

VERTICALLY INTEGRATED BIG TRUCKS FORGED IN AMERICA



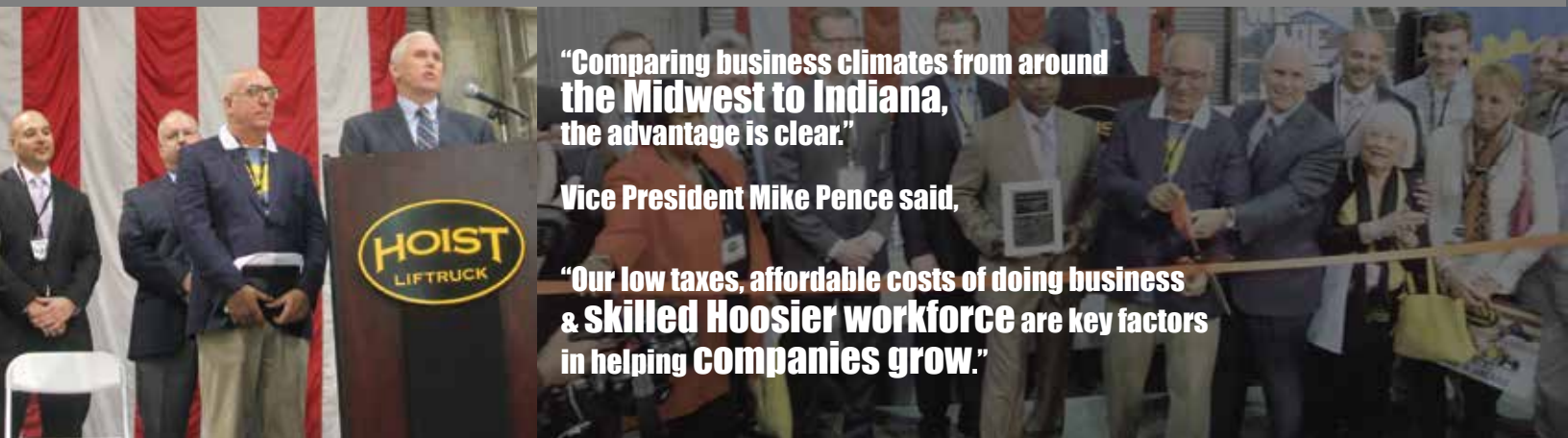
**LARGEST BIG TRUCK MANUFACTURING
FACILITY IN NORTH AMERICA**
550,000 SQ FT



HOIST LIFTRUCK MFG LLC

Hoist would like to thank all of our customers for their support in making Hoist Liftruck a success and welcoming us into your rental houses, fleets, rail yards, marinas, and ports across the world. As you read about each piece of our production “puzzle”, you can gain an understanding of the major investment and thought put into our new, state-of-the-art facility.

We invite all customers, past, present, and future, to come see that even though our address changed, we still strive to produce the highest quality, American-made products in the industry.



“Comparing business climates from around the Midwest to Indiana, the advantage is clear.”

Vice President Mike Pence said,

“Our low taxes, affordable costs of doing business & skilled Hoosier workforce are key factors in helping companies grow.”

From early talks of a move in 2016, to a ribbon cutting at the newly-renovated East Chicago facility, all the way to present day as supporters of Pence’s own office relocation to the West Wing, Hoist has built a strong relationship with the Vice President. We foresee a continued growth in American-made products with leaders like Pence and President Donald Trump in office.

A little less than a year ago, Hoist Liftruck left the Land of Lincoln and relocated its manufacturing headquarters just over the state border to East Chicago, Indiana with the hopes of a better labor force, savings in worker’s compensation, and lower taxes to support Hoist’s demand for a larger manufacturing facility.

Then-Governor of Indiana, Vice President Mike Pence aided Hoist in their transition to the Hoosier State. As an Indiana native, Pence recognized the potential of Northwest Indiana’s labor force, one of the many incentives for Hoist’s relocation. Pence noted, “We’ve seen a number of companies that have moved not only from Illinois but from other states to come to the Hoosier state because of our low taxes, because of our great workforce.”

Once Hoist grew confident in the choice to move over the state border, executive leaders were tasked with finding a facility large enough to house Hoist’s growing number of product orders. CEO Marty Flaska made the decision to renovate a 100-year old building formerly occupied by Blaw-Knox Casting and Machinery. The 550,000 sq ft facility sat mostly vacant for over 10 years, but saw production of machinery for the booming steel mill industry during its prime. Governor Pence said to Flaska, “By your company’s decision, you are bringing one of the largest big truck, material handling, manufacturing plants in North America right here, to East Chicago, and we couldn’t be more grateful.”



“My Administration will follow two simple rules: Buy American, & Hire American”



HOIST LIFTRUCK MFG., LLC

EAST CHICAGO, IN (550,000 sq. ft. 35 acres)



Hoist Liftruck's East Chicago, IN factory is the largest of its kind in North America producing high capacity forklifts. The 550,000 sq. ft. facility is completely vertically integrated and includes 100,000 ft of continuous production line for single piece flow. The East Chicago facility has increased Hoist's production capacity by a factor of 6 compared to the previous Bedford Park, IL location.

One of the major goals in laying out the new facility was to reduce unnecessary material movement throughout the manufacturing process. Raw materials enter the end of one of two large bays and are quickly transformed into finished parts, and ultimately completed liftrucks, as they follow a linear path through the building with strict quality processes administered at each stop along the way. After final testing and inspection, finished product is shipped from the end of the opposite bay.

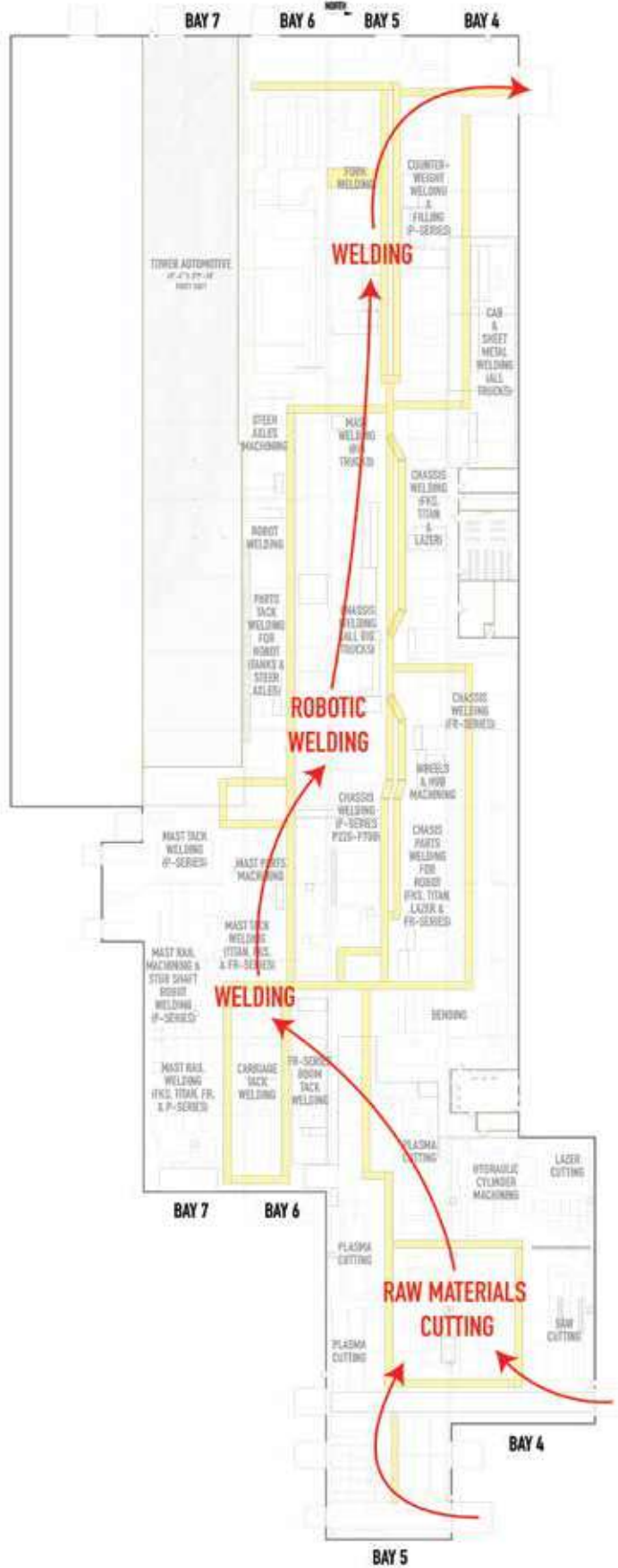
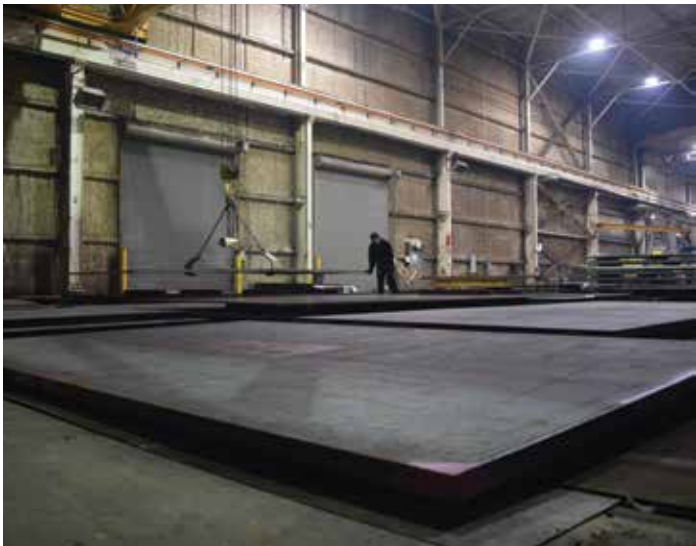
Hoist Liftruck incorporated the latest technology throughout the manufacturing process including:

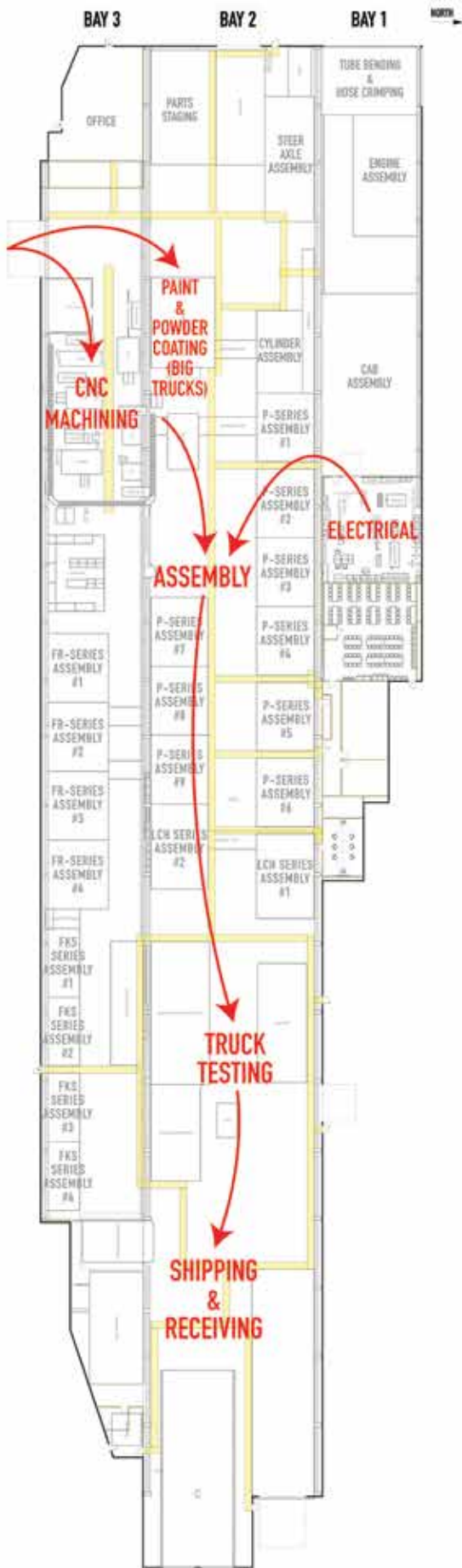
- All new AGV (Automated Guided Vehicle Systems) throughout entire facility
- State of the art paint & powder system
- Invested in new CNC machines to increase machining capacity
- Laser burnout tables
- Automated Hydraulic Cylinder Assembly Table
- Best in class inspection booth
- Increasing its highly skilled workforce.



MANUFACTURING FLOW

The layout of Hoist's East Chicago, Indiana facility is key not only for a quality product, but to have competitive lead-times as well...

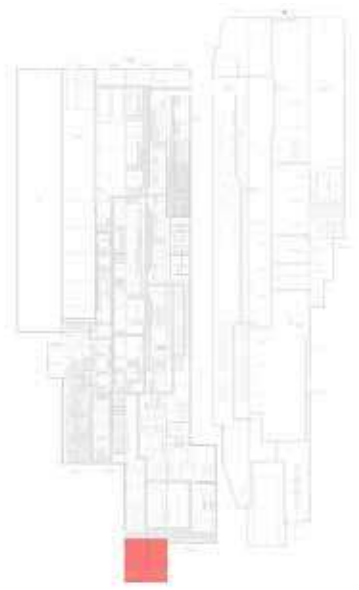




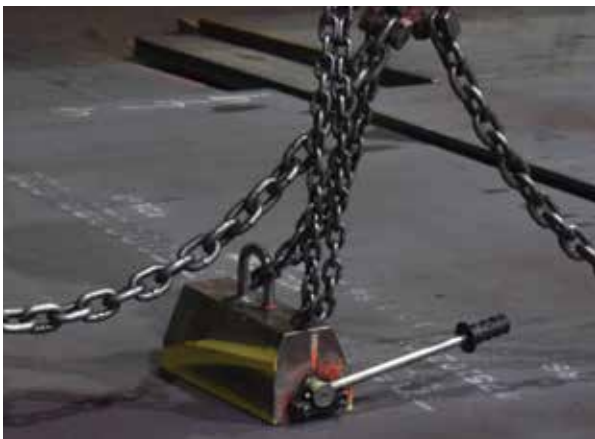
100,000 ft
single piece flow



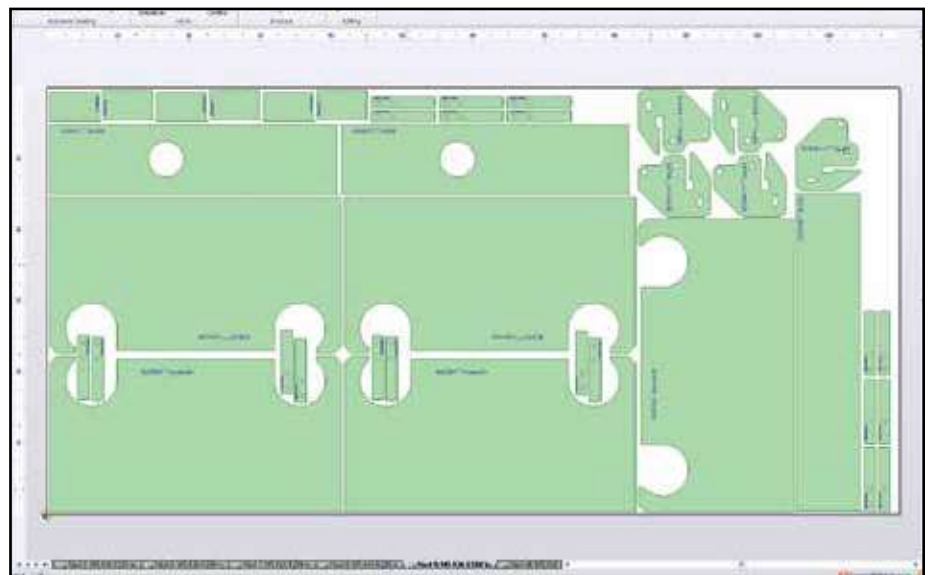
RAW MATERIAL

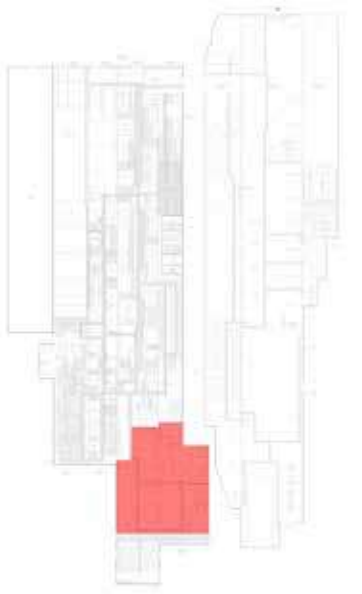


As raw materials are received in the rear of the facility, steel sheets and plates are sorted by size before being transferred either directly to the burn tables or placed into inventory. To aid workers handling the heavy steel, large remote-operated overhead cranes fitted with magnets or other specialized handling attachments are utilized. Steel ranges from 22 gauge sheet all the way up to 4" thick plate.



The Plasma Office, located adjacent to the plasma tables, is where several 'nesting engineers' use ProNest software to create layouts that not only reduce scrap by maximizing plate utilization, but also increase efficiency with optimal burn paths. This process not only helps reduce costs but insures a steady supply of parts necessary to maintain our best in industry lead times.





PLASMA



With a focus on quality and continued growth, Hoist has invested over \$40 million into our East Chicago facility incorporating both state-of-the-art equipment and lean manufacturing best practices throughout the production process.

Hoist is currently operating three Alltra gantry cutting machines utilizing the latest cutting technologies enhanced with ProNest nesting software. Tables can accommodate plates 10 ft. wide and 40 ft. long, up to 2 in. thick for plasma and up to 6 in. thick for oxyfuel.

After the large steel plate is cut into individual parts, powerful magnets are used to remove the parts from the table where they are either staged or immediately transferred to the next stage of production, whether to forming, machining or welding.



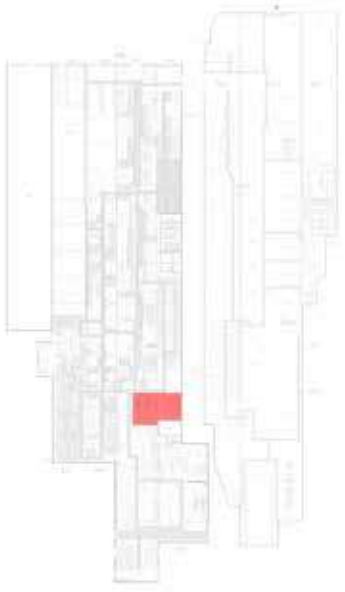


Trumpf Laser 2000 Watt, 48" x 96" L2520 for tight tolerance precision cutting with +/-0.005" accuracy for material up to 1/2" thick.



Trumpf Laser 4000 Watt, 60" x 120" TLF 4000 Turbo for tight tolerance precision cutting with +/-0.005" accuracy for material up to 3/4" thick.

FORMING



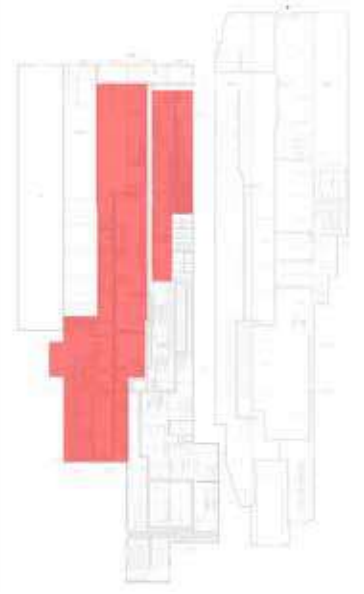
Edwards Pearson 450 Tons full CNC control, X 260" long Heavy Duty Press Brake for bending plate up to 1" thick.



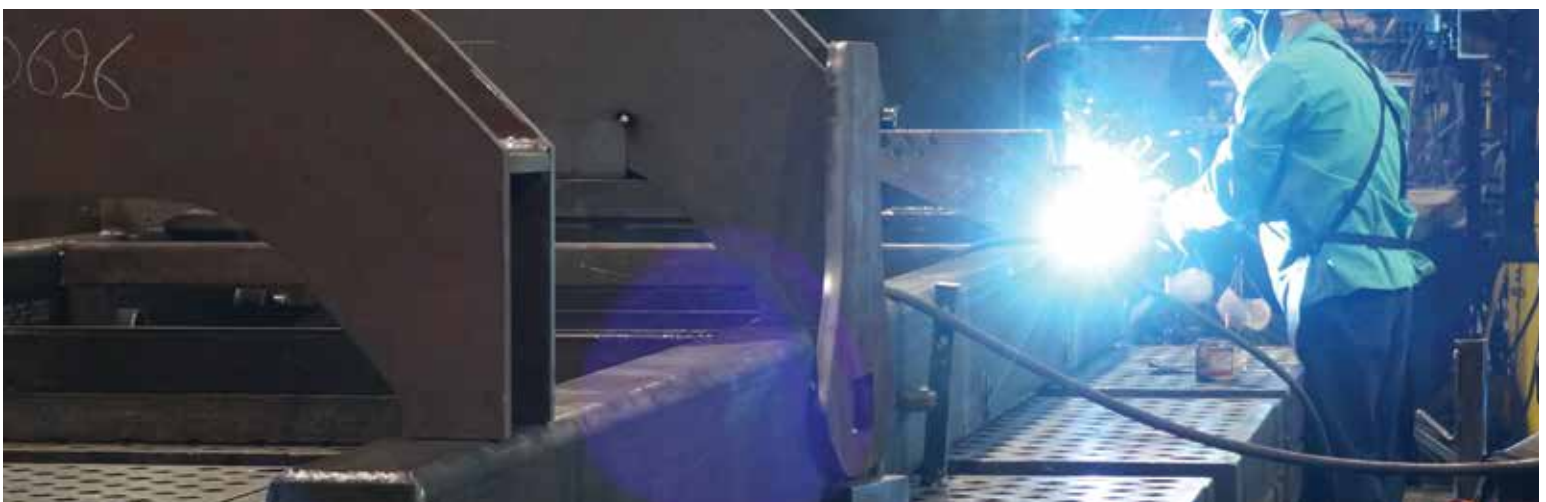
Accurpress 175 Ton full CNC control Press Brake X 120" long utilizing the latest in high-speed precision bending technology.



WELDING



Our East Chicago facility has allowed us to more than double our welding space to accommodate our manual, semi-automatic and fully automated robotic weld cells. Rotary fixtures allow for optimal weld position on all chassis weldments. All sub-weldments such as cabs, tanks and steer axle beams are fully fixed as well.





The new facility was specifically laid out to isolate welding in one bay segregated from main assembly and paint/powder coat. In order to control potential contaminants, maintain the quality of vehicle finish and provide the best air quality possible, the assembly and paint/powder coat bay is pressurized with the welding bay exhausting air.

Within the welding bay individual welding cells are dedicated to specific truck weldments including: chassis, tanks, wheels and masts.

Additionally, in order to take advantage of the efficiencies, time savings and consistency of robotic welding, Hoist continues to develop and add to the number of fully automated robotic welding cells in the new facility.



CNC MACHINING



There are a total of 26 CNC machines throughout our facility. Working in three shifts, our CNC department produces premium quality components that are utilized throughout our entire product line. Hoist also maintains a large inventory of parts for all series, stocked and ready for immediate delivery.





The CNC department is responsible for supplying machined parts to the welding department, sub-assembly and assembly as well as for the aftermarket parts group. The CNC department utilizes both lathes and mills, with lathes machining round parts, such as cylinder pistons, glands, rods, tubes and end caps, and mills machining parts made from flat plate such as steer links, axle mounting pads, and carriage side plates.

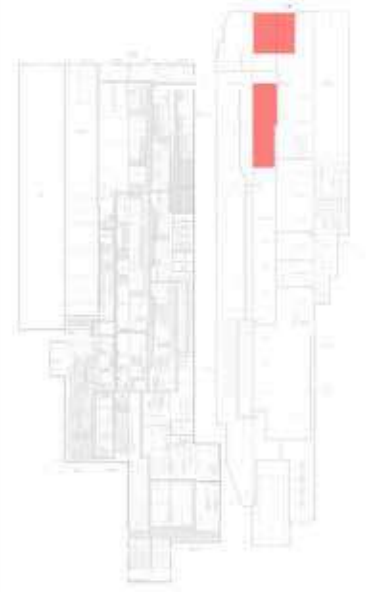
The VL-125CM vertical turning center has a 63" turning diameter, a 63" swing diameter and 11,000 Lb table capacity and is used for machining large round parts such as wheels and hubs.



The HNK HB-130 horizontal boring mill features a wide 15-ton work table, 118" X-axis travel, 90" Y-axis travel, 63" Z-axis travel and 27" of spindle travel. This is ideal for precision heavy-duty boring and milling applications.



PAINTING



The updated Paint Department includes brand new paint/powder coat booths and ovens. Parts coming from the Welding and CNC Departments are first cleaned of any debris and then undergo a more thorough washing and inspection before entering the paint booth.



Filtered fans located at the bottom of the main paint/powder coat booth pull air and residual paint and powder out of the negative pressure space allowing for a more precise, even application. The custom paint/powder coat booth was specifically designed to easily accommodate even the largest chassis Hoist manufactures such as the one found on the HRS series of reach stackers.

Both the main paint booth and smaller touch-up booth are unique in that they can accommodate wet-spraying as well as powder coating. Additionally, both booths are extremely well-lit to allow painters to see all details and identify and correct potential flaws.





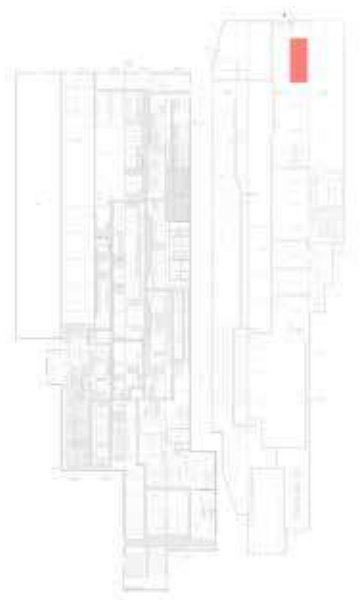
When powder coating, applying the powder is only half the job. In order to achieve the best results, powder coated parts must be heat-cured properly.

The Paint Department's parts oven, like the main paint booth, is sized to accommodate the largest fabrications manufactured by Hoist, including the reach stacker chassis.

The industrial oven features heavy-duty doors hung on beefy hinges. Interior full-length air supply floor ducting provides excellent air uniformity.



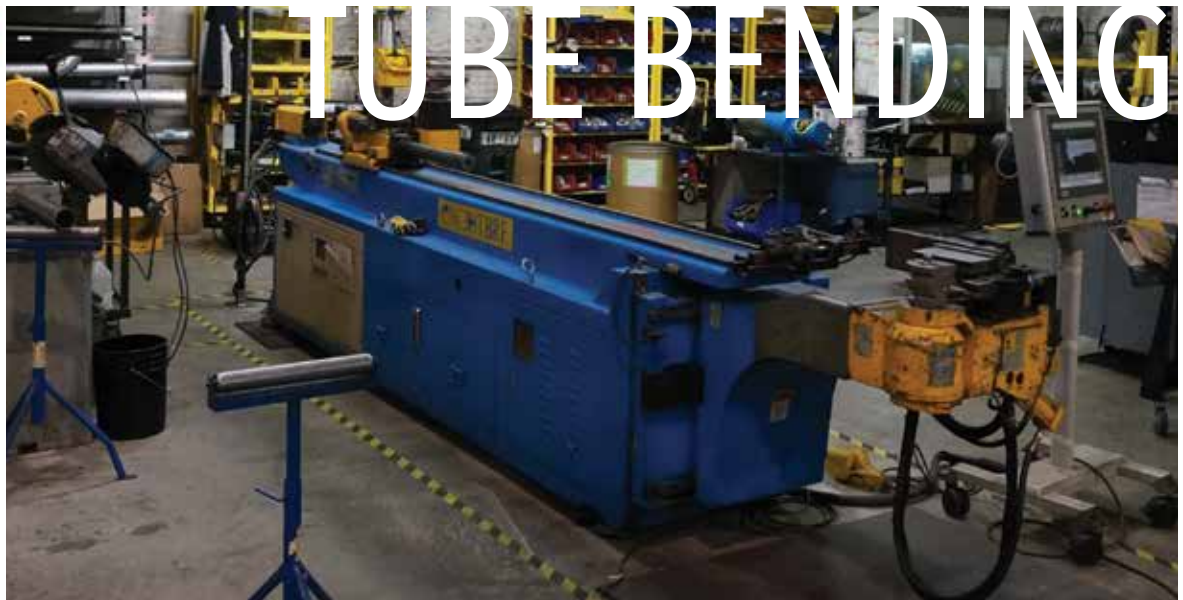
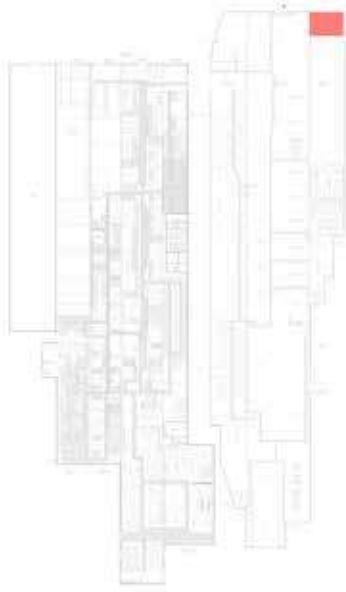
STEER AXLE ASSEMBLY



All Hoist steer axles are completely assembled in the Steer Axle Department of our new facility.

Knuckles, hubs and kingpins are assembled with pre-greased bearings to the heavy duty fabricated axle beams and cylinders are fully tested prior to being installed.

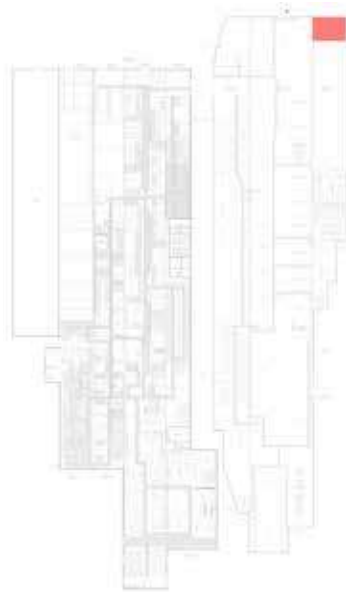




TUBE BENDING



All hydraulic piping is made using a CNC tube bender. All bending programs are stored in a computer fixed to the bending machine. After being cut to a predetermined length and locked into a collet, the hydraulic tubing is automatically bent based on the associated program. A flaring machine then deburrs the ends of the tubing and forms the appropriate flares.

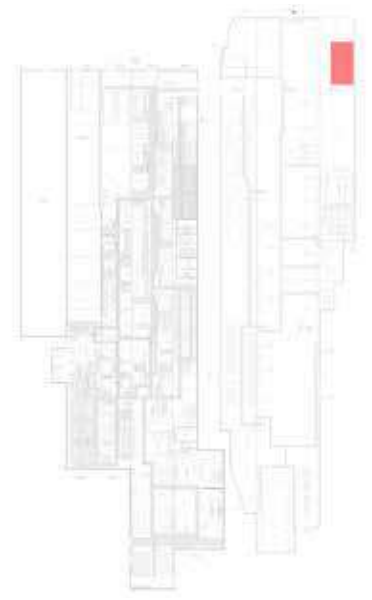


HOSE CRIMPING



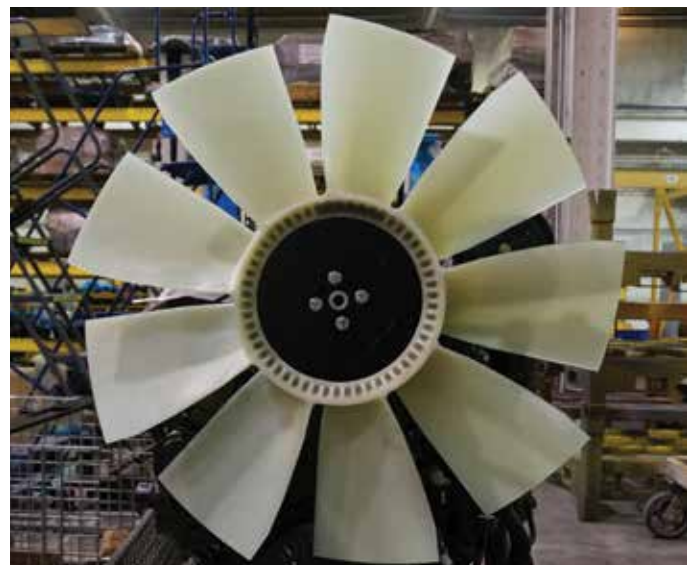
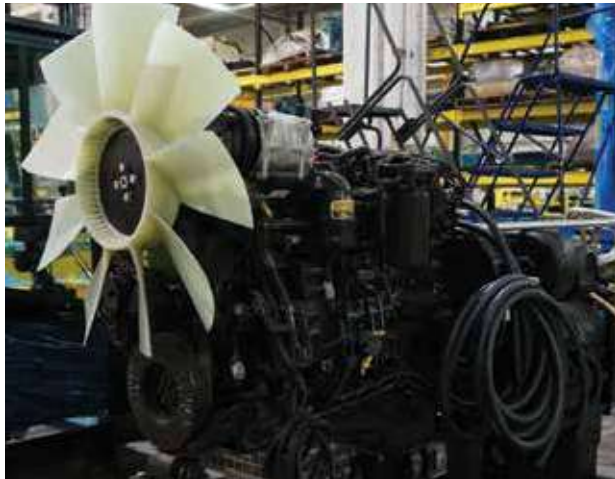
A programmable hose crimping machine is utilized to assembly all hydraulic hoses, ensuring proper tolerance for every hose size.

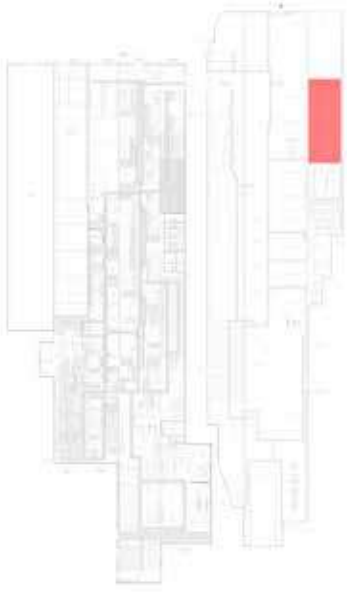
ENGINE ASSEMBLY



All of our diesel models feature Cummins engines, renowned for their durability and reliability and, like all Hoist lift trucks, are 100% made in the USA.

Many cushion tire models feature 3.0L and 4.3L IC engines as well, available in both LP and LP/Gasoline dual fuel models.

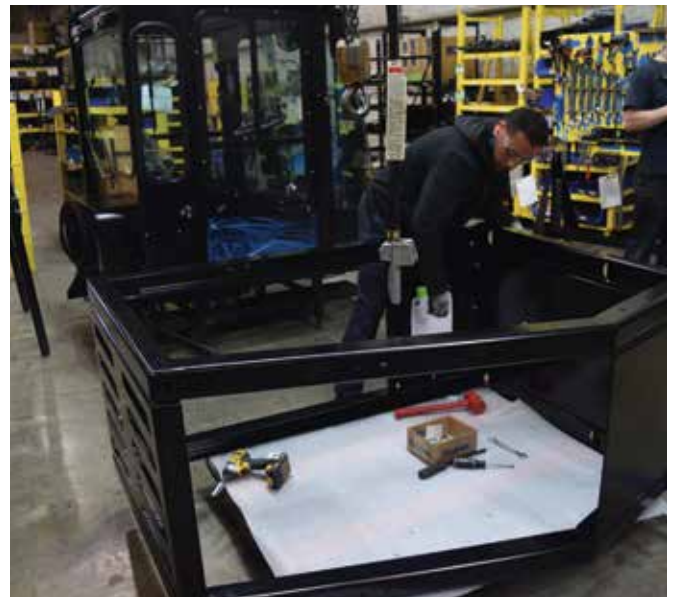




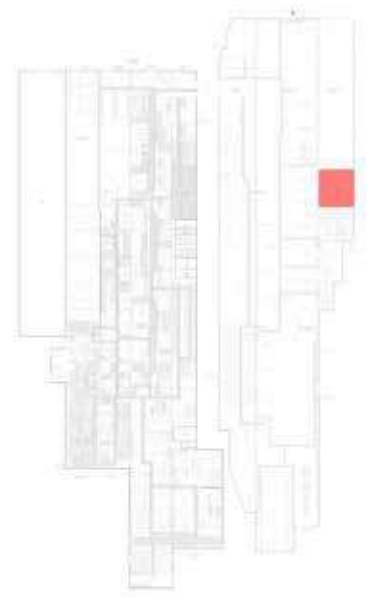
CAB ASSEMBLY



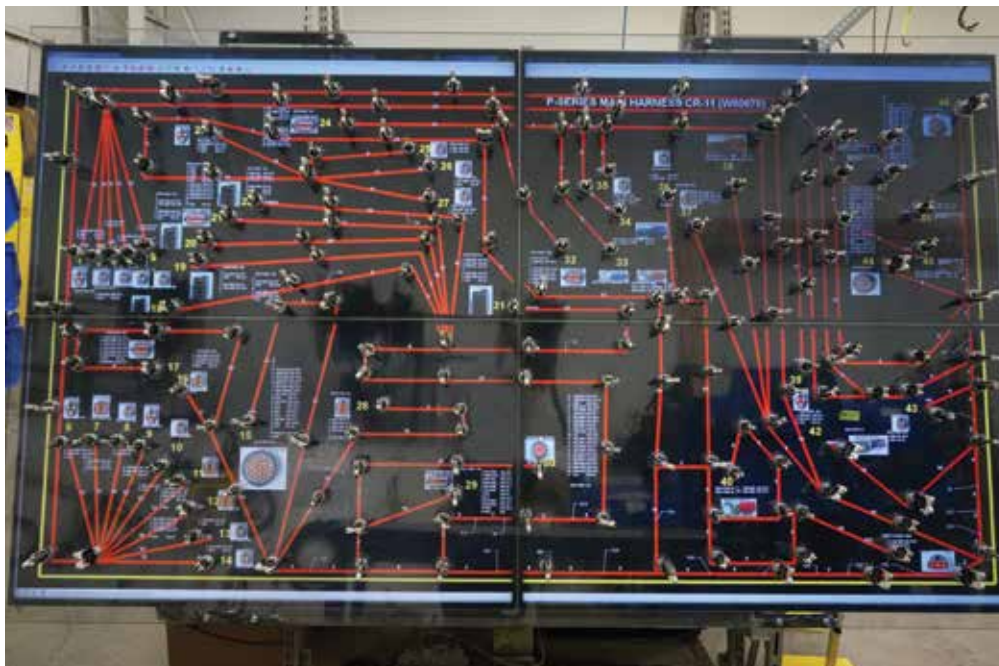
All Hoist cabs are completely manufactured and assembled in-house. With the additional space in the new facility, a dedicated cab-only assembly bay was created, strategically located just off the main assembly bay. Finished cabs exit the Cab Assembly bay directly into main assembly where they are fitted for final truck assembly.



ELECTRICAL

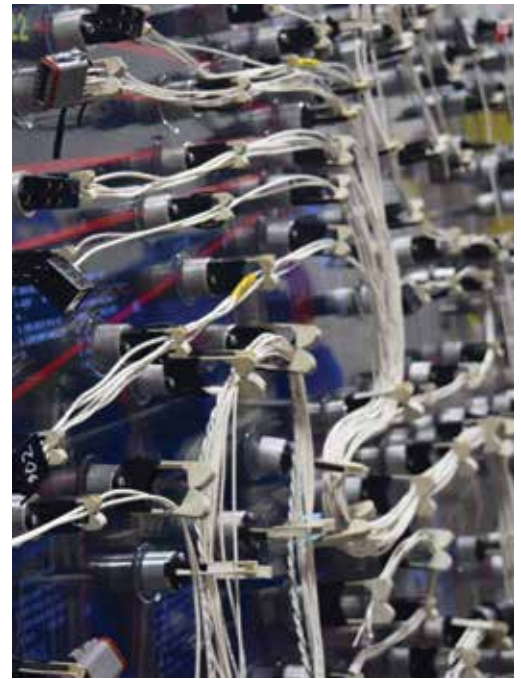


All wiring harnesses are produced in the Electrical Department. Individual wires are processed on a fully automatic crimping machine ideally suited for high-speed wire processing. The crimping machine not only cuts, strips, and crimps the terminations on wires, but also prints on the jacket for proper wire identification.

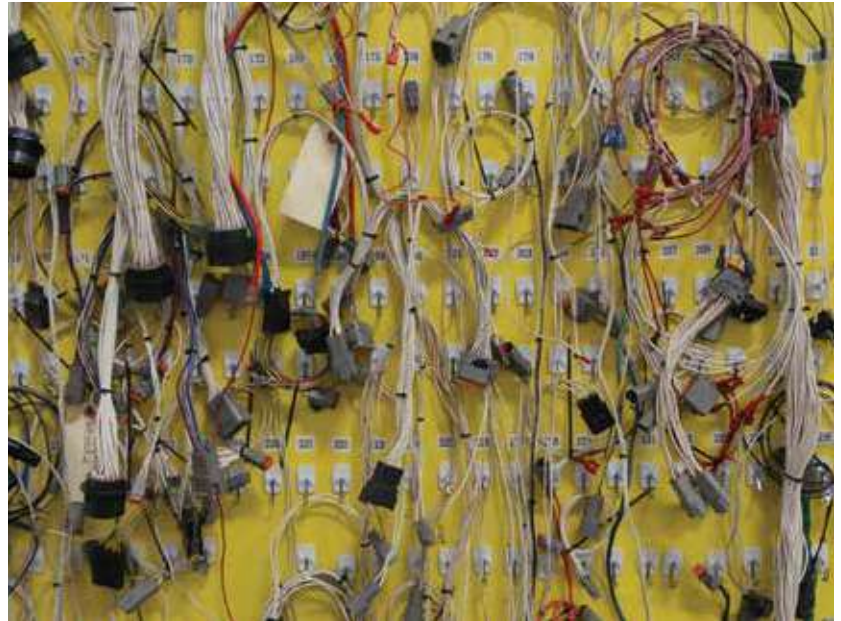


Digital wiring "boards" display wire routing and connector information. Removable wire holders are placed directly on the digital boards and the harnesses are created in place over the digital template. A P-Series harness starting from raw bulk wire to finished assembly can be completed in less than 8 hours.

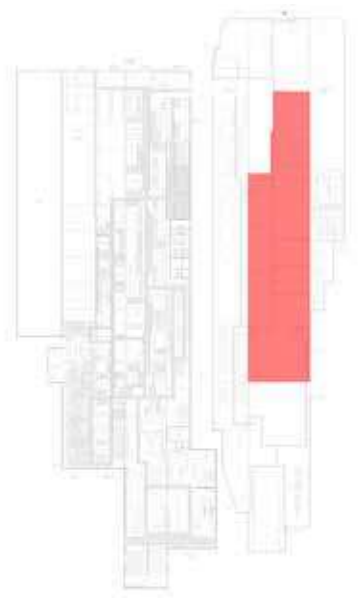




Once completed, harnesses are 100% tested on the custom designed harness tester. Every termination in every connector is verified for continuity. After passing testing, harnesses are transferred to the loom station where they get their protective covering before being sent to main assembly.



MAIN ASSEMBLY



The layout of the new Hoist facility was carefully planned to not only embrace the best practices of lean manufacturing and overall quality, but also to improve already industry best lead times. The main assembly bay features 100,000 ft. of continuous production for single piece flow. Each truck is assembled in its own designated stall with 22 stalls stretching down the bay.

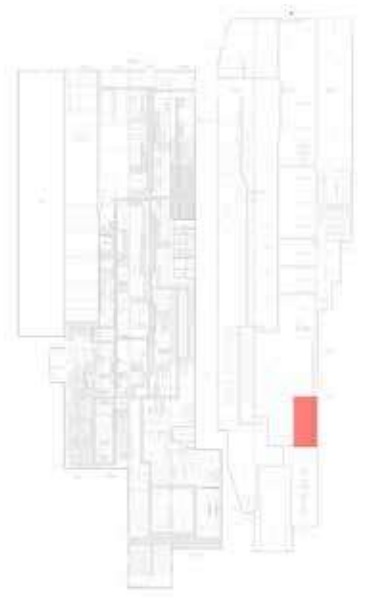




Current production rate in the new facility is 40 trucks per month and growing. The facility, however, can easily accommodate 60 trucks per month - a goal we are closer to achieving with each passing day. Each truck is assigned to a highly skilled assembly team. Our FR Series currently takes an assembly team a mere 3 days to assemble! The additional floor space in our new facility also allows us to build stock FR units available for immediate purchase or rental.

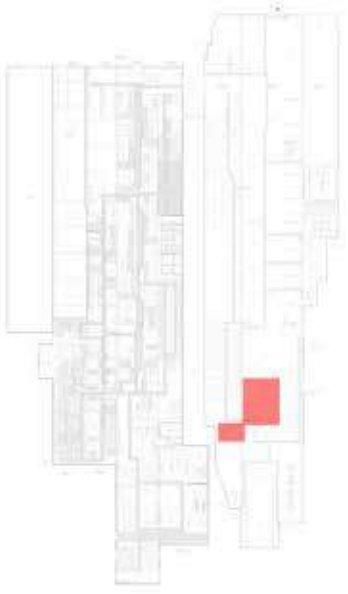


TESTING



Once final assembly of a unit is complete, the lift truck moves on to the Testing Department. Trucks undergo rigorous testing of all functions, including load testing above rated capacity to ensure the trucks are fit for purpose.





After testing is complete, trucks move on to the Inspection Department. A large wash bay is first used to thoroughly clean each truck before it is positioned in the inspection booth. High intensity light curtains aid in the certified safety technician's 150-point inspection.

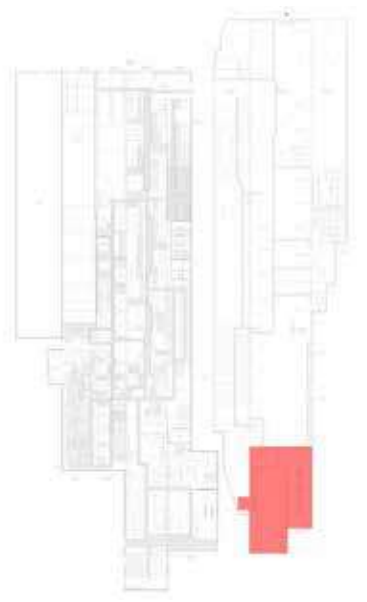


The Inspection Department includes a smaller touch-up paint booth in the event any finish flaws are detected during the inspection.

Once inspection and any required touch-up is complete, trucks move on to the Shipping Department to be prepared for transport.



SHIPPING & RECEIVING



Hoist's Shipping and Receiving Department is responsible for processing all incoming deliveries of parts, making sure they are delivered to the appropriate department in a timely manner, as well as coordinating outbound shipping for finished product. The Hoist shipping teams work very closely with a number of freight companies to ensure that all loads leaving the facility are properly secured, adequately protected, and done in the most cost-effective manner possible for a prompt, safe, and professional delivery.



PARTS DISTRIBUTION



Hoist's dedicated Parts Distribution Facility, situated in the former manufacturing facility, is located mere minutes away from Chicago's Midway airport allowing for same day air shipment.

The Parts Distribution facility has in excess of \$5 million in parts inventory available for same- or next-day delivery. Non-stock items, such as some large fabrications, are typically available in less than two weeks.

Additionally, Hoist factory stores and dealerships maintain inventory of commonly used parts that are available for immediate pick-up.



OUR OTHER LOCATIONS:



Forklift Exchange: Phoenix, AZ 10,000 sq. ft. 1 acre of Land

In 1980, Marty Flaska started Forklift Exchange from his house in the Western suburbs of Chicago specializing in buying and renting material handling equipment. Over the next decade, the company grew tremendously. The challenges that were overcome with this growth allowed for the company to allocate to an ever-changing industry. We have become a company unbound by geographical location and Forklift Exchange understands that the demands for exceptional equipment are continually increasing.

Forklift Exchange understands what it means to do things right and do them right the first time. This is why we will strive to provide the best customer service possible. **We Put Our Customers First!**



Hoistlift of Florida: Fort Myers & Orlando, FL 18,000 sq. ft.. 5 acre of Land

At Hoistlift of Florida, we have 2 servicing locations, 20 support personnel, 18 field technicians, and a fleet of 6 service trucks armed with the latest tools and technology to get you up and running in an efficient, cost-effective, and courteous manner.

Hoistlift of Florida now offers a full service rental department ranging from small tools, compact equipment, full size construction equipment, industrial and marina forklifts. All of our rental equipment is sourced from top line manufacturers such as Husqvarna, Bosch, Genie, MQ, Terex and Hoist. We also offer prompt and reliable delivery to your job site.



Flaska: JCB: Denver, CO 6,000 sq. ft.. 2 acres of Land

As Flaska JCB continues to grow, we have opened our newest Flaska JCB in Denver, Colorado. With over 20 years of expertise, our technicians have a vast amount of knowledge when it comes to material handling and construction equipment. We maintain a full selection of JCB construction equipment including wheel loaders, backhoes, excavators, and much more.

Along with the construction equipment, we offer a wide range of brands including Hoist Liftruck, Kion, Linde, and Baoli. Quality new and used equipment as well as rental equipment is always available along with parts and service solutions for many major brands. We pride ourselves on quick response times so you have less downtime.



Hoist Liftruck Parts & Distribution Center 40,000 sq. ft.

In order to meet the increasing demand for Genuine Hoist parts, Hoist Liftruck has opened a facility dedicated to parts distribution in Bedford Park, IL incorporating best in class technology. Hoist is committed to limiting equipment breakdowns and has invested \$5 million dollars made up of 150,000 SKU of new and remanufactured parts in stock ready for immediate shipment.

The proprietary program, which is managed by our purchasing group, calculates minimum stock levels, generates purchase orders, tracks lost sales, and automates many of the inventory management functions.



Hoist Liftruck Mfg., LLC.

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www.hoistlift.com | Made in the USA