

LCH SERIES





**SILENT
HOIST**

**GIANT
FORK TRUCKS**
CONTAINERIZATION SYSTEMS

40,000 to 100,000 lbs. CAPACITIES

 A smaller black and white photograph showing a similar Silent Hoist Giant Fork Truck lifting a Grace Line container. The container has "GRACE LINE SEATAINER SERVICE" and the number "1387" on it. Other containers with numbers like "1385", "1498", "1414", and "1297" are visible in the background.

PIONEERS IN CONTAINER HANDLING

BULLETIN NO. 825A **SILENT HOIST & CRANE CO., BROOKLYN, N. Y. 11220**
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**We helped pave the way.
Now we want to lead the way.**

Hoist Liftruck made its debut in 1994 already with a rich history in port/intermodal equipment that dated back more than 80 years.

Brooklyn-New York-based Silent Hoist & Crane was one of the pioneers for American ports, beginning to manufacture products such as heavy-duty forklifts to handle containers and other cargo in 1918. Silent Hoist & Crane's presence at New York ports and others along the coasts helped boost the nation's import/export business, as well as pave the way for other manufacturers and innovative equipment.

In the 1950s, when containerization started to become the standard in shipping, Silent Hoist & Crane was in the forefront in producing what is known today as the modern container handler.

When Marty Flaska acquired Silent Hoist & Crane in 1994, there were 10 companies manufacturing large forklifts and container handling equipment in North America. Six years later, all but one were gone.

Leveraging Silent Hoist & Crane's profound history, Hoist Liftruck is poised to introduce a new generation of cargo handling equipment. In 2008, the company reintroduced its empty container handler (ECH Series) and is now proud to reintroduce its loaded container handler (LCH Series), more than 80 years after setting the standard.



Introducing the LCH SERIES

The LCH Series is designed to quickly and safely stack loaded containers with a capacity up to 90,000 lbs. Proven as the fastest and most stable loaded container handler on the market, the LCH Series paves the way for a new generation of heavy duty equipment by Hoist Liftruck.

The LCH Series is designed to quickly and safely stack/unstack loaded ISO containers with models that can handle up to 6-high stacking of 9'6" loaded containers with single-stacking attachment

The LCH Series is the fastest and most stable loaded container handler on the market. Its remarkable features include:

- **Extremely fast lifting speed**
- **Large width over-the-drive tires**
- **Large wheelbase**
- **Industry-best reserve capacity**

The modular design allows for reduced freight cost, easy assembly, and efficient parts replacement, ideal for efficient transportation between terminals. The elevated cab position and angled glass roof provide the operator with superior visibility at all load elevations. The unique mast design boasts a rigid inner and outer mast, reducing torsion stresses for improved durability and increased visibility.



OPERATOR COMFORT & SAFETY

Every Hoist Liftruck is built equipped with the essential tools for maximum performance. The LCH Series is designed with advanced ergonomics for maximum comfort and visibility.



- Elevated cab position provides superior visibility in all directions
- Angled overhead window provides excellent upward visibility
- Dashless cab design provides completely unobstructed forward visibility, while the large cab area provides ample floor and elbow room
- Optional trainer seat available
- Standard cab heater and optional dual evaporator air conditioning system
- Tinted glass, sliding side window, and front/rear/overhead wipers provide optimum visibility
- Luxury air ride seat with retractable seat belt
- Easy entrance/exit stairway platform design with non-skid steps and handrails for three-point contact



- IQAN display features gauge and warning functions, diagnostic capabilities and user interface for making vehicle adjustments
- Intuitive multi-function, single joystick control for ease of use
- Tilt-steering column with direction control for ease of use
- Electronic push-button parking brake control
- Easily accessible emergency stop button



- Isolated rubber mounts between cab and chassis; insulated cab provide a smooth ride and reduced noise levels
- Optional hydraulically tilted cab for stacking in high positions
- Dual fender-mounted side mirrors
- Standard forward and reverse travel alarms
- Dual brake pedals (left for brake/declutch; right for brake only)



- Horn, audible backup alarm and amber strobe light installed for optimal safety
- Interlock safety system ensures proper locking sequence and overload warning system
- Halogen lights: forward and rear work lights; lights on spreader to illuminate engagement heads; stop/tail/turn indicators; and stairway safety lighting

“Hoist Liftruck has provided the industry another option in premium material handling equipment with the LCH Series that is proudly made in the United States with the best components possible.”

*- Marty Flaska
president, Hoist Liftruck*





SUPERIOR VISIBILITY & HANDLING

The LCH Series' heavy duty attachment is designed to maximize efficiency. Unique mast design provides excellent visibility and durability.



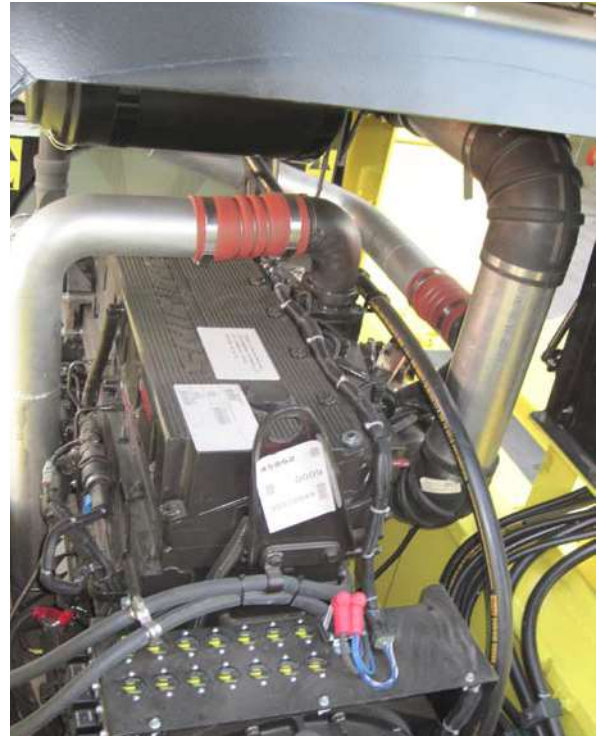
- 4-point top pick loaded ISO container attachment
- 24" of side shift; 5 degree hydraulic slew; 9" reach; 3-degree hydraulic pile slope
- Optional WTP/Pin container attachment
- Optional trailer handling attachment
- Chain suspended attachment designed for easier maintenance and allows for "soft landing", reduces container damage and increases component longevity
- Extends, retracts and can be quickly adjusted to handle containers from 20' to 53'
- Twistlock engagement indicator lights on carriage/inside cab
- Carriage mounted slider beam, designed to reduce stress to the attachment
- Mounted work lights provide improved safety and visibility
- Handles containers 8'-8'6" wide, 8'6"-9'6" high and 20'-53' long
- Common greaseable shielded main rollers; dual tapered bearings
- Adjustable common side thrust wear pads
- Twist lock work lights and cab mounted signal lights for optimal visibility
- Plastic composite slides designed to improve reliability and reduce maintenance requirements
- Exposed spreader cylinders provide excellent serviceability, while the remote hydraulic valve eliminates additional hoses and wiring to the mast. (see Service page)
- Operator has unobstructed upward visibility through the mast and angled glass on top of the cab
- Excellent operator visibility at all load elevations, reducing body position adjustment
- Wide-view mast; outer cylinders/chains for increased visibility
- Main mast rollers utilize Timken tapered roller bearings
- High-load and wear-resistant composite plastic side thrust bearings for improved performance and life
- High-mount tilt cylinders; less rail twisting, greater mast stability
- Mast pivot housing designed with a two piece bolt-on for easy and safe service removal

POWER & RELIABILITY

The LCH Series carries the Hoist Liftruck reputation of reliable and durable lift trucks. While some high-quality components are optional on other lift trucks, Hoist Liftruck makes them standard for a true heavy-duty forklift that exceeds customer expectations.

ENGINE

- Tier compliant Cummins 335 HP turbocharged engine, with two wing designed doors and hinged mounted engine hood for easy access
- Charge air cooler with side-by-side integral radiator and transmission oil cooler for maximum heat dissipation, air flow and serviceability
- Two-stage heavy duty air cleaner with electronic filter restriction indicator and high air intake, providing maximum efficiency
- 12-volt electrical system with 12-volt starter motor and alternator for dependable starting and operation
- Two (2) 12-volt industrial batteries in parallel, each for reliable starting in all conditions
- 160-amp alternator with built-in regulator
- Bolt-on high capacity fuel tank, designed to hold 155 gallons (587 liters) for increased run times and ease of maintenance
- Built-in emergency protection system, designed for engine and transmission safety, and longevity
- Electronic diagnostics on engine with fault code history, built for easy diagnostics and repair
- High performance, 9-blade fans built to draw air through the coils more effectively, ensuring cooler operation with less dirt and debris



TRANSMISSION

- Dana heavy-duty power shift transmission built with three forward/reverse speeds and is the most common transmission for use in off-highway applications
- Electronic Declutch system included for increased hydraulic performance at higher RPMs
- 12-plate modulation, designed for smooth shifting and protection against directional change stock loads with constant mesh gears during shifting
- Dedicated transmission oil cooler



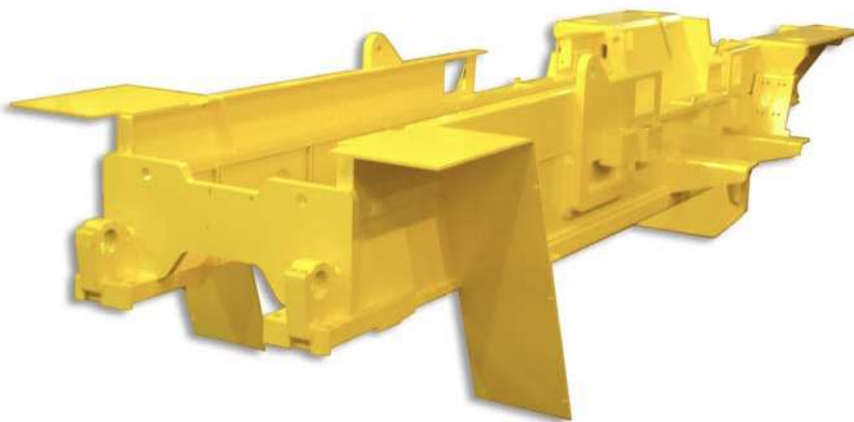
HYDRAULIC SYSTEM

- Load sense “on-demand” steer pump increases vehicle efficiency by up to 27%, as compared to individual gear pumps
- High capacity return filter with electronic restriction indicator for maximum efficiency
- Dedicated external hydraulic oil cooler for reliable performance
- CANBus control simplifies wiring and provides diagnostic capabilities
- Dual element air cleaner with restriction indicator
- Internal force-cooled, wet disc service brakes are oil-actuated and utilize a pedal to combine transmission declutch and brakes
- Large 160 gallons (606 liters) capacity hydraulic bolt-on tank designed with spin-on tank breathers, dual wire-mesh strainers and additional cooling capabilities
- Standard brake and steer accumulators
- Optional lift and tilt accumulators

STRENGTH & SERVICEABILITY

Hoist Liftruck's quality line of lift trucks starts with a strong foundation. The LCH Series chassis provide strength and durability, while the modular design allows for easy parts replacements, as well as efficient shipping and assembly.

- Modular chassis designed with bolt-on sections, providing fast and cost-effective shipping, easy assembly and customization while protecting all vital systems and components
- Vehicle can be fully containerized to save customers as much as 50% in shipping costs versus RoRo or over-the-road
- Minimizes initial setup time of vehicle at customer's location
- Bolt-on assemblies allow for easy part replacement without compromising the structural integrity of the vehicle
- Anti-slip steps/handrails for 3-point mounting and dismounting
- Fully welded rigid steel frame provides the strength and durability for the most rugged applications and harshest yard conditions
- Large 155-gallon capacity, heavy gauge steel wall fuel tank with lockable cap and integral strainer, minimizing tank fill-ups
- Large 160-gallon capacity hydraulic tank with a heavy steel wall, promoting system cooling
- Bolt-on tanks, designed for easy removal and cleaning
- "ORS" face seal o-ring fittings built to control leaks
- Standard eight work lights and two step lights installed for optimal visibility
- Safety feature to prevent dropping the load in the event of a hydraulic failure





DRIVE AXLE

- Outboard planetary drive axle provides long life and ruggedness; heavy-duty for improved stability
- Outboard wet disk brakes with force-cooling, designed for improved performance and longevity
- 18.00 x 25 tires provide long life and low operating costs, 21.00 x 25 drive tires on LCH-6
- Spring-applied/hydraulic-released parking brake with brake saver system prevent the operator from driving through the parking brake
- Parking brake doubles as operator controlled emergency brake



STEERING SYSTEM

- Load sense hydrostatic steering for decreased effort and reliable control
- Heavy duty welded beam steer axle, designed to protect the cylinder from damage
- Steer knuckles utilize Timken tapered roller bearings with easily accessible grease points
- Full lock-to-lock steering in 3-4 steering wheel revolutions to minimize operator fatigue



SUPERIOR SERVICE

- Two wing designed doors under cab and one hinged engine hood with gas strut supports provides quick access to the bolt-in powertrain and all related components
- Bolt-on tanks, counterweights, cab superstructure and stairways can be removed for additional access
- All hydraulic hoses and wiring harnesses routed for easy inspection
- Drivetrain filters located in one external compartment for easy access
- Batteries located in one external compartment for easy access
- Attachment-mounted main hydraulic valve minimizes hosing routed through mast and simplifies hydraulic plumbing
- External attachment spreader cylinders provide easy access
- Diagnostic multi-gauge eliminates the need to tap into hydraulic lines¹
- Digital display includes diagnostic capabilities
- Lock out/tag out connection; lockable device kills power to vehicle²



REMOTE TECH

Utilizing CANbus technology, RemoteTech is a vehicle management system that provides superior serviceability, preventative maintenance, vehicle monitoring, automated customer support and the ability to customize vehicle display inside the cab.

It also provides the ability to send an email to an authorized personnel list, detailing vital information of the issue, optional with monthly fee. Service technicians can also quickly identify issues through electronic diagnostics and view fault code history.

- Unlike similar systems that rely on third-party companies to program and operate the system, RemoteTech is programmed and operated by Hoist Liftruck. This provides the ability to customize and adjust the system to accommodate the customer's preference
- Decrease downtime/repair costs by identifying/resolving issues early
- Parameters such as vehicle/lifting speeds and electronic fingertip control functions can be adjusted on MD3 Display
- Detect issues such as clogged or failing filters, overheated engine, and vehicle overload and impact
- Great for fleet management – record and monitor engine hours, service intervals and operator usage. Key code security capability is also optional, limiting access to designated operators

More than 75% of the material on the LCH Series is made in-house at Hoist Liftruck's Bedford Park, Illinois factory, while the remaining components come from reputable North American vendors. Hoist Liftruck uses many of the same North American components throughout its product line to keep costs low and make parts immediately available 24 hours a day.



Not only is the LCH Series extremely eye-appealing, it has been designed and tested to meet or exceed current, worldwide regulations for stability, sound levels, and safety. Hoist Liftruck's engineering design staff uses the latest CAD three-dimensional solid modeling technology to develop the highest quality lift truck in terms of performance, durability, operator safety, comfort, visibility, and serviceability.

The combination of in-house manufacturing and reputable, domestic vendors allows Hoist Liftruck to have among the fastest lead times in the industry. Hoist Liftruck's standardization of components helps ensure fast lead times and provides customers with excellent service and parts support. By providing a single, premium brands, Hoist Liftruck is able to provide maximum support for each component. While other manufacturers may provide a wide range of options, sufficient support for those options lacks consistency.

Hoist Liftruck's CNC department operates 24 hours a day machining various parts for components, including cylinders, steer axles and wheels. These CNC machines ensure fast and accurate machining, resulting in superior lead times and parts support.

Every Hoist Liftruck is backed by a company dedicated to complete customer satisfaction. From the initial contact through the sale and for as long as you own a Hoist Liftruck, the experienced staff works for you.

- **12 -month/2,000-hour warranty (parts and labor). Optional extended warranties up to 12,000 hours**
- **Lift truck operation, parts and service manual included**
- **24-hour parts and service support**

Hoist Liftruck also has a worldwide dealer network that keeps a majority of its replacement parts in stock for immediate pick up or delivery, as well as technicians to assist with preventative maintenance reports. Visit www.hoistlift.com to locate your nearest Hoist Liftruck dealer.

