

HTC-8650 50-ton

Telescopic Truck Crane

- 110' (33.53 m) Full Power 4-Section Boom
- 172' (52.43 m) On-Board Tip Height
- Two Powertrain Options
- Two Attachment Options



The New HTC-8650 Features The Confined Area Lifting Capacities (CALC™) System

• Loaded With Advances...Not Compromises •

• COMFORT • CONTROL •

Maximum Comfort and Control...standard operating values on the HTC-8650 with its revolutionary fibrous composite cab – the ULTRA-CAB™, gear motor winches, and integral rated capacity limiter (RCL).

An Office With A View....

A major step forward in the construction equipment industry, the new environmental ULTRA-CAB found on the HTC-8650 is molded from an LFC•2000 construction process featuring laminated fibrous composite material. Laminated fibrous composites are a hybrid class of composites with lamination techniques. The layers of fiber-reinforced material are built up with the fiber directions of each layer typically oriented in different directions to add strength and stiffness.

This fibrous composite technology offers superior advantages over steel in sound reduction with sound levels one-half as loud as conventional cabs. This fibrous composite material, while eliminating corrosion, also adds dimensional stability and allows modern styling techniques to be utilized including molded radii and ribs. Designed with the operator in mind, the cab features:



Fabric Seat New improved six-way adjustable seat with height-adjustable armrests and 45° reclining seat back.

Hydraulic Control Levers Armrest mounted, responsive dual axis controllers standard. Single axis available.

Lift-Up Armrest Left armrest lifts up out of the way providing outstanding operator ease in entering or exiting the cab. For safety, all control functions become inactive when the armrest is in raised position.

Overhead Console with switches for outrigger controls, lights, fan, windshield wiper, function lockout, swing park brake, and ignition.

Bubble Level Sight level mounted on side console.

Single Foot Pedal Control Hydraulic pilot controlled for simultaneous extension or retraction of power boom sections.

Ducted Air through automotive style directional vents.

Comprehensive Instrumentation Corner post mounted backlighted gauges monitor hydraulic oil temperature, fuel level, coolant temperature, oil pressure and voltage. Corner post also has stop engine and check engine indicator lights and tachometer.

Additional Cab Features Include:

- Dash-less design for superior visibility.
- Automotive style windshield and large side window provides operator with 25% more glass area.
- Sliding right side and rear windows and swing-up roof window provide excellent ventilation.
- Large sweep electric wipers.

Integral Rated Capacity Limiter

This "LMI" system aids the operator in safe and efficient operation by continuously monitoring boom length, boom angle, head height, radius of load, machine configuration, allowed load, actual load, and percent of allowed load. This Microguard 434 graphic audio-visual system features improved access time, improved radio frequency shielding, a new display panel with large liquid crystal alphanumeric display, total system override capabilities to provide for rigging requirements and an expanded memory which provides capacity information on all possible lift configurations.



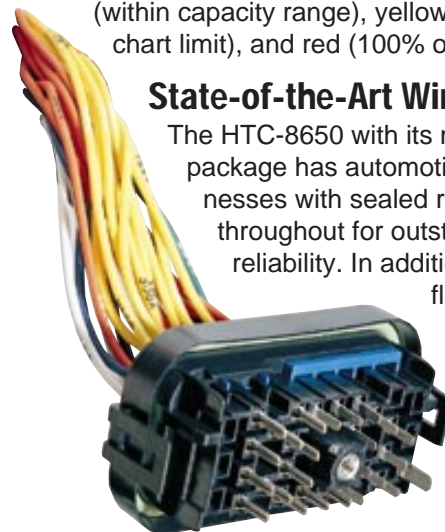
An exclusive new feature available on the HTC-8650 is the Operator Defined Area Alarm. By setting two points, the operator creates an imaginary vertical plane to maintain a safe working distance from nearby obstacles. Should the operator attempt to operate the crane beyond the plane, the RCL will sound an alarm.

An optional graphic display bar, positioned near the top of the windshield for optimum viewing during crane operation, is available. This bar constantly alerts the operator of the current lift capacity situation through a series of green (within capacity range), yellow (approaching 90% chart limit), and red (100% of chart limit) lights.

State-of-the-Art Wire Harness

The HTC-8650 with its multi-plex gauge package has automotive-type wire harnesses with sealed relays and connectors throughout for outstanding long term reliability. In addition, all wires have a

flame retardant, polyethylene insulation, resulting in a higher heat resistant wiring system.



POWER • PRODUCTIVE

Link-Belt has never been content simply to build cranes the same way as everyone else...the new HTC-8650 proves that again.

With 172' (52.43 m) of on-board tip height, superior capacities, innovative engineering, attachment flexibility, and available counterweight lowering for balanced axle loadings for travel, this crane is loaded with advances instead of compromises.

Transportability

The HTC-8650 offers superior roadability complete with 172 ft. (52.43 m) of on-board tip height. Transportability is enhanced by the unique counterweight design. In addition to the standard 5,000 lb. (2 268 kg) counterweight, two 3,000



lb. (1 361 kg) slab-type counterweight pieces and counterweight lowering are available. This hydraulic removal system can position one or both of these counterweight slabs on the carrier deck for most efficient axle load distribution or can lower them directly

onto a trailer for transport. Counterweight removal cylinders are recessed in the upper frame for protection.

Wide Stance Carrier An 8' 6" (2.59 m) wide carrier with 231" (5.87 m) wheelbase provides 'big feet' for a stable lifting base. The Link-Belt 8 x 4 carrier features:

- Large strategically located grab handles/steps and mid-mount access ladders provide superior accessibility to carrier deck areas and engine for routine maintenance and service.
- Flat deck area.
- Lightweight aluminum outrigger floats with a "quick latch" feature.
- Throttle-up switch at outrigger control station.
- Self-storing fifth outrigger steel pontoon.
- Full air, S-cam brakes on all wheel ends with automatic slack adjusters.
- Rack and pinion steering puts the operator in complete control. This two steering gear system does not have exposed machined surfaces which can be easily damaged by rocks and debris.
- Air service ports.
- Complete DOT approved light package including side mounted clearance/turn indicator lights.
- Aluminum fuel tank for less condensation and corrosion.

Power Train Utilization of a Detroit Diesel Series 50 engine and Eaton transmission translates to maximum parts availability as these components are common to the construction and on-highway truck industry. The Detroit Diesel 315 horsepower (235 kW) engine, coupled to the

11-speed forward, 3-speed reverse transmission, features electronic throttle control and cruise control. The 8650 can travel at a .5 mph (.80 km/hr) creep speed @ idle for maximum maneuverability on the job site and run up to 58 mph (93 km/hr) top speed on the highway, unmatched in the industry today. If "more power" is what you desire, an optional 365 horsepower Detroit Diesel Series 60 engine is available.

Carrier Cab The carrier cab and engine cowling are also manufactured from laminated fibrous composite material which is combined with acoustical treatments to assure the operator of maximum highway comfort.



Additional features include dash mounted comprehensive instrumentation with attractive lighted gauges, sliding side and rear windows and roll up/down door window for excellent ventilation, fully adjustable air ride fabric

seat, suspended pedals, and rear view mirrors. Cruise control and engine brake controls are conveniently located on transmission shift lever.



V I T Y • R E L I A B I L I T Y

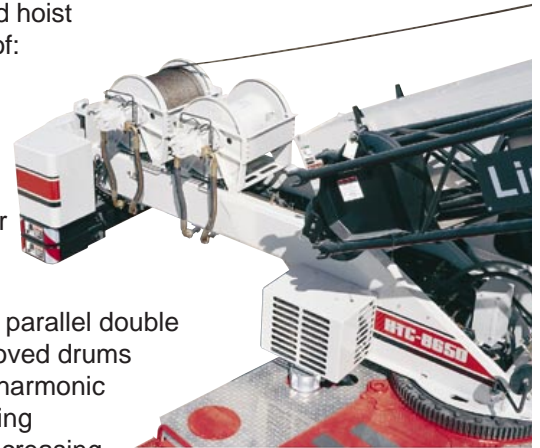
Paint Coating System Link-Belt utilizes a two-part coating technology coupled with a pre-assembly paint process to provide the finest quality coating system available today. This new coating technology provides superior adhesion and abrasion resistance. Because all parts are painted before assembly, 100% coverage of each part is realized, virtually eliminating corrosion bleed-through that is common with other paint processes.

Serviceability Wide opening engine doors provide excellent accessibility, fittings are staggered for easy servicing, and standard quick disconnects installed at various locations in the hydraulic system allow the hydraulic pressure to be quickly and easily checked with Link-Belt's exclusive diagnostic kit (optional). The driver can use the stop engine and check engine indicator lights to troubleshoot the engine. An engine diagnostic connector, located under the carrier cab dash, allows an engine service technician to further analyze engine problems with an engine diagnostic data reader.

Gear Motor Hydraulic Hoist System

The standard load hoist system consists of:

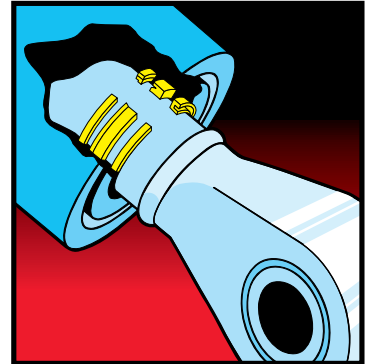
- 2M main winch with two-speed motor and automatic brake for power up/down mode of operation.
- Asynchronous, parallel double cross-over grooved drums minimize rope harmonic motion, improving spooling and increasing rope service life.
- Standard rotation resistant rope.
- An available two-speed 2M auxiliary winch. On the two-winch machines, an independent winch function lockout is provided. When this mode is selected, the operator won't inadvertently operate a winch which has been shut down preventing a two blocking or rope "bird nesting" situation.



Multi-Function Control For greater productivity and control, the five pump-section hydraulic circuit provides smooth, simultaneous function of winch, boomhoist, swing, and drums.

State-Of-The-Art Oil Seal Technology

The HTC-8650 features improved seals on boomhoist, boom extend/retract, and outrigger jack cylinders. This new 'redundant' oil seal technology incorporates 3 rod sealing surfaces versus one or two found on competitive models. This new seal design is highly resistant to side loading and pressure spikes for outstanding sealing performance and when incorporated with full O-ring face seal technology used throughout the machine, leads to an environmentally dry system.



Computer-Aided Design

Advanced, high speed computer-aided, state-of-the-art designs are measured by their reliable performance through extensive testing and re-testing before Link-Belt endorses a new idea, assuring the customer of real user value and maximum on-the-job performance.



• I N N O V A T I O N S •

The New HTC-8650 telescopic truck crane features unmatched innovations such as the Confined Area Lifting Capacity System (CALC™) and two modes of boom extension...innovative design features that have become industry standards from Link-Belt.



Retracted Outriggers
7' 9" (2.36 m) Spread



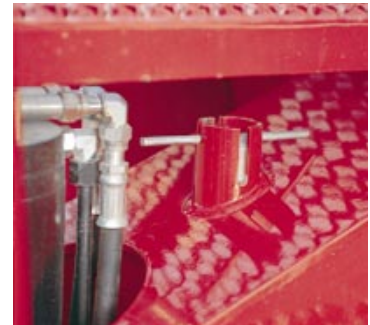
Intermediate Outriggers
14' 2" (4.32 m) Spread



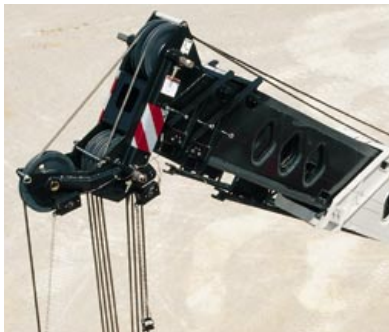
Fully Extended Outriggers
20' 6" (6.25 m) Spread

Confined Area Lifting Capacities (CALC™)

The HTC-8650 is specifically designed to allow contractors to work in confined work areas where full outrigger extension is not possible. The CALC system provides the operator with three outrigger positions (full extension, intermediate, and retracted). Outriggers may be extended to an intermediate position where working area is limited or, in extremely tight quarters, lifts can be made with outriggers fully retracted. In the fully retracted outrigger mode, lift capacities are significantly improved over the 'on tires' configuration. When the **extend position pins**, located on top of the outrigger boxes, are engaged, the operator can set the crane in the intermediate or fully retracted outrigger mode without having to leave the cab. A thorough, easy-to-read crane rating manual gives the operator comprehensive capacities covering the three outrigger positions, five counterweight configurations, and all attachments plus 'on tires' capacities.



4-Section Full Power Boom With *A*-max Mode



Exclusive *A*-max boom extend mode



Basic boom extend mode – boom mode 'B'

Two standard boom extension modes enhance the 8650's performance and provides the operator the capability to match the crane's configuration to specific jobsite conditions. For maximum tip height the basic boom extension mode (mode 'B') offers a full power, synchronized mode of telescoping all sections proportionally to 110' (33.53 m). To enhance performance, the exclusive *A*-max mode (or mode 'A') extends only the inner mid section to 60.3' (18.38 m) offering substantially increased capacities for in-close, maximum capacity picks.

• PATENTED BOOM •

EXCLUSIVE



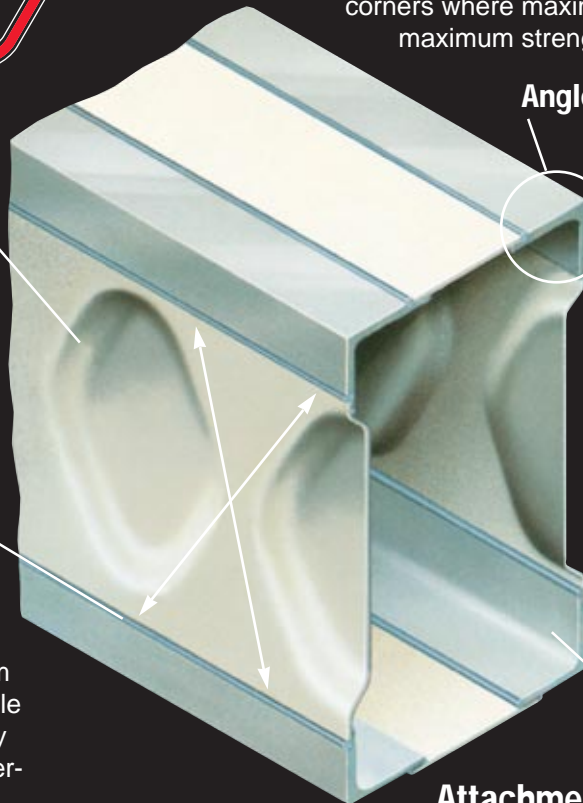
Embossed Sidewall Stiffeners With No-Weld Corners

Boom Concept The arrangement of high strength angle chords (corners) with high formability steel sidewall (embossments) places the most steel at corners where maximum stress is concentrated. The result: maximum strength with minimum weight.

Embossed Sidewall Stiffeners Increases sidewall stiffness.

Sidewall Design Concept Not only do the embossments increase sidewall stiffness, but because of their placement they naturally transfer stresses uniformly to the high strength angle chords (corners) — a concept derived from Link-Belt lattice boom technology.

Boom Wear Shoes Boom wear shoes are replaceable without boom disassembly and utilize simple fast external adjusters.



Angle Chords 100,000 psi (689.5 MPa) high strength steel angle chords are precision machined for boom sidewall overlap. This design allows all interior and exterior boom welds to be offset or staggered for maximum structural integrity.

Time Proven Boom Design Over two decades and thousands of hydraulic crane booms later, Link-Belt's exclusive, patented design is unchanged, state-of-the-art — before its time; providing superior capacities, tip heights and reliability.

It is true testimony to Link-Belt's engineering design achievement that this design concept is being imitated today for optimum performance.

NO WELDS IN HIGH STRESS CORNERS

Attachment Flexibility

- Full power, fully synchronized 35' 6" – 110' (10.82 – 33.53 m) four-section boom.
- Stowable, 34' (10.36 m) offsettable (1°, 15°, or 30° offset), one piece lattice type fly with lugs to allow addition of second section.
- Stowable, 34' – 56' (10.36 m – 17.07 m) offsettable (1°, 15°, or 30° offset) 2-piece, double swing-around, lattice type fly.

Added Value Attachment Features

- **Fast, Easy, Fly Pinning** The fly pinning tool helps eliminate the age old problem of difficult fly pin alignment and pin installation.
- **Quick Reeve Head Machinery** for fast, easy parts of line change.
- **Hammerhead Boom Nose** Allows the operator to work at high boom angles without fouling wire rope.
- **Deflector Rollers** Rollers prevent premature wire rope wear when working at low boom angles.
- **Lightweight Nylon Head Sheaves** Reduce overall machine weight and increases lift capacities.
- **Available Auxiliary Lifting Sheave** Can be used for quick lifts with one or two parts of line when the boom head has multiple reeving. And it does not have to be removed when fly is erected in working position.



Stowable Attachments Swing-away lattice flies are easily stored for transportability or can be removed to meet specific road laws.

Authorized Link-Belt Distributor

Link-Belt Construction Equipment Company Lexington, Kentucky

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