

Liftsafe Engineering and Service Group Inc.



Inspections

Liftsafe utilizes the latest wireless technology, ensuring accurate inspections and reports.



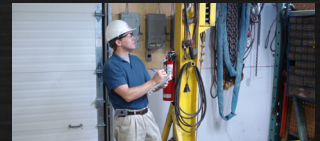
Service

Whether you need a minor repair, or you're experiencing a major failure, the Liftsafe team is the one to call.



Fabrication

With over 20 years of Standard and Custom Fabrication experience, we are confident there is no project we cannot handle.



Professional Service

From Engineering to Pre-Start Health and Safety Reviews, the Liftsafe team has the expertise to ensure your project is a success.

Providing Turn-Key Material Handling Solutions

For Over 20 Years!

Table of Contents...

Inspections

- 04 Lifting Equipment Inspections
- 05 Man Lift Inspections
- 06 Access Ladder Inspections
- 07 Mobile Crane Inspections
- 08 Roof Anchor Testing
- 09 Fall Arrest Anchor Points
- 10 Load Testing

Trusted Products

- 20 Kito Hoists
- 22 Budgit Hoists and Yale Crane Kits
- 24 R&M Crane Kits
- 26 Spanco Jib Cranes
- 27 Spanco Enclosed Track Systems

Professional Services

- 28 Professional Services Offered

Service

- 12 Service
- 13 Hoist and Crane Repairs
- 14 Welding Service
- 15 Lifting Equipment Service

Fabrication

- 30 Lifting Equipment Fabrication
- 31 Custom Fabrication

Overhead Cranes

- 16 Crane Manufacturing and Installation
- 18 Crane Modernization
- 19 TC American Patented Track



Liftsafe Engineering and Service Group Inc.

"As a large manufacturer in the automotive sector, having clear and organized inspections is crucial for our day to day operations. The reports offered in your G10 system allow us to keep track of all of our equipment and easily determine which repairs are required. Having these online and available immediately has made organizing inspections and repairs easy and efficient."

- International Automotive Manufacturer



Changing the way you think about inspections.

Wireless inspections of your equipment with 24-hour online customer access.

Our environmentally friendly system allows you to keep all of your equipment manuals, inspection certificates, repair and maintenance reports in one convenient location.

Visit our website to learn more!

At Liftsafe Engineering and Service Group Inc., we pride ourselves on our complete and accurate certification procedure to ensure your lifting equipment is “Safe.” Our qualified inspectors not only meet but exceed all requirements for performing your annual inspections. Liftsafe utilizes the latest wireless technology, ensuring accurate inspections and reports. Our safety inspectors will give you peace of mind knowing that we did the job right the first time!

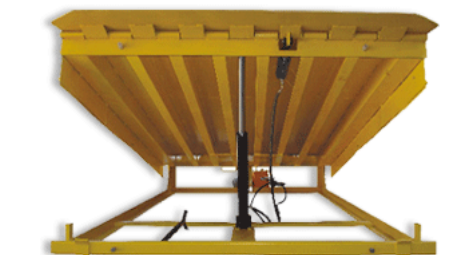
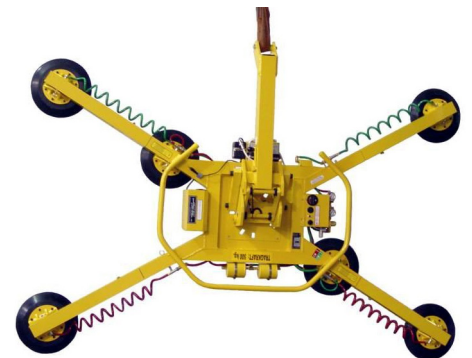
Equipment We Inspect

- Anchor points
- Automotive lifts
- Balancers
- Custom lifting fixtures
- Die carts
- Dock levelers
- Electric hoists
- Fall protection equipment and systems
- Fixed and portable ladders
- Forklift trucks
- Hand chain hoists
- Hospital patient lifts
- Lever hoists
- Lift tables
- Man lifts
- Mobile cranes
- Overhead cranes
- Pallet racking
- Portable automotive lifting devices
- Pallet trucks
- Rigging equipment
- Slings
- Vacuum lifters

Inspection Methods

- Visual
- Mechanical
- Magnetic particle inspection
- Liquid penetrant inspection
- Electrical
- Load testing
- Destructive testing
- Proof testing
- UT pin testing
- Thickness testing

Lifting Equipment Inspections



Legislative Requirements

According to the Canadian Standards Association, periodic annual structural inspections are required for man lifts and articulating booms. Annual inspections will comply with the CSA standard and will be performed by a qualified person.

To learn more about when your man lift inspection is required, send us an email or call.

PIN Testing

Liftsafe Engineering and Service Group Inc. will examine all structural pins using Ultrasonic Testing Methods. Our competent inspectors will ensure there are no cracked or sheared pins.

Critical Weld Inspections

Each accessible critical weld will be examined visually, with the assistance of our non-destructive methods such as magnetic particle and/or dye penetrant inspection when deemed necessary.

Documentation

Upon completion of the inspection, Liftsafe Engineering and Service Group Inc. will provide full computer generated reports for each unit that has been inspected/tested. All of your reports and inspection certificates are available online via our secure customer portal, allowing you 24-hour online access to your documents.

After each unit is inspected, a colour-coded inspection label will be affixed to the unit. At your request we will fully interpret and analyze the results with the company appointed representative, ensuring all of your questions are addressed.



Man Lift Inspections

Liftsafe Engineering and Service Group Inc. inspects Access Ladders in conformance with the Ontario Ministry of Labor regulations.

Our competent staff will report on faults and make recommendations for repair.

Our engineering department will review reports and our service department can offer turn-key repairs and retrofits of existing ladders, or manufacture new ladders to meet current standards.

Section 19 of the Regulations for Establishments states:

“Fixed access ladders must be designed, constructed, installed and maintained so as not to endanger a worker, and must be capable of withstanding all loads to which they may be subjected.”

“Fixed access ladder installations must be periodically inspected by a competent person for rust, corrosion and structural integrity, and must be maintained in good condition, not likely to endanger any worker. These inspections should be conducted at least once per year. Records of inspection and maintenance to fixed access ladder systems should be maintained.”

Access Ladder Inspections

Annual Inspection Requirements

A “complete inspection of the crane shall be performed by a competent person and supervised by a professional engineer competent in the inspection of cranes.”



Safety and Mobile Cranes

The safe operation of mobile cranes in Ontario continues to be a key concern for the Ministry of Labour.

In a five year span there were three critical injuries involving mobile cranes at construction sites across Ontario, according to ministry reports. Some of these incidents occurred when cranes overturned and contacted electrical conductors or when the cranes or the material that they were lifting struck or crushed workers when the load was dropped.

- Ministry of Labour 2012.

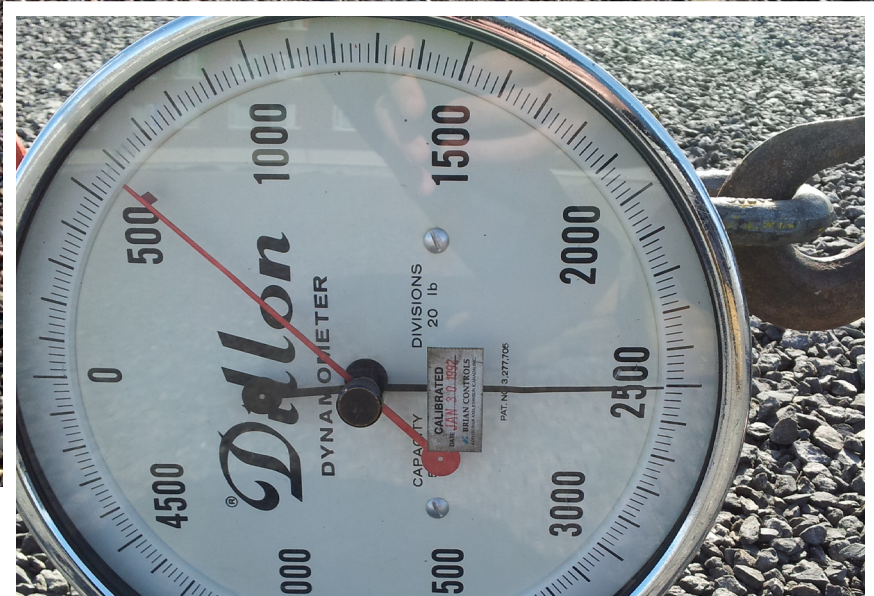
Our Process

We provide detailed Engineering Reports upon completion of inspection. In order to be in compliance with CSA standard Z150, our Engineers may conduct an onsite assessment or review the inspection records in-house. Our Engineering Reviews along with our detailed reports will identify if the Mobile Crane is safe for use and document all required or suggested repairs to ensure compliance.

Mobile Crane Inspections



"Inspections shall be completed according to CSA Z91 at intervals not exceeding twelve (12) months."



Liftsafe Engineering and Service Group Inc offers a range of services related to non-destructive load testing and inspection of roof top fall arrest anchors and davit arm assemblies.

According to CSA Z91 and CSA Z271:

"Persons working on a surface within 2m of an unprotected edge, where they may fall onto a hazardous substance or object, or at a height of 3m or more above the ground, the adjacent roof level, or an acceptable landing without the protection of guardrails or other devices to guard against falls, shall wear a fall-arrest full body harness with lanyard. The fall protection system shall be attached to anchors, or to substantial members on the building, at all times."

Roof Anchor Testing



Our trained and experienced inspection team can provide inspections of Fall Arrest Anchor Points, in accordance with applicable CSA standards.

Liftsafe can provide anchor points rated to either the CSA Z259.15 standard for anchor points, or the Z271 standard.

Z259.15 anchors are rated for fall arrest only (no rappelling), and may incorporate shock absorption to provide additional protection to the sub-structure. These systems can also incorporate engineered horizontal lifelines.

Rigid Z271 style anchors are common on rooftops for suspended equipment and/or window washers. These anchors can also be used to support an engineered horizontal lifeline system.



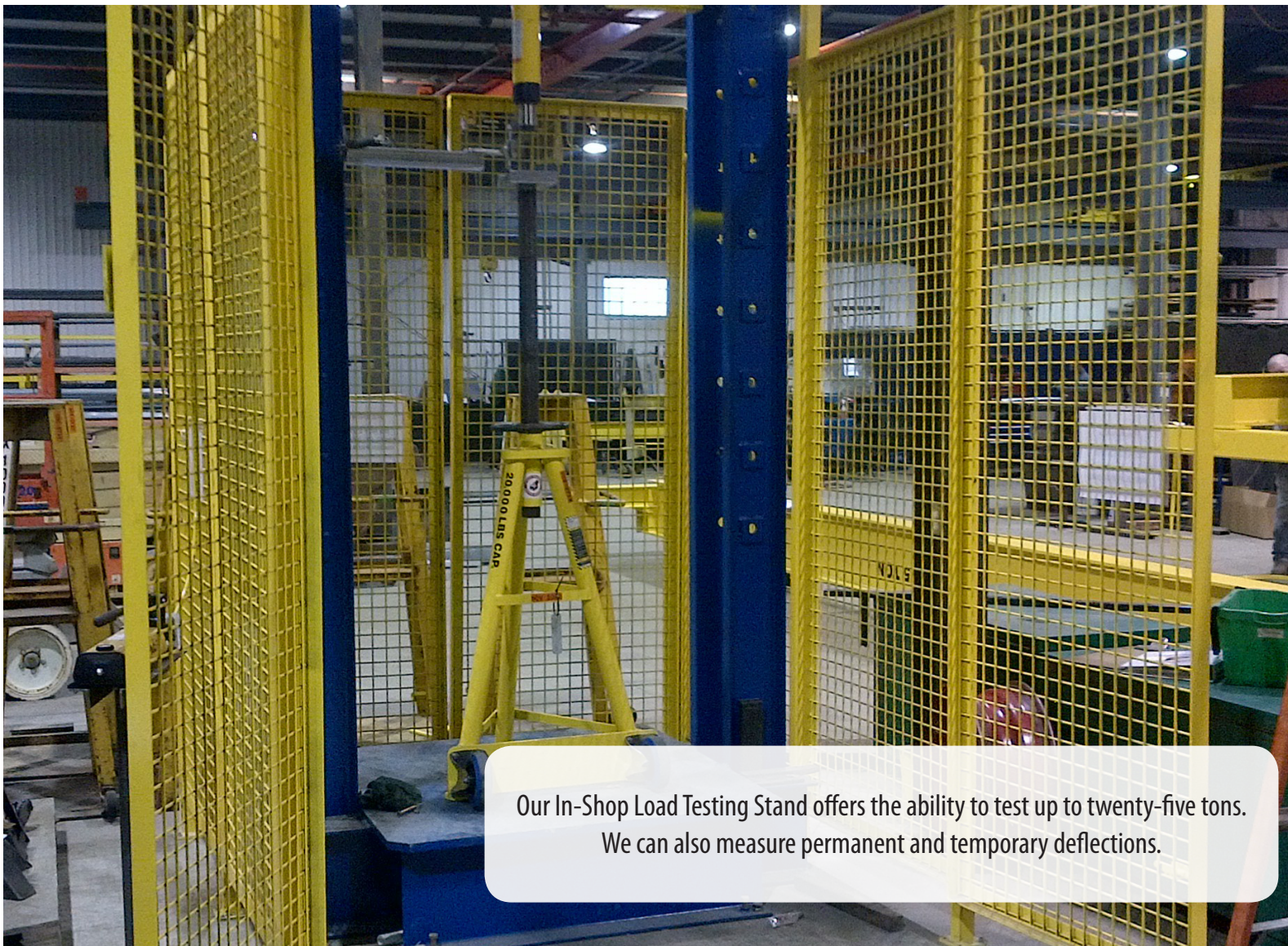
Ten-ton In-Shop Load Tester



Five-ton Portable Load Tester



Portable Weight Plates



Our In-Shop Load Testing Stand offers the ability to test up to twenty-five tons. We can also measure permanent and temporary deflections.



Water Bag Load Testing provides the ability to load test cranes, general lifting equipment and structures.

- Many applications require equipment to be load tested prior to being placed into service, or upon completion of repairs.

- Repaired hoists are load tested to 125% of their rated capacity, ensuring a high level of safety.
- Liftsafe offers a range of on-site and in-shop, non-destructive load testing services.

- **On-Site Load Testing** - Liftsafe uses a custom, portable, five-ton load tester to load test hand chains and lever hoists. This allows us the ability to complete on-site, certified inspections with little downtime to our customer's production.

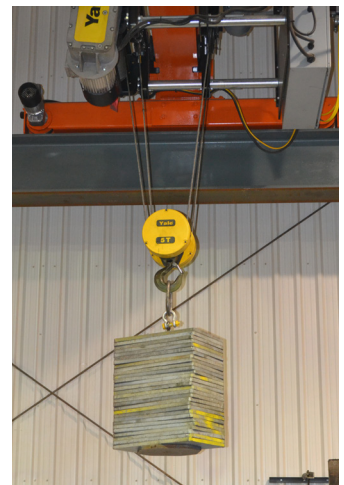
- Overhead bridge cranes, lifting beams and hoists can all be load tested using suspended weights.
- Depending on the nature of the load test we can test up to 5000 lbs. with our portable weight plates.

- Our Water Bag Load Testing is ideal for testing large pieces of equipment and requires minimal manpower to execute.

- **In-Shop Load Testing** - Our in-shop load testing areas are ideal for large pieces of equipment as well as hand chains and lever hoists, load testing prior to delivery of fabricated equipment and load testing of repaired equipment.

- We have designed a custom Load Testing structure specifically for the testing of stands and other equipment. This unique stand differs from our other testing methods as it utilizes compression to test, instead of the standard tension force.

- Complete with both weighted plates and a ten-ton testing structure, our facility ensures your equipment is safe and compliant.





Service

Whether you need a minor repair, or you're experiencing a major failure, the Liftsafe team is the one to call. We inspect and service all types of cranes, hoists and other lifting devices. We are your single source for all your material handling service needs.

Services Include:

- Millwrighting and rigging
- Crane and hoist repairs
- Electrical troubleshooting
- PM programs
- Material handling plant maintenance
- Weld repair
- Non-destructive testing
- Load testing
- Inspection services



Liftsafe Engineering and Service Group Inc.'s in-house service depot guarantees the fastest turnaround time on your hoist repairs. We offer 24-hour emergency service, as well as on-site breakdown service. Our facility is fully stocked with hoist wear parts, and our hoist inspection assessment and testing area is capable of handling all of your repair and inspection requirements.

Our Promise

- Liftsafe will provide you with an estimate before we begin the work.
- Liftsafe will load test your hoist before we return it to you.
- Liftsafe will clean and lubricate your hoist before we return it to you.
- Liftsafe will return all old parts to you, at your request.
- Liftsafe will guarantee prompt, quality service.

We are an authorized service dealer for most makes and models!

Call Liftsafe Engineering and Service Group Inc. for your hoist repairs!





Liftsafe's qualified welders offer exceptional quality and service. We offer full in-house welding services, as well providing Mobile Welding Services. We will ensure your welding repairs are completed immediately, reducing down time and increasing production.

Our in-house welding team is qualified to perform Fusion Welding of Steel as well Fusion Welding of Aluminum, adhering to standards W47.1 and W47.2.

Welding Services

Welding Services Include

- Heavy equipment repair
- Stairs and railings
- Damaged shipping docks
- Mezzanines and structures
- Fixed access ladders
- Structural repairs
- Miscellaneous welding repairs
- Lifting equipment



PM_{PLUS} Maintenance Program

Minimize ongoing maintenance costs by enrolling in Liftsafe Engineering and Service Group Inc.'s **PM_{PLUS}** program.

What is the **PM_{PLUS}** Maintenance Program?

Liftsafe's customized preventive maintenance program **monitors** and **prevents equipment failure**. By **scheduling routine repairs, maintenance work and inspections**, we will help to not only **prevent equipment safety issues, breakdowns and compliance violations**, but also **prevent component failures**. This averts **unnecessary downtime in production - saving you time and money**.



Why **PM_{PLUS}**?

Savings

Higher efficiency and less downtime, means cost savings.

Peace of Mind

Fewer equipment failures and compliance violations.

Priority Service

Customers in the **PM_{PLUS}** program receive priority service.

Continuity

A technician may be assigned to a specific customer for consistency in service and familiarity with you and your equipment.





Crane Manufacturing and Installation

Liftsafe Engineering and Service Group Inc. provides lifting equipment to a broad range of industries. Our systems are designed to suit the application's capacity, duty class and environmental conditions. Liftsafe's experienced Engineers ensure that correct components are selected to meet these important criteria.

Manufacturing

- Capacity from 1 to 100 ton offered.
- Software is utilized to optimize girder selections, verify code compliance and minimize deflections.
- Liftsafe selects only the finest components that meet CMAA and CSA standards. Crane and runway manufacturing is completed by CWB qualified welders, meeting our most stringent quality control measures.
- Bridge crane panels are CSA compliant prior to shipping. Variable frequency drive systems are provided for smooth operation.

Installation/Commissioning

- Crane installations meet applicable standards and tolerances.
- Liftsafe Engineering and Service Group Inc. provides crane systems with tried and proven reliability, which requires very little maintenance.
- Installation includes a pre-start health and safety review exemption letter and proper engineering sign-offs, as required by the Ministry of Labor and local building codes.
- Crane and runway electrification according to CSA C22 standards.
- Pendant and radio control systems are also available.
- Custom PLC systems available for semi-automated applications.

Take advantage of the latest in technological advances, upgrade and modify your existing crane to meet your production demands, and increase equipment life. Liftsafe's specially trained technicians will perform structural, electrical and mechanical modifications to your crane that will increase its reliability and performance while saving you the expense of purchasing a new crane. Fully planned and supervised by our engineering department, conversions may include upgrades to crane capacity, load and speed, lifting height, and classification of the crane. As with all of Liftsafe's products and services, we guarantee 100% satisfaction with your modernized crane, providing full documentation, testing and re-certification of the upgraded unit. Contact Liftsafe's engineering department to discuss your organization's specific needs.



Improved Performance Through

- Advanced crane control methods
- Better crane positioning systems
 - Improved crane automation
 - Increased capacity

Boost Productivity & Efficiency By

- Compliance with safety regulations
 - Reducing downtime
- Reducing manpower needed in lifting process

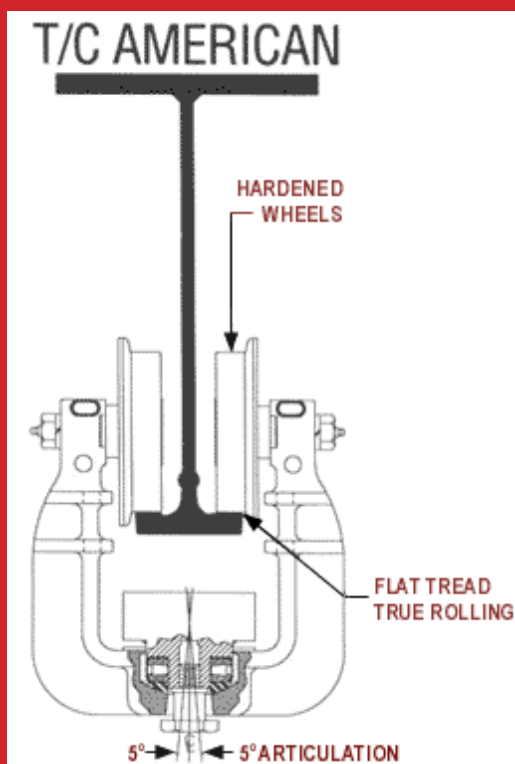
Upgrades Include

- Replace mechanical and electrical components to meet current standards
 - Converting manual operation to motorized control
 - Realigning crane runway beams
 - Increasing or decreasing span
 - Adding variable frequency drive speed control for smooth operation
- Adding radio control
 - Increasing capacity
 - Rewiring crane

Crane Modernization



Patented Track is economical, has better wear resistance and delivers a smooth riding surface.



The backbone of our patented track cranes or monorail systems is our 3-piece rail, specifically designed to provide the maximum in strength, flexibility and durability. This “composite” beam is engineered to fit the needs of the system and fabricated to order, resulting in the lowest weight per system, the lowest weight imparted to the support structure, and the lowest lead time possible. Compare this to wide flange or I-beam systems that must be constructed from whatever materials are currently available at a steel warehouse, or wait for a mill to roll the size required.

Patented Track



L5LB Lever Hoists

Ideal for pulling, lifting, or tensioning; there are few material handling puzzles that can't be solved with a Kito lever hoist.

FEATURES

- Patented compact, lightweight design
- Durable, high-impact steel housing
- Smooth & easy freewheel operation

OPTIONS

- $\frac{3}{4}$ to 9 metric tonne capacity
- Standard or Slip Clutch models



M3CB Hand Chain Hoists

Kito's hand chain operated hoists have earned a reputation for delivering superior performance and value.

FEATURES

- Low hand-force operation
- Durable, high impact steel housing
- Premium grade components

OPTIONS

- $\frac{1}{2}$ to 50 metric tonne capacity
- Standard or Slip Clutch models
- High-Speed and Spark Resistant models
- Hook, Plain or Geared trolley mount

KITO

THE TRUSTED CHOICE OF HEAVY INDUSTRY



ER2 Electric Hoists

Leveraging today's most advanced hoisting technology for performance that exceeds the expectations of the world's most demanding users.

FEATURES

- Industry leading duty ratings
- Advanced smart brake technology
- Durable extended life load chain

OPTIONS

- ½ to 20 metric tonne capacity
- 220/440/575 volt, 3 phase
- Single or Dual Speed
- Food Grade Model
- Hook, Plain, Geared, or Motorized trolley mount



TCR Air Hoists

When applications demand 100% duty cycle hoisting, Kito's air powered hoists deliver.

FEATURES

- Outstanding feathering control
- Heavy duty self-adjusting brake
- Quiet external muffler

OPTIONS

- ¼ to 25 metric tonne capacity
- Pendant, Cord, or Manipulator control
- Hook, Plain or Geared trolley mount

WWW.KITO.CA | 1 888 322 KITO (5486)

CRANE KITS AND HOISTS



Shophoist

- Easy installation and maintenance.
- Standard protector overload device.
- Gear train lifetime lubricated with non-oxidizing grease.
- NEMA 4, industrial-rated control station.
- Lifetime Warranty.



HOIST & TROLLEY For Single & Double Grinders

The Yale® Global King Hoists & Trolleys provide long life in heavy service applications with capacities from 1 to 20 tons.

- Built to meet and exceed either FEM 2m or 3m duty (similar to ASME H4 or H4+ duty).
- Low headroom design provides maximum hook travel.
- 200% torque DC hoist motor brake.
- All Controls housed in NEMA 4/12 enclosure with easily accessible components.
- Triple reduction, helical, oil-bath lubricated hoist gearing in a cast aluminum gear case.
- Standard Hoists and Trolleys are CSA approved.



BRIDGE MOTORS Complete with Plug & Play Cables

- Motor, Reducer and DC Rectified Brake are fully assembled for easy installation.
- Shipped ready to install End Truck with 4 bolt connection.
- Quick-Connect Power Cable to Control Panel.
- Motors are sized to provide more torque and cooler operation for superior performance and longer life.
- Direct-Spline connection to the drive wheel.
- Motor built for use with industry standard variable frequency controls to provide a wide range of travel speed capacity.
- Totally enclosed oil-bath helical gear bridge reducers.
- Power 230/460, 200 & 575; HP: 3/4, 1, 1.5, 2, & 3.
- Motors are provided with TAS as standard. CSA & CE Approved.



Hook and Lug Mounted Hoists

- Single speed standard. Optional 2-speed or variable frequency control available for precision load spotting.
- Gearing totally enclosed in oil-bath lubrication for long life.



Air Chain Hoists

- Variable speed pneumatic power.
- Variable flow, two-lever pendant for precise load spotting.
- Industrial-duty air motor for tough requirements.
- Gear train is lifetime-lubricated with non-oxidizing grease.

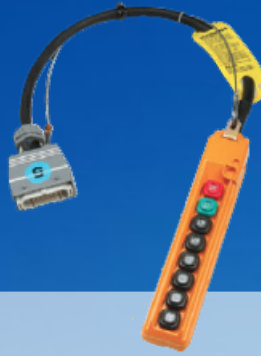


CRANE



CONTROL PANNEL
With Plug & Play Connectors

- Plug & Play cables connect to bridge motors, hoist & trolley, power and pendant control for easy assembly.
- Standard Variable Frequency Control provides controlled acceleration and deceleration for smoother operation, reduced load swing, and extends the life of the drive train.
- NEMA 4/12 Enclosure. Meets NEC.
- Fusing, Manual Disconnect & Mainline Contactor.
- Control Panel Components are CSA approved.



PENDANT CONTROL
Plug & Play Feature

- Plug & Play connection make installation and maintenance quick and easy, eliminating the need of an electrician and minimizing downtime.
- Simplified 8 button operation for all movement.
- UL Listed and CSA approved.



FESTOON SYSTEM
With Plug & Play Connections

- Easy quick connect plugs requires no special tools or skills to "wire up" a bridge crane.
- Connection housings are durable metal with spring loaded snap connections. No plastic housings to break or long screws or loose gaskets to contend with.
- Flat cables and plugs are CSA approved.

ONLINE ESTIMATING SOFTWARE & Component Manuals

- Our easy to use web based estimating software allows our Yale® Shaw-Box® Authorized Distributors the ability to easily prepare an estimate and generate clearance drawings.
- Clearance diagrams automatically calculated and provided in PDF or a variety of AutoCAD, E-Drawing or Solid Works formats.



CRANE KIT: Virtually Everything Required to Build a Crane





QX® Modular Crane packages are pre-engineered, complete crane component packages utilizing cutting edge technology including the innovative Spacemaster® SX wire rope hoist.

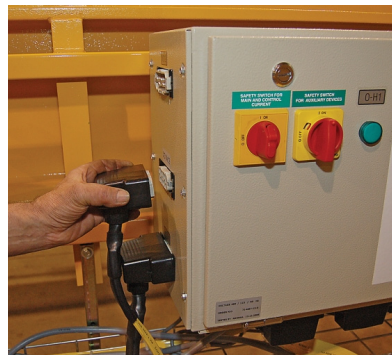
R&M Modular Overhead Crane Kit



Radio Controls



Standard Bolted Girder
Connection Plates



Plug-in Festoon
Connections



Galvanized Steel Cable Trolleys
on C-track Festoon

WHAT IS INCLUDED WITH AN R&M CRANE KIT?

Everything you need to build your overhead bridge crane is included except the bridge steel, paint, tools and labour to build the crane. We even recommend the bridge beam size for you. We will provide an easy to follow Hoosier Crane Kit "Help Manual" and back you up with the support of our team. We are just a toll free call away to help you with any questions along the way. We can also provide runway design services and CAD drawings of your crane system.

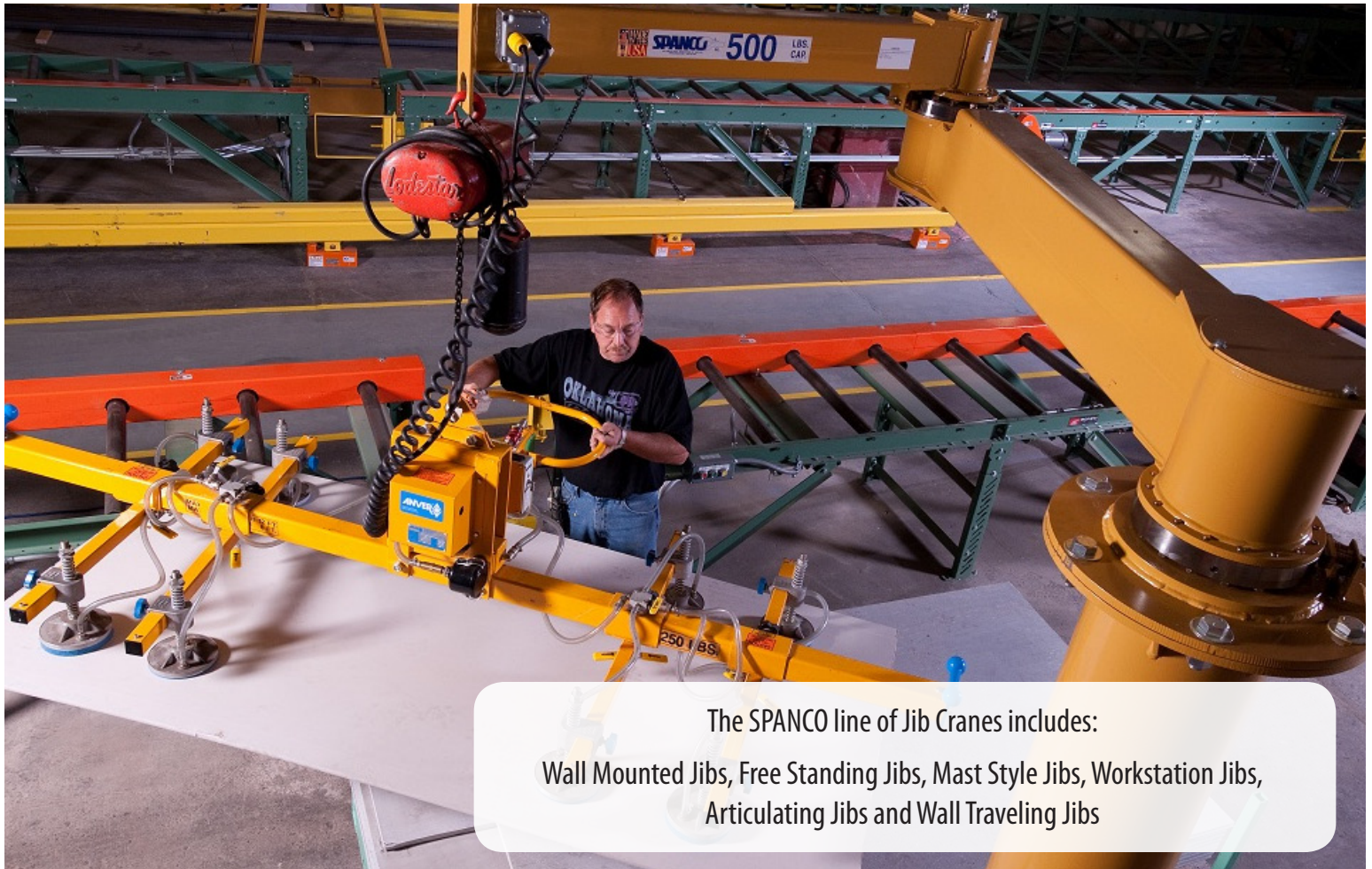
QX® Modular Crane Packages are equipped with your choice of C-track festoon system or the new NRGmaster electrification system.



2 - 80 TON CAPACITIES

QX® Modular Crane packages are pre-engineered, complete crane component packages utilizing cutting edge technology including the innovative Spacemaster® SX wire rope hoist . Variable frequency drives are standard on trolley and bridge motions for smooth starts and stops. Plug-in electrical cabling and bolted structural connections simplify assembly.

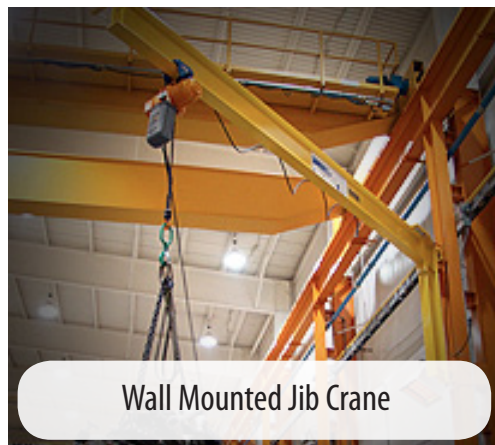
Give us a call or email to learn more about our Overhead Crane Kits.



The SPANCO line of Jib Cranes includes:
Wall Mounted Jibs, Free Standing Jibs, Mast Style Jibs, Workstation Jibs,
Articulating Jibs and Wall Traveling Jibs



Articulating Jib Crane



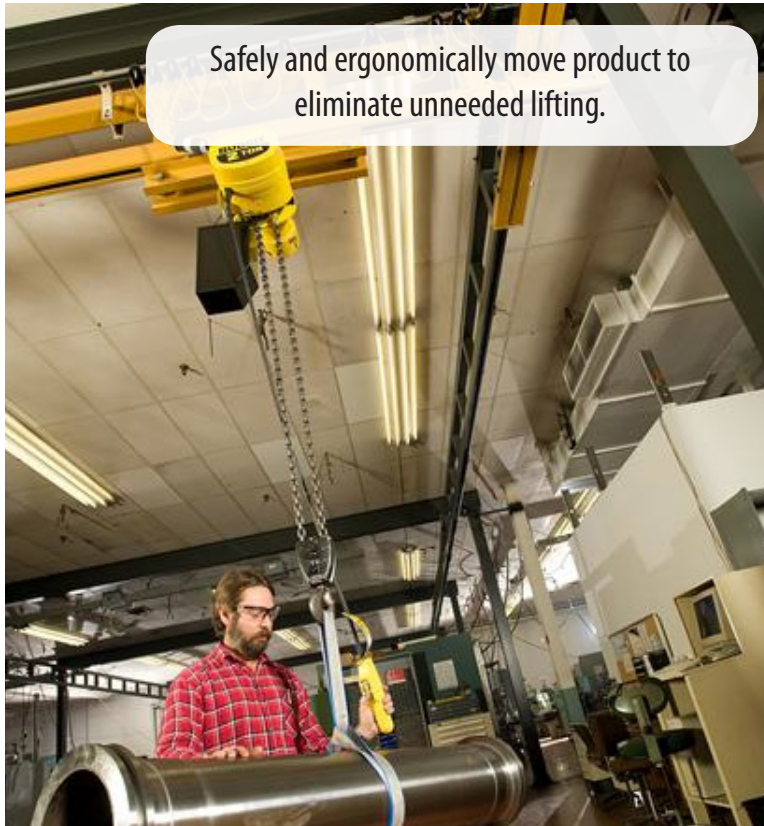
Wall Mounted Jib Crane



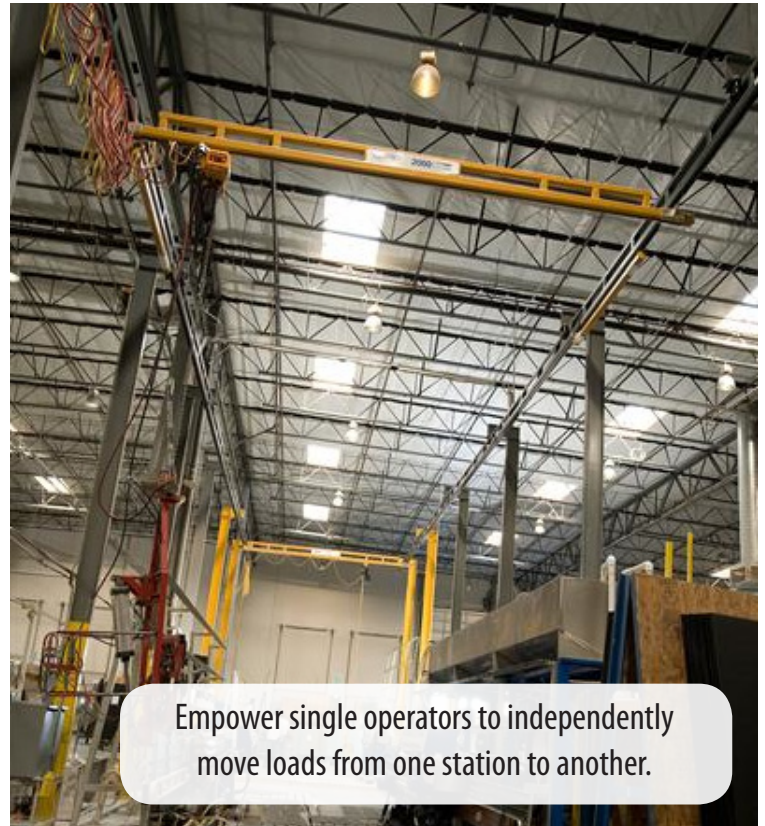
Workstation Jib Crane

JIB CRANES

The versatility of a SPANCO Jib Crane is unmatched. Our Jib Cranes offer an extensive range of installation options and capacities, with the power to create the best material handling solution with maximum space utilization. A Jib Crane can be mounted to your facility floor, foundation, column, pillar or wall to accommodate any space constraints or work plans.



Safely and ergonomically move product to eliminate unneeded lifting.



Empower single operators to independently move loads from one station to another.



For hard to reach areas where a bridge crane cannot go or areas where ceiling height is a problem, a monorail system provides the access you need.

MONORAILS

Monorail systems are an economical choice for lifting and transporting product along a fixed path.

Perfect for production processes such as painting or moving raw materials, a monorail system is mounted to an existing overhead structure to preserve floor space.

WORKSTATION BRIDGE CRANES

A quality SPANCO Workstation Bridge Crane provides the durability, flexibility and efficiency needed in a variety of complex workstation applications where multiple areas of lifting are required.



Training. We offer specialized training in all areas of lifting equipment operation. Our experienced and highly knowledgeable trainers will provide participants with a thorough understanding of safe and efficient operation of lifting equipment. Improve employee morale, efficiency and productivity in your workplace.

Pre-Start Health and Safety Reviews. Our Pre-Start Health and Safety Reviews include: Lifting, Racking and Machine Guarding. Integrating a Pre-Start Health and Safety Review in the design stage of your next project is a cost effective and proactive way to prevent workplace illness or injury. Contact us to learn more!

Professional Engineering Service. Our in house team of Engineers possess expert knowledge and hands on experience in a number of industrial and building applications. From development to design let our Professional Engineers assist you with your next project.

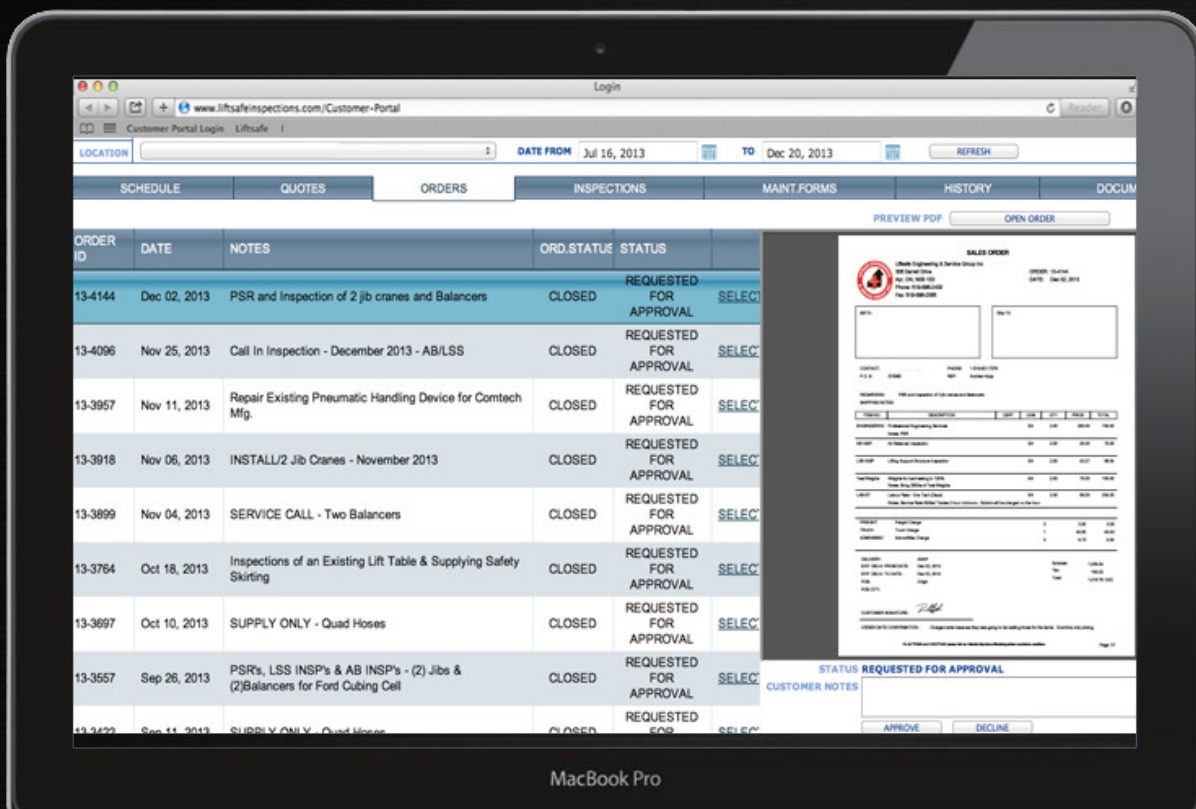
Safety Audits. We take a collaborative approach to our Safety Audit process, after all our clients know their machinery better than anyone else! A licensed Professional Engineer will work with you to design a safety solution that is user friendly, operationally efficient and safety compliant.

Design Services. With a full in-house Design Team, we are equipped to ensure your next project is a success right from the beginning. Our experienced Design Team can provide 2D and 3D Modeling Services and will work closely with you to ensure your unique project is a success!

Ensure your next project is a success, give us a call to learn more about how our expert Professional Services can transform your vision into a reality!

G10

Paperless and seamless reporting, leading our industry
with environmentally efficient practices.



Features

- Full colour computer generated reports.
- Bar scan coded equipment.
- A full picture inventory of your equipment.
- Complete inventory of deficiencies with documented photos.
- Full summary report of all of our inspections of your equipment.
- Full tracking of your equipment.
- Follow up repair quotation for any deficiencies offering a full service solution.

Benefits

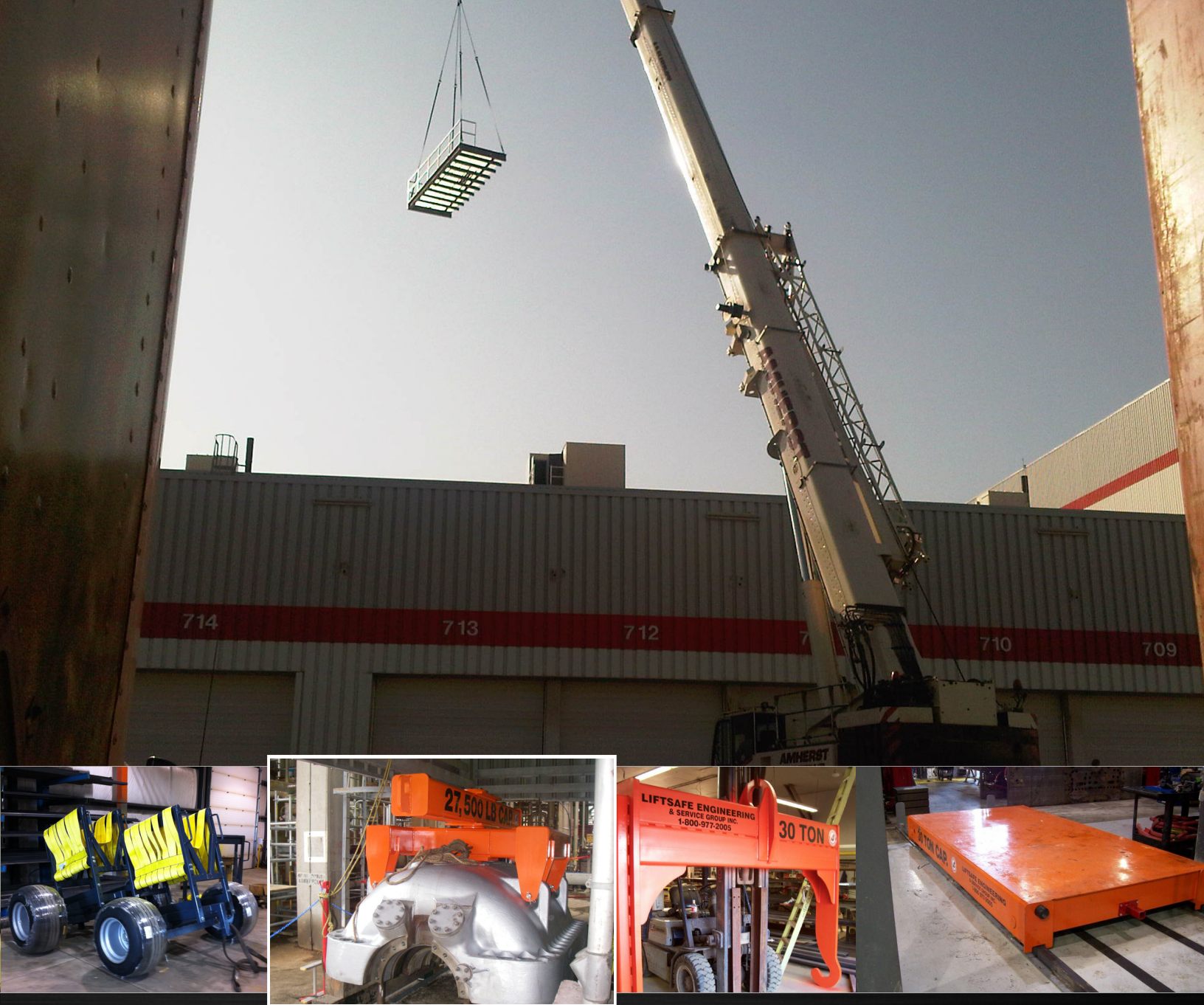
- Full access of inspection and equipment records via our secure website, allowing you to view your reports anywhere at anytime.
- Comparison graphs are generated from year to year illustrating the change in your equipment.
- One company to handle all of your requirements, reducing costs and ensuring your equipment is safe providing complete peace of mind.



At Liftsafe Engineering and Service Group Inc., we provide a number of standard and custom lifting equipment solutions. Our expert team of Engineers along with our skilled and certified shop staff, combine to provide our customers with reliable and durable equipment.

Our team will work with you to determine the best solution for your lifting requirements and will recommend viable and long term products, that will exceed your expectations.

Lifting Equipment Fabrication



Liftsafe Engineering and Service Group Inc. prides itself on quality built products. Our engineering department ensures Liftsafe projects are completed in conformance with CSA standards and applicable building codes.

Count on Liftsafe from inception to fabrication and final installation. We do the job right the first time!

With over 20 years of Custom Fabrication experience, we are confident we have the team and knowledge to turn your project into a reality.

Visit our website to view some of our recent projects!

Custom Fabrication



Professional Engineers
Ontario



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