Upperstructure

**Boom**

Link-Belt patented design. 35° 0" — 85° 0" (10.67 m — 25.91 m) three-section boom with two power sections. Boom side plates have diamond shaped impressions for superior strength to weight ratio and are offset welded to carefully machined 100,000 p.s.i. (689.5 MPa) steel angle chords for maximum integrity and strength. Boom telescope sections are supported by wear shoes both vertically and horizontally. Anti-two block device with audio-visual warning.

**Load Moment Indicator** — Audio-visual warning system with anti-two block and function kickouts. Constant display of boom length and angle, tip height, radius of load, machine configuration, allowed load, actual load and % of allowed load. Presettable alarms for maximum and minimum boom angles, maximum tip height and maximum boom length.

**Optional boom** — 35° 0"—110° 0" (10.67 m—33.53 m) four-section boom includes base section, two power sections, and manual fourth section. Fourth section is power pinned by manually activating a cylinder locking system.

**Boom head** — **Standard**; Four 16-3/8" (0.42 m) root diameter head sheaves with five 16-3/8" (0.42 m) root diameter head sheaves available to handle up to 10 parts of 3/4" (19 mm) wire rope. Two removable wire rope guards and rope dead end lugs are provided on each side of the boom head.

**Auxiliary lifting sheave** — **Optional**; Single 16-3/8" (0.42 m) root diameter head sheave with removable wire rope guards, mounted to boom. For use with one or two parts of line off the optional auxiliary winch. Does not affect erection of jib or use of main head sheaves for multiple reeving.

**Boom elevation** — Two Link-Belt designed double-acting hydraulic boom hoist cylinders with integral holding valves. Hand or foot controls for boom elevation from -3° to 78°.

**Jib**

Optional — 25° 0" (7.62 m) stowable A-frame. Can be offset 5°, 17.5°, and 30°. Attaches to fly only.

**Cab and Controls**

Environmental cab; isolated from sound and vibration by rubber mounts. All tinted and tempered safety glass windows. For maximum visibility and ventilation, sliding right side and rear window and swing up roof window supported with two gas cylinders. Slide-by-door opens to 3° 0" (0.91 m) width. Six-way adjustable operator’s seat. Control levers for swing, boom telescope, winch and boom hoist, with foot control for swing brake and optional boom hoist. Outtrigger controls, sight level bubble.

**Cab instrumentation** — Dash mounted gauges for hydraulic oil temperature, fuel, water temperature, and oil pressure.

**Swing**

Bi-directional hydraulic swing motor mounted to a two-stage planetary reducer for 380° continuous smooth swing at 2.45 r.p.m.

**Swing brake** — **Standard**; Foot operated, spring released disc brake mounted on the speed reducer.

**Swing lock** — **Standard**; 360° position pin-type controlled from the operator’s cab. Two position house lock for travel and pick and carry modes.

**Counterweight** — Pinned to upperstructure frame. 9,000 lb. (4 082 kg) counterweight with single-wincho system. 8,050 lb. (3 651 kg) counterweight with two-wincho system. Optional counterweight removal system is available.

**Filtration** — One six-micron filter located inside the hydraulic reservoir.

**Control valves** — Six separate control valves allow simultaneous operation of all crane functions.

**Load Hoist System**

**Standard** — Model 2M main winch with two-speed motor and automatic brake; power up/power down mode of operation. Bi-directional gear type hydraulic motor.

**Optional** — Model 2M auxiliary winch with two-speed motor and automatic brake, power up/power down mode of operation. Bi-directional, gear-type hydraulic motor.

**Optional** — Model 3M winch with power up/power down, two-speed motor and exclusive controlled true gravity freefall. Available on main or both winches.

**Line pulls and speeds** — Maximum line pull is 15,870 lbs. (7 199 kg) and maximum line speed is 548 f.p.m. (167.03 m/min) on 17" (0.43 m) root diameter drums.

**Additional Upperstructure Equipment - Optional**

Boom hoist foot control, drum rotation indicators, propane heater, diesel heater, 40-ton (36.29 metric ton) hook block, 8-1/2 ton (7.72 metric ton) ball and swivel, roof window windshield wiper, flood lights, lifting lug package, hand throttle, air conditioning, windshield washer, amber rotating beacon, cab mounted spotlight, tachometer and engine monitoring system.

**Hydraulic System**

**Main pump** — Three-section gear-type pump. Combined pump capacity of 185 gpm (700 lpm)Powered by carrier engine (1:1 ratio) with pump disconnect. Pump disconnect is a jaw-type clutch engaged/disengaged from carrier cab. Maximum system operating pressure is 2,900 p.s.i. (204 kg/cm²). Hydraulic oil cooler is standard.

**Reservoir** — Link-Belt, 145 gallon (548.83 L) capacity. Diffusers for deaeration.
Carrier

Type
Link-Belt 8' 0" (2.44 m) wide, 228" (5.79 m) wheelbase.
Standard — 8 x 4 drive

Frame — All-welded high strength alloy steel plate construction with box-type design and integral 100,000 p.s.i. (689.5 MPa) steel outrigger boxes.

Outriggers
Standard — Power hydraulic, double box, dual beam outriggers, front and rear. Vertical jack cylinders, each equipped with integral holding valve. Beams extend to 20' 0" (6.10 m) centerline-to-centerline and retract to within 8' 0" (2.44 m) overall width. Equipped with stowable, lightweight 24" (.61 m) diameter floats. Controls and sight level bubble located in upperstructure cab.

Front bumper outrigger — Standard; front center vertical jack mounted under bumper with 20" (.51 m) square lightweight float. Provides 360° lifting capacities.

Axles
Front — Tandem, 83.31" (2.12 m) track.
Rear — Tandem, 71.8" (1.82 m) track. 6.83 to 1.0 ratio with interaxle differential lockout.

Suspension
Front — Spring suspension with torque rods.
Rear — Solid mount 54" (1.37 m) bogie beam.

Wheels
Front — Cast six-spoke.
Rear — Cast six-spoke.

Tires
Standard Front — 15.0 x 22.5 (16 PR) transport type tubeless.
Standard Rear — 11.0 x 20.0 (14 PR) transport type with tube.
Optional Front — 16.5 x 22.5 (16-PR) or 18.00 x 22.5 (16-PR) transport type tubeless.
Optional Rear — 12.00 x 20.0 (14 PR) transport type with tube.
Optional Front — 445/65R22.5 XZY lug type radials.
Optional Rear — 12R20 XZA transport type radials.
Optional Rear — 12R20 XZY lug type radials

Brakes
Full air on all wheels. Air dryer is standard.

Service
Front — 8 x 4 Cam Type 16-1/2" x 6" (.42 m x .15 m) shoe diameter.
Rear — Cam-type 16-1/2" x 7" (.42 m x .18 m) shoe diameter.

Parking & emergency — One spring set, air released chamber per rear axle end. Parking brake applied with valve mounted on carrier dash. Emergency brakes apply automatically when air pressure drops below 60 p.s.i. (4.14 Bars) in both systems.

Steering
Sheppard Steering, rack-and-pinion design. Provides wall-to-wall turning radius of 48' 4-1/2" (14.74 m).

Clutch — Lipe-Rollway 14" (0.36 m) diameter, spring loaded, double plate dry disc.

Universals — Rockwell; easy service type.

Transmission
Standard — Fuller Roadranger RTO-6613; 13 speeds forward, 3 reverse.

Electrical System
Two 12-volt batteries; 2,230 cold cranking amps available, 80 amp alternator.

Lights — Four dual-beam sealed headlights, front and rear directional signals, stop and tail lights, four-way emergency flashers, back-up lights, front, rear and side clearance lights with integral reflectors and license plate light.

Carrier Cab
One-man cab. Acoustical insulation with vinyl covering. Equipped with electric windshield wiper and washer, horn, four-way adjustable seat with seat belt, dome and dash lights, cigar lighter, ashtray, 22,400 BTU capacity heater, defroster, door and window locks, fire extinguisher, LH/RH rear view mirrors, tilt/telescoping steering wheel and sliding LH/RH and rear tinted windows.

Cab Instrumentation — Standard; illuminated instrument panel with speedometer, odometer, tachometer, voltmeter, hourmeter, front and rear air pressure gauges, low air pressure light and warning buzzer, automotive-type ignition (common with upper), engine oil pressure gauge, water temperature gauge, fuel gauge, turn signal indicator, high beam light switch, adjustable defroster vents and circuit breakers.

Additional Equipment — Standard
Front and rear fenders, air dryer, back-up warning alarm, cab steps, access ladder to rear carrier deck with hand grab rails, front/rear tow loops, and skid-resistant finish on carrier deck and mud flaps.

Additional Equipment — Optional
Engine block heater, ether injection starting package, spare tire and rim assemblies, towing shackles and engine monitoring system.
### Travel Speeds and Gradeability

<table>
<thead>
<tr>
<th>Engine</th>
<th>Maximum Speed</th>
<th>Maximum Gradeability at peak engine torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cummins 6CTA 8.3</td>
<td>50.43 Mph 81.16 Km/h</td>
<td>44.8%</td>
</tr>
</tbody>
</table>

© Maximum speed based on full load r.p.m. Gradeability is based on peak torque of the engine and machine equipped with standard tires and G.V.W.

<table>
<thead>
<tr>
<th>Engine</th>
<th>Cummins 6CTA 8.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinders / cycle</td>
<td>6 / 4</td>
</tr>
<tr>
<td>Bore</td>
<td>4.5&quot; (0.11 m)</td>
</tr>
<tr>
<td>Stroke</td>
<td>5.32&quot; (0.14 m)</td>
</tr>
<tr>
<td>Displacement</td>
<td>504.5 cu. in. (8 267 cm³)</td>
</tr>
<tr>
<td>Gross engine power</td>
<td>234 h.p. @ 2200 rpm</td>
</tr>
<tr>
<td>Peak torque</td>
<td>640 ft. lbs. (867.72 J)</td>
</tr>
<tr>
<td>Electric system</td>
<td>12 volt negative ground</td>
</tr>
<tr>
<td>Fuel capacity</td>
<td>100 gallons (378.5 L)</td>
</tr>
<tr>
<td>Alternator</td>
<td>80 amps</td>
</tr>
<tr>
<td>Crankcase capacity</td>
<td>23.7 quarts (22.43 L)</td>
</tr>
<tr>
<td>Air compressor</td>
<td>13.2 c.f.m. (0.37 m³/min)</td>
</tr>
</tbody>
</table>

### Axle Loads

Base machine includes 35° - 85° (10.67 m - 25.91 m) three-section boom with four-sheave head machinery, main winch with two-speed hoisting and power up/down, 600' (182.88 m) 1" (19mm) rope, 8x4, 8 (2.4m) carrier with Cummins 6CTA 8.3 diesel engine, front bumper outrigger, Roadranger transmission, full hydraulic and hydraulics.

<table>
<thead>
<tr>
<th>G.V.W.</th>
<th>Upper facing front</th>
<th>Upper facing rear</th>
</tr>
</thead>
<tbody>
<tr>
<td>lbs.</td>
<td>kg</td>
<td>lbs.</td>
</tr>
<tr>
<td>61,169</td>
<td>27,746</td>
<td>32,012</td>
</tr>
</tbody>
</table>

35° - 110° (10.67m - 33.53 m) 4-section boom

- Counterweight for single winch: 1,952 lbs. (885 kg)
- Counterweight for two winches: 8,050 lbs. (3,651 kg)
- Freetail man winch with 600' (182.88 m) rope: 442 lbs. (200 kg)
- Power up/down aux. winch with 465' (141.73 m) rope: 1,758 lbs. (797 kg)
- Freetail aux. winch with 465' (141.73 m) rope: 2,200 lbs. (998 kg)
- 33° (10.06 m) lattice fly, slowed: 1,040 lbs. (472 kg)
- 25° (7.62 m) A-frame jib, slowed: 1,128 lbs. (512 kg)
- Hook block at bumper: 800 lbs. (363 kg)
- Headache ball at bumper: 325 lbs. (147 kg)
- Auxiliary lifting sheave: 150 lbs. (68 kg)
- Fly and pb slavage brackets: 230 lbs. (104 kg)
- 16.5 X 22.5 front tires and rims: 36 lbs. (16 kg)
- 18.0 X 22.5 front tires and rims: 172 lbs. (78 kg)
- 12.0 X 20.0 rear tires with rims and wheels: 413 lbs. (187 kg)
- Counterweight removal system: 120 lbs. (54 kg)

© Adjust gross vehicle weight & axle loading according to component weight.

**Note:** All weights are ± 3%.

### Maximum Front Axle Load Table

<table>
<thead>
<tr>
<th>Tire</th>
<th>Maximum Axle Load @ 50 mph (80.45 km/h)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.0 X 22.5 H</td>
<td>36,400 lbs. (16 511 kg)</td>
</tr>
<tr>
<td>16.5 X 22.5 H</td>
<td>39,500 lbs. (17 917 kg)</td>
</tr>
<tr>
<td>18.0 X 22.5 H</td>
<td>40,000 lbs. (18 142 kg)</td>
</tr>
</tbody>
</table>

* For speeds exceeding 50 mph (80.45 km/h) see Operator's Manual

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

Link-Belt Construction Equipment Company Lexington, Kentucky

A unit of Sumitomo Construction Machinery Co., Ltd