

RTC-8050 50-ton

Hydraulic Rough Terrain Crane

- 172' (52.43 m) On-Board Tip Height
- Full Power Four-Section Boom
- Rated Capacity Limiter (RCL)
- Two Attachment Options



The RTC-8050 Features The
Confined Area Lifting Capacities
(CALC™) System



The Link-Belt RTC-8050...

Featuring unmatched customer benefits such as the Confined Area Lifting Capacities (CALC™) System, Full Power Four-Section Boom, and Integral Rated Capacity Limiter (RCL).

Operator Control Center Designed for maximum operator comfort and control with these features:

Fabric Seat – Six-way adjustable fabric seat for all-day comfort.

Drum Rotation Indicators – Informs operator of drum rotation at all times.

Tilt/Telescoping Steering Wheel

Low Effort Control Levers

Foot Controls – For engine throttle, swing brake and travel brake. Foot controls for boomhoist available.

Additional Cab Features Include:

- Sound suppressed environmental cab.
- Large front and door windows for excellent visibility.
- Tinted glass.
- Sliding right side and rear windows and swing-up top window provide excellent ventilation.

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 RTC-8050 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 RTC-8050 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.



Operator Cab Dash Dash panel provides easy control access for the operator. Conveniently located, this panel houses control levers and switches for wiper, fan, lights, steering mode select, ignition, throttle lock, and outrigger functions. Mechanical controls are provided for 360° swing lock and travel swing lock. Toggle switches are rubber encased for protection against dust and moisture. Comprehensive and easy to read gauges monitor hydraulic oil temperature, battery charge, fuel level, water temperature, engine oil pressure, air pressure and transmission temperature. And a standard sight level bubble aids in machine setup.



Superior controllability, performance,

The RTC-8050 with 172' (52.43 m) of on-board tip height is specifically designed to give contractors and rental house companies the best equipment value in the 50-ton RT class.

Jobsite Maneuverability

Maneuvering the RTC-8050 on the job site is made easier with independent controls for steering. Steering modes include independent front steer, four wheel coordinated steer and "crab" steering for tight job site situations. All steering wheel controlled.



Power Train Utilizing a standard Cummins engine and Clark transmission translates to maximum parts availability as these components are common to many drive trains used in the construction industry. The Cummins 215 horsepower (160 kW) engine is coupled to a Clark 6-speed forward, 2-speed reverse powershift transmission. This electric over hydraulic transmission is far superior to air shift which have the potential to freeze up in cold weather conditions.

Gear Pumps One triple gear and one single gear type pump provide hydraulic power. A mechanical disconnect on the triple pump saves wear on the hydraulic system and reduces the load placed on the engine when travelling long distances.

Added Value Carrier Features Large grab handles and steps strategically located around the RTC-8050 provide superior accessibility to carrier deck areas and engine for routine maintenance and service. Safety strips on top of the deck and fenders provide a non-slip surface for maintenance personnel.

A standard oversize storage compartment is ideal for tools, slings, and accessories. Additionally an outrigger cover package, lightweight aluminum outrigger floats with a "quick latch" feature, rigid front axle for greater stability in rough terrain, dual full air service/emergency brake for improved braking, air service ports, complete light package, and aluminum fuel tank for less condensation and corrosion set new rough terrain crane standards...superior customer benefits for superior customer value.

Two-Part Paint Coating System Setting another new industry standard, Link-Belt



Pre-Painted components

is utilizing a two-part coating technology coupled with a pre-paint process before assembly to provide the finest quality coating system available today. This new 2-part paint and coating technology provides superior adhesion and abrasion resistance. In addition, because all parts are painted before assembly, 100% coverage of each part is realized, virtually eliminating corrosion bleed-through that is common with old paint processes.

The combination of this paint's superior abrasion resistance and the pre-painting technique dramatically enhances the aesthetic appeal of the final machine as nuts, bolts, hoses, and a whole multitude of piece parts are no longer painted. As a result, paint chipping, cracking, and paint deterioration is substantially reduced when service work and disassembly is required.



and reliability...all Link-Belt Standards!

Superior Hydraulics

Multi-Function Control For greater productivity and control, the three pump hydraulic circuit allows simultaneous function of boomhoist, winch and swing...setting the standard in the 50-ton class.

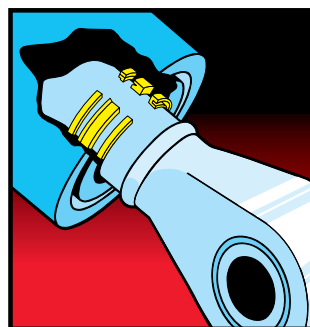
Simplified Routings The RTC-8050 incorporates simplified hydraulic routings for easy access. Fittings and connections are staggered where necessary for quick and easy servicing.

Serviceability 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 gauge kit (optional).



Diagnostic Kit

State-Of-The-Art Oil Seal Technology The RTC-8050 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 'ORFS' technology used throughout the machine, leads to an environmentally dry system.



Hoist System

Delivers superior hoisting to the 50-ton rough terrain class

Model 2M main winch with two speed motor and automatic brake; power up/down mode of operation. Bi-directional gear-type hydraulic motor, driven through a double planetary reduction unit provides precise, smooth load control with minimal engine rpm.



Matched sizes of main and auxiliary winches provide equal maximum available line pulls of 16,200 lbs. (7 348 kg) and maximum line speeds of 474 f.p.m. (144 m/min.) on 17" (.43 m) root diameter grooved drums.

Computer-Aided Design Link-Belt has pursued a course of 'continuous innovation' to set new standards for hydraulic crane design...design originals that improve reliability and performance.

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... maximum on-the-job performance.



Industry first innovations...

Confined Area Lifting Capacities (CALC™) System



The RTC-8050 rough terrain crane 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 fully 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 because of the ability to fully level the machine, no matter the ground conditions.



Fully Extended Outriggers
22' 0" (6.71 m) spread



Intermediate Extended Outriggers
15' 6" (4.72 m) spread



Fully Retracted Outriggers
9' 3/4" (2.76 m) spread



The outrigger **position levers** (located on the outrigger boxes) are easily applied. Once the levers are engaged, the operator can set the crane in the intermediate or fully retracted outrigger mode without having to leave the cab.

Under full extension, the outrigger beams extend to a wide 22' 0" (6.71 m) spread centerline to centerline. Centerline to centerline spread dimension for intermediate outriggers measures 15' 6" (4.72 m) and 9' 3/4" (2.76 m) for fully retracted...narrow enough to fit in extremely tight working areas but with the stability and capacities provided by being set on outriggers.

A thorough, easy-to-read crane rating manual gives the operator comprehensive capacities covering the three outrigger positions with all attachments plus 'pick and carry' capacities.

The **CALC** System...another industry innovation from Link-Belt designed for exceptional customer value.

Full Power Boom With Exclusive *A*-max Mode

A customer benefit which enhances the 8050'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 offers a full power, synchronized mode of telescoping all sections proportionally to 110' 0" (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.



Basic boom extend mode



Exclusive *A*-max boom extend mode

Patented boom design

EXCLUSIVE

Patented Design
THE BOSS
THE ORIGINAL EMBOSSED BOOM STIFFENER

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.

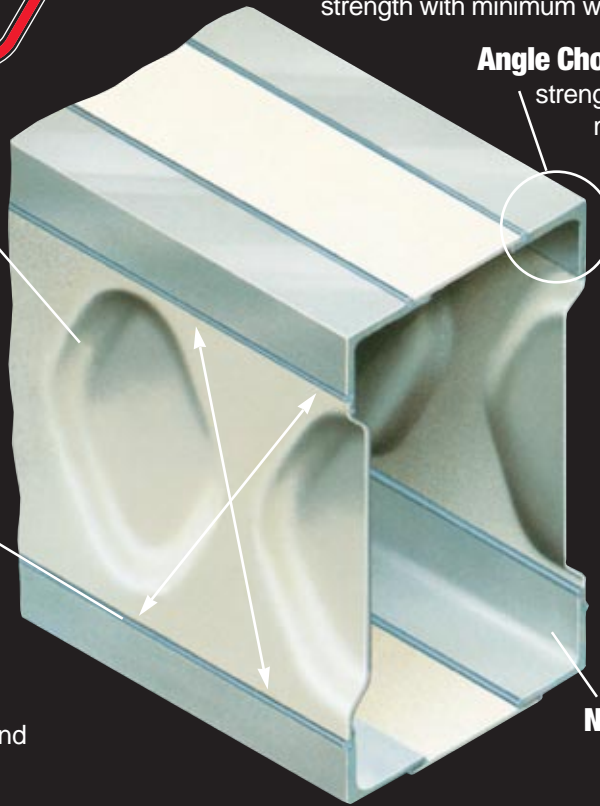
Boom Wear Shoes Boom telescope sections are supported by adjustable wear shoes both vertically and horizontally.

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' 0" (10.82 – 33.53 m) four-section boom.
- Stowable, 34' (10.36 m) offsettable (1°, 15°, or 30° offset), one piece lattice type fly. Available 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.



Stowable Attachments

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

Added Value Attachment Features

- **Hammerhead Boom Nose** Allows the operator to work at high boom angles without fouling wire rope.
- **Deflector Rollers** Prevent premature wire rope wear when working at low boom angles.
- **Lightweight Nylon Head Sheaves** Reduce overall machine weight and increase 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.

Link-Belt Construction Equipment Company Lexington, Kentucky

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