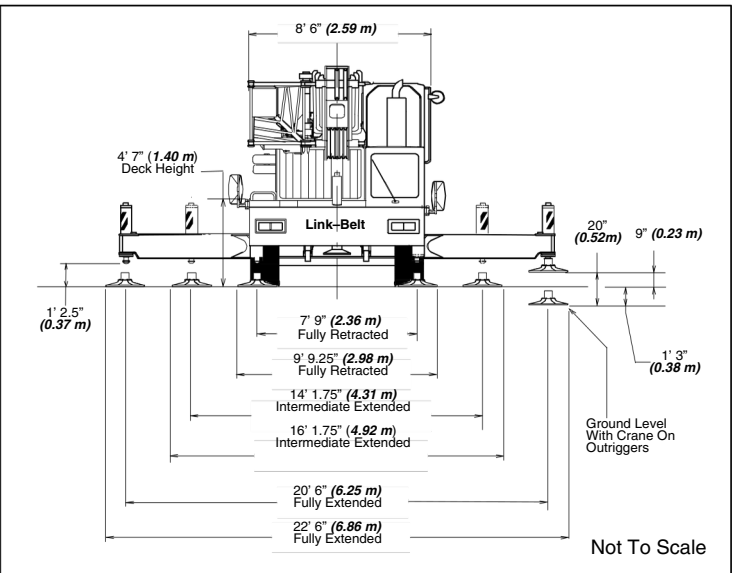
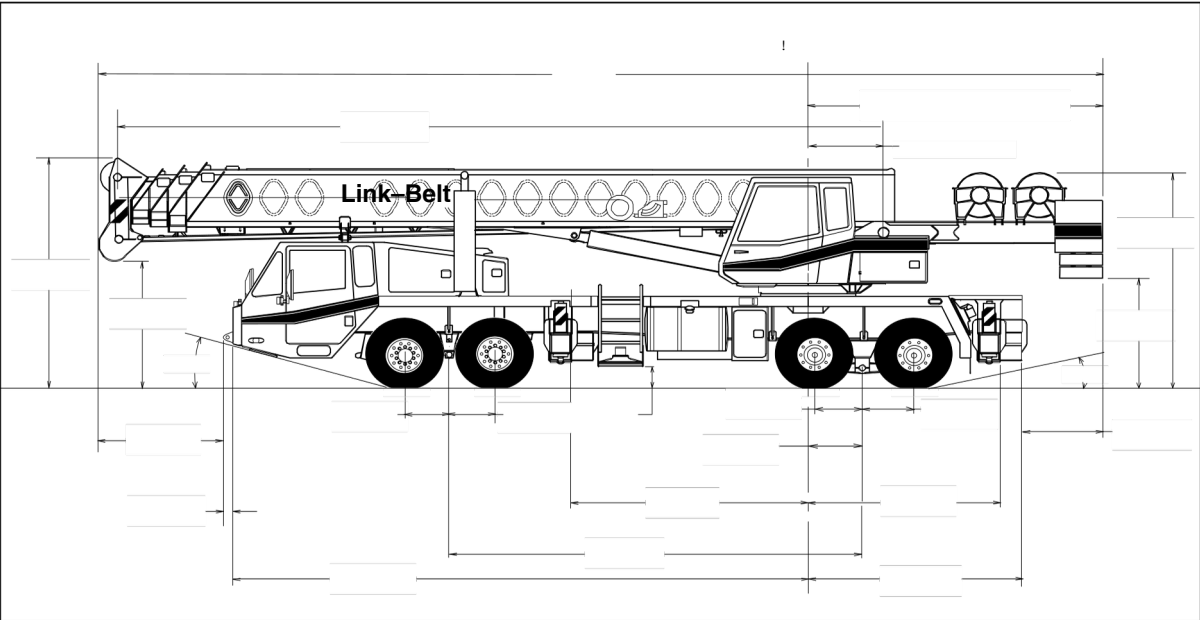


Specifications

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

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 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 (**36.3 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' (**10.36 – 17.07 m**) two-piece (bi-fold) 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 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 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

Optional

Amber strobe light

Third wrap indicator

Amber rotating beacon

Hydraulic heater

Controls

Hydraulic controls (joystick type) for:

Swing

Optional auxiliary winch

Foot controls for:

Boom telescope

Engine throttle

Optional

Auxiliary winch

Single axis controls

Cab Instrumentation

Cornerpost-mounted gauges for:

Hydraulic oil temperature

Audio/Visual warning system

Check and stop engine indicator lights

Tachometer

Voltmeter

Water temperature

Circulating fan

Warning horn

Cup holder

Backup alarm

Hand throttle

Mirrors

Defroster fan

RCL light bar

Air conditioning

Main winch

Boom hoist

Swing brake

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

Head height

Allowed load

Oil pressure

Fuel

Boom angle

Radius of load

% of allowed load

resettable alarms include:

P

Maximum height

Maximum boom length

Swing left/right positions

Operator defined area alarm is standard

Anti-two block weight designed for quick

reeve of hook block

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 pre-settable 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 lpm**).

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 gear housing.

Maximum 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
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 lock-out. Power up/down modes.
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 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

Leafspring suspension

Rear axle

Air-ride, bogie beam type, suspension.

Wheels
Standard

Hubpiloted aluminum disc
Spare tire and wheel assemblies

Tires
Standard Front and Rear

445/65R22.5 (Loadrange "L") single tube-less radials.

Brakes
Service

Full air brakes on all wheel ends with automatic adjusters. 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, all-wheel, and "crab" steer.

Front

Sheppard rack and pinion design

Rear

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

Lights

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

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.

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
Fire extinguisher
36,000 BTU heater
Dome light
Mud flaps

Horn
Ashtray
Defroster
Cruise control

Optional

Air conditioning
Amber strobe light
Rotating beacon

Cab instrumentation

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

Carrier Speeds (Manual Transmission – Standard tires)

Gear		High					Low			Deep reduction		Hi rev.	Lo rev.	Deep reduction	Deep reduction @ 700 rpm	Deep reduction @ 700 rpm	
		8	7	6	5	4	3	2	1	Low	LL2	LL1	Rev.	Rev.	Rev.	LL1	Rev.
Speed	Ratio	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
	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
	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 cm³)
Maximum brake hp.	365 @ 1,800 rpm; 350 @ 2,100 rpm
Peak torque	1,350 ft. lbs. (1 831 J) @ 1,200 rpm 12–
Electric system	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

Either injection starting package – optional

Axle Loads

Base machine with standard 35.5' – 110' **(10.82 – 33.53 m)** four-section boom, 2M main winch with 2-speed hoisting and power up/down, 600' **(182.88 m)**, 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 kg.)** counterweight.

Carrier aluminum storage box	57	26
Engine block heater – propane	83	38
Ether injection	6	3
Air conditioning – Carrier cab	124	56
Pintle hook	25	11
Electrical and air electrical hook-ups for dolly or trailer	7	3
Driver in carrier cab	200	91
Hydraulic operator's cab heater assembly	129	59
Air conditioning operator's cab	264	120
Remove one slab of counterweight on upper	–3,000	–1 361
Remove two slabs of counterweight on upper	–6,000	–2 722
Rear winch roller	93	42
Winch with two speeds and 600' (182.88 m) of wire rope	712	323
Front winch roller	93	42
Remove 600' (182.88 m) of rope from rear winch	–660	–299
Remove 600' (182.88 m) of rope from front winch	–660	–299
Boom float kit	56	25
Add fly brackets to boom base section fly options	160	73
Add 34' (10.36 m) offsettable fly w/ATB weight (stowed)	1,478	670
Add 34' – 56' (10.36 – 17.07 m) offsettable fly w/ATB weight (stowed)	2,134	968
Add floodlight to front of boom base section	10	5
Add 40-ton (36.43 mt) hookblock stowed behind bumper (4-sheaves)	720	327
Add 60-ton (54.43 mt) hookblock stowed behind bumper (5-sheaves)	1,109	503
Hookball to front bumper	360	163
Auxiliary arm w/ATB switch to boomhead	95	43

G.V.W.

Upper Facing Front

Front Axle		Rear Axle	
lbs.	kg.	lbs.	kg.
28,707	13 021	54,074	24 528
16	7	41	19
105	48	–22	–10
6	3	0	0
158	71	–34	–15
–10	–5	35	16
0	0	7	3
252	114	–52	–23
2	1	127	57
2	1	262	119
1,572	713	–4,572	–2 074
3,143	1 425	–9,143	–4 147
–44	–20	137	62
–197	–89	909	412
–31	–14	124	56
279	127	–939	–426
185	84	–845	–383
14	6	42	19
141	64	19	9
1,456	660	22	10
1,857	842	277	126
16	7	–6	–2
1,201	545	–481	–218
1,850	839	–741	–336
600	272	–240	–109
178	81	–83	–38

Transfer one slab of counterweight to carrier deck
Transfer two slabs of counterweight to carrier deck

Front Axle	Rear Axle
3,948	1 791
7,896	3 582
–3,948	–1 791
–7,896	–3 582

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	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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