HC-278H
HYLAB
300-ton (272t)
Hydraulic Lattice Boom
Truck Crane

GENERAL INFORMATION ONLY
Unmatched Large Crane Tran
Control and Proven Lattice Boom Technology.

The HC-278H HYLAB lift crane features unmatched load control, capacities, and transportability. This Hydraulic Lattice Boom (HYLAB) truck crane also features pilot operated hydraulic controls that have been setting industry standards for over 50 years. The basic HYLAB hydraulic system has been proven in over 2,000 cranes currently working worldwide assuring the user of unprecedented reliability.

Transportability The new HC-278H hydraulic lattice boom truck crane provides a practical solution to customers that need to move a very large truck crane, quickly, legally and efficiently. This truck crane was designed by Link-Belt for fast unassisted stripdown and assembly.

Transporting this crane starts by removing major components including boom and counterweight ... all done by using the crane’s standard live mast or optional 10’ (3.05 m) boom extension with lifting sheaves.

Next, the standard lift-off system is put into action.

1. The four self-contained hydraulic lift-off jacks are swung into the working position. 4:00 minutes

2. The patented hydraulic actuated quick disconnect turntable bearing is released. The ingenious adaptor with snap ring allows for fast undocking or docking the upper-structure from the carrier in minutes ... not hours. 2:00 minutes


Sportability... with Dependable Hydraulic

**Carrier** A deep channel, triple box carrier design provides the optimum strength essential to maximize lift capacity while yielding lightweight axle loadings necessary to meet strict highway regulations. This 12x6 Link-Belt designed and built carrier also features twelve wheel air brakes, bogie beam axle suspension, full time hydraulic power steering, and standard aluminum fenders.

The new HC-278H features a 430 horsepower (321 kW) Detroit Diesel Series 60 engine. This in-line 6-cylinder features Detroit Diesel Electronic Controls (DDEC) which incorporate multiple torque curves and variable speed idling for a low creep speed of .3 mph (0.5 km/h) and highway speeds of up to 58.5 mph (94.2 km/h), electronic throttle control for instantaneous response, and cruise control which reduces driver fatigue.

And for the ultimate in comfort and smoothness in drive-ability, a CEEMAT 9-speed fully automatic transmission is available.

**Attachment** Link-Belt lattice tubular booms represent the latest advance in crane boom design. The HC-278H provides the longest reach in the mobile crane business for increased job performance. The standard high strength, alloy steel lattice boom is available up to 330' (100.58 m) in length or 300' (91.44 m) + 100' (30.48 m) boom and jib combination.

To reach up and over buildings and obstructions, a 250' (76.2 m) maximum luffing boom plus 200' (60.96 m) luffing jib plus 30' (9.14 m) fixed jib is available. A “hammerhead” style attachment is also available for special applications.

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3 The lift-off jacks are fully extended, raising the upper up and clear of the carrier.

3:00 minutes

4 The carrier is driven away and a flatbed trailer is backed under the upper. The upper is lowered to the trailer and the lift-off jacks returned to the stored position.

5:00 minutes
Carrier/Upper/Boom Base Transport

Carrier

59,400# (26,944 kg)
32,200# (14,615 kg)

HC-278H Carrier.........91,620 lbs. (41,559 kg)
with Goodyear® tires
(outrigger boxes and beams in place – outrigger jacks removed)

Load #1 (Alternate 'A')

13' 8" (4.11m)

HC-278H Upper with base section, special 10' (3.05 m)
extension with lifting sheaves, and live mast
81,669 lbs. (37,045 kg)

Load #1 (Alternate 'B')

60' 5" (18.42m)

HC-278H Upper with live mast only
75,315 lbs. (34,163 kg)

Load #1 (Alternate 'C')

76' 1" (22.89m)

HC-278H Upper with base section and live mast
79,440 lbs. (36,034 kg)
Boom + Jib Transport

**Load #2**

Upper Ctwt. "C" .................. 21,500 lbs. (9,752 kg)
Upper Ctwt. "D" .................. 21,500 lbs. (9,752 kg)
4 - 20' (6.10 m) Jib Extensions ...... 1,800 lbs. (816 kg)
44,800 lbs. (20,320 kg)

**Load #5**

Boom Tip ....................... 5,175 lbs. (2,347 kg)
Bumper Ctwt. "A" ................ 11,400 lbs. (5,171 kg)
Upper Ctwt. "B" ................ 25,200 lbs. (11,431 kg)
41,775 lbs. (18,949 kg)

**Load #3**

Upper Ctwt. "A" .................. 30,000 lbs. (13,608 kg)
Outrigger Jacks, Floats,
and Handling Tree .............. 6,400 lbs. (2,903 kg)
Basic 30' (9.14 m) Jib ........... 2,184 lbs. (991 kg)
Rigging Box ..................... 4,000 lbs. (1,814 kg)
42,584 lbs. (19,316 kg)

**Load #6**

100' (30.48 m) Boom .............. 10,000 lbs. (4,536 kg)

**Load #4**

Bumper Ctwt. "B" .................. 15,300 lbs. (6,940 kg)
200-ton (181 t), 6 Sheave Block ...... 3,900 lbs. (1,769 kg)
40' (12.19 m) Boom Insert ...... 4,480 lbs. (2,032 kg)
23,680 lbs. (10,741 kg)

**Load #7**

100' (30.48 m) Boom .............. 10,000 lbs. (4,536 kg)

**General Information Only**
Pinpoint Hydraulic Control

Close Loop Hydraulics For Dedicated, Responsive Performance

Upperstructure All welded, precision machined frame. All hydraulic lines and motors provide a 'clean' look with maximum service accessibility.

Hydraulic Power System A Cummins N14-C360 diesel provides power to variable displacement piston pumps. These pumps provide power to individual hydraulic motors for fast, efficient operation of front and rear hoisting drums, boomhoist and swing drive. Fully independent hydraulic control allows drums to be run simultaneously at different speeds or in different directions. Large capacity hydraulic cooling keeps all hydraulics running in the green.

Load Control The variable displacement system provides infinite control of load speed in hoist and lowering modes. Load speed is directly proportional to lever movement. This infinite control of drum speed allows operator to choose the most efficient speed for each load. Maximum full load line speed of over 235 rpm (72 m/min) results in high speed crane work. Multiple disc drum brakes are integral with drum drive units. Drum brakes and standard drum locking pawls automatically apply when control lever is in neutral position, keeping you in compliance with the latest codes.

Fine Inching Control For super precise control of load lowering/hoisting, hydraulic pump flow can be minimized by activating the 2-speed pump control switch located on the overhead console. This allows the operator to place loads with either the main or rear drums with extreme accuracy.

Boomhoist Independent hydraulic boomhoist is driven by a variable displacement, axial piston motor through a gear reduction system. This system features infinitely variable boomhoist speed, automatic boomhoist brake and a limiting device that restricts hoisting boom beyond recommended minimum radius.

Swing Variable speed and smooth swing is provided by the hydraulic swing system. A standard swing brake is applied by a convenient button on the swing lever. A hydraulically controlled positive, 360° swing lock is also provided for transport.

Operator Control Station Situated in an environmental, modular type cab, the operator comfortably sits in a cloth upholstered, fully adjustable seat for all-day comfort.

Single axis, armchair controllers provide positive, smooth control of all drum and swing functions. Standard drum rotation indicators for front, rear and boomhoist drums are recessed in drum control lever handles. Also, a standard boomhoist foot control offers maximum productivity.

An overhead console contains switches for wiper, on/off drum controls, 2-speed drum control, and lights.

A complete complement of gauges monitor all aspects of the 360 horsepower (269 kW) upper engine. Mounted on the inside cab corner post, these gauges are easily viewed at a glance. Gauge panel also includes switches for house lock and hydraulic boomfoot pin and a swing brake indicator light.

Rated Capacity Limiter The standard PAT DS-350 rated capacity limiter, programmed with multiple charts, provides the operator with: main boom angle, jib angle, operating mode, load radius, boom tip height, anti-two block indicator, pre-warning light, audible alarm, overload light, and load on hook.

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A unit of Sumitomo Construction Machinery Co., Ltd

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