Specifications
Telescopic Boom Truck Crane

HTC–8670 LB 70–ton (63.5 metric tons)
Long Boom

General Dimensions

<table>
<thead>
<tr>
<th></th>
<th>feet</th>
<th>meters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turning radius (wall to wall)</td>
<td>51' 2.75&quot;</td>
<td>15.61</td>
</tr>
<tr>
<td>Turning radius (curb to curb)</td>
<td>41' 10.5&quot;</td>
<td>12.67</td>
</tr>
<tr>
<td>Ground clearance</td>
<td>13.25&quot;</td>
<td>0.34</td>
</tr>
<tr>
<td>Tailswing</td>
<td>13' 8.125&quot;</td>
<td>4.17</td>
</tr>
</tbody>
</table>

Not To Scale
Upper Structure

■ Boom

Patented Design
- Boom side plates have diamond shaped impressions for superior strength to weight ratio and 100,000 p.s.i. (689.5 MPa) steel angle chords for lateral stiffness.
- Boom telescope sections are supported by top, bottom and adjustable side wear shoes to prevent metal to metal contact.
- The basic mode is the full power, synchronized mode of telescoping all sections proportionally to 127' (38.71 m).
- The exclusive “A-max” mode (or mode ‘A’ extends only the inner mid sections to 69.6' (21.21 m) offering increased capacities for in-close, maximum capacity picks.
- Mechanical Boom Angle Indicator

Boom Head
- Five 16.5" (0.42 m) root diameter nylon sheaves with a fifth nylon sheave available to handle up to ten parts of wire rope.
- Easily removable wire rope guards
- Rope dead end lugs provided on each side of boom head
- Boom head designed for quick reeve of hook block
- Fly pinning alignment tool

Boom Elevation
- One Link-Belt designed hydraulic cylinder with holding valve and bushing in each end.
- Hand control for controlling boom elevation from –3° to +78°.

Optional Auxiliary Lifting Sheave
- Single 16.5" (0.42 m) root diameter nylon sheave with removable wire rope guard, mounted to boom
- Use with one or two parts of line off the optional front winch
- Does not affect erection of fly or use of main head sheaves for multiple reeving.

Optional
- 40-ton (36.29 mt) quick-reeve hook block
- 60-ton (54.43 mt) quick-reeve hook block
- 70-ton (63.5 mt) quick-reeve hook block
- 8.5-ton (7.7 mt) hook ball
- Boom floodlight

■ Fly

Optional
- 39.5' (12.04 m) One-piece lattice fly, stowable, offsettable to 2°, 20° and 40°.
- Lugs to allow for second section.
- 39.5' – 67' (12.04 – 20.42 m) Two-piece (bifold) lattice fly, stowable, offsettable to 2°, 20° or 40°.

■ Cab and Controls

Environmental Ultra-Cab™
- Laminate fibrous composite material; isolated from sound with acoustical fabric insulation.
- Windows are tinted and tempered safety glass
- Sliding rear and right side windows and swing-up roof window for maximum visibility and ventilation
- Slide–by–door opens to 3’ (0.91 m) width
- Six–way adjustable seat, with seat belt, for maximum operator comfort
- Hand–held outrigger controls and sight level bubble located on right side of cab
- Diesel cab heater
- Pull–out Cabwalk™
- Audible swing alarm
- Backup alarm
- Fire extinguisher
- 12–volt accessory outlet
- Electric windshield wiper
- Swing lock
- Engine throttle
- Top hatch window wiper
- Circulating fan
- Warning horn
- Dome light
- Cup holder
- Sun screen
- Hand throttle
- Mirrors
- Defroster fan

Optional
- Internal RCL light bar: Visually informs operator when crane is approaching maximum load capacity with a series of green, yellow and red lights.
- External RCL light bar: Visually informs ground crew when crane is approaching maximum load capacity kickouts and presettable alarms with a series of three lights: green, yellow and red

■ Swing

- Bi–directional hydraulic swing motor mounted to a planetary reducer for 360° continuous smooth swing at 1.7 r.p.m.
- Swing park brake – 360°, electric over hydraulic (spring applied, hydraulic released) multi–disc brake mounted on the speed reducer. Operated by toggle switch in overhead control console.
- Swing brake – 360°, foot operated, hydraulic applied disc brake mounted on the speed reducer.
- Swing lock – Standard; two position travel lock operated from the operator’s cab.
- Counterweight
  - Standard – Pinned to upper structure frame. 12,000 lbs. (5,443 kg) three–piece design (4,000 lbs. each).
  - Optional – 16,000 lbs. (7,258 kg) five–piece design. (Dolly required for five piece arrangement).
- Hydraulically controlled counterweight removal, standard. Counterweight sections may be lowered on and pinned to carrier deck to balance axle loadings for travel.

Optional
- 360° (Pawl–in–Gear) swing lock. Meets New York City requirements

■ Hydraulic System

Main Pump
- Two gear pump with a total of five sections
- Combined pump capacity of 152 gpm (575 lpm). Powered by carrier engine with pump disconnect.
- Spline type pump disconnect, engaged / disengaged from carrier cab
- Maximum system operating pressure is 3,500 psi (24 133 kPa)

Pilot Pressure / Counterweight Removal Pump
- Pressure compensated piston pump powered by carrier engine with pump disconnect. Operates at 1,500 psi (10 343 kPa) maximum.

Steering / Fifth Outrigger Pump
- Single gear type pump, 8 gpm (30 lpm). Powered by carrier engine through front gear housing. Max. pump operating pressure is 2,000 psi (13 790 kPa).
- Reservoir – 169 gallon (639.7 L) capacity. One diffuser for deaeration.
Filtration
• One, 10–micron filter located inside hydraulic reservoir
• Accessible for easy replacement

Control valves
• Six separate pilot operated control valves allow simultaneous operation of all crane functions.

Load Hoist System
Standard
• 2M main winch with grooved lagging
• Two–speed motor and automatic brake

Optional
• Front – 16.5 x 6 S–Cam brakes
• Rear – 16.5 x 7 S–Cam brakes

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 drops below 40 psi (275.8 kPa) in both systems

Steering
• Sheppard rack and pinion design

Transmission
Standard
• Eaton RTO–14909ALL; 11 speeds forward, 3 reverse.

Electrical
• Four, 12–volt batteries provide 12–volt starting
• 2,800 cold cranking amps available
• 12–volt operating system, 130–amp alternator
• Illuminated instrument panel speedometer.

Outriggers
• Three position operation capability
• Four hydraulic, telescoping beam and jack outriggers
• Vertical jack cylinders equipped with integral holding valve
• Beams extend to 24’ (7.32 m) centerline–to–centerline and retract to within 8’ 6” (2.59 m) overall width.
• Equipped with stowable, lightweight 24” (0.61 m) diameter aluminum floats.
• Standard fifth outrigger, 14.75” (0.37 m) self storing steel pad is operable from ground or operator’s cab.
• Hand–held controls and sight level bubble located in operators cab and on carrier deck.

Confined Area Lifting Capacities (CALC™) System
• The crane is operational in one of the three outrigger positions and operational in confined areas in two positions (intermediate and full retraction).

Line Pulls and Speeds
• Maximum available line pull 16,506 lbs. (7 484 kg) and maximum line speed of 513 f.p.m. (156 m/min) on 16” (0.41 m) root diameter grooved drum.

Optional
• 2M auxiliary winch with two–speed motor, automatic brake, and winch function lockout. Power up/down modes.
• Hoist drum cable followers
• Third wrap indicators

Carrier
Type
• 8’ 6” (2.59 m) wide, 231” (5.87 m) wheel-base. 8 x 4 drive – standard

Frame
• 100,000 p.s.i. (689.5 MPa) steel, double walled construction with integral 100,000 p.s.i. steel outrigger boxes.

Optional
• Carrier mounted storage box
• Pintle hook
• Electric and air connections for trailers and boom dollies

Axles
Front
• Tandem, 84.38” (2.14 m) track

Rear
• Tandem, 72.8” (1.85 m) track. 6.17 to 1.0 ratio with interaxle differential with lockout.

Suspension
Front axle
• Leaf spring suspension

Rear axle
• Air–ride, bogie beam type, suspension

Wheels
Standard
• Front and rear hub piloted aluminum disc

Optional
• Spare tire and wheel assemblies

Tires
Standard Front
• 445/65R22.5 (Load range “L”) single tubeless radials

Standard Rear
• 12R22.5 (Load range “L”) dual tubeless radials

Brakes
Service
• Full air brakes on all wheel ends with automatic slack adjustors. Dual circuit with modulated emergency brakes.

Cab instrumentation
• Illuminated instrument panel speedometer.
• Tachometer
• Fuel gauge
• Oil pressure gauge
• Turn signal indicator
• Water temperature gauge
• Front and rear air pressure gauges
• Check engine and stop engine lights
• Automotive type ignition

Optional
• Amber strobe light
• Air conditioning
**Carrier Speeds** (Manual Transmission – Standard tires)

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</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 Low</td>
<td>LL2</td>
<td>LL1</td>
<td>Rev.</td>
<td>Rev.</td>
<td>Rev.</td>
</tr>
<tr>
<td>Ratio</td>
<td>0.73</td>
<td>1.00</td>
<td>1.38</td>
<td>1.95</td>
<td>2.77</td>
<td>3.79</td>
<td>5.23</td>
<td>7.41</td>
</tr>
<tr>
<td>Speed</td>
<td></td>
<td></td>
<td>mph</td>
<td>km/hr.</td>
<td>93.65</td>
<td>68.36</td>
<td>49.54</td>
<td>35.06</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>58.20</td>
<td>79.30</td>
<td>21.79</td>
<td>15.34</td>
<td>8.12</td>
<td>5.73</td>
</tr>
<tr>
<td>Max. Load @ 65 mph.</td>
<td>16 839</td>
<td>42.49</td>
<td>3.43</td>
<td>13.03</td>
<td>20.85</td>
<td>26.08</td>
<td>20.85</td>
<td></td>
</tr>
</tbody>
</table>

**Engine**

<table>
<thead>
<tr>
<th>Engine – standard</th>
<th>Detroit Diesel Series 60 12.7 L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinders – cycle</td>
<td>6 / 4</td>
</tr>
<tr>
<td>Bore</td>
<td>5.12” (0.13 m)</td>
</tr>
<tr>
<td>Stroke</td>
<td>6.30” (0.16 m)</td>
</tr>
<tr>
<td>Displacement</td>
<td>778 cu. in. (12.751 cm³)</td>
</tr>
<tr>
<td>Maximum brake hp.</td>
<td>365 @ 1,800 rpm; 350 @ 2,100 rpm</td>
</tr>
<tr>
<td>Peak torque</td>
<td>1,350 ft. lbs. (1 831 J) @ 1,200 rpm</td>
</tr>
<tr>
<td>Electric system</td>
<td>12–volt neg. ground / 12 volt starting</td>
</tr>
<tr>
<td>Fuel capacity</td>
<td>100 gallons (378.5 L)</td>
</tr>
<tr>
<td>Alternator</td>
<td>12 volt, 130 amps</td>
</tr>
<tr>
<td>Crankcase capacity</td>
<td>32 qts. (30 L)</td>
</tr>
</tbody>
</table>

- Engine brake – standard
- Ether injection starting package – optional

**Axle Loads**

| Base machine with standard 41” – 127” (12.50 – 38.71 m) four–section boom, 2M main winch with 2-speed hoisting and power up/down, 670” (204.21 m), 3/4” (19 mm) wire rope, 6 x 4, 8.5” (2.59 m) carrier with Detroit Diesel Series 60 engine, 100 gal. (378.5 L) fuel and no counterweight. |
|-----------------------------------------------|----------------------------------|---------------------------------|
| G.V.W. (lbs.)                                | Upper Facing Front                |
| lbs.   | kg.   | lbs.   | kg.   | lbs.   | kg.   |
| 77,614 | 35,205 | 37,123 | 16,839 | 40,491 | 18,366 |
| Cold weather starting aids – propane and ether | 40 | 18 | 57 | 26 | –17 | –8 |
| Aluminum storage box                         | 57 | 26 | 16 | 7 | 41 | 19 |
| Driver in carrier cab                        | 200 | 91 | 254 | 115 | –54 | –24 |
| Pitot hook w/air and electrical hook–ups     | 30 | 14 | –12 | –5 | 42 | 19 |
| Air conditioning in carrier cab              | 100 | 45 | 127 | 57 | –27 | –12 |
| Auxiliary winch with 670” (204.21 m) front rope | 899 | 408 | –298 | –135 | 1,197 | 543 |
| Hydraulic heater                             | 170 | 77 | 1 | 0.5 | 169 | 77 |
| Air conditioning in upper cab                | 120 | 54 | –4 | –2 | 124 | 56 |
| One slab of counterweight on upper           | 4,000 | 1,814 | –2,140 | –971 | 6,140 | 2,785 |
| Two slabs of counterweight on upper          | 8,000 | 3,629 | –4,281 | –1,942 | 12,281 | 5,571 |
| Three slabs of counterweight on upper        | 12,000 | 5,443 | –6,421 | –2,913 | 18,421 | 8,356 |
| Three slabs of counterweight on upper plus two cheek weights | 16,000 | 7,257 | –8,561 | –3,883 | 24,561 | 11,141 |
| Fly brackets to boom base section for fly options | 160 | 72 | 147 | 68 | 11 | 5 |
| 39.5” (12.04 m) offsettable fly with tip lugs – stowed | 1,602 | 700 | 1,349 | 703 | 52 | 24 |
| 39.5” – 67 ft. (12.04 – 20.42 m) two–piece fly – stowed | 2,380 | 1,020 | 1,711 | 912 | 370 | 168 |
| 40-ton (36.3 mt) hookblock at front bumper   | 720 | 327 | 1,175 | 533 | –455 | –206 |
| 70-ton (63.5 mt) hookblock at front bumper   | 1,400 | 635 | 2,284 | 1,036 | –884 | –401 |
| Hookball to front bumper                     | 360 | 163 | 587 | 266 | –227 | –103 |
| Auxiliary arm                                | 125 | 57 | 230 | 104 | –105 | –48 |

- Adjust gross vehicle weight & axle loading according to component weight. Note: All weights are ± 3%

- Axle Max. Load @ 65 mph. (105 km/h)
  - Front 46,400 lbs. (21,047 kg) – aluminum disc wheels with 445/65R22.5 tires
  - Rear 50,350 lbs. (22,838 kg) – aluminum disc wheels with 12R22.5 tires

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Link–Belt Construction Equipment Company Lexington, Kentucky www.linkbelt.com

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