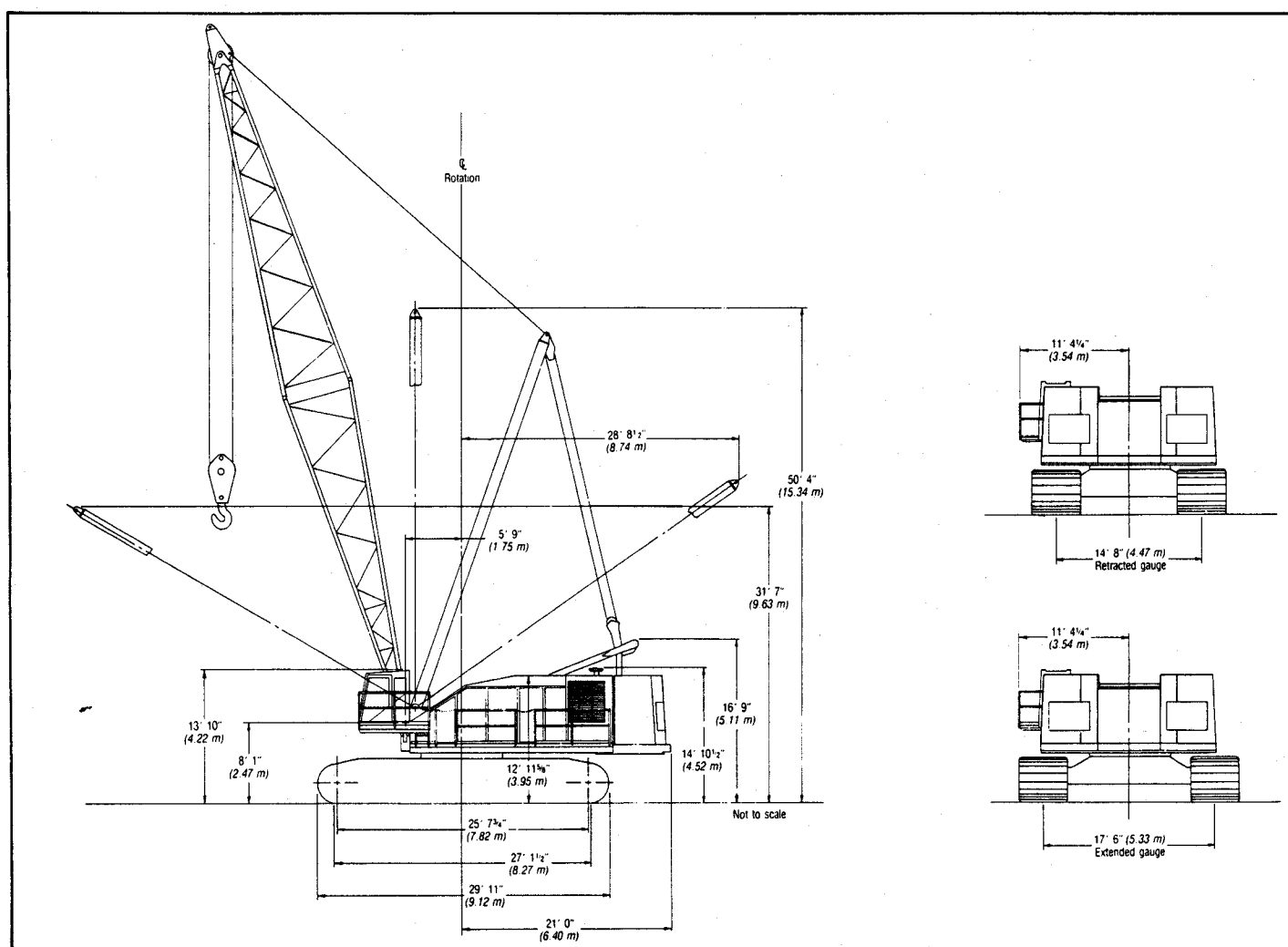




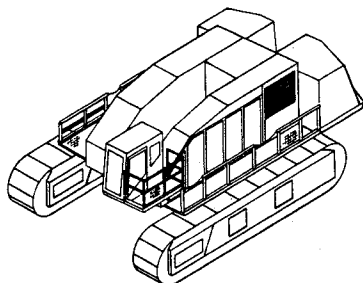
# General Specifications

Link-Belt® 250-ton (226.75 metric ton)

**Wire rope crawler crane/excavator****LS-718****GENERAL INFORMATION ONLY**

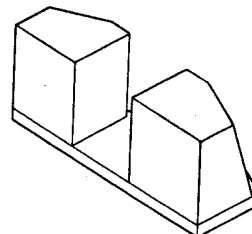
| General dimensions                    | Feet    | meters |
|---------------------------------------|---------|--------|
| Basic boom length                     | —       | —      |
| long range boom                       | 100' 0" | 30.48  |
| heavy duty boom                       | 70' 0"  | 21.34  |
| Overall width with 50" (1.27 m) shoes | —       | —      |
| side frames extended                  | 21' 8"  | 6.61   |
| side frames retracted                 | 18' 10" | 5.74   |
| Overall width with 60" (1.52 m) shoes | —       | —      |
| side frames extended                  | 22' 6"  | 6.86   |
| side frames retracted                 | 19' 8"  | 6.00   |
| Overall width of counterweight        | 19' 2"  | 5.84   |
| Clearance under counterweights        | 4' 11"  | 1.50   |
| Minimum ground clearance              | 11 1/8" | 0.30   |

| General dimensions                                                            | Feet        | meters |
|-------------------------------------------------------------------------------|-------------|--------|
| Width of upper without operator's cab and catwalk                             | 12' 0"      | 3.66   |
| Width of upper with operator's cab and catwalk                                | 18' 0"      | 5.49   |
| Tailswing of counterweights                                                   | 21' 0"      | 6.40   |
| Overall height                                                                | —           | —      |
| cab (over engine air cleaner)                                                 | 14' 10 1/8" | 4.52   |
| retractable gantry raised                                                     | 16' 9"      | 5.11   |
| Overall width of machine with either 50" (1.23 m) or 60" (1.52 m) track shoes | —           | —      |
| — with operator's cab and catwalk                                             | 22' 9 1/2"  | 6.95   |
| — without catwalks on operator's cab                                          | 22' 6"      | 6.86   |

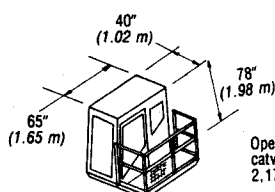
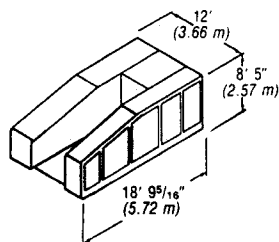
**Weights for transporting — approximate****GENERAL INFORMATION ONLY**

Complete basic machine including retractable gantry (2,500 lbs. — 1 134 kg) and gantry backstays (1,036 lbs. — 470 kg) counterweight cylinder (900 lbs. — 408 kg), boom stops (1,670 lbs. — 757 kg), 18-part boomhoist bail (1,450 — 658 kg), front and rear drum with 21¼" (0.54 m) smooth laggings, load lowering clutches, and drum locking pawls, 1,655' (504 m) of 1¼" (31.75 mm) wire rope (4,782 lbs. — 2 169 kg) on one drum, catwalks both sides, and "AB" counterweight:

With 50' (1.27 m) shoes—385,300 lbs. (174 772 kg)  
 With 60' (1.52 m) shoes—395,900 lbs. (179 580 kg)

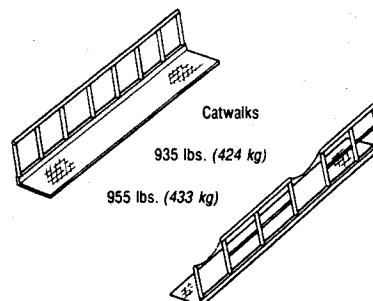


"A" counterweight 60,000 lbs. (27 216 kg)  
 "AB" counterweight 134,500 lbs. (61 009 kg)

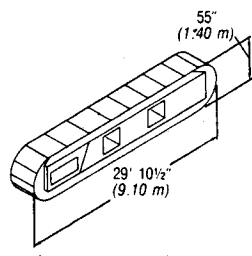


Operator's cab with catwalks and support — 2,170 lbs. (984 kg)

Basic upper with front and rear drums with load lowering clutches and drum locking pawls but no laggings or wire rope, with turntable bearing disconnect mechanism; without boom stops, retractable gantry and gantry backstays, and 18-part boomhoist bail:  
 73,100 lbs. (33 158 kg)

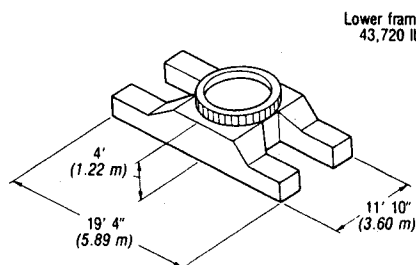
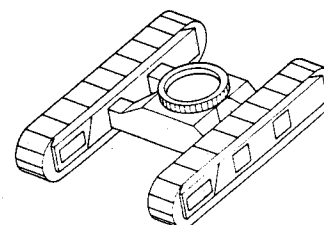


Catwalks  
 935 lbs. (424 kg)  
 955 lbs. (433 kg)



One crawler side frame  
 With 50' (1.27 m) shoes — 57,160 lbs. (25 928 kg)  
 With 60' (1.52 m) shoes — 62,460 lbs. (28 332 kg)

Complete crawler mounting with turntable bearing  
 50' (1.27 m) shoes — 158,040 lbs. (71 687 kg)  
 60' (1.52 m) shoes — 168,460 lbs. (76 413 kg)



Lower frame with turntable bearing  
 43,720 lbs. (19 831 kg)

|                                                                                                                                                     | Pounds | kg    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------|
| 35' (10.67 m) heavy duty and/or long range boom base section complete with deflector roller, 4 connecting pins, and boom angle indicator            | 6,500  | 2 948 |
| 35' (10.67 m) heavy duty boom top section complete with deflector rollers, 6 head sheaves with wire rope guards, and basic boom suspension pendants | 9,350  | 4 241 |
| 50' (15.24 m) jib for heavy duty boom, including jib mast and staylines                                                                             | 4,210  | 1 910 |
| 120' (36.58 m) jib for heavy duty boom, including jib mast and staylines                                                                            | 6,910  | 3 134 |
| 20' (6.10 m) long range boom mid-section                                                                                                            | 1,794  | 814   |
| 45' (13.72 m) long range boom top section complete with deflector rollers, 2 head sheaves with wire rope guards, and basic boom suspension pendants | 5,840  | 2 649 |
| 30' (9.14 m) jib for long range boom, including jib mast and staylines                                                                              | 2,010  | 912   |
| 100' (30.48 m) jib for long range boom, including jib mast and staylines                                                                            | 3,900  | 1 769 |
| Boom live mast complete with boomhoist bridle and 18-part, 1,065' (325 m) boomhoist wire rope                                                       | 9,550  | 4 331 |
| Fairleader                                                                                                                                          | 2,460  | 1 116 |
| Tagline winder with mounting plate and 200' (60.96 m) tagline wire rope                                                                             | 1,450  | 658   |

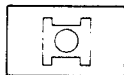
**Machine working weights — approximate**

|                                                                                                         |                           |
|---------------------------------------------------------------------------------------------------------|---------------------------|
| Machine with 70' (21.34 m) heavy duty boom, boom live mast, 50' (1.27 m) shoes, and "AB" counterweight  | 410,700 lbs. (186 294 kg) |
| Machine with 100' (30.48 m) long range boom, boom live mast, 50' (1.27 m) shoes, and "AB" counterweight | 409,000 lbs. (185 522 kg) |



## General Specifications

### Mounting — crawler



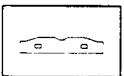
**Lower frame**

All-welded, precision machined surfaces for turntable bearing and cover plates.



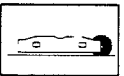
**Turntable bearing**

Ball bearing type; outer race with external swing (ring) gear bolted to lower frame. Inner race provides "Quick Disconnect" capability for dismounting revolving upperstructure.



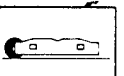
**Crawler side frames**

All-welded, precision machined. Positioned on cross axles by dowels and held in place with two patented, adjustable wedgebacks per side frame. Optional quick disconnect fittings on travel motor hydraulic lines provided to facilitate removal of side frames. Optional — two hydraulic cylinders on lower frame provided to extend/retract, or assist in removing, side frames.



**Track drive sprockets**

Cast steel, heat treated; one per side frame. Track drive sprocket assembly involute splined to shaft, mounted on anti-friction bearings and powered by hydraulic motor(s) through double reduction gear drive.



**Track idler wheels**

Cast steel, heat treated. Mounted on two bronze bushings.



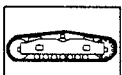
**Track carrier slide rails**

Tracks slide on rails; on top of each side frame.



**Track rollers**

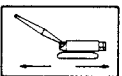
Thirteen double flange, heat treated rollers per side frame; each mounted on two bronze bushings.



**Tracks**

Heat treated, self-cleaning, multiple hinged track shoes joined by two-piece full floating pins. 53 shoes per side frame. Standard — 50" (1.27 m) wide; optional — 60" (1.52 m) wide shoes.

**Track adjustment** — Idler wheel adjusted by means of hydraulic cylinder and hand pump. Idler wheel shaft held in position with shims after adjustment is made.



**Independent hydraulic travel/steering**

Power transmitted from hydraulic motors through gear reduction unit into track drive sprocket.

**Travel motors** — An axial piston motor is bolted to a speed reducer at inner drive end of each crawler side frame. Power is transmitted through the speed reducer to a final drive planetary. Output of final planetary is splined to track drive sprocket.

One variable displacement axial piston pump delivers power to each travel motor.

Steering is provided through the travel motors which can be powered simultaneously or individually for straight-line travel (forward or reverse), pivot or differential turns, or the tracks can be counter rotated for spin turns.

**Travel speeds** — Low, 0.31 m.p.h.; high, 0.78 m.p.h.

**Parking brake** — Multiple disc type brakes; one located between each hydraulic travel motor and the speed reducer input. Spring applied, hydraulically released; brakes automatically set when both travel levers are in neutral or when engine is shut down.

**Gradeability** — 30% permissible based on efficient engine/gear box lubrication.

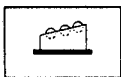
GENERAL INFORMATION ONLY

### Ground contact area and ground bearing pressure

| Shoes                                                              | 50" (1.27 m)                           | 60" (1.52 m)                           |
|--------------------------------------------------------------------|----------------------------------------|----------------------------------------|
| Ground contact area                                                | 35,805 sq. in. (23.09 m <sup>2</sup> ) | 39,060 sq. in. (25.19 m <sup>2</sup> ) |
| Ground bearing pressure<br>70' (21.34 m) heavy duty boom, no load  | 11.5 p.s.i. (0.81 kg/cm <sup>2</sup> ) | 10.7 p.s.i. (0.75 kg/cm <sup>2</sup> ) |
| Ground bearing pressure<br>100' (30.48 m) long range boom, no load | 11.4 p.s.i. (0.80 kg/cm <sup>2</sup> ) | 10.7 p.s.i. (0.75 kg/cm <sup>2</sup> ) |

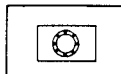


## Revolving upperstructure



**Frame**

All welded, stress relieved, precision machined.



**Turntable bearing**

**Turntable bearing** — Patented quick disconnect bearing. Complete bearing is mounted on top of lower frame carbody. External tooth ring (swing) gear is integral with bearing outer race. Bearing inner race has snap ring groove on inner side of race.

Upperstructure mounting adaptor and snap ring. Snap ring, and its hydraulic actuating cylinder, as mounted to adaptor. Engagement of snap ring with groove on inner side of bearing inner race permits attachment of upperstructure to crawler mounting.

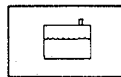


**Engines**

Full pressure lubrication, oil filter, oil cooler, air cleaner, fuel filter, hour meter, hand throttle, foot throttle, tachometer and overheat alarm.

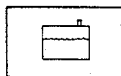
**Engine master clutch** — Double-acting hydraulic cylinder connected to master clutch disconnect control lever; operator controlled through solenoid valves. Cylinder disconnects master clutch between engine and torque converter.

**Load hoist torque converter** — Twin Disc Model 4-MO-2018-1 with modulating clutch.



**Fuel tank**

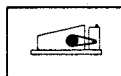
300 gal. (1 136 liters) capacity; equipped with fuel sight level gauge, flame arrester, and filler pipe cap with locking eye for padlock.



**Hydraulic oil reservoir**

100 gallon (379 liters) capacity; for travel, boomhoist and swing. Torque converter oil reservoir — 45 gallon (170 liters) capacity.

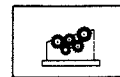
## Power train



**Transmissions**

**Load hoist functions** — Power transmitted from one torque converter through 5-strand roller chain to drum shafts for load hoist/lowering function. Chain fully enclosed and running in oil. Idler sprocket, mounted on anti-friction bearings and attached to inside of chain case, provides chain adjustment.

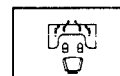
**Swing function.** Swing power is provided by hydrostatic transmission. A variable volume pump and fixed volume motor drive a planetary speed reducer.



**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 load hoist, swing, and boomhoist functions independent of one another. Components such as 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. Chain wheel and pinion fully enclosed and running in oil. Hydraulic motors used for boomhoist and swing drive.

## Principal operating functions

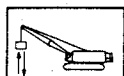


**Control system**

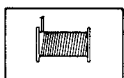
Speed-o-Matic® power hydraulic control system; a variable pressure system requiring no bleeding. Operating pressure is transmitted through oil to all 2-shoe clutch cylinders, and other hydraulic cylinders as required. System includes a constant displacement, engine driven, gear type hydraulic pump to provide constant flow of oil, an accumulator to maintain system operating pressure, relief valve to control excessive pressure build-up in system, full-flow filter with 40 micron disposable filter element, and variable pressure control valves to control drum clutches, travel and boomhoist and swing variable displacement hydraulic pumps, swing brake, and drum brakes.

| Engine specifications         | GM 8V-92TA               | Cummins KT 1150-C 450    |
|-------------------------------|--------------------------|--------------------------|
| Number of cylinders           | 8                        | 6                        |
| Bore and stroke — inches      | 4.84 x 5                 | 6¼ x 6¼                  |
| — (mm)                        | (122.94 x 127.00)        | (158.75 x 158.75)        |
| Piston displacement — cu. in. | 735                      | 1,150                    |
| — (cm <sup>3</sup> )          | (12 047)                 | (18 849)                 |
| Peak torque                   | —                        | —                        |
| — ft. lbs. at engine pinion   | 1,247 at 1,400 r.p.m.    | 1,350 at 1,500 r.p.m.    |
| — (kg-m)                      | (172.46)                 | (186.71)                 |
| Horsepower                    | 450 at 2,100 r.p.m.      | 450 at 2,100 r.p.m.      |
|                               | 336 (kW) at 2,100 r.p.m. | 335 (kW) at 2,100 r.p.m. |

GENERAL INFORMATION ONLY

**Load hoisting and lowering**

Independent load hoisting and lowering is powered from the load hoist converter. Initially, actuating the front and/or rear drum control lever engages the 2-shoe hydraulically operated clutch. Further movement of control lever engages torque converter modulating clutch. Degree of movement of the control lever determines the degree of modulating clutch engagement. The load may be held stationary, or hoisted/lowered at variable speeds by varying engagement of the modulating clutch. Optional third drum is operated by an independent control lever which automatically locks the modulating clutch in "full on" position. Third drum hoist speed is then controlled by varying engine speed to produce desired torque converter output rather than using the modulating clutch.

**Load hoist drums**

Front and rear main operating drums; two-piece 21 $\frac{1}{4}$ " (0.54 m) root diameter smooth laggings bolted to brake drums. Optional; two-piece 25 $\frac{1}{4}$ " (0.65 m) grooved laggings for clamshell or dragline.

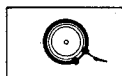
**Third operating drum** — Optional; mounts forward of front operating drum. One-piece, 14 $\frac{7}{8}$ " (0.38 m) root diameter smooth lagging keyed to brake drum and mounted on anti-friction bearings. Third drum required for tower and Heavy Lift attachments. (Third drum lagging need not be removed for dragline operation.)

**Drum clutches**

Speed-o-Matic power hydraulic two-shoe clutches for control of load hoisting/lowering on the front and rear main operating drums and for load hoisting on the optional third drum. Internal expanding, cast iron, lined shoes. Clutch drums are bolted to spur gears with clutch spiders splined to drum shafts.

**Load hoist clutches** — Front and rear main operating drums. Clutch drums 37" (0.94 m) diameter, 5 $\frac{1}{2}$ " (0.14 m) wide; effective lining area 501 square inches (3 233 cm<sup>2</sup>). Optional third drum clutch drum — 23" (0.58 m) diameter, 6" (0.15 m) wide; effective lining area 242 square inches (1 562 cm<sup>2</sup>).

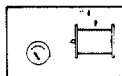
**Load lowering devices** — Front and rear main operating drums; power load lowering through Speed-o-Matic controlled clutches. Clutch drums 37" (0.94 m) diameter, 5 $\frac{1}{2}$ " (0.14 m) wide; effective lining area 501 square inches (3 233 cm<sup>2</sup>). Lowering against the torque converter is also possible. Optional third drum — low speed planetary drive unit (required for tower and Heavy Lift attachments); hydraulically controlled by external contracting band brake.

**Drum brakes**

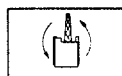
Front and rear main drums — dual, external contracting band brakes; hydraulically controlled. Brake drums 36" (0.91 m) diameter, 5 $\frac{1}{2}$ " (0.14 m) wide; effective lining area 441 square inches (2 846 cm<sup>2</sup>) per brake. Optional third drum — single, external contracting band brake. Brake drum 20" (0.51 m) diameter, 5" (0.13 m) wide; effective lining area 223 square inches (1 439 cm<sup>2</sup>). Brakes spring applied, hydraulically released. Automatic brake; standard on third drum, optional on front and rear drums.

**Drum locking pawls**

Standard on front and rear main, and optional third drums; spring applied, hydraulically released. Pawls engage ratchet teeth integral with drum flanges.

**Drum rotation indicators**

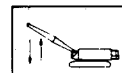
Standard on boomhoist drum, optional for two main load hoist drums. Pulsating buttons, recessed in the drum clutch control lever handles, indicate to operator when rope drums are rotating in either direction. Manually adjustable to compensate for number of parts of load line.

**Swing system**

Consists of a closed loop hydrostatic transmission and two stage planetary speed reducer. The transmission is powered by a variable volume pump and fixed volume motor, thus swing speed is proportioned by engine speed. The swing drive pinion is splined to the planetary output shaft.

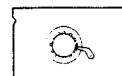
**Swing lock** — Double tooth pawl meshes with swing (ring) gear teeth; hydraulically engaged/disengaged. Swing mechanism equipped with sensing device and hydraulic lock-out to prevent engagement of swing lock during swing cycle.

**Maximum swing speed** — 1.2 r.p.m.

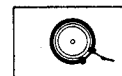
**Independent hydraulic boomhoist/lowering**

Power is from the engine-driven variable displacement hydraulic pump. The hydraulic pump drives the bi-directional, fixed displacement hydraulic motor powering the boomhoist rope drum in either direction for raising or lowering boom. The circuit between pump and hydraulic motor is charged with filtered oil. Hydraulic oil is routed through engine mounted oil cooler to assist in maintaining proper oil temperature.

**Boomhoist drum** — 15 $\frac{1}{4}$ " (0.38 m) root diameter, grooved drum; bolted to brake drum.

**Boomhoist drum locking pawl**

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

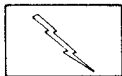
**Boom hoist/lowering brake**

External contracting band, spring applied, hydraulically released. Drum lagging bolted to brake drum. 24" (0.61 m) diameter, 5" (0.13 m) wide brake drum; effective lining area 253 square inches (1 633 cm<sup>2</sup>).

**GENERAL INFORMATION ONLY**



**Boomhoist limiting device** — Provided to restrict hoisting boom above recommended minimum radius; located at bottom end of telescoping boom stop. Electrical switch, contacted by boom stop when boom is in near vertical position, actuates hydraulic solenoid valve which shuts off hydraulic pressure in line to boom hoist motor. As pressure is shut off, boom hoist brake is spring applied.



### Electrical system

24-volt negative ground system includes four maintenance free 12-volt batteries, warning horn, 50-amp alternator, and heavy duty start. *Optional*; Onan independent light plant with twin cylinder, four cycle, air-cooled, diesel engine with remote electric starting; 6,000 watt, 120-volt, three wire single phase, 60 cycles A.C., includes wiring in conduit, three interior cab lights, trouble lamp with cord and two 500 watt adjustable flood lights on front of cab roof. Additional cab-mounted and boom-mounted floodlights available.



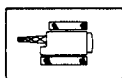
### Operator's cab

Full-vision, modular type cab with sliding door. All windows equipped with tinted safety glass. Standard equipment includes catwalk with hand rails alongside operator's cab, catwalk access ladder, dry chemical fire extinguisher and electric horn warning device.



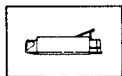
### Machinery cab

Equipped with hinged doors on both sides and rear, removable panels and doors on top for machinery access and inspection. Catwalks run length of operator's and machinery cabs. Skid resistant finish on roof.



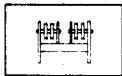
### Catwalks

Fabricated steel, bolted in place along both sides of cab; complete with hand rails.



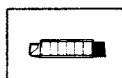
### Gantry

Retractable type; raised and lowered with optional double acting hydraulic cylinder, powered by Speed-o-Matic power hydraulic pump. Gantry pinned in raised working position or lowered traveling position.



### Gantry ball

Contains eight 15" (0.38 m) root diameter sheaves, mounted on anti-friction bearings to accommodate standard 18-part boomhoist wire rope reeving.



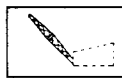
### Counterweight

"A" counterweight consists of a steel plate pinned to the rear of the revolving upperstructure. "AB" counterweight consists of "A" counterweight plus two additional steel counterweights held in place by dowel/socket on top of "A" counterweight.

"A" counterweight — 60,000 lbs. (27 216 kg).  
"AB" counterweight — 134,500 lbs. (61 009 kg).

**Counterweight removal device** — Optional; link connects counterweight to a double acting hydraulic cylinder which is connected to retractable gantry; gantry or counterweight is raised or lowered by the cylinder. Cylinder control valve located at left rear of machinery cab. Lowering counterweight to ground requires minimum of 24" (0.61 m) high cribbing on ground.

## Booms and jibs



### Heavy duty boom

Two-piece, 70' (21.34 m) basic length; 100" (2.54 m) wide, 85" (2.16 m) deep at centerline of connections. Alloy steel, round tubular main chords 5 1/4" (0.13 m) outside diameter. Maximum boom length 290' (88.39 m). Heavy duty boom also functions as the tower for the tower attachment and/or the mast for the Heavy Lift attachment.

**Base section** — 35' (10.67 m) long, boom feet 4 1/2" (0.11 m) wide on 84" (2.13 m) centers. Alloy steel, round tubular main chords 5 1/4" (0.14 m) outside diameter.

**Boom extensions** — Available in 20' (6.10 m), 30' (9.14 m), 40' (12.19 m) and 50' (15.34 m) lengths with appropriate length dual pendants.

**Boom connections** — In-line pin connected.

**Top section** — Open throat, 35' (10.67 m) long; mounted 1.6° (12" — 0.30 m, at head machinery) off centerline of boom.

**Boompint machinery** — Six 28 3/8" (0.72 m) root diameter sheaves or optional three 4 1/4" (1.05 m) root diameter wide mouth sheaves for crane service. *Optional*; two 4 1/4" (1.05 m) root diameter wide mouth sheaves for clamshell or one 4 1/4" (1.05 m) root diameter wide mouth sheave for dragline. All sheaves mounted on anti-friction bearings.

**Boompint sheave guards** — Upper sheave guard; single tubular guard, for crane/dragline/clamshell service, bolted to top side of boom head. Lower sheave guards — for crane; round steel rods between each sheave, bolted to underneath side of boom head. For dragline/clamshell — tubular roller guards mounted on anti-friction bearings; two for dragline, four for clamshell.

**Deflector rollers** — Deflect load hoist wire rope off boom to avoid chafing; steel rollers mounted on anti-friction pillow block bearings. One mounted on boom base section; one on each 20' (6.10 m), 30' (9.14 m) and 40' (12.19 m) boom extension; two on each 50' (15.24 m) extension and the 35' (10.67 m) open throat top section. A pair of deflector sheaves, which mount directly to the top section boom chords, are standard equipment.



### Jib

Two piece, 50' (15.24 m) basic length for heavy duty boom; 48" (1.22 m) wide, 39" (0.99 m) deep at connections. Main tubular chords alloy steel, 2 1/2" (63.50 mm) outside diameter. Maximum boom/jib combination 240' (73.15 m) boom, 120' (38.58 m) jib. Jib also functions as Heavy Lift attachment jib.

GENERAL INFORMATION ONLY



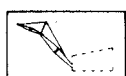
**Base section** — 20' (6.10 m) long; mounted to bracket on top section of boom.

**Jib extensions** — Available in 20' (6.10 m) and 30' (9.14 m) lengths.

**Jib connections** — In-line pin connected.

**Tip section** — 30' (9.14 m) long; equipped with single, wide mouth 26¼" (0.67 m) root diameter sheave, mounted on anti-friction bearings.

**Deflector rollers** — Deflect jib load hoist wire rope (whipline) off jib to avoid chafing; mounted on anti-friction bearings. One mounted on jib tip section, and mounted 50' (15.24 m) from jib head shaft on jib lengths 100' (30.48 m) through 120' (36.58 m).

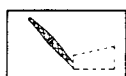


Jib mast

Dual tubular chord sections; 20' (6.10 m) high, mounted on jib base section. One deflector sheave mounted within mast to guide whipline.

**Jib staylines** — Front and rear staylines pinned at top of jib mast. Rear staylines attach to boom pin connecting lugs 85' (25.91 m) or 95' (28.96 m) below boom head shaft, depending on boom extensions. One pair of pendants added to rear staylines to offset jib 15°, two pairs added to offset jib 30°.

**Jib stops** — Telescoping type; one pair pinned to boom top section and jib mast, another pair pinned to jib base section and jib mast.



Long range boom

Three-piece, 100' (30.48 m) basic length; 100" (2.54 m) wide, 85" (2.16 m) deep at centerline of connections. Alloy steel, round tubular main chords 4¾" (0.12 m) outside diameter. Maximum boom length 360' (109.73 m). Long range boom top section and extensions also function as tower boom when machine is so equipped.

**Boom base section** — 35' (10.67 m) long; boom feet 4½" (0.11 m) wide on 84" (2.13 m) centers.

**Boom extensions** — Available in 20' (6.10 m), 30' (9.14 m), 40' (12.19 m) and 50' (15.34 m) lengths with appropriate length dual pendants.

**Boom connections** — In-line pin connected.

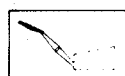
**Boom top section** — Open throat, 45' (13.72 m) long.

**Boompint machinery** — Two 28¾" (0.72 m) root diameter sheaves for crane service; sheaves mounted on anti-friction bearings equipped with reverse lip-type seals to assist in retaining lubrication.

**Boompint sheave guards** — Tubular upper guard; steel rod lower guard.

**Deflector rollers** — Deflect load hoist wire rope off boom to avoid chafing; steel rollers mounted on anti-friction pillow block bearings. One mounted on boom base section; one on each 20' (6.10 m), 30' (9.14 m) and 40' (12.19 m) boom extension; two on each 50' (15.24 m) extension and the 45' (13.72 m) top section.

**Boom midpoint suspension pendants** — Required on booms 270' (82.30 m) long and over; connect to top boom connecting lugs at point 155' (47.24 m) from boomfoot pin.



Jib

Two-piece, 30' (9.14 m) basic length for long range boom. 36" (0.91 m) wide, 30" (0.76 m) deep at connections. Main tubular chords alloy steel, 2¼" (57.15 mm) outside diameter. Maximum boom/jib combination 350' (106.68 m) boom, 100' (30.48 m) jib. Jib also functions as tower attachment jib.

**Base section** — 15' (4.57 m) long; mounted to bracket on top of boom.

**Jib extensions** — Available in 20' (6.10 m), 30' (9.14 m) and 40' (12.19 m) lengths.

**Jib connections** — In-line pin connected.

**Tip section** — 15' (4.57 m) long; equipped with single 21" (0.53 m) root diameter sheave, mounted on anti-friction bearings.

**Deflector rollers** — Deflect jib load hoist wire rope (whipline) off jib to avoid chafing; mounted on anti-friction bearings. One mounted on jib tip section, and mounted 50' (15.24 m) from jib head shaft on jib lengths 100' (30.48 m) through 120' (36.58 m).



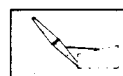
Jib mast

Tubular chord sections; 12' 7¾" (3.86 m) long. Single jib load hoist rope (whipline) deflector sheave, 15¾" (0.40 m) root diameter mounted on anti-friction bearings.

**Jib staylines** — Front staylines attached to jib peak shaft and jib mast peak. Pendant ropes are added to front staylines as jib length increases. Rear staylines attached to boom pin connecting lugs at lower end of boom top section. One pair pendants added to rear staylines to offset jib 15°, two pairs added to offset jib 30°.

**Jib stops** — Telescoping type; one pair pinned to boom top section and jib mast, another pair pinned to jib base section and jib mast.

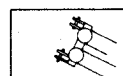
## Items applicable to both heavy duty and long range booms



Boom stops

Dual telescoping, pinned to both boom and upper frame. Required for all boom lengths.

**Hydraulic boomfoot pin removal** — Optional; Speed-o-Matic controlled and located between boomfoot lugs. Hydraulically inserts or retracts boomfoot pins.



Boomhoist bridle

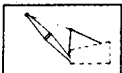
Serves as connection for boom pendants and boomhoist wire rope reeving. Bridle contains ten 15" (0.38 m) root diameter sheaves. Nine sheaves mounted on anti-friction bearings, one sheave mounted on self-lubricated journal bearing.

GENERAL INFORMATION ONLY



# Link-Belt

CONSTRUCTION EQUIPMENT



**Boom live mast**

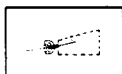
40' (12.19 m) long from center of head shaft to mounting pin; mounts on front of frame near boom feet. Supports boomhoist bridle and boom midpoint suspension pendants.

## Auxiliary equipment



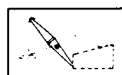
**Boom angle indicator**

Standard with either crane boom. Pendulum type, mounted inside boom base section.



**Fairlead**

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



**Tagline**

*Optional.* Spring wound drum type mounted on crane boom. Rud-o-Matic model 1866, 3 barrel, with 30" (0.76 m) reel and 200' (60.96 m) wire rope.

GENERAL INFORMATION ONLY



**Link-Belt Construction Equipment Company Lexington, Kentucky**

Litho in U.S.A. 4/90 #5143

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# Link-Belt®LS-718 Performance Specifications

## GENERAL INFORMATION ONLY

### Wire rope and rope drum data

Main load hoist wire rope length — for heavy duty ① and long range ② booms using 1¼" (32 mm) wire rope.

| Parts of line | Boom length   |        |               |        |                |        |                |        |                |        |                |        |                |        |                |        |
|---------------|---------------|--------|---------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|
|               | 70' (21.34 m) |        | 90' (27.43 m) |        | 100' (30.48 m) |        | 110' (33.53 m) |        | 120' (36.58 m) |        | 130' (39.62 m) |        | 140' (42.67 m) |        | 150' (45.72 m) |        |
|               | Feet          | meters | Feet          | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters |
| 1             | 165           | 50.29  | 205           | 62.48  | 225            | 68.58  | 245            | 74.68  | 265            | 80.77  | 285            | 86.87  | 305            | 92.96  | 325            | 99.06  |
| 2             | 245           | 74.68  | 305           | 92.96  | 335            | 102.12 | 365            | 111.25 | 395            | 120.40 | 425            | 129.54 | 455            | 138.68 | 485            | 147.83 |
| 3             | 325           | 99.06  | 405           | 123.44 | 445            | 135.64 | 485            | 147.83 | 525            | 160.02 | 565            | 172.21 | 605            | 184.40 | 645            | 196.60 |
| 4             | 405           | 123.44 | 505           | 153.92 | 555            | 169.16 | 605            | 184.40 | 655            | 199.64 | 705            | 214.88 | 755            | 230.12 | 805            | 245.36 |
| 5             | 485           | 147.83 | 605           | 184.40 | 665            | 202.69 | 725            | 220.98 | 785            | 239.27 | 845            | 257.56 | 905            | 275.84 | 965            | 294.13 |
| 6             | 565           | 172.21 | 705           | 214.88 | 775            | 236.22 | 845            | 257.56 | 915            | 278.89 | 985            | 300.23 | 1,055          | 321.56 | 1,125          | 342.90 |
| 7             | 645           | 196.60 | 805           | 245.36 | 885            | 269.75 | 965            | 294.13 | 1,045          | 318.52 | 1,125          | 342.90 | 1,205          | 367.28 | 1,285          | 391.67 |
| 8             | 725           | 220.98 | 905           | 275.84 | 995            | 303.28 | 1,085          | 330.71 | 1,175          | 358.14 | 1,265          | 385.57 | 1,355          | 413.00 | 1,445          | 440.44 |
| 9             | 805           | 245.36 | 1,005         | 306.32 | 1,105          | 336.80 | 1,205          | 367.28 | 1,305          | 397.76 | 1,405          | 428.24 | 1,505          | 458.72 | 1,605          | 489.20 |
| 10            | 885           | 269.75 | 1,105         | 336.80 | 1,215          | 370.33 | 1,325          | 403.86 | 1,435          | 437.39 | 1,545          | 470.92 | 1,655          | 504.44 | 1,765          | 537.97 |
| 11            | 965           | 294.13 | 1,205         | 367.28 | 1,325          | 403.86 | 1,445          | 440.44 | 1,565          | 477.01 | 1,685          | 513.59 | 1,805          | 550.16 |                |        |
| 12            | 1,045         | 318.52 | 1,305         | 397.76 | 1,435          | 437.39 | 1,565          | 477.01 | 1,695          | 516.64 | 1,825          | 556.26 |                |        |                |        |

| Parts of line | Boom length    |        |                |        |                |        |                |        |                |        |                |        |                |        |                |        |
|---------------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|
|               | 160' (48.77 m) |        | 170' (51.82 m) |        | 180' (54.86 m) |        | 190' (57.91 m) |        | 200' (60.96 m) |        | 210' (64.01 m) |        | 220' (67.06 m) |        | 230' (70.10 m) |        |
|               | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters |
| 1             | 345            | 105.16 | 365            | 111.25 | 385            | 117.35 | 405            | 123.44 | 425            | 129.54 | 445            | 135.64 | 465            | 141.73 | 485            | 147.83 |
| 2             | 515            | 156.97 | 545            | 166.12 | 575            | 175.26 | 605            | 184.40 | 635            | 193.55 | 665            | 202.69 | 695            | 211.84 | 725            | 220.98 |
| 3             | 685            | 208.79 | 725            | 220.98 | 765            | 233.17 | 805            | 245.36 | 845            | 257.56 | 885            | 269.75 | 925            | 281.94 | 965            | 294.13 |
| 4             | 855            | 260.60 | 905            | 275.84 | 955            | 291.08 | 1,005          | 306.32 | 1,055          | 321.56 | 1,105          | 336.80 | 1,155          | 352.04 | 1,205          | 367.28 |
| 5             | 1,025          | 312.42 | 1,085          | 330.71 | 1,145          | 349.00 | 1,205          | 367.28 | 1,265          | 385.57 | 1,325          | 403.86 | 1,385          | 422.15 | 1,445          | 440.44 |
| 6             | 1,195          | 364.24 | 1,265          | 385.57 | 1,335          | 406.91 | 1,405          | 428.24 | 1,475          | 449.58 | 1,545          | 470.92 | 1,615          | 492.25 | 1,685          | 513.59 |
| 7             | 1,365          | 416.05 | 1,445          | 440.44 | 1,525          | 464.82 | 1,605          | 489.20 | 1,685          | 513.59 | 1,765          | 537.92 | 1,845          | 562.36 | 1,925          | 586.74 |
| 8             | 1,535          | 467.87 | 1,625          | 495.30 | 1,715          | 522.73 | 1,805          | 550.16 | 1,895          | 577.60 |                |        |                |        |                |        |
| 9             | 1,705          | 519.68 | 1,805          | 550.16 | 1,905          | 580.64 |                |        |                |        |                |        |                |        |                |        |
| 10            | 1,875          | 571.50 |                |        |                |        |                |        |                |        |                |        |                |        |                |        |

| Parts of line | Boom length    |        |                |        |                |        |                |        |                |        |                |        |                |        |                |        |
|---------------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|
|               | 240' (73.15 m) |        | 250' (79.25 m) |        | 260' (79.25 m) |        | 270' (82.30 m) |        | 280' (85.34 m) |        | 290' (88.39 m) |        | 300' (91.44 m) |        | 310' (94.49 m) |        |
|               | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters |
| 1             | 505            | 153.92 | 525            | 160.02 | 545            | 166.12 | 565            | 172.21 | 585            | 178.31 | 605            | 184.40 | 625            | 190.50 | 645            | 196.60 |
| 2             | 755            | 230.12 | 785            | 239.27 | 815            | 248.41 | 845            | 257.56 | 875            | 266.70 | 905            | 275.84 | 935            | 284.99 | 965            | 294.13 |
| 3             | 1,005          | 306.32 | 1,045          | 318.52 | 1,085          | 330.71 | 1,125          | 342.90 | 1,165          | 355.09 | 1,205          | 367.28 | 1,245          | 379.48 | 1,285          | 391.67 |
| 4             | 1,255          | 382.52 | 1,305          | 397.76 | 1,355          | 413.00 | 1,405          | 428.24 | 1,455          | 443.48 | 1,505          | 458.72 | 1,555          | 473.96 | 1,605          | 489.20 |
| 5             | 1,505          | 458.72 | 1,565          | 477.01 | 1,625          | 495.30 | 1,685          | 513.59 | 1,745          | 531.88 | 1,805          | 550.16 | 1,865          | 568.45 | 1,925          | 586.75 |
| 6             | 1,755          | 534.92 | 1,825          | 556.26 | 1,895          | 577.60 | 1,965          | 598.93 |                |        |                |        |                |        |                |        |

| Parts of line | Boom length    |        |                 |        |                 |        |                 |        |                 |        |
|---------------|----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|
|               | 320' (97.54 m) |        | 330' (100.58 m) |        | 340' (103.63 m) |        | 350' (106.68 m) |        | 360' (109.73 m) |        |
|               | Feet           | meters | Feet            | meters | Feet            | meters | Feet            | meters | Feet            | meters |
| 1             | 665            | 202.69 | 685             | 208.79 | 705             | 214.88 | 725             | 220.98 | 745             | 227.08 |
| 2             | 995            | 303.28 | 1,025           | 312.42 | 1,055           | 321.56 | 1,085           | 330.71 | 1,115           | 339.85 |
| 3             | 1,325          | 403.86 | 1,365           | 416.05 | 1,405           | 428.24 | 1,445           | 440.44 | 1,485           | 452.63 |
| 4             | 1,655          | 504.44 | 1,705           | 519.68 | 1,755           | 534.92 | 1,805           | 550.16 | 1,855           | 565.40 |

- ① Heavy duty boom length: 70' (21.34 m) through 290' (88.39 m).  
 ② Long range boom length: 100' (30.48 m) through 360' (109.73 m).



## LS-718 performance specifications

## GENERAL INFORMATION ONLY

## Jib load hoist wire rope length (whipline) ③

| Jib length     | Parts of line | Boom length    |        |                |        |                |        |                |        |                |        |                |        |                |        |                |        |
|----------------|---------------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|
|                |               | 130' (39.62 m) |        | 140' (42.67 m) |        | 150' (45.72 m) |        | 160' (48.72 m) |        | 170' (51.82 m) |        | 180' (54.86 m) |        | 190' (57.91 m) |        | 200' (60.96 m) |        |
|                |               | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters |
| 50' (15.24 m)  | 1             | 390            | 118.87 | 410            | 124.97 | 430            | 131.06 | 450            | 137.16 | 470            | 143.26 | 490            | 149.35 | 510            | 155.45 | 530            | 161.54 |
|                | 2             | 580            | 176.78 | 610            | 185.93 | 640            | 195.07 | 670            | 204.22 | 700            | 213.36 | 730            | 222.50 | 760            | 231.65 | 790            | 240.79 |
| 80' (24.38 m)  | 1             | 450            | 137.16 | 470            | 143.26 | 490            | 149.35 | 510            | 155.45 | 530            | 161.54 | 550            | 167.64 | 570            | 173.74 | 590            | 179.83 |
|                | 2             | 670            | 204.22 | 700            | 213.36 | 730            | 222.50 | 760            | 231.65 | 790            | 240.79 | 820            | 249.94 | 850            | 259.08 | 880            | 268.22 |
| 100' (30.48 m) | 1             | 490            | 149.35 | 510            | 155.45 | 530            | 161.54 | 550            | 167.64 | 570            | 173.74 | 590            | 179.83 | 610            | 185.93 | 630            | 192.02 |
|                | 2             | 730            | 222.50 | 760            | 231.65 | 790            | 240.79 | 820            | 249.94 | 850            | 259.08 | 880            | 268.22 | 910            | 277.37 | 940            | 286.51 |
| 120' (36.58 m) | 1             | 530            | 161.54 | 550            | 167.64 | 570            | 173.74 | 590            | 179.83 | 610            | 185.93 | 630            | 192.02 | 650            | 198.12 | 670            | 204.22 |
|                | 2             | 790            | 240.79 | 820            | 249.94 | 850            | 259.08 | 880            | 268.22 | 910            | 277.37 | 940            | 286.51 | 970            | 295.66 | 1,000          | 304.80 |

| Jib length     | Parts of line | Boom length    |        |                |        |                |        |                  |        |                |        |                |        |                |        |                |        |
|----------------|---------------|----------------|--------|----------------|--------|----------------|--------|------------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|
|                |               | 210' (64.01 m) |        | 220' (67.06 m) |        | 230' (70.10 m) |        | 240' (73.15 m) ① |        | 250' (75.20 m) |        | 260' (79.25 m) |        | 270' (82.30 m) |        | 280' (85.34 m) |        |
|                |               | Feet           | meters | Feet           | meters | Feet           | meters | Feet             | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters |
| 50' (15.24 m)  | 1             | 550            | 167.64 | 570            | 173.74 | 590            | 179.83 | 610              | 185.93 | 630            | 192.02 | 650            | 198.12 | 670            | 204.22 | 690            | 210.31 |
|                | 2             | 820            | 249.94 | 850            | 259.08 | 880            | 268.22 | 910              | 277.37 | 940            | 286.51 | 970            | 295.66 | 1,000          | 304.80 | 1,030          | 313.94 |
| 80' (24.38 m)  | 1             | 610            | 185.93 | 630            | 192.02 | 650            | 198.12 | 670              | 204.22 | 690            | 210.31 | 710            | 216.41 | 730            | 222.50 | 750            | 228.60 |
|                | 2             | 910            | 277.37 | 940            | 286.51 | 970            | 295.66 | 1,000            | 304.80 | 1,030          | 313.94 | 1,060          | 323.09 | 1,090          | 332.23 | 1,120          | 341.38 |
| 100' (30.48 m) | 1             | 650            | 198.12 | 670            | 204.22 | 690            | 210.31 | 710              | 216.41 | 730            | 222.50 | 750            | 228.60 | 770            | 234.70 | 790            | 240.79 |
|                | 2             | 970            | 295.66 | 1,000          | 304.80 | 1,030          | 313.94 | 1,060            | 323.09 | 1,090          | 332.23 | 1,120          | 341.38 | 1,150          | 350.52 | 1,180          | 359.66 |
| 120' ②         | 1             | 690            | 210.31 | 710            | 216.41 | 730            | 222.50 | 750              | 228.60 |                |        |                |        |                |        |                |        |
|                | 2             | 1,030          | 313.94 | 1,000          | 323.09 | 1,090          | 332.23 | 1,120            | 341.38 |                |        |                |        |                |        |                |        |

| Jib length    | Parts of line | Boom length    |        |                |        |                |        |                |        |                 |        |                 |        |                 |        |      |        |
|---------------|---------------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|------|--------|
|               |               | 290' (88.39 m) |        | 300' (91.44 m) |        | 310' (94.49 m) |        | 320' (97.54 m) |        | 330' (100.58 m) |        | 340' (103.63 m) |        | 350' (106.68 m) |        |      |        |
|               |               | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet            | meters | Feet            | meters | Feet            | meters | Feet | meters |
| 50' (15.24 m) | 1             | 710            | 216.41 | 730            | 222.50 | 750            | 228.60 | 770            | 234.70 | 790             | 240.79 | 810             | 246.89 | 830             | 252.98 |      |        |
|               | 2             | 1,060          | 323.09 | 1,090          | 332.23 | 1,120          | 341.38 | 1,150          | 350.52 | 1,180           | 359.66 | 1,210           | 368.81 | 1,240           | 377.95 |      |        |
| 80' (24.38 m) | 1             | 770            | 234.70 | 790            | 240.79 | 810            | 246.89 | 830            | 252.98 | 850             | 259.08 | 870             | 265.18 | 890             | 271.27 |      |        |
|               | 2             | 1,150          | 350.52 | 1,180          | 359.66 | 1,210          | 368.81 | 1,240          | 377.95 | 1,270           | 387.10 | 1,300           | 396.24 | 1,330           | 405.38 |      |        |
| 100' ②        | 1             | 810            | 246.89 | 830            | 252.98 | 850            | 259.08 | 870            | 265.18 | 890             | 271.27 | 910             | 277.37 | 930             | 283.46 |      |        |
|               | 2             | 1,210          | 368.81 | 1,240          | 377.95 | 1,270          | 387.10 | 1,300          | 396.24 | 1,330           | 405.38 | 1,360           | 414.53 | 1,390           | 423.67 |      |        |

- ① Maximum boom/jib combination for the heavy duty boom is 240' (73.15 m) plus 120' (36.58 m), use wire rope length only up to this combination.  
 ② Maximum boom/jib combination for the long range boom is 350' (106.68 m) plus 100' (30.48 m), use wire rope length only up to this combination.  
 All other wire rope lengths and boom/jib combinations applicable to either long range boom or heavy duty boom.  
 ③ Jib load hoist wire rope available in 1" (25 mm) for long range boom or 1 1/4" (32 mm) for heavy duty boom.

## Drum wire rope capacities

| Wire rope layer | Front or rear drum — 21 1/4" (0.54 m) root diameter smooth lagging |        |                 |        |                          |        |                 |        |                          |        |                 |        | Third drum — 14 1/4" (0.38 m) root diameter smooth lagging |        |                 |        |
|-----------------|--------------------------------------------------------------------|--------|-----------------|--------|--------------------------|--------|-----------------|--------|--------------------------|--------|-----------------|--------|------------------------------------------------------------|--------|-----------------|--------|
|                 | 1" (25 mm) wire rope                                               |        |                 |        | 1 1/4" (28 mm) wire rope |        |                 |        | 1 1/2" (32 mm) wire rope |        |                 |        | 1 3/4" (22 mm) wire rope                                   |        |                 |        |
|                 | Rope per layer                                                     |        | Total wire rope |        | Rope per layer           |        | Total wire rope |        | Rope per layer           |        | Total wire rope |        | Rope per layer                                             |        | Total wire rope |        |
|                 | Feet                                                               | meters | Feet            | meters | Feet                     | meters | Feet            | meters | Feet                     | meters | Feet            | meters | Feet                                                       | meters | Feet            | meters |
| 1               | 216                                                                | 66     | 216             | 66     | 192                      | 59     | 192             | 59     | 173                      | 53     | 173             | 53     | 177                                                        | 54     | 177             | 54     |
| 2               | 241                                                                | 73     | 457             | 139    | 218                      | 66     | 410             | 125    | 199                      | 61     | 372             | 113    | 202                                                        | 62     | 379             | 116    |
| 3               | 477                                                                | 145    | 718             | 219    | 430                      | 131    | 648             | 198    | 392                      | 119    | 591             | 180    | 222                                                        | 68     | 601             | 183    |
| 4               | 522                                                                | 159    | 999             | 304    | 476                      | 145    | 906             | 276    | 408                      | 124    | 800             | 243    | 242                                                        | 74     | 843             | 257    |
| 5               | 778                                                                | 237    | 1,300           | 396    | 708                      | 216    | 1,184           | 361    | 681                      | 208    | 1,089           | 332    | 262                                                        | 80     | 1,105           | 337    |
| 6               | 843                                                                | 257    | 1,621           | 494    | 773                      | 236    | 1,481           | 451    | 685                      | 209    | 1,366           | 416    | 282                                                        | 86     | 1,367           | 423    |
| 7               | 1,117                                                              | 340    | 1,960           | 597    | 1,022                    | 312    | 1,795 ①         | 547    | 975                      | 297    | 1,660           | 506    | 302                                                        | 92     | 1,689           | 515    |
| 8               | 1,199                                                              | 365    | 2,316           | 706    | 1,103                    | 336    | 2,125           | 651    | 995                      | 303    | 1,970 ②         | 600    | 323                                                        | 98     | 2,012           | 613    |
| 9               | 1,489                                                              | 454    | 2,688 ③         | 819    | 1,370                    | 418    | 2,473           | 754    | 1,305                    | 550    | 2,300           | 701    |                                                            |        |                 |        |
| 10              | 1,589                                                              | 484    | 3,078           | 938    | 1,470                    | 448    | 2,840           | 866    |                          |        |                 |        |                                                            |        |                 |        |
| 11              | 1,898                                                              | 579    | 3,487           | 1,063  |                          |        |                 |        |                          |        |                 |        |                                                            |        |                 |        |

- ① First layer for each size wire rope is shown for storage purposes only — it is not a working layer.  
 ② Front drum — 40" (1.02 m) diameter flange.  
 ③ Front drum — 43" (1.09 m) diameter flange.  
 ④ Maximum wire rope capacity for front drum with 40" (1.02 m) diameter flange.



## LS-718 performance specifications

### Drum wire rope capacities - continued

| Wire ①<br>rope<br>layer | Front or rear drum — 25½" (0.64 m)<br>root diameter grooved lagging |        |                 |        |                       |        |                 |        |
|-------------------------|---------------------------------------------------------------------|--------|-----------------|--------|-----------------------|--------|-----------------|--------|
|                         | 1½" (28 mm) wire rope                                               |        |                 |        | 1¼" (32 mm) wire rope |        |                 |        |
|                         | Rope per layer                                                      |        | Total wire rope |        | Rope per layer        |        | Total wire rope |        |
|                         | Feet                                                                | meters | Feet            | meters | Feet                  | meters | Feet            | meters |
| 1                       | 197                                                                 | 60     | 197             | 60     | 198                   | 60     | 198             | 60     |
| 2                       | 258                                                                 | 79     | 455             | 139    | 235                   | 72     | 433             | 132    |
| 3                       | 475                                                                 | 145    | 733             | 223    | 453                   | 138    | 688             | 210    |
| 4                       | 555                                                                 | 169    | 1,030           | 314    | 508                   | 155    | 961             | 293    |
| 5                       | 789                                                                 | 240    | 1,344           | 410    | 743                   | 226    | 1,251           | 381    |
| 6                       | 886                                                                 | 270    | 1,675           | 511    | 814                   | 248    | 1,557           | 475    |

### GENERAL INFORMATION ONLY

① Last layer for each size is shown for storage purposes only — it is not a working layer.

### Clamshell wire rope lengths using one part of line

| Attachment | Function | Heavy duty boom lengths only |        |               |        |                |        |                |        |                |        |                |        |
|------------|----------|------------------------------|--------|---------------|--------|----------------|--------|----------------|--------|----------------|--------|----------------|--------|
|            |          | 70' (21.34 m)                |        | 90' (27.43 m) |        | 100' (30.48 m) |        | 110' (33.53 m) |        | 120' (36.58 m) |        | 130' (39.62 m) |        |
|            |          | Feet                         | meters | Feet          | meters | Feet           | meters | Feet           | meters | Feet           | meters | Feet           | meters |
| Clamshell  | Holding  | 280                          | 85.34  | 300           | 91.44  | 310            | 94.49  | 320            | 97.54  | 330            | 100.58 | 340            | 103.63 |
|            | Closing  | 325                          | 99.06  | 345           | 105.16 | 355            | 108.20 | 365            | 111.25 | 375            | 114.30 | 385            | 117.35 |

**Available line speed and line pull** — developed by machinery with first layer of wire rope but not based on wire rope strength.

| Attachment | Front and rear drums |                    |    |                        |       |                       |           | Third drum       |                    |    |                        |       |                       |           |
|------------|----------------------|--------------------|----|------------------------|-------|-----------------------|-----------|------------------|--------------------|----|------------------------|-------|-----------------------|-----------|
|            | Root diameter        | Wire rope diameter |    | Line speed first layer |       | Line pull first layer |           | Root diameter    | Wire rope diameter |    | Line speed first layer |       | Line pull first layer |           |
|            |                      | Inches             | mm | F.p.m.                 | m/min | Pounds                | kilograms |                  | Inches             | mm | F.p.m.                 | m/min | Pounds                | kilograms |
| Crane      | 21½"<br>(0.54 m)     | 1                  | 25 | 139                    | 42.4  | 54,600                | 24 767    | 14½"<br>(0.38 m) | ¾                  | 22 | 207                    | 63.09 | 34,900                | 15 831    |
|            |                      | 1½                 | 28 | 140                    | 42.7  | 54,300                | 24 630    |                  |                    |    |                        |       |                       |           |
|            |                      | 1¾                 | 32 | 141                    | 43.0  | 54,000                | 24 494    |                  |                    |    |                        |       |                       |           |
| Clamshell  | 25½"<br>(0.64 m)     | 1¾                 | 32 | 169                    | 51.5  | 45,000                | 20 412    |                  |                    |    |                        |       |                       |           |

**Permissible line speed and line pull** — Based on Type "N" wire rope strength, single part line.

| Attachment | Front and rear drums |                    |    |                        |       |                       |           | Third drum       |                    |    |                        |       |                       |           |
|------------|----------------------|--------------------|----|------------------------|-------|-----------------------|-----------|------------------|--------------------|----|------------------------|-------|-----------------------|-----------|
|            | Root diameter        | Wire rope diameter |    | Line speed first layer |       | Line pull first layer |           | Root diameter    | Wire rope diameter |    | Line speed first layer |       | Line pull first layer |           |
|            |                      | Inches             | mm | F.p.m.                 | m/min | Pounds                | kilograms |                  | Inches             | mm | F.p.m.                 | m/min | Pounds                | kilograms |
| Crane      | 21½"<br>(0.54 m)     | 1                  | 25 | 242                    | 73.8  | 29,500                | 13 381    | 14½"<br>(0.38 m) | ¾                  | 22 | 287                    | 87.48 | 22,700                | 10 297    |
|            |                      | 1½                 | 28 | 204                    | 62.2  | 37,100                | 16 829    |                  |                    |    |                        |       |                       |           |
|            |                      | 1¾                 | 32 | 169                    | 51.5  | 45,600                | 20 684    |                  |                    |    |                        |       |                       |           |
| Clamshell  | 25½"<br>(0.64 m)     | 1¾                 | 32 | 169                    | 51.5  | 45,000                | 20 412    |                  |                    |    |                        |       |                       |           |

**LS-718 performance specifications****GENERAL INFORMATION ONLY**

**Best performance** — line speeds are maximum for full throttle operation, with engine governed at 2,100 r.p.m. full load.

| Single line load <sup>①</sup> |           | Front or rear drum — using 1¼" (32mm) wire rope |       |              |       |               |       |                                             |       |             |        |             |       |
|-------------------------------|-----------|-------------------------------------------------|-------|--------------|-------|---------------|-------|---------------------------------------------|-------|-------------|--------|-------------|-------|
|                               |           | 21¼" (0.54 m) root diameter smooth lagging      |       |              |       |               |       | 25¼" (0.64 m) root diameter grooved lagging |       |             |        |             |       |
|                               |           | Line speed                                      |       |              |       |               |       | Line speed                                  |       |             |        |             |       |
|                               |           | First layer                                     |       | Fourth layer |       | Seventh layer |       | First layer                                 |       | Third layer |        | Fifth layer |       |
| Pounds                        | kilograms | F.p.m.                                          | m/min | F.p.m.       | m/min | F.p.m.        | m/min | F.p.m.                                      | m/min | F.p.m.      | m/min  | F.p.m.      | m/min |
| 5,000                         | 2 268     | 321                                             | 97.8  | 426          | 129.8 | 530           | 161.5 | 384                                         | 117.0 | 454         | 138.45 | 523         | 159.4 |
| 10,000                        | 4 535     | 316                                             | 96.3  | 418          | 127.4 | 512           | 156.1 | 378                                         | 115.2 | 445         | 135.6  | 507         | 154.5 |
| 15,000                        | 6 804     | 312                                             | 95.1  | 387          | 118.0 | 443           | 135.0 | 361                                         | 110.0 | 404         | 123.1  | 439         | 133.8 |
| 20,000                        | 9 072     | 290                                             | 88.4  | 343          | 104.5 | 371           | 113.1 | 325                                         | 99.1  | 353         | 107.6  | 370         | 112.8 |
| 25,000                        | 11 340    | 266                                             | 81.1  | 297          | 90.5  | 305           | 93.0  | 288                                         | 87.8  | 301         | 91.7   | 305         | 93.0  |
| 30,000                        | 13 608    | 240                                             | 73.2  | 254          | 77.4  | 255           | 77.7  | 251                                         | 76.5  | 255         | 77.7   | 255         | 77.7  |
| 35,000                        | 15 876    | 214                                             | 65.2  | 223          | 68.0  | 213           | 64.9  | 218                                         | 66.4  | 218         | 66.4   | 214         | 65.2  |
| 40,000                        | 18 144    | 191                                             | 58.2  | 190          | 57.9  | 180           | 54.9  | 192                                         | 58.5  | 188         | 57.3   | 181         | 55.2  |
| 45,600 <sup>②</sup>           | 20 684    | 169                                             | 51.5  | 162          | 49.4  | 158           | 48.2  | 166                                         | 51.0  | 159         | 48.5   | 149         | 45.4  |

① Maximum permissible load for 1¼" (32 mm) Type "P" rope is 37,200 lbs. (16 871 kgs) for single part of line only.

② Maximum permissible load for 1¼" (32 mm) Type "N" rope is 45,600 lbs. (20 680 kgs) per part of line.

**Permissible main hoist loads — using 1¼" (32 mm) Type "N" wire rope<sup>①</sup>**

| No. parts of line   | 1      | 2      | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10      | 11      | 12      |
|---------------------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Maximum load — lbs. | 45,600 | 91,200 | 136,800 | 182,400 | 228,000 | 273,600 | 319,200 | 364,800 | 410,400 | 456,000 | 500,000 | 500,000 |
| Maximum load — kg   | 20 680 | 41 360 | 62 040  | 82 720  | 103 400 | 124 080 | 144 760 | 165 440 | 186 120 | 206 800 | 226 757 | 226 757 |

① Based on wire rope strength only. Consult lifting capacity chart for allowable loads.

**Boom hoist wire rope length — 1,220' (371.86 m) heavy duty and long range booms only****Rope size and type**

| Wire rope application                          | Size and type used             |
|------------------------------------------------|--------------------------------|
| Boom hoist                                     | ¾" (22 mm) diameter, Type "W"  |
| Main load hoist                                | 1¼" (32 mm) diameter, Type "N" |
| Jib load hoist (1-part) Heavy duty boom        | 1¼" (32 mm) diameter, Type "P" |
| Jib load hoist (2-part) Heavy duty boom        | 1¼" (32 mm) diameter, Type "N" |
| Jib load hoist (1-part) long range boom        | 1" (25 mm) diameter, Type "N"  |
| Jib load hoist (2-part) long range boom        | 1" (25 mm) diameter, Type "N"  |
| Boom pendants — dual                           | 1¼" (28 mm) diameter, Type "N" |
| Boom midpoint suspension pendants <sup>①</sup> | ¾" (22 mm) diameter, Type "N"  |
| Jib front stay line                            | 1¼" (28 mm) diameter, Type "N" |
| Jib back stay line                             | 1¼" (28 mm) diameter, Type "N" |
| Clamshell holding                              | 1¼" (32 mm) diameter, Type "N" |
| Clamshell closing                              | 1¼" (32 mm) diameter, Type "N" |

① Used only on long range boom 270' (82.30 m) through 360' (109.73 m).

| Wire rope type                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------|
| Type "N" — 6 x 25 (6 x 19 class), filler wire, extra improved plow steel, preformed, independent wire rope center, right lay, regular lay. |
| Type "P" — 19 x 7 non-rotating, extra improved plow steel, preformed, wire center core.                                                    |
| Type "W" — 6 x 26 (6 x 19 class), extra improved plow steel, preformed independent wire rope center, right lay, alternate lay.             |