Tel: (888) 337-BIGGE or (510) 638-8100 Web: www.bigge.com

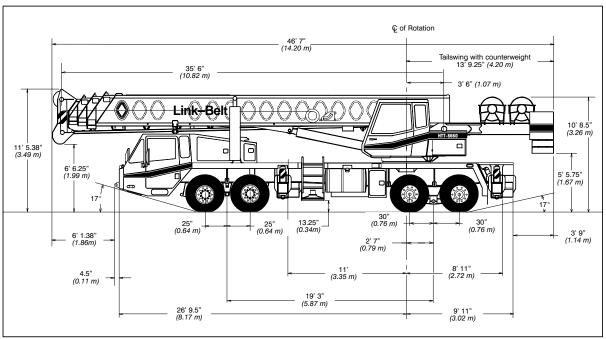


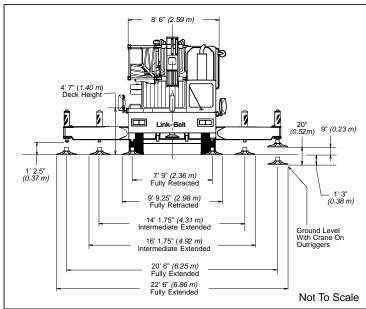
Specifications

Hydraulic Truck Terrain Crane

HTT-8660

60-ton (54.43 metric tons)





General Dimensions	feet	meters		
Front Steer				
Turning radius (wall to wall)	49' 9.56"	15.17		
Turning radius (curb to curb)	41' 10.5"	12.76		
All-Wheel Steer				
Turning radius (wall to wall)	36' 7.37"	11.16		
Turning radius (curb to curb)	28' 7.25"	8.72		
Ground clearance	13.25"	0.34		

Litho in U.S.A. 3/03 #5384 (Supersedes #5346)



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.

Boom

- 35.5' 110' (10.82 33.53 m) four-section full-power boom
- Two mode boom extension
- The basic mode is the full power, synchronized mode of telescoping all sections proportionally to 110' (33.53 m).
- The exclusive "A-max" mode (or mode 'A') extends only the inner mid section to 60.3' (18.38 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 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

- Two Link-Belt designed hydraulic cylinders with holding valves and bushings in
- Hand control for controlling boom elevation Cab Instrumentation from -3° to $+78^{\circ}$

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 (36.3 mt) quick-reeve hook block
- 60-ton (54.43 mt) quick-reeve hook block
- 70-ton (63.30 mt) quick-reeve hook block
- 8.5-ton (7.71 mt) hook ball
- · Boom floodlight.

■ Fly

Optional

- 34' (10.36 m) one-piece lattice fly, stowable, offsettable to 2°, 20° and 40°
- 34' 56' (10.36 17.07 m) two-piece (bifold) lattice fly, stowable, offsettable to 2°, 20° and 40°

Cab and Controls

Environmental Ultra-Cab

Laminated fibrous composite material; isolated from sound with acoustical fabric insulation.

- · Windows are tinted and tempered safety
- 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 in cab
- Diesel cab heater
- Top hatch window wiper
- Audible swing alarm Fire extinguisher
- Sun screen
- Electric windshield wiper
- Windshield washer
- Cab work lights
- Pull-out Cabwalk™
- · RCL light bar Air conditioning

Circulating fan

Warning horn

· Backup alarm

Hand throttle

Defroster fan

· Cup holder

Mirrors

- Amber strobe light Third wrap indicator Amber rotating beacon
- Hydraulic heater

Controls

Optional

Hydraulic controls (joystick type) for: Main winch

- Swing
- Optional auxiliary winch · Boom hoist
- Foot controls for:
- Boom telescope
- · Swing brake
- Engine throttle

Optional

- Auxiliary winch
- Single axis controls

Cornerpost-mounted gauges for:

- Hydraulic oil temperature
- Audio/Visual warning system
- Check and stop engine indicator lights
- **Tachometer**
- Oil pressure
- Voltmeter
- Fuel
- Water temperature

Rated Capacity Limiter

Microguard 434 Graphic audio-visual warning system built into dash with anti-two block and function limiters.

Operating data available includes:

- Machine configuration.
- Boom length
- · Boom angle
- Head height
- · Radius of load
- Allowed load
- · Actual load
- % of allowed load

Presettable alarms include:

- Maximum and minimum boom angles
- Maximum tip height
- Maximum boom length
- Swing left/right positions
- Operator defined area alarm is standard
- Anti-two block weight designed for guick reeve of hookblock

Optional

Internal RCL light bar: Visually informs operator when crane is approaching maximum load capacity with a series of green, yellow and red lights.

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• 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 2.1 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 (pin device) operated from the operator's cab.
- Counterweight
 - Standard Pinned to upper structure frame. 12,000 lbs. (5 443 kg) three-piece design. Consist of one 6,000 lbs. (2 722 kg) piece bolted to upper structure and two 3,000 lbs. (1 361 kg) pieces pinned to standard counterweight.
 - Two counterweight sections can be hydraulically lowered on, and pinned to carrier deck to balance axle loadings for travel.
- Optional
- 360° swing lock. Meets New York City requirements.

Hydraulic System

Main Pump

- One gear pump with a total of four sections
- Combined pump capacity of 176 gpm (666 Ipm).
- Powered by carrier engine with pump disconnect.
- Rocker switch controlled, air applied pump disconnect engaged / disengaged from carrier cab
- Maximum system operating pressure is 3,000 psi (20 685 kPa).
- O-ring face seals technology used throughout with hydraulic oil cooler standard.

Pilot Pressure / Counterweight Removal **Pump**

Pressure compensated piston pump powered by carrier engine. Maximum pump operating pressure is 1,500 psi (10 342 kPa).

Steering / Fifth Outrigger Pump

- Single gear type pump, 8 gpm (30 lpm). Powered by carrier engine through front
- Maximum pump operating pressure is 2,000 psi (13 790 kPa)

169 gallon (639.7 L) capacity. One diffuser for deaeration.

HTT-8660



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

Load Hoist System

Standard

2M main winch with grooved lagging

- Two-speed motor and automatic brake
- Power up/down mode of operation
- Bi-directional gear-type hydraulic motor driven through planetary reduction unit for positive control under all load conditions.
- Asynchronous parallel double crossover grooved drums minimize rope harmonic motion.
- Pressure compensated winch circuit provides balanced oil flow to both winches for smooth, simultaneous operation.
- Rotation resistant wire rope
- Drum rotation indicators

Line Pulls and Speeds

Maximum available line pull 16,438 lbs. (7 454 kg) and maximum line speed of 463 f.p.m. (141 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.
- Third wrap indicators

Carrier

■ Type

8' 6" (2.59 m) wide, 231" (5.87 m) wheelbase. 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 boxes
- · Pintle hook
- Electric and air connections for trailers and boom dollies

Axles

Front

Tandem, 84.38" (2.14 m) track

Rear

Tandem, 81.29" (2.08 m) track. 7.29 to 1.0 ratio with interaxle differential and cross-axle lock capability.

Suspension

Front axle

Leaf spring suspension

Rear axle

· Air-ride, bogie beam type, suspension.

Wheels

Standard

- Hub piloted aluminum disc
- Spare tire and wheel assemblies

Tires

Standard Front and Rear

445/65R22.5 (Load range "L") single tubeless radials.

Brakes

Service

- Full air brakes on all wheel ends with automatic adjustors. Dual circuit with modulated emergency brakes.
- Front 16.5 x 6 S–Cam brakes
- Rear -16.1 x 7 Wedge brake

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

Four steer capabilities; front, rear, allwheel, and "crab" steer.

Front

· Sheppard rack and pinion design

Hydraulic power cylinders

Transmission

Standard

Eaton RTO-14909ALL; 11 speeds forward, 3 reverse with Series 60 engine

Electrical

- Two 12-volt batteries provide 12-volt starting. 130-amp alternator
- 2,800 cold cranking amps available
- 12-volt operating system

Liahts

- Four dual beam sealed headlights
- Front, side, and rear directional signals
- Stop, tail and license plate lights
- Rear and side clearance lights
- Hazard warning lights

I Outriggers

- Three position operation capability
- Four hydraulic, telescoping beam and jack outriggers.
- Vertical jack cylinders equipped with integral holding valve.
- Beams extend to 20' 6" (6.25 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 3/4" (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. Cab instrumentation

Confined Area Lifting Capacities (CALC™) System

The crane is operational in one of the three outriggers positions and operational in confined areas in two positions (intermediate and full retraction.

The three outrigger positions are:

- Full extension 20' 6" (6.25 m)
- Intermediate position 14' 1.75" (4.31 m)
- Full retraction 7' 9" (2.36 m)
- Capacities are available with the outrigger beams in the intermediate and full retraction positions.
- When the outrigger position levers (located on the outrigger beams) are engaged, the operator can set the crane in the intermediate or full retraction outrigger position without having to leave the cab.

Carrier Cab

- One-man cab of laminated fibrous composite material acoustical insulation with cloth covering. Equipped with:
- Air-ride, six-way adjustable operator's seat.
- Four-way adjustable tilting and lockable steering wheel.
- Door and windows locks
- Left-hand and right-hand rear view mirrors
- Sliding right-hand and rear tinted windows
- Roll up/down left-hand tinted window
- Desiccant-type air dryer
- Steps to upper, lower cab and rear carrier
- 110-volt electric engine block heater
- Back-up warning alarm
- Tow hooks and shackles
- Aluminum fenders with ground control outriggers.
- Electric windshield wiper and washer.
- Travel lights
- Horn Ashtray
- Fire extinguisher
 - Defroster 36,000 BTU heater Cruise control
- Dome light Mud flaps

Optional

- Air conditioning
- Amber strobe light
- Rotating beacon

- Illuminated instrument panel speedometer.
- **Tachometer**
- Hourmeter Fuses
- Fuel gauge
 - Oil pressure gauge Odometer Turn signal indicator • Voltmeter
- Water temperature gauge
- Front and rear air pressure gauges
- Audio/visual warning system Automotive type ignition

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Carrier Speeds (Manual Transmission – Standard tires)

	iear		Hi	gh		Low		Deep reduction		Hi rev.	Lo rev.	Deep reduction	Deep reduction Deep reduction @ 700 rpm @ 700 rpm				
		8	7	6	5	4	3	2	1	Low	LL2	LL1	Rev.	Rev.	Rev.	LL1	Rev.
R	atio	0.73	1.00	1.38	1.95	2.77	3.79	5.23	7.41	16.30	11.85	26.08	3.43	13.03	20.85	26.08	20.85
Cnaad	mph	51.92	37.90	27.47	19.44	13.68	10.00	7.25	5.12	3.20	2.33	1.45	9.13	2.41	1.82	0.48	0.61
Speed	km/hr.	83.6	61.0	44.2	31.3	22.0	16.1	11.7	8.2	5.1	3.7	2.3	14.7	3.9	2.9	0.77	0.98

■ Engine

Engine – standard	Detroit Diesel, Series 60 12.7 L				
Cylinders – cycle	6/4				
Bore	5.12" (0.13 m)				
Stroke	6.30" (0.16 m)				
Displacement	778 cu. in. (12 751 cm ³)				
Maximum brake hp.	365 @ 1,800 rpm; 350 @ 2,100 rpm				
Peak torque	1,350 ft. lbs. (1 831 J) @ 1,200 rpm				
Electric system	12-volt neg. ground / 12 volt starting				
Fuel capacity	85 gallons (321.8 L)				
Alternator	12 volt, 130 amps				
Crankcase capacity	32 qts. (30 L)				
Engine brake – standard Ether injection starting package – optional					

■ Axle Loads

Base machine with standard 35.5' – 110' (10.82 – 33.53 m) four–section boom,	0 V	\A/	Upper Facing Front				
2M main winch with 2–speed hoisting and power up/down, 600' (182.88 m),	G.V.	VV. 🗇	Front		Rear Axle		
3/4" (19 mm) wire rope, 8 x 4, 8.5' (2.59 m) carrier with Detroit Diesel Series 60 12.7 L engine, 85 gal. (321.8 L) fuel, aluminum fenders and 12,000 lb. (5 443	lbs.	kg.	lbs.	kg.	lbs.	kg.	
kg.) counterweight.	82,781	37 549	28,707	13 021	54,074	24 528	
Carrier aluminum storage box	57	26	16	7	41	19	
Engine block heater – propane	83	38	105	48	-22	-10	
Ether injection	6	3	6	3	0	0	
Air conditioning – Carrier cab	124	56	158	71	-34	-15	
Pintle hook	25	11	-10	– 5	35	16	
Electrical and air electrical hook-ups for dolly or trailer	7	3	0	О	7	3	
Driver in carrier cab	200	91	252	114	-52	-23	
Hydraulic operator's cab heater assembly	129	59	2	1	127	57	
Air conditioning operator's cab	264	120	2	1	262	119	
Remove one slab of counterweight on upper	-3,000	-1 361	1,572	713	-4,572	-2 074	
Remove two slabs of counterweight on upper	-6,000	-2 722	3,143	1 425	-9,143	-4 147	
Rear winch roller	93	42	-44	-20	137	62	
Winch with two speeds and 600' (182.88 m) of wire rope	712	323	-197	-89	909	412	
Front winch roller	93	42	-31	-14	124	56	
Remove 600' (182.88 m) of rope from rear winch	-660	-299	279	127	-939	-426	
Remove 600' (182.88 m) of rope from front winch	-660	-299	185	84	-845	-383	
Boom float kit	56	25	14	6	42	19	
Add fly brackets to boom base section fly options	160	73	141	64	19	9	
Add 34' (10.36 m) offsettable fly w/ATB weight (stowed)	1,478	670	1,456	660	22	10	
Add 34' – 56' (10.36 – 17.07 m) offsettable fly w/ATB weight (stowed)	2,134	968	1,857	842	277	126	
Add floodlight to front of boom base section	10	5	16	7	-6	-2	
Add 40-ton (36.43 mt) hookblock stowed behind bumper (4-sheaves)	720	327	1,201	545	-481	-218	
Add 60-ton (54.43 mt) hookblock stowed behind bumper (5-sheaves)	1,109	503	1,850	839	-741	-336	
Hookball to front bumper	360	163	600	272	-240	-109	
Auxiliary arm w/ATB switch to boomhead	95	43	178	81	-83	-38	
			Front		Rear Axle		
Transfer one slab of counterweight to carrier deck			3,948	1 791	-3,948	-1 791	
Transfer two slabs of counterweight to carrier deck		7,896	3 582	-7,896	- 3582		

Axle	Max. Load @ 65 mph. (105 km/h)
Front	46,400 lbs. (21 047 kg) – Aluminum disc wheels with 445/65R22.5 tires
Rear	49,200 lbs. (22 317 kg.) – Aluminum disc wheels with 445/65R22.5 tires

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

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