. "AB"           Feet         Meters         Degree         Feet         Meters         Pounds         Kilograms           35         10.67         78.9         162′ 7"         49.55         26,600         12,066           40         12.19         77.1         161′ 6"         49.23         22,200         10,070           50         15.24         73.4         158′ 10"         48.41         15,900         7,212           60         18.29         69.6         155′ 6"         47.40         12,100         5,489           70         21.34         65.7         151′ 4"         46.13         9,500         4,309           80         24.38         61.7         146′ 6"         44.65         7,600         3,447           90         27.43         57.6         140′ 7"         42.85         Not Applicable         5,000         2,268           110         33.53         48.6         125′ 7"         38.28         4,000         1,814           120         36.58         43.6         116′ 0"         35.36         3,300         1,497           130         39.62	Radius         Angle         Boom Point Height ⊕         Ctwt. "A"         Ctwt. "AB"         Ctwt. "AB"           Feet         Meters         Degree         Feet         Meters         Pounds         Kilograms         Pounds         Kilograms         Pounds           35         10.67         78.9         162′ 7"         49.55         26,600         12.066         12.066           40         12.19         77.1         161′ 6"         49.23         22.200         10,070         7.212           50         15.24         73.4         158′ 10"         48.41         15,900         7.212         15,900         7.212         12,100         5,489         9.500         4,309         7.600         3,447         6,100         2,767         9,500         4,309         7,600         3,447         6,100         2,767         6,100         2,767         100         30,48         53.2         133′ 8"         40,74         40,74         5,000         2,268         4,000         1,814         1,497         1,497         3,300         1,497         2,600         1,179         2,600         1,179         2,600         1,179         2,600         1,179         2,600         1,179         2,600         1,179				

OMeasured from center of boom head sheave to ground.

#### Notes — lifting crane capacities

- The capacities included in this chart are the maximum allowable, and are based on machine standing level on firm supporting surface under ideal job conditions.
- Capacities are based on 75% of minimum tipping loads unless marked with an asterisk (\*).
  - Asterisk indicates capacities based on factors other than those which would cause a tipping condition.
- Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, and operating speeds.
   Operator must reduce load ratings to take such conditions into account. Deduction from rated capacities must be made for weight of hook block, weighted ball/hook, sling, spreader bar, or other suspended gear.
- 4. 44" x 54" (1.54 m x 1.37 m) Tubular Boom With Open Throat Top Section for

lifting 120,000# (54,432 kg), 8-part load hoist line (¾" — 19.05 mm, Type "N" wire rope) is required. Check parts of line required for all capacities.

- Hydraulic retractable high gantry must be fixed in raised position for all capacities on this chart.
- 6. The 20' 6" (6.25 m) boom live mast must be used for all capacities on this chart.
- When using live mast as short boom, maximum lifting capacity of the mast is 36,000# (16,330 kg) at minimum 10' (3.05 m) radius.
  - a. For lifting 36,000# (16,330 kg) on boom live mast with ¾" (19.05 mm) dia. wire rope, 3 parts of ¾" (19.05 mm) dia. Type "N" wire rope are required.

Note: Use of live mast as short boom is intended for machine assembly or disassembly only. It is not to be used for general crane service.

- Use of boom midpoint suspension pendants required for boom 150". (45.72 m) and 160" (48.77 m) tong.
- 9. Least stable rated position is over the
- Main boom length must not exceed (48.77 m).
- 11. Maximum boom/jib combination permitted 160' (48.77 m) boom phase (12.19 m) jib, or 150' (45.72 m) boom 50' (15.24 m) jib. Maximum jib length permitted 50' (15.24 m).
- 12. To determine capacities for intermed boom lengths not shown on this chart the capacity for the next longer boom length shown for actual angle or radiat which boom/load are being worked.
- These capacities apply only to the machine as originally manufactured normally equipped by FMC Corporation Crane and Excavator Division.

**Boom** — angle: 42" x 42" (1.06 x 1.06 m) with open throat.

Jib — tubular; 30" x 24" (.76 x .61 m).

Crawler — 12' 6" (3.81 m) gauge extended 8' 11" (2.72 m) retracted; 17' 0" (5.18 m) over-all length.

# Maximum boom and boom/jib<sup>1</sup> machine can lift off ground unassisted — without load.

		Cou	interweight '	" <b>A"</b>		Cou	nterweight "	
	Boom		Boo	m + Jib	Boom		Boom + Jlb	
	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters
Over Ends Side frames extended Side frames retracted	120 120	36.58 36.58	100 + 50 100 + 50	30.48 + 15.24 30.48 + 15.24	160 —	48.77 —	160 + 40	48.77 + 12.19
Over Sides Side frames extended Side frames retracted	120 100	36.58 30.48	90 + 50 70 + 50	27.43 + 15.24 21.34 + 15.24	160 —	48.77	150 + 50 —	45.72 + <b>15.2</b>

-DHook block on ground.



Maximum boom and boom/jib machine can lift off ground and travel<sup>②</sup> with boom horizontal<sup>③</sup> — without load.

•		Cou	ınterweight	"A"	Counterweight "AB"				
	Boom		Boom + Jib		Boom		Boom + Jib		
	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	
Over Ends									
Side frames extended	90	27.43	70 + 50	21.34 + 15.24	140	42.67	110 + 50	33.53 + 15.24	
Side frames retracted	90	27.43	70 + 50	21.34 + 15.24	<b>I</b> –	<u> </u>		-	
Over Sides					<b>.</b>				
Side frames extended	80	24.38	60 + 50	18.29 + 15.24	140	42.67	110 + 50	33.53 + 15.24	
Side frames retracted	70	21.34	50 + 50	15.24 + 15.24	<b> </b>	<u> </u>	_	<u> </u>	

Based on firm, level supporting surface and minimum travel speed.

Boom and boom/jib combinations include 60-ton (54.4 metric ton) hook block and 15-ton (13.6 metric ton) ball with swivel hook suspended beneath main boom and jib headshafts.

### LS-118 jib capacities

Refer to Notes below.

Boom — tubular; 44" x 54" (1.11 m x 1.37 m) with open throat top section, 11/4" (31.75 mm) dia. boom pendants, hydraulic retractable high gantry, boom live mast, and with boom midpoint suspension pendants (as required).

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Crawler - 12' 6" (3.81 m) gauge extended 8' 11" (2.72 m) retracted; 17' 0" (5.18 m) over-all length.

Counterweight — 12,200# (5,534 kg) ctwt. "A" or 46,000# (20,866 kg) ctwt. "AB".

**Jib** — tubular; 30" (.76 m) wide, 24" (.61 m).

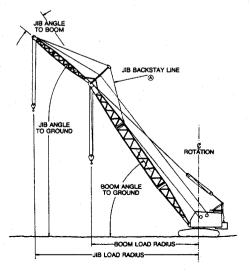
		Jib Lengths												
Jib Angle	20' (6.10 m)		30′ (9.14 m)		40' (1	2.19 m)	50′ (1	50' (15.24 m)						
To Ground	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms						
80°	20,000	9,072	16,000	7,258	12,000	5,443	8,000	3,629						
65°	16,000	7,258	13,000	5,897	10,000	4,763	6,000	2,722						
50°	13,000	5,897	10,000	4,763	8,000	3,629	5,000	2,268						
35°	10,500	4,763	8,000	3,629	6,000	2,722	4,000	1,814						
20°	9,500	4,309	7,000	3,175	5,000	2,268	3,000	1,361						

### Notes — tubular jib capacities

- 1. Capacities shown are based on a FMC tubular jib with a cross section 30" (.76 m) wide by 24" (.61 m) deep used with 10' 0" (3.05 m) high jib mast in the proper working position.
- 2. For jib angle to ground, deduct jib angle to boom from the boom angle to ground.
- 3. The backstay line (A) is anchored to the boom upper section.
- 4. The jib angle to boom must not exceed 30°.
- 5. Determining machine jib capacities:
  - a. Add the length of boom plus the length of jib used.
  - b. Determine the jib load radius.
  - c. Refer to lifting crane capacity chart and select the boom length that corresponds to the total length of boom and jib in (a) and the radius in (b).
    - (1) The jib capacity is equal to the lifting crane capacity unless restricted by the maximum jib capacities shown above.

- d. If the total length of boom and jib exceeds the longest boom length listed in the lifting capacity chart deduct 600# (272 kg) from the capacity shown for the longest boom length for the radius required in (b).
  - (1) The jib capacity is the resulting figure unless restricted by the maximum jib capacities shown above.
- 6. Determining lifting crane capacities with jib on boom:
  - a. When operating off the main boom peak sheaves with a jib on the boom, the following reductions in machine lifting capacities must be made.

    - (1) 20' (6.10 m) jib 1,600# (726 kg) (2) 30' (9.14 m) jib 1,900# (862 kg) (3) 40' (12.19 m) jib 2,200# (998 kg)
    - (4) 50' (15.24 m) jib 2,500# (1,134 kg)







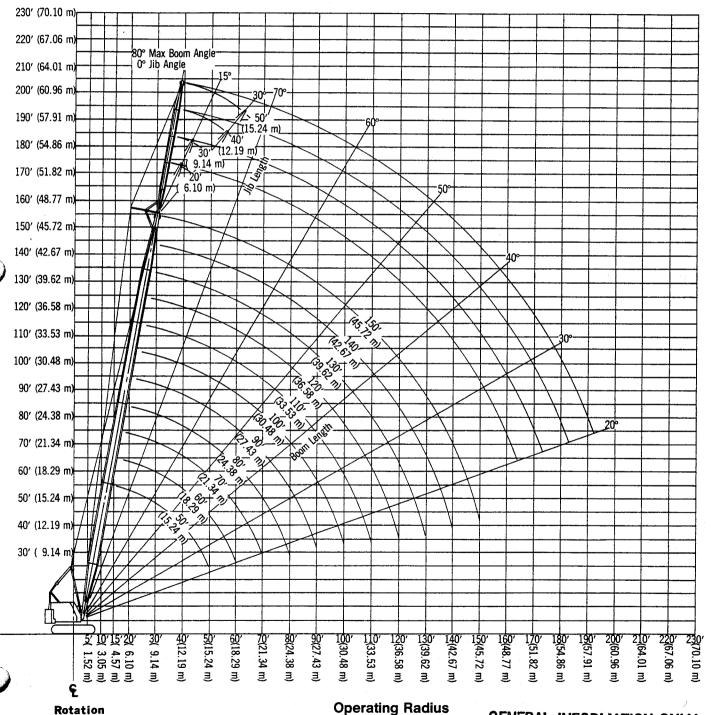


# LS-118 boom/jib working ranges

Boom — tubular; 44" x 54" (1.11 m x 1.37 m) with open throat top section, 11/4" (31.75 mm) dia. boom pendants, hydraulic retractable high gantry, boom live mast, and with boom midpoint suspension pendants (as required). **Crawler** — 12' 6" (3.81 m) gauge extended, 8' 11" (2.72 m) retracted; 17' 0" (5.18 m) over-all length.

**Counterweight** — 12,200# (5,534 kg) ctwt. "A" or 46,000# (20,866 kg) ctwt. "AB".

Jib — tubular; 36" (.76 m) wide, 24" (.61 m)





**Operating Radius** 

**GENERAL INFORMATION ONLY** 



## Link-Belt<sub>®</sub> LS-118 lifting crane capacities

PCSA Class 10-235 Refer to Notes page 3

**Boom** — angle; 42" x 42" (1.06 x 1.06 m) with open throat top section, 11/4" (31.75 mm) dia. boom pendants, hydraulic retractable high gantry, with boom live mast (as required) and with boom midpoint suspension pendants (as required).

**Crawler** — 12' 6" (3.81 m) gauge extended, 8' 11" (2.72 m) retracted; 17' 0" (5.18 m) ctwt. "A" or 46,000# (20,866 kg) ctwt. "AB". over-all length.

		В	oom				Side Frame	s Extended		11	Frames acted
	Ra	idius	Angle	Boom Heigh		Ctw	t. "A"	Ctwt.	"AB"	Ctwt. "	A" Only
Length	Feet	Meters	Degree	Feet	Meters	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms
	10	3.05	81.7	45' 1"	13.74	98,900*	44,861*	120,000*	54,432*	67,900	30,799
	11	3.35	80.2	45′ 0″	13.72	91,100*	41,323*	110,700*	50,214*	57,100	25,901
	12	3.66 3.96	78.8	44′ 9″	13.64	82,700	37,513	102,600*	46,539*	49,200	22,317
40′	13 14	3.96 4.27	77.3 75.8	44' 7" 44' 3"	13.59	70,000	31,752	95,500*	43,319*	43,100	19,550
(12.19 m)	15	4.27	75.6 74.4	44′ 3″ 44′ 1″	13.49 13.44	60,600 53,300	27,488 24,177	89,300*	40,506* 38,057*	38,300	17,373
(12.13 111)	20	6.10	66.7	42' 3"	12.88	32,900	14,923	83,900* 62,300	28,259	34,300	15,558 10,161
	25	7.62	58.7	39′ 8″	12.09	23,300	10,569	44,900	20,367	22,400 16,200	7,348
	30	9.14	49.9	36' 1"	10.00	17,800	8,074	34,800	15,785	12,400	5,625
	35	10.67	39.7	31' 1"	9.47	14,200	6,441	28,200	12,792	9,900	4.491
	40	12.19	26.5	23′ 4″	7.11	11,600	5,262	23,500	10,660	8,000	3,629
***************************************	12	3.66	81.0	54′ 10″	16.71	82,900	37,603	102,200*	46,358*	49.200	22,317
	13	3.96	79.9	54' 9"	16.69	70,100	31,797	95.200°	43,183*	43,100	19,550
	14	4.27	78.7	54′ 7″	16.64	60,700	27,534	89,000*	40,370*	38,300	17,373
	15	4.57	77.5	54′ 4″	16.56	53,400	24,222	83,600*	37,921*	34,300	15,558
50′	20	6.10	71.6	53′ 0″	16.15	32,900	14,923	62,300	28,259	22,300	10,115
(15.24 m)	25	7.62	65.4	51′ 0″	15.54	23,300	10,569	44,900	20,367	16,200	7,348
	30	9.14	58.9	48′ 4″	14.73	17,800	8,074	34,800	15,785	12,400	5,625
	35	10.67	52.0	45′ 0″	13.72	14,200	6,441	28,200	12,792	9,900	4,491
	40	12.19	44.3	40′ 6″	12.34	11,600	5,262	23,500	10,660	8,000	3,629
	50	15.24	23.7	25′ 7″	7.80	8,200	3,720	17,400	7,893	5,500	2,495
	15	4.57	79.6	64′ 7″	19.68	53,400	24,222	83,300*	37,921*	34,300	15,558
	20	6.10	74.7	63′ 4″	19.30	32,900	14,923	62,200	28,214	22,200	10,070
	25	7.62	69.7	61′ 9″	18.82	23,200	10,524	44,800	20,321	16,100	7,303
60′	30	9.14	64.5	59′ 8″	18.19	17,700	8,029	34,600	15,695	12,300	5,579
(18.29 m)	35	10.67	59.1	57′ 1″	17.40	14,100	6,396	28,100	12,746	9,700	4,400
	40	12.19 15.24	53.4 40.3	53′ 8″	16.36	11,500	5,216	23,400	10,614	7,900	3,583
:	50 60	18.29	21.6	44′ 3″ 27′ - 7″	13.49 8.41	8,100 5,900	3,674 2,676	17,300	7,847 6,124	5,400	2,449 1,724
							<del> </del>	13,500		3,800	
	20	6.10	77.0	73′ 9″	22.48	32,800	14,878	62,100	28,169	22,100	10,025
	25	7.62 9.14	72.7 68.4	72′ 4″	22.05	23,100	10,478	44,600	20,231	15,900	7,212
70′	30 35	10.67	63.9	70′ 7″ 68′ 4″	21.51 20.83	17,500	7,938 6,305	34,500	15,649 12,655	12,100	5,489 4,355
(21.34 m)	40	12.19	59.3	65' 8"	20.03	13,900 11,300	5,126	27,900 23,300	10,569	9,600 7,700	3,493
(21.04 m)	50	15.24	49.1	58' 8"	17.88	8,000	3,629	17,200	7,802	5,300	2,404
	60	18.29	37.2	47′ 9″	14.55	5,800	2,631	13,300	6.033	3,700	1,678
	70	21.34	20.0	29′ 6″	8.99	4,300	1,950	10,700	4,854	2,600	1,179
	20	6.10	78.6	84' 0"	25.60	32,700	14,833	61,900	28,078	21,900	9,934
	25	7.62	74.9	82' 9"	25.22	23,000	10,433	44,500	20,185	15,700	7,122
	30	9.14	71.2	81′ 3″	24.77	17,400	7,893	34,300	15,558	12,000	5,443
80'	35	10.67	67.4	79' 4"	24.18	13,800	6,260	27,800	12,610	9,400	4,264
(24.38 m)	40	12.19	63.4	77′ 1″	23.49	11,200	5,080	23,100	10,478	7,600	3,447
, ,	50	15.24	55.1	71′ 2″	21.69	7,800	3,538	17,000	7,711	5,100	2,313
	60	18.29	45.8	62' 10"	19.15	5,600	2,540	13,200	5,988	3,500	1,588
	70	21.34	34.7	51′ 1″	15.57	4,200	1,905	10,500	4,763	2,400	1,089
	80	24.38	18.7	31′ 2″	9.50	3,100	1,406	8,600	3,901	1,600	726
	20	6.10	79.9	94' 2"	28.70	32,500	14,742	61,800	28,032	21,700	9,843
	25	7.62	76.6	93′ 1″	28.37	22,800	10,342	44,300	20,094	15,600	7,076
	30	9.14	73.3	91′ 9″	27.97	17,200	7,802	34,100	15,468	11,800	5,352
	35	10.67	70.0	90′ 1″	27.46	13,600	6,169	27,600	12,519	9,200	4,173
90′	40	12.19	66.6	88′ 1″	26.85	11,000	4,990	22,900	10,387	7,400	3,357
(27.43 m)	50	15.24	59.4	83′ 0″	25.30	7,600	3,447	16,800	7,620	4,900	2,223
	60	18.29 21.34	51.7 43.0	76′ 2″	23.22	5,500	2,495	13,000	5,897	3,300	1,497
	70	24.38	32.6	67' 0"	20.42 16.48	4,000	1,814	10,300	4,672 3,810	2,200	998 635
	80 90	27.43	17.6	54′ 1″ 32′ 9″	9.98	2,900 2,100	1,315 953	8,400 6,900	3,130	1,400	
	<del></del>	7.62	78.0	<del></del>							6.005
	25	9.14	78.0 75.1	103′ 4″	31.49 31.14	22,600	10,251	44,100	20,004	15,400	6,985
	30	10.67	72.1	102′ 2″	31.14 30.68	17,000	7,711	33,900	15,377 12,429	11,500	5,216
	35	12.19	69.0	100′ 8″ 98′ 10″	30.12	13,400	6,078 4,899	27,400 22,700	10,297	9,000	4,082 3,221
100′	40 50	15.24	62.7	94' 6"	28.80	10,800 7,400	3,357	16,600	7,530	7,100	2,132
(30.48 m)	60	18.29	56.1	88' 7"	26.00	5,200	2,359	12,800	5,806	4,700	1,406
(50.40 111)	70	21.34	48.9	80′ 10″	24.64	3,800	1,724	10,100	4,581	3,100 2,000	907
	80	24.38	40.7	70′ 9″	21.56	2,700	1,225	8,200	3,720	1,200	544
	90	27.43	30.9	56' 10"	17.32	1,900	862	6,700	3,039		1 -
	100	30.48	16.7	34' 3"	10.44	1,200	544	5,500	2,495		I

Measured from center of boom head sheave to ground.

(continued)

# GENERAL INFORMATION ONLY

# LS-118 lifting crane capacities

Refer to Notes page 3

		Вс	oom				Side Frame	s Extended			Frames
	Ra	idius	Angle	Boom Heig		Ctwi	. "A"	Ctwt.	"AB"	l <del>l</del>	'A'' Only
Length	Feet	Meters	Degree	Feet	Meters	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms
110' (33.53 m)	25 30 35 40 50 60 70 80 90 100	7.62 9.14 10.67 12.19 15.24 18.29 21.34 24.38 27.43 30.48 33.53	79.1 76.4 73.7 71.0 65.4 59.5 53.3 46.4 38.7 29.4 15.9	113' 7" 112' 6" 111' 2" 109' 7" 105' 7" 100' 4" 93' 8" 85' 3" 74' 4" 59' 7" 35' 8"	34.62 34.29 33.88 33.40 32.18 30.58 28.55 25.98 22.66 18.16 10.87	22,400 16,800 13,200 10,600 7,200 5,000 3,600 2,500 1,700 1,000	10,161 7,620 5,988 4,808 3,266 2,268 1,633 1,134 771 454	43,900 33,700 27,200 22,500 16,400 12,600 9,900 8,000 6,500 5,300 4,400	19,913 15,286 12,338 10,206 7,439 5,715 4,491 3,629 2,948 2,404 1,996	15,100 11,300 8,800 6,900 4,500 2,900 1,800 1,000	6,849 5,126 3,992 3,130 2,041 1,315 816 454
120′ (36.58 m)	30 35 40 50 60 70 80 90 100 110	9.14 10.67 12.19 15.24 18.29 21.34 24.38 27.43 30.48 33.53 36.58	77.6 75.1 72.6 67.6 62.3 56.8 50.8 44.4 37.0 28.2 15.2	122' 9" 121' 6" 120' 1" 116' 6" 111' 9" 105' 10" 98' 7" 89' 6" 77' 9" 62' 2" 37' 1"	37.41 37.03 36.60 35.51 34.06 32.26 30.05 27.28 23.70 18.95 11.30			33,500 27,000 22,300 16,200 12,300 9,700 7,700 6,300 5,100 4,200 3,400	15,196 12,247 10,115 7,348 5,579 4,400 3,493 2,858 2,313 1,905 1,542		
130′ (39.63 m)	30 35 40 50 60 70 80 90 100 110 120	9.14 10.67 12.19 15.24 18.29 21.34 24.38 27.43 30.48 33.53 36.58 39.63	78.6 76.3 74.0 69.4 64.6 59.6 54.3 48.7 42.5 35.5 27.0 14.6	133' 0" 131' 10" 130' 6" 127' 2" 123' 0" 117' 8" 111' 2" 103' 2" 93' 4" 81' 1" 64' 8" 38' 4"	40.54 40.18 39.78 38.76 37.49 35.87 33.88 31.45 28.45 24.71 19.71			33,300 26,700 22,100 16,000 12,100 9,500 7,500 6,000 4,900 3,900 3,200 2,500	15,105 12,111 10,025 7,258 5,489 4,309 3,402 2,722 2,223 1,769 1,452 1,134		
140' (42.68 m)	30 35 40 50 60 70 80 90 100 110 120 130	9.14 10.67 12.19 15.24 18.29 21.34 24.38 27.43 30.48 33.53 36.58 39.63 42.68	79.4 77.3 75.2 70.9 66.5 62.0 57.2 52.2 46.8 40.9 34.2 26.0 14.1	143' 2" 142' 1" 141' 10" 137' 10" 134' 0" 129' 1" 123' 3" 116' 2" 107' 8" 97' 3" 84' 3" 67' 0" 39' 7"	43.64 43.31 43.23 42.01 40.84 39.34 37.57 35.41 32.82 29.64 25.68 20.42 12.06	Not Apı	plicable	33,200 26,500 21,800 15,800 11,900 9,200 7,300 5,800 4,600 3,700 2,900 2,300 1,700	15,060 12,020 9,888 7,167 5,398 4,173 3,311 2,631 2,087 1,678 1,315 1,043 771	Not Ap	plicable
150′ (45.72 m)	35 40 50 60 70 80 90 100 110 120 130 140	10.67 12.19 15.24 18.29 21.34 24.38 27.43 30.48 33.53 36.58 39.63 42.68 45.72	78.2 76.2 72.2 68.2 64.0 59.7 55.1 50.3 45.1 39.5 33.0 25.1 13.6	152' 4" 151' 2" 148' 4" 144' 9" 140' 4" 135' 0" 128' 7" 121' 0" 111' 10" 100' 10" 87' 3" 69' 3" 40' 9"	46.43 46.08 45.21 44.12 42.77 41.15 39.19 36.88 34.09 30.73 26.59 21.11 12.42			26,300 21,600 15,500 11,600 9,000 7,000 5,500 4,400 3,400 2,700 2,000 1,500 1,000	11,930 9,798 7,031 5,262 4,082 3,175 2,495 1,996 1,542 1,225 907 680 454		
160′ (48.77 m)	35 40 50 60 70 80 90 100 110 120 130 140 150 160	10.67 12.19 15.24 18.29 21.34 24.38 27.43 30.48 33.53 36.58 39.63 42.68 45.72 48.77	78.9 77.1 73.4 69.6 65.7 61.7 57.6 53.2 48.6 43.6 38.2 31.9 24.3 13.2	162' 7" 161' 6" 158' 10" 155' 6" 151' 4" 146' 6" 133' 8" 125' 7" 116' 0" 104' 4" 90' 2" 71' 6" 42' 0"	49.55 49.23 48.41 47.40 46.13 44.65 42.85 40.74 38.28 35.36 31.80 27.48 21.79 12.80			25,100* 21,400 15,300 11,400 8,700 6,800 5,300 4,100 3,200 2,400 1,800 1,200	11,385* 9,707 6,940 5,171 3,946 3,084 2,404 1,860 1,452 1,089 816 544		

 $<sup>\</sup>Phi_{\mbox{\scriptsize Measured}}$  from center of boom head sheave to ground.

#### Notes — lifting crane capacities

- 1. The capacities included in this chart are the maximum allowable, and are based on machine standing level on firm supporting surface under ideal job conditions.
- 2. Capacities are based on 75% of minimum tipping loads unless marked with an asterisk (\*).
  - a. Asterisk indicates capacities based on factors other than those which would cause a tipping condition.
- 3. Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, and operating speeds. Operator must reduce load ratings to take such conditions into account. Deduction from rated capacities must be made for weight of hook block, weighted ball/hook, sling, spreader bar, or other suspended gear.
- 4. 42" (1.06 m) Angle Boom with Open Throat 8. Use of boom midpoint suspension Top Section — for lifting 120,000# (54,432 kg), 6-part load hoist line (34" -19.05 mm, Type "N" wire rope) is required. Check parts of line required for all capacities.

- 5. Retractable high gantry must be fixed in raised position for all capacities on this chart.
- 6. The 20' 6" (6.25 m) boom live mast must be in operating position for all boom lengths on machines equipped with "AB" ctwt. On machines equipped with "A" ctwt., boom live mast is required for boom lengths exceeding 100' (30.48 m).
- 7. When using live mast as short boom, maximum lifting capacity of the mast is 36,000# (16,330 kg) at minimum 10' (3.05 m) radius.
  - a. For lifting 36,000# (16,330 kg) on boom live mast with 3/4" (19.05 mm) dia. wire rope, 3 parts of 34" (19.05 mm) dia. Type "N" wire rope are required.

Note: Use of live mast as short boom is intended for machine assembly or disassembly only. It is not to be used for general crane service.

pendants required for boom lengths exceeding 140' (42.67 m).

- 9. Least stable rated condition is over the
- 10. Main boom length must not exceed 160' (48.77 m), and jib must not be mounted on boom longer than 150' (45,72 m). Maximum jib length permitted on 150 (45.72 m) main boom - 20' (6.10 m).
- 11. Maximum boom/jib combination permitted — 140' (42.67 m) boom plus 50' (15.24 m) jib.
- 12. To determine capacities for intermediate boom lengths not shown on this chart, use the capacity for the next longer boom length shown — for actual angle or radius at which boom/load are being worked.
- 13. These capacities apply only to the machine as originally manufactured and normally equipped by FMC Corporation, Crane and Excavator Division.

**Boom** — angle; 42" x 42" (1.06 x 1.06 m) with open throat.

**Jib** — tubular; 30" x 24" (.76 x .61 m).

Crawier - 12' 6" (3.81 m) gauge extended, 8' 11" (2.72 m) retracted; 17' 0" (5.18 m) over-all length.

### Maximum boom and boom/jib<sup>1</sup> machine can lift off ground unassisted — without load.

		Cou	interweight	"A"	Counterweight "AB"					
	Boom		Boom + Jib		Boom		Boom + Jib			
	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters		
Over Ends Side frames extended Side frames retracted	110 110	33.53 33.53	90 + 50 90 + 50	27.43 + 15.24 27.43 + 15.24	160 —	48.77 —	140 + 50	42.67 + 15.24 —		
Over Sides Side frames extended Side frames retracted	100 80	30.48 24.38	80 + 50 70 + 40	24.38 + 15.24 21.34 + 12.19	150	45.72 —	130 + 50	39.62 + 15.24 —		

<sup>1</sup>Hook block on ground.

### Maximum boom and boom/jib machine can lift off ground and travel with boom horizontal<sup>®</sup> — without load.

		Cou	interweight	"A"	Counterweight "AB"					
	Boom		Boom + Jib		Boom		Boom + Jib			
	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters		
Over Ends Side frames extended Side frames retracted	80 80	24.38 24.38	70 + 40 70 + 40	21.34 + 12.19 21.34 + 12.19	130	39.62	110 + 50	33.52 + 15.24		
Over Sides Side frames extended Side frames retracted	80	24.38 18.29	60 + 50 50 + 40	18.29 + 15.24 15.24 + 12.19	130	39.62 —	100 + 50	30.48 + 15.24		

Based on firm, level supporting surface and minimum travel speed.

<sup>&</sup>lt;sup>®</sup>Boom and boom/jib combinations include 65-ton (58.9 metric ton) hook block and 10-ton (9 metric ton) ball with swivel hook suspended beneath main boom and jib headshafts.





## LS-118 jib capacities

Refer to Notes below



**Boom** — angle; 42" x 42" (1.06 x 1.06 m) with open throat top section, 11/4" (31.75 mm) dia. boom pendants, hydraulic retractable high gantry, with boom live mast (as required) and with boom midpoint suspension pendants (as required).

Crawler — 12' 6" (3.81 m) gauge extended 8' 11" (2.72 m) retracted; 17' 0" (5.18 m) over-all length.

Jib - tubular; 30" (.76 m) wide, 24" (.61 m) deep.

Counterweight — 12,200# (5,534 kg) ctwt. "A" or 46,000# (20,866 kg) ctwt. "AB".

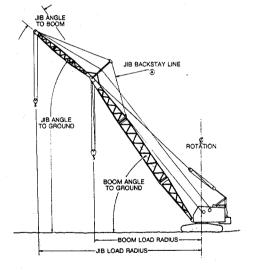
Jib Angle	Jib Lengths										
	20′ (6	5.10 m)	30′ (9	9.14 m)	40′ (1	2.19 m)	50' (15.24 m)				
To Ground	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms			
80°	20,000	9,072	16,000	7,258	12,000	5,443	8,000	3,629			
65°	16,000	7,258	13,000	5,897	10,000	4,763	6,000	2,722			
50°	13,000	5,897	10,000	4,763	8,000	3,629	5,000	2,268			
35°	10,500	4,763	8,000	3,629	6,000	2,722	4,000	1,814			
20°	9,500	4,309	7,000	3,175	5,000	2,268	3,000	1,361			

#### Notes — tubular jib capacities

- 1. Capacities shown are based on a FMC tubular jib with a cross section 30" (.76 m) wide by 24" (.61 m) deep used with 10' 0" (3.05 m) high jib mast in the proper working position.
- 2. For jib angle to ground, deduct jib angle to boom from the boom angle to ground.
- 3. The backstay line (A) is anchored to the boom upper section.
- 4. The jib angle to boom must not exceed 30°.
- 5. Determining machine jib capacities:
  - a. Add the length of boom plus the length of jib used.
  - b. Determine the jib load radius.
  - c. Refer to lifting crane capacity chart and select the boom length that corresponds to the total length of boom and jib in (a) and the radius in (b).
    - (1) The jib capacity is equal to the lifting crane capacity unless restricted by the maximum jib capacities shown above.

- d. If the total length of boom and jib exceeds the longest boom length listed in the lifting capacity chart deduct 600# (272 kg) from the capacity shown for the longest boom length for the radius required in (b).
  - (1) The jib capacity is the resulting figure unless restricted by the maximum jib capacities shown above.
- 6. Determining lifting crane capacities with jib on boom:
  - a. When operating off the main boom peak sheaves with a jib on the boom, the following reductions in machine lifting capacities must be made.

    - (1) 20' (6.10 m) jib 1,600# (726 kg) (2) 30' (9.14 m) jib 1,900# (862 kg) (3) 40' (12.19 m) jib 2,200# (998 kg) (4) 50' (15.24 m) jib 2,500# (1,134 kg)





## LS-118 boom/jib working ranges

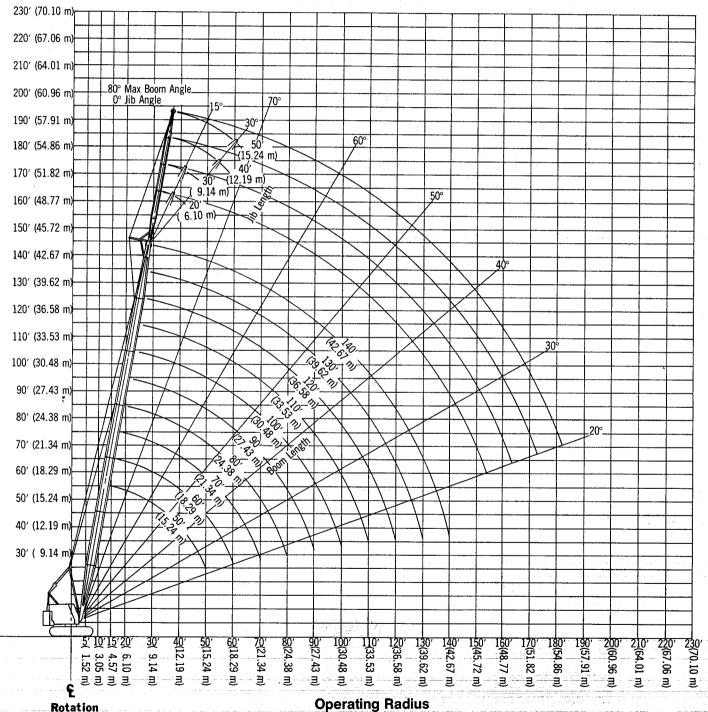


**Boom** — angle; 42" x 42" (1.06 x 1.06 m) with open throat top section; 11/4" (31.75 mm) dia. boom pendants, hydraulic retractable high gantry, with boom live mast (as required) and with boom midpoint suspension pendants (as required).

8' 11" (2.72 m) retracted; 17' 0" (5.18 m) over-all length.

Crawler — 12' 6" (3.81 m) gauge extended, Counterweight — 12,200# (5,534 kg) ctwt. "A" or 46,000# (20,866 kg) ctwt. "AB".

Jib - tubular; 30" (.76 m) wide, 24" (.61 m)





**Operating Radius**