

CRANES • RIGGING • LIFT PLANNING • ENGINEERING



We exist to serve and learn every day.



INDUSTRIAL TRAINING INTERNATIONAL

TRAINING CATALOG 2018

VOL. 1. 2018



THANK YOU!



Hello!

Thank you for learning a bit more about us and how we aim to serve organizations like yours that conduct crane, rigging, heavy lift and load handling activities.

As of this writing in the summer of 2017, we have committed significant time and resources to growing our ability to serve you well in the preparation of your workforce.

We can serve you with:

- 9 Training Center locations in North America
- 14 full-time professional instructors
- Over 1,200 hours of engaging online course content
- Virtual Reality Simulations for operator training and competency qualification

We know that you do not rest in your endeavors, whether mission driven or to provide products and services to the economy, and we do not rest either in our investment in our abilities to better serve you. We have also continued to enroll many customers in the development process of our training courses and products. Should you have any ideas, comments or questions for us on improvements, please do not hesitate to let us know.



We look forward to serving your organization this year and beyond.

Sincerely,

Zack Parnell
President/CEO
Industrial Training International

Mike Parnell
Technical Director
Industrial Training International



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INDUSTRIAL TRAINING INTERNATIONAL

CRANES | RIGGING | LIFT PLANNING | ENGINEERING



Mission Statement

To serve diverse global communities by advancing, disseminating and applying engineering knowledge for improving the quality of life; and communicating the excitement of engineering.

In 2015, ITI's Fundamentals of Rigging Engineering received accreditation from the American Society of Mechanical Engineers (ASME). Their mission is to promote the art, science and practice of multidisciplinary engineering and allied sciences around the globe. With this accreditation, students completing individual courses and the full program will receive the ASME logo on their Certificates of Completion, a free one year membership to ASME, continuing education units (CEUs) from the International Association for Continuing Education and Training (IACET) and a coupon valid for one additional ASME training course.

Want to learn more about ASME?
asme.org



The Lifting Equipment Engineers Association (LEEA) is established across the globe as the leading representative body for all those involved in the lifting industry worldwide.

In 2012, ITI underwent a series of audits and evaluations to become an Accredited User Training Company according to the Lifting Equipment Engineers Association. ITI was the first, and currently the only professional training company in North America to be accredited by LEEA.

The process entailed:

1. A corporate audit of ITI as an organization.
2. A complete audit of all ITI course curriculum and ITI examination processes.
3. Individual presentation skill audits of ITI Instructors.
4. Facility audit to determine compliance of ITI Training Centers.

Want to learn more about LEEA?
leeaint.com

ITI TRAINING SOLUTIONS

At ITI we exist to serve and learn every day. That simple message drives **ALL** of our training solutions. We strive to have a solution for any and all of your training needs; whether it be attending a course at one of our state-of-the-art training centers, or implementing ITI VR to help raise a new generation of crane operators, we want to find the solution that fits best for you.

	Training Centers		Virtual Reality
	Client Site Training		Bookstore
	Online		Field Services

Cranes	Rigging	Lift Planning & Management	Rigging Engineering	Equipment	HSE/Safety	Maintenance	Fall Protection
Mobile Crane Operator	Rigging Gear Inspector I, II, III	Lift Director & Critical Lift Planning	Engineering Principles for Rigging & Load Handling	Aerial Work Platform Operator	General Health & Safety	Core Competencies - Fundamentals	Authorized Person
Mobile Crane Inspector	Basic Rigging & Inspection	Assembly/Disassembly Director	Crane & Derrick Engineering Installation, & Planning	Aerial Work Platform Inspector	Regulatory Compliance	Electrical Systems	Equipment Inspector
Overhead Crane Operator	Intermediate Rigging	Accident Investigation	Rigging & Load Handling Equipment Engineering & Applications	Forklift/Telehandler Operator	HAZWOPER	Mechanical Systems	Confined Space Entry Supervisor
Overhead Crane Inspector	Master Rigger	Project Execution for Lift Planners & Rigging Engineers	Alternative Load Handling Equipment Engineering & Applications	Forklift Inspector	Laboratory Safety	KWIK REF Series	Confined Space Entry Rescuer
Pedestal Crane Operator	Bull Rigging w/ Chain Hoists	Specialized Transport & Heavy Lift Master Class	Lift Planning Procedure Considerations & Execution	Skidsteer Operator	Air Conditioning/Refrigeration	Confined Space Trainer	
Tower Crane Operator	ITI Qualified Signalperson	Human Performance Improvement	Specialized Transport Planning & Engineering Considerations	Front End Loader Operator	Building/Grounds Maintenance	Competent Person	
Boom Truck Operator	NCCCO Rigger I & II	Crane & Rigging Management Bootcamp	Standards & Regulations for Load Handling Equipment	Backhoe Operator	Electronics	Competent Person Trainer	
NCCCO Mobile Crane Operator	NCCCO Signalperson	Lift Planning Bootcamp	Project Execution for Lift Planners & Rigging Engineers	Dozer Operator	Energy Conservation	Competent Tower Rescuer	
NCCCO Tower Crane Operator	Basic Entertainment Rigging & Inspection	NCCCO Lift Director	Offshore Lifting for Lift Planners & Rigging Engineers		Material Handling Systems	Competent Industrial Rescuer	

Woodland, WA - iti.com/woodland

Headquarters & Training Center
9428 Old Pacific Highway
Woodland, WA 98674



The ITI Corporate Headquarters and Training Center is renowned by many to be the best crane and rigging training center of its kind in the world.

ITI maintains three mobile cranes on-site, two Virtual Reality Mobile Crane Simulators, over 75 live-loads, an overhead load rail system, extensive rigging gear including slings, hardware, jacks, industrial rollers, winches, hoists, come-a-longs, hydraulic and air systems, as well as two large classrooms for theoretical education.

Houston, TX - iti.com/houston

Office & Training Center
5213 Center St.
Pasadena, TX 77505



ITI has partnered with the Houston Area Safety Council to house a Training Center at the organization's headquarters in Pasadena, Texas. The Houston facility includes:

- Indoor - practical training space and equipment
- Outdoor - practical training space and equipment
- 2 Virtual Reality Mobile Crane Simulators
- ITI Rigging Conex
- Multiple Classrooms

Edmonton, AB - iti.com/edmonton

Training Centre
505 11 Avenue
Nisku, AB T9E 1A8



Super Slings Inc. has invited ITI to operate and host open-enrollment training courses at their Nisku facility.

ITI has outfitted this training centre with over \$250,000 in state-of-the-art rigging and lifting equipment making it the premier training location for cranes, rigging and load handling in Western Canada. ITI conducts training utilizing a multitude of rigging equipment, overhead lifting systems, over 25 live-loads, and a mobile crane at this location.

New Orleans, LA - iti.com/neworleans

Training Center
279 Thompson Road
Houma, LA 70363



The Houma Training Center (Terrebonne Parish) is 60 minutes down US-90 W from the Louis Armstrong New Orleans International Airport. The location is in the heart of the Gulf's offshore operations.

Facility partner Sparrows is headquartered in Aberdeen, UK, and has a vast history and worldwide network in offshore lifting and the other services they offer, including crane manufacturing.

Cleveland, OH - iti.com/cleveland

Training Center
21000 Aerospace Parkway
Cleveland, OH 44142



ITI has partnered with the Mazzella Companies to house a Training Center at the company's headquarters in Cleveland, Ohio. The Cleveland facility includes:

- Indoor - practical training space and equipment
- Outdoor - practical training space and equipment
- ITI Rigging Conex
- Full-sized classroom
- Break test bed

Memphis, TN - iti.com/memphis

Training Center
1701 Dunn Avenue
Memphis, TN 38114



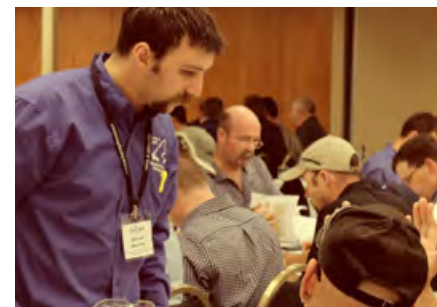
The Memphis Training Center is within a two-hour drive for over 100 million people. This location is owned by Barnhart Crane & Rigging who invited ITI to operate and outfit their training center for in-house use.

The Memphis Training Center features a full classroom, a multitude of rigging equipment, an overhead crane system, over 35 live-loads, and a mobile crane at this location.

New York City, NY

iti.com/newyork

Training Center
266 Merrick Road, Ste 300
Lynbrook, NY 11563



ITI has partnered with Howard I. Shapiro & Associates at the company's headquarters in Lynbrook, NY, less than 20 minutes from John F. Kennedy International Airport. The New York facility includes an indoor practical training space, rigging equipment and full-sized classroom.

Chicago, IL

iti.com/chicago

Training Center
9925 Industrial Drive
Bridgeview, IL 60455



ITI has partnered with Lifting Gear Hire to bring world-class, hands-on rigging training to Chicago. Located at Lifting Gear Hire's National Headquarters, the ITI Chicago Training Center hosts open enrollment courses.

Anchorage, AK

iti.com/anchorage

Training Center
5811 Old Seward Highway
Anchorage, AK 99518



ITI has partnered with Alaska Rubber & Supply to house a Regional Training Center at the 44,000 square foot Anchorage location. The ITI Anchorage Training Center hosts a variety of open enrollment rigging and inspection training courses.

ITI TECHNICAL TEAM

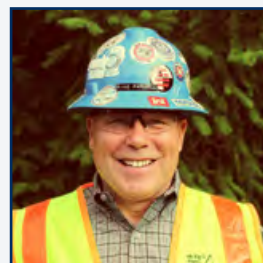
For more than 30 years, ITI has been renowned for providing the highest quality instruction for industry leaders the world over. In large part, this can be attributed to the experts that make up the ITI Technical Team. With more than 300 combined years of industry experience, ITI Instructors & Consultants have lived what they teach. ITI has delivered its high quality, hands-on training in every U.S. State, eight of ten Canadian Provinces, and on every continent except for Antarctica. The ITI Technical Team is led by Technical Director, Mike Parnell; Asst. Technical Director, Joseph Kuzar; and Technical Services Manager, Judy Chenoweth.



Joseph Kuzar

- Asst. Technical Director, ITI
- Certified Lift Director (NCCCO)
- Certified Practical Examiner (NCCCO Mobile & Overhead Crane Operator, Signalperson, Rigger Level I & Level II)
- Member, ASME P30 Lift Planning Main Committee

Joseph joined ITI in 2012 and has over 20 years in the construction industry with experience in gas/oil field operations, and civil, commercial, and transportation construction with a large emphasis on crane operations. Joe's background includes Safety Management, Mobile Crane Operator, Practical Examiner, Lift Planning, and Audits.



Mike Parnell

- Technical Director/Founder, ITI
- Author, *Mike's Rigging Mysteries*
- Author, *Master Rigger Workbook*
- Chair, ASME P30 Lift Planning Main Committee
- Past Vice Chair, ASME B30 Cranes & Rigging Main Committee

"Everyday is a great day to be helping people learn and improve their skills", is a typical Parnell concept. Mike founded ITI to create engaging learning methods that can accelerate a student's learning curve. Mike regularly expresses a humor, passion and enthusiasm which has affected thousands of industry friends over the past 30 yrs.



Judy Chenoweth

- Field Services Manager, ITI
- Past Training Center Manager, ITI
- Former Small Business Owner

Over the past 12 years, Judy has experienced nearly all facets of ITI. She began as the Bookstore Manager, while at the same time serving as Executive Assistant to ITI's Mike Parnell for Field Services Projects, overseeing legal cases, and ensuring all commitments to industry-related organizations and committees were met.



John 'Red' Bartlett

- Instructor/Consultant, ITI
- Certified Class A Crane Operator, State of New York - DOL
- Certified Practical Examiner (NCCCO Mobile & Overhead Crane Operator, Signalperson, Rigger Level I & Level II)
- LEEA Accredited Instructor

John joined ITI in 2014 with over 35 years' experience in crane and equipment operations and inspection, rigging applications, rigging gear inspection, and project management. He was awarded ITI Instructor of the Year for 2016.



Adrian Calvillo

- Instructor/Consultant, ITI
- Certified Mobile Crane Operator (NCCER & NCCCO)
- Certified Basic & Advanced Rigger (NCCER)
- Certified Signalperson/Rigger Level I & Level II (NCCCO)

Adrian joined the ITI Technical Team in January 2017, with over 7 years' experience in the rigging field. Before joining ITI, Adrian represented Bechtel as a Rigging Foreman. His background in mathematics has been instrumental in grasping the formulas required for rigging, crane operations and lift planning.



Jim Cox

- Senior Instructor/Consultant, ITI
- Certified Practical Examiner (NCCCO Mobile & Overhead Crane Operator, Signalperson, Rigger Level I & Level II)
- Certified Master Rigger and Rigging Instructor (ITI)
- LEEA Accredited Instructor

Jim joined ITI in 2008 as an Instructor/Consultant specializing in mobile and overhead crane operations, rigging applications, rigging gear inspection, lift planning, accident investigation, socketing & sling fabrication. Jim was awarded ITI Instructor of the Year for 2015, leading the ITI Instructor Team with the highest student feedback scores.



Jay Dyson

- Instructor/Mechanic, ITI
- Certified Practical Examiner (NCCCO Mobile & Overhead Crane Operator)
- Certified Mobile Crane Inspector (ITI)
- Certified Signalperson/Rigger Level I & Level II (NCCCO)
- LEEA Accredited Instructor

Jay joined ITI in 2008 with 25 years of progressive experience in crane and equipment operation and maintenance. Jay provides instruction in mobile and overhead crane operation and inspection, forklift, aerial lift, backhoe and loader operation and inspection, and signaling and rigging applications.

ITI TECHNICAL TEAM



Fernando Ferraz, PE

- Instructor & Managing Director, ITI Latin America
- Member, Associação Brasileira de Normas Técnicas (ABNT)
- Member, ACRP

Fernando has been with ITI since 1999. He began his activities as an instructor in Brazil, working on the translation and adaptation of ITI courses to meet Brazilian Standards. Fernando has over 25 years of experience inspecting, testing and certifying wire rope and rigging gear. He has a Bachelor's of Civil Engineering from Mackenzie University.



Michael Johnson

- Instructor/Consultant, ITI
- Certified Practical Examiner (NCCCO Signalperson, Rigger Level I & Level II)
- Certified Master Rigger and Rigging Instructor (ITI)
- LEEA Accredited Instructor
- Member, ACRP

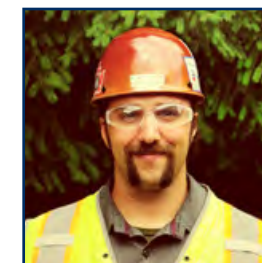
Michael joined ITI in 2011 with over 30 years' experience in rigging and crane operations, inspection, training and program development. He serves as an instructor in the areas of rigging applications, rigging gear inspection, and overhead crane operations. His background includes 30 years as a Navy Sonar Technician/Command Master Chief.



Amanda Jordan

- Instructor & Regional Director, ITI
- Certified Practical Examiner (NCCCO Mobile & Tower Crane Operator, Signalperson, Rigger Level I & Level II)
- Member, HBR - Crane & Rigging Committee
- Member, ACRP

In 2017, Amanda joined ITI as an Instructor and Regional Director of the Gulf Region. Prior to joining ITI she helped run American International Crane Bureau, becoming the primary trainer for the company and delivering the overwhelming majority of courses and exams. Amanda is a Certified Practical Examiner for NCCCO Certifications at ITI Houston.



Richard Marcotte

- Instructor/Consultant, ITI Canada
- Canadian Hoisting and Rigging Safety Council (CHRSC), Main Committee Member
- Master Rigger Trainer (ITI)
- Certified Rigger Level I & Level II (NCCCO)

Richard joined ITI in 2013. He has over 10 years' experience as a steam-fitter/plumber with a career focusing on rigging and specializing in critical, heavy and complex rigging and lifting activities. Richard has substantial experience in oil refinery construction, steel manufacturing, power generation (fossil fuels and hydro) and other heavy industries.



Jackie Pickett

- Instructor/Consultant, ITI
- Certified Mobile Crane Operator (NCCCO)
- Certified Signalperson-Rigger Level I & Level II (NCCCO)
- Certified Mobile Crane Inspector (ITI)

Jackie joined the ITI Technical Team in January 2017. Over the years, Jackie has operated and worked with hydraulic, lattice, truck mounted, and tower cranes just to name a few. Previously lending his skills to Tennessee Valley Authority, Barnhart Crane & Rigging, Sterling Crane and most recently Mammoet, Jackie is a Red Seal ticketed operator.



Alberto Rocha, PE

- Instructor/Consultant, ITI Latin America
- Member, Associação Brasileira de Normas Técnicas (ABNT)
- Member, American Society of Mechanical Engineers (ASME)
- Member, ACRP

Alberto joined ITI Latin America in 2013. He has over 20 years' experience in the wire rope and rigging field, including; inspection, testing and certification of rigging gear. He has a vast amount of experience in oil and gas, steel manufacturing, ports, civil construction, and mining. Alberto is a Bachelor's of Mechanical Engineering from Mackenzie University.



Bob Shumacher

- Senior Instructor/Consultant, ITI
- Certified Practical Examiner (NCCCO Mobile & Overhead Crane Operator)
- Certified Master Rigger and Rigging Instructor (ITI)
- LEEA Accredited Instructor

Bob joined ITI in 2006 as an Instructor and specializes in crane and rigging audits, safety/security, regulation compliance, and training. He has 38 years in commercial aviation, aerospace, rigging and hoisting, of which 20 years has been dedicated to technical training. He is also a 3rd party global compliance auditor for wire rope hoist applications.



Efren Solis

- Instructor/Consultant, ITI
- Certified Construction Site Safety Technician (NCCER)
- Certified Construction Site Safety Supervisor (NCCER)
- Certified Rigger Level I & Level II (NCCCO)

Efren joined the ITI Technical Team with 17+ years of experience in health, safety and environmental management, as well as a background in training. He comes to ITI from Bishop Lifting Products in Houston where he served as the Training Manager.

INDUSTRIAL TRAINING INTERNATIONAL

is proud to have served the following organizations & industries:



- Aerospace
- Construction (AEC)
- Defense Departments
- Distribution
- Electric Utility (Transmission & Distribution)
- Energy Departments (Nuclear Labs)
- Manufacturing (Capital Goods)
- Maritime
- Mining
- Oil & Gas – Upstream/Midstream
- Petrochemical – Downstream
- Offshore
- Power Generation – Coal
- Power Generation – Hydro
- Power Generation – Nuclear
- Power Generation – Solar
- Power Generation – Wind
- Pulp & Paper
- Railroad
- Shipbuilding & Repair

Scheduled Training at our Training Centers

Individuals seeking training, as well as companies who require training for a few persons, often find our open enrollment courses meet their needs and budget. Each program is designed to provide a practical approach that will advance knowledge, skill, and confidence, while enhancing safety awareness.

Registration and Course Fees

Prepayment by check or credit card is required. Payment must accompany the registration. If paying after the program start date, add \$50 to each registration fee.

Personal Protective Equipment

Coveralls or appropriate work attire, gloves and steel-toed footwear are required. Hard hats, safety glasses, safety vests and ear protection are provided.

Program Recording

Audio and video recording of programs is prohibited.

Program Time

Programs are held from 8am - 5pm each day.

Lodging

ITI can assist you with locating lodging in the cities where our training centers are located. Just ask your Training Solutions Advisor for more details when registering for your course(s).

Cancellation Policy

With 30 days' notice, (1) a full refund will be issued less a 5% processing fee, or (2) fees may be applied towards another program held within 1 year. Cancellations made within 30 days of the program start date, including re-scheduling and "no-shows" will be liable for the entire fee. Substitutions of personnel are permitted. If registering 4 or more participants in any one program, a 60 day notice is required for a full refund, less the processing fee. Please contact ITI for full details.

If it is necessary for ITI to cancel a program, you will be notified at least one week prior to the class start date. Please purchase airline tickets accordingly and check with your travel agent. ITI will not be responsible for non-refundable travel fees.

Registration & Payments

Prepayment is required to guarantee your seat. Reservations can be made by calling **1.800.727.6355** or online at iti.com, or by mailing a check to: USA Programs (US funds) - **P.O. Box 1660, Woodland WA 98674**
Canada Programs (Canadian Funds) - **P.O. Box 53618, Ellerslie Rd., Edmonton AB T6X 0P6**

On-Site Training - Host a course at your location

On-site training brings a customized program to your facility. On-site programs are customized for your cranes, equipment, personnel, and any job, corporate or regulatory compliance requirements. All ITI Courses include classroom interactive, problem-solving workshops and hands-on sessions. Course pricing indicated in this catalog is for Training Center open-enrollment only and is subject to change. Please check iti.com/training for current pricing and course information.

Woodland Training Center

9428 Old Pacific Hwy, Woodland, WA 98674
Flights should be made into Portland International Airport.

Houston Training Center

5213 Center Street, Pasadena, TX 77505
Flights should be made into William P. Hobby Airport or George Bush Intercontinental Airport in Houston, TX.

Memphis Training Center

1701 Dunn Ave, Memphis, TN 38106
Flights should be made into Memphis International Airport.

Cleveland Training Center

21000 Aerospace Pkwy, Cleveland, OH 44142
Flights should be made into Cleveland Hopkins International Airport.

New Orleans Training Center

279 Thompson Road, Houma, LA 70363
Flights should be made into Louis Armstrong New Orleans International Airport.

Chicago Training Center

9925 S. Industrial Drive, Bridgeview, IL 60455
Flights should be made into Chicago Midway International Airport.

New York Training Center

266 Merrick Road, Ste 300, Lynbrook, NY 11563
Flights should be made into John F. Kennedy International Airport.

Anchorage Training Center

5811 Old Seward Highway, Anchorage, AK 99518
Flights should be made into Anchorage International Airport.

Edmonton Training Centre

Flights should be made into Edmonton International Airport.

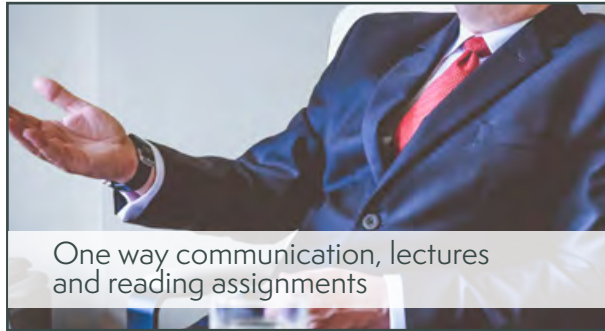
THE ITI DIFFERENCE

ITI RIGGING COURSE LEARNING OBJECTIVES

Typical Training

-VS-

ITI Training



One way communication, lectures and reading assignments



Learn theory from industry experts inside our interactive classrooms



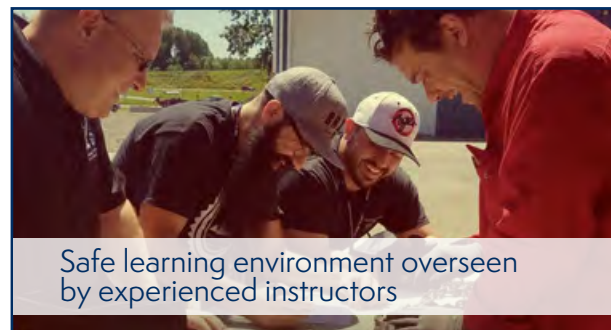
Zero student interaction or attention to individual needs



Individuals execute in the field with hands-on skills in real work situations



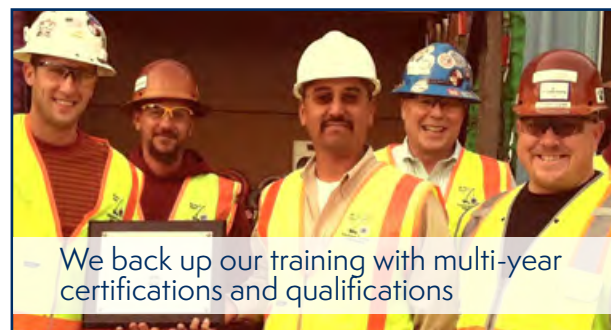
Limited hands-on learning and lack of personal engagement



Safe learning environment overseen by experienced instructors



Low return on investment for companies, lost production and no lasting benefits



We back up our training with multi-year certifications and qualifications

ITI Qualification Courses

	Basic Rigging & Inspection	Intermediate Rigging	Master Rigger (Advanced Rigging)
Basic Hand Signals	Ⓜ	Ⓜ	Ⓜ
Application of Hitch Types	Ⓜ	Ⓜ	Ⓜ
Slings; Limitations, Practices, Hazards and Inspection	Ⓜ	Ⓜ	Ⓜ
Rigging Hardware; Limitations, Practices, Hazards and Inspections	Ⓜ	Ⓜ	Ⓜ
Below-the-Hook Devices; Limitations, Practices, Hazards and Inspections	Ⓜ	Ⓜ	Ⓜ
Knots and Taglines	Ⓜ	Ⓜ	Ⓜ
Types of Slings and Hitches	Ⓜ	Ⓜ	Ⓜ
Center of Gravity		Ⓜ	Ⓜ
Load Weight Estimation		Ⓜ	Ⓜ
Effects of Angles on Rigging Components		Ⓜ	Ⓜ
Load Distribution			Ⓜ
Off-Level Lifting Points			Ⓜ
Chain Hoist / Come-a-long Usage			Ⓜ
Load Turning			Ⓜ
Jack & Rolling			Ⓜ

Want to learn more about ITI Training Solutions?
iti.com/library

ITI Rigging Gear Inspector Level I & II

ITI Qualified • 2.4 CEUs • 3-4 Days • \$1,695 per registration

The Rigging Gear Inspector Course is designed to build and enhance the skills of the student to become a qualified, in-house rigging gear inspector. The course includes classroom sessions and multiple hands-on inspection activities.

Participants learn the removal criteria for wire rope, wire rope slings, synthetic web and round slings, chain slings, rigging hardware and below-the-hook lifting devices according to the applicable federal and provincial regulations as well as ASME standards. Written exams are administered and participants perform hands-on inspections of used and damaged gear to test their knowledge of the criteria learned.

Participants who successfully pass the exams are issued a three-year Level I Qualification. Level II is available to those who meet on-the-job inspection requirements.



ITI Rigging Gear Inspector Level III

ITI Qualified • 2.4 CEUs • 3 Days • \$1,695 per registration

The Rigging Gear Inspector Level III Course is designed for those who have attained a Level II Rigging Gear Inspector Qualification from ITI. The course covers product application and troubleshooting, field analysis, field inspection processes, fabrication and quality control, wear and abuse prevention, and problem-solving techniques for wire rope, wire rope slings, synthetic web and round slings, chain slings, rigging hardware and below-the-hook lifting devices.

A written exam will determine participants' knowledge of manufacturing and fabrication techniques, ability to troubleshoot and confirm comprehension of how the regulations and standards are practically applied to daily crane and rigging activities. A five-year Level III Qualification is issued to participants who successfully pass the exam.



View Training Center Dates:
iti.com/calendar

Get Registered Today:
800.727.6355
iti.com



Available Training Solutions



ITI Training Centers



ITI Online



Client-Site



VR Simulations



ITI Bookstore

RIGGING GEAR INSPECTION TRAINING



INDUSTRIAL TRAINING INTERNATIONAL

ITI Basic Rigging & Inspection

0.8 CEU • 1 Day • \$495 per registration

Our 8-hour Basic Rigging & Inspection Course is designed to provide participants with a basic level of knowledge of rigging gear inspection, proper rigging procedures, and load control using typical rigging techniques. Classroom interactive, and problem-solving workshops. Qualification test available.

Course Subjects:

- Rigging Introduction
- Rigging Inspection
- Rigging Selection
- Load Handling Theory



ITI Intermediate Rigging

1.6 CEUs • 2 Days • \$895 per registration

This course is designed for the beginner to intermediate level person whose work assignments involve some rigging activity. All industries and their employees who handle and move loads or products in the course of their daily activities would benefit by taking the ITI Intermediate Rigging Course. Qualification test available.

Course Subjects:

- Terms and Definitions
- D/d Ratio
- Effects of Shock Loading
- Rigging Gear Inspection
- Load Control/CG
- Load Weight Estimation
- Load Factors for Sling Legs
- Hitches and Pick Points
- Rigger's Checklist
- Crane Hand Signals



NOTE: Our ITI Intermediate Rigging Course and NCCCO Rigger Level I Exams and Signalperson Prep Course and Exams are conveniently scheduled back-to-back for those candidates looking to achieve NCCCO Rigger Level I and/or NCCCO Signalperson Certification. The ITI Intermediate Rigging course will help prepare candidates for the Rigger Level I Exams.



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RIGGING & INSPECTION TRAINING

ITI Master Rigger

3.2 CEUs • 4 Days • \$1,895 per registration



The ITI Master Rigger Course is designed for participants that have had some exposure (2-10 years) to crane and rigging operations. The course exposes participants to a variety of equipment and applications which include multiple crane lifts, load turning, load drifting with chain hoists, jacking and rolling using mechanical, pneumatic and hydraulic systems, incline planes and managing the center-of-gravity in all three axes. ITI Qualification test available following the final day of the course.

Course Subjects:

- Rigging Gear Inspection
- Load Weight Estimation
- Sling Angles and Tension
- Load Control
- Center of Gravity
- Rigging Blocks and Winch Systems
- Chain Fall Load Drifting
- Levers, Jacks and Rollers
- Inclined Planes
- Spreader Bars
- Multiple Hitch Systems
- Load Turning
- Multiple Crane Lifts
- Signals and Tag Lines
- Off-Level Pick Points
- Load Distribution
- Load Moving Procedures

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ITI Qualified Signalperson & Qualified Rigger Exams

1 Day • Signalperson \$195 per registration • Rigger \$595 per registration



ITI is offering Signalperson and Rigger Qualification on Day 5 following the Master Rigger Course. Written and Practical Exams are administered. Candidates who successfully pass the exams will receive a 5-year ITI Qualification. These qualifications meet the requirements of OSHA.



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ADVANCED RIGGING TRAINING

ITI Bull Rigging w/Chain Hoists

1.6 CEUs • 2 Days • \$895 per registration

This intermediate to advanced course focuses on planning for and utilization of chain hoists and other similar devices to drift, upright and turn loads. At least half of this course involves hands-on activities moving loads into and out of an engineered structure, vertically through hatchways and through various other openings intended to replicate real world hoisting & drifting challenges.

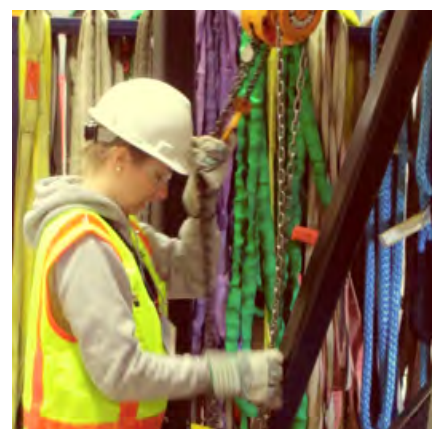
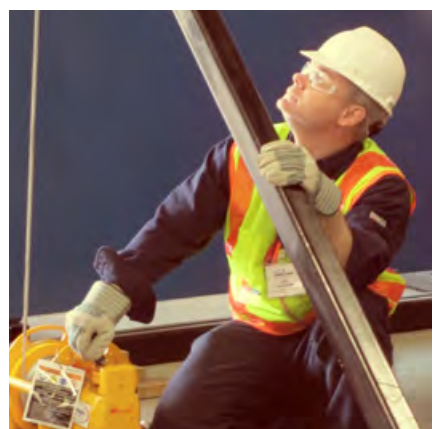
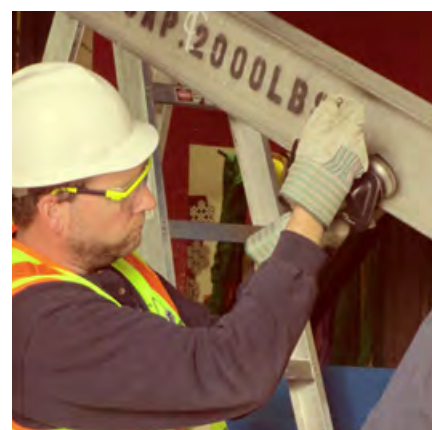
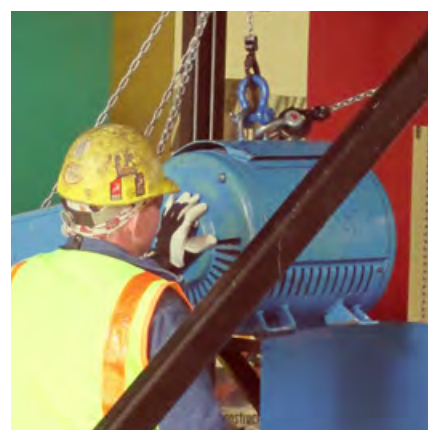
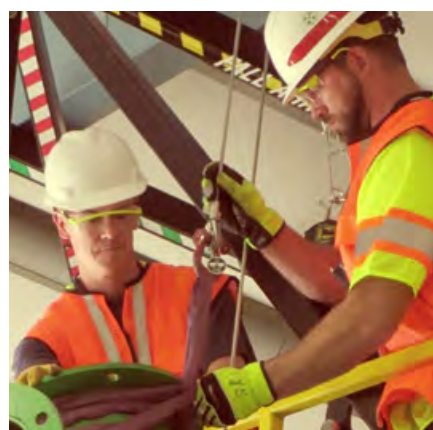
Course Subjects:

- Chain Hoist & Applicable Rigging Inspection
- Load Distribution
- Center of Gravity Determination
- Sling/Chain Hoist Tension
- Single and Multiple Load Rigging Points
- Multiple Overhead Connection Points
- Load Turning
- Hazard Awareness
- Trolley Beams

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ADVANCED RIGGING TRAINING



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Certified Rigger Level I & II Prep Course

2.5 Days • \$1,295 per registration

The 3-day rigger Prep Course is designed to prepare candidates to take the NCCCO Rigger I and Rigger II Written Certification Exams. Subjects covered are listed below.

The Prep Course is followed by the NCCCO Written and Practical Certification Exams on Days 4 & 5.



Certified Rigger Level I Exams

1 Day • \$595 per registration

A Certified Rigger Level I can perform simple, repetitive rigging tasks when the load weight, center of gravity, rigging, and rigging configuration are provided or known by the rigger through experience or knowledge of:

- Inspecting rigging before use
- Identifying and attaching rigging with basic knowledge of hitch configurations, capacities, and basic knots
- Recognizing associated hazards
- Signaling operations
- Using various types of rigging equipment and basic hitches and their applications



Certified Rigger Level II Exams

1 Day • \$595 per registration

A Certified Rigger Level II can select rigging components and procedures based on rigging capacity. A Rigger Level II can perform the following rigging tasks unsupervised:

- Estimate load weight and center of gravity
- Identify lift points
- Determine and select rigging based on loading
- Perform pre-use inspection of rigging and lift points
- Identify and attach rigging with knowledge of hitch configurations and load angle factors, rigging capacities, and load integrity
- Understand load dynamics and associated hazards

Industrial Training International endorses the national certification program offered by the National Commission for the Certification of Crane Operators (NCCCO) and provides training to prepare candidates for CCO exams.



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Certified Signalperson Test Prep & Exams

1 Day • \$795 per registration

The test prep course prepares candidates to take the NCCCO certification exams. NCCCO certification exams are designed for signalpersons who are trained and who will use hand and voice signals in crane operations.

A NCCCO candidate must pass the NCCCO written and practical examinations to be certified. NCCCO Signalperson certification is valid for five (5) years.

NCCCO RIGGER CERTIFICATION PREP & EXAMS



Mobile Crane Operator Certification

Test Preparation Course and Certification Exams • 2.4 CEUs • 5 Days

This course is designed to prepare candidates to take the core and crane-specific written exams in the NCCCO Operator Certification Series.

Course Subjects

The preparatory course and certification exams sponsored by Industrial Training International are formatted into three parts over a five day period for qualified candidates.

Test Preparation Training (Monday-Wednesday)

This is a classroom only session, with training, sample exams and load chart exercises. The Test Prep Course is not mandatory to take the exams.

Written Exams

The Mobile Crane Operator Core Exam is administered. Additionally, candidates may choose any of the supplemental exams listed below.

Practical Exams

Candidates perform the hands-on practical portion of the Mobile Crane Operator Certification process. Practical exams are provided based on the candidate's category selection.

Certification Categories	Woodland	Memphis	Houston	New Orleans
Telescopic Boom Fixed Cab(TSS)	√		√	√
*Telescopic Boom Swing Cab(TLL)	√	√	√	√
Lattice Boom Truck(LBT)	√			
**Lattice Boom Crawler(LBC)	√			

* Telescopic Boom Swing Cab(TLL) is available in Memphis only
 **Lattice Boom Crawler(LBC) has limited availability, call for details

Industrial Training International endorses the national certification program offered by the National Commission for the Certification of Crane Operators (NCCCO) and provides training to prepare candidates for CCO exams.



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NCCCO CRANE CERTIFICATION TRAINING



INDUSTRIAL TRAINING INTERNATIONAL



Overhead Crane Operator Certification

0.8 CEU • 1 Day

The 1 Day Test Prep course prepares candidates to take the NCCCO Written Exam. The course is followed on Day 2 by the NCCCO Written and Practical Exams. **\$495 per registration**

NCCCO Overhead Crane Operator Test Prep and Exams can be conducted at client locations and ITI Training Centers upon request. **\$595 per registration**



Tower Crane Operator Certification

Test Preparation Course and Certification Exams • 4.0 CEUs • 4 Days • \$2,250 per registration

The Tower Crane Certification program provides training to prepare candidates for CCO examinations. Training Center courses prepare the student for tower crane, signal person and rigger written and practical examination.

Certification requirements include: written examination, practical examination, physical requirements, and a recertification requirement. All CCO written examinations are in multiple-choice format.

A Certification Card is issued by CCO to those meeting eligibility requirements and passing written and practical exams, demonstrating their fundamental knowledge of, and skill in, safe operation. In the first 12 years, the NCCCO administered over 320,000 written examinations to more than 60,000 operators in the U.S.



Industrial Training International endorses the national certification program offered by the National Commission for the Certification of Crane Operators (NCCCO) and provides training to prepare candidates for CCO exams.



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NCCCO CRANE CERTIFICATION TRAINING



INDUSTRIAL TRAINING INTERNATIONAL



ITI Mobile Crane Operator - Qualified*

ITI Qualified • 4.0 CEUs • 5 Days • \$1,595 per registration

This course is designed to increase the crane operator's knowledge, skill and proficiency level through classroom and hands-on training.

Students can achieve qualified operator status by successfully completing written and hands-on segments. ITI Qualification is available for Fixed and Swing Cab. Additional fees may apply.

This is an excellent prep course for those who wish to take the NCCCO national certification exams. The candidates for the mobile crane operator program are individuals who wish to be apprentices in crane handling, crane maintenance personnel, and current operators who have been trained by "field practices", but not yet exposed to the formal side of crane subjects. This course is also excellent for supervisory persons and lift directors who did not rise through the trades in the seat of a crane.

*All ITI Crane Operator Qualification courses meet the requirements of 29 CFR 1926.1427.

Course Subjects:

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> • Center of Gravity • Radius • Rated Strength • Leverage • Load Charts • Side Loading • Outrigger Position • Calculating Capacities | <ul style="list-style-type: none"> • Boom Length / Angle • Operating Practices • Operator's Responsibilities • Static/Dynamic Load • Range Diagram • Load Weight Calculations • Reeving • Gross and Net Loads | <ul style="list-style-type: none"> • Set-up • High Voltage • Daily Inspection • Pick and Carry Practices • Applicable federal, state and/or provincial regulations and standards (ASME, OSHA, CSA, Alberta OH&S) |
|--|---|---|



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ITI Mobile Crane Operator - Initial

4.0 CEUs • 5 Days • \$2,995 per registration

This course is designed for those who have little or no experience with mobile crane operation. The course helps establish good operating practices for the participant while gaining seat-time and real-life operating experience.

Participants will conduct pre-operational inspections of hydraulic and/or lattice/conventional cranes. Each will be given individual instruction regarding crane operating basics and will gain seat-time while handling an empty and loaded hook.



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MOBILE CRANE OPERATOR TRAINING

ITI Boom Truck Operator*

2.4 CEU • 3 Days



Boom truck operator training is designed to increase the operator's knowledge, skill, and proficiency level through classroom workshops and hands-on training. This course can be conducted at client locations and ITI Training Centers upon request.

The hands-on session includes operating with live loads. ITI Qualification is available.

*All ITI Crane Operator Qualification courses meet the requirements of 29 CFR 1926.1427.

Course Subjects:

- Daily Inspection
- Communication
- Boom Truck Setup
- Rigging Practices
- Load Chart Interpretation
- Calculating Capacities
- Operator Responsibilities
- Operating Practices
- Operating Near Power Lines
- Conditions that Effect Capacities
- Applicable federal, state and/or provincial regulations and standards

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ITI Carrydeck Operator*

2.4 CEU • 3 Days



Carrydeck operator training is designed to increase the operator's knowledge, skill, and proficiency level through classroom workshops and hands-on training. This course can be conducted at client locations and ITI Training Centers upon request.

The hands-on session includes operating with live loads. Qualification is available.

*All ITI Crane Operator Qualification courses meet the requirements of 29 CFR 1926.1427.



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MOBILE CRANE OPERATOR TRAINING

ITI Articulating Boom Crane Operator*

ITI Qualified • 3.2 CEUs • 4 days

This course is designed to increase the Articulating Boom Crane operator's knowledge, skill and proficiency level through classroom and hands-on training.

Students can achieve qualified operator status by successfully completing written and hands-on segments. ITI Qualification is available, additional fees may apply.

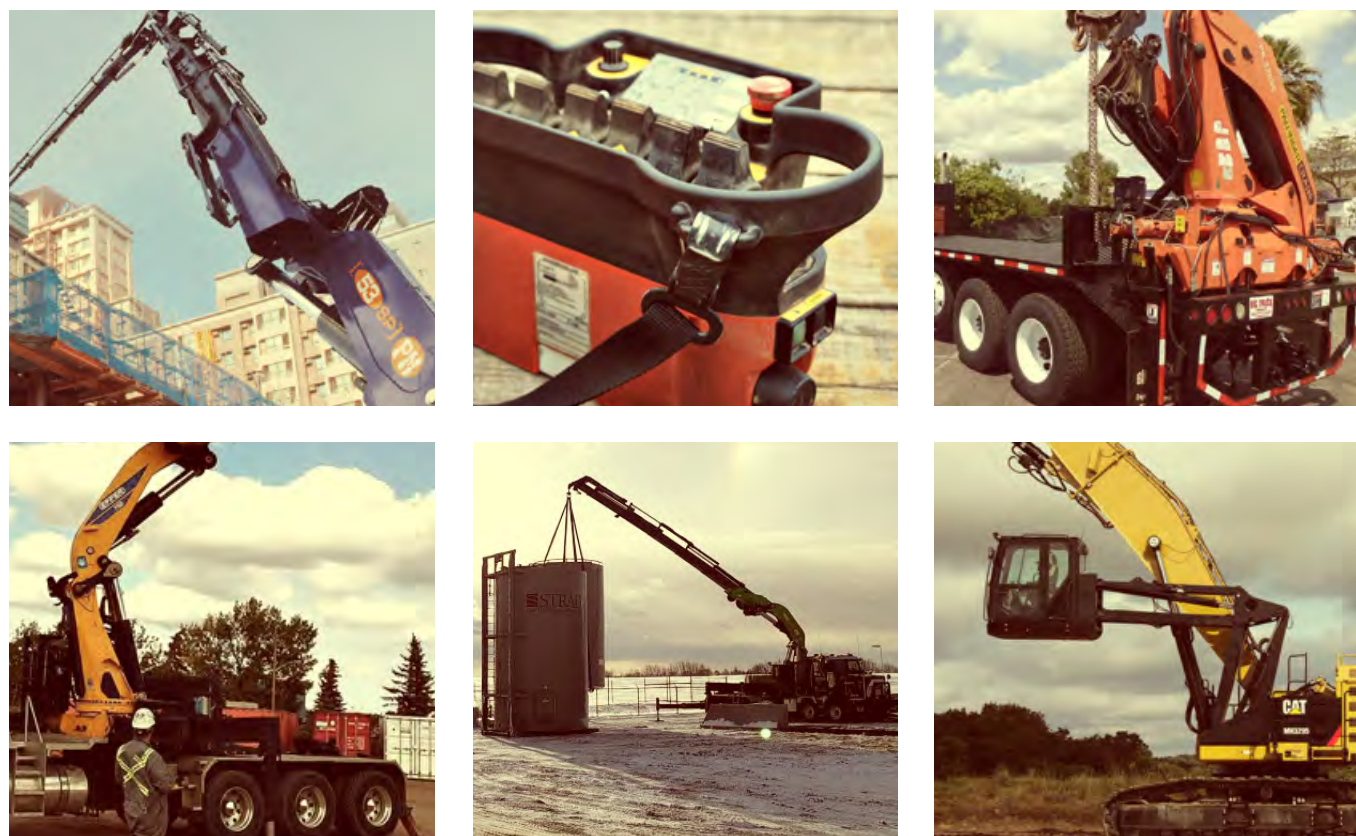
*All ITI Crane Operator Qualification courses meet the requirements of 29 CFR 1926.1427.

Course Subjects:

- Center of Gravity
- Radius
- Rated Strength
- Leverage
- Load Charts
- Side Loading
- Stabilizer Position
- Calculating Capacities
- Operating Practices
- Operator's Responsibilities
- Static/Dynamic Load
- Range Diagram
- Load Weight Calculations
- Reeving (as applicable)
- Gross and Net Loads
- Set-up
- High Voltage
- Daily Inspection
- Applicable federal, state and/or provincial regulations and standards (ASME, OSHA, CSA, Alberta OH&S)



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ARTICULATING OPERATOR TRAINING

ITI Mobile Crane Inspector - Qualified

ITI Qualified • 3.2 CEUs • 4 Days* • \$1,595* per registration

This course is designed to help field personnel identify damage and wear on mobile and pedestal crane components.

It focuses on spotting the problems and identifying the damage that can be discovered through external evaluation. It addresses MESH (mechanical, electrical, structural and hydraulic) components. All mechanics and maintenance personnel who are responsible for their company's crane(s) should attend this course, especially those industries with high use cranes, such as production and construction.

**Day 5 is required by Washington State for those who intend to apply for Washington State Inspector Certification or who need continuing education. The cost including the 5th day is \$1,995 per registration.*

Course Subjects:

- Daily, Monthly and Annual Checklists
- Inspection Requirements
- Boom Inspection
- Wire Rope Inspection
- Upper Revolving Structure
- Lower Structure
- Electrical, Hydraulic and Air Systems
- Safety Devices
- Outriggers
- Testing
- Applicable federal, state and/or provincial regulations and standards

Hands-On Session

Hands-on inspections of Conventional (Lattice) and Hydraulic Boom Cranes are performed by participants, and a performance evaluation of each inspector will be conducted. A five-year ITI Qualification is issued to participants who successfully pass the written exam and performance evaluations of one or both crane types.

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MOBILE CRANE INSPECTION TRAINING



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ITI Overhead Crane Operator

0.8 CEU • 1 Day* • \$495 per registration



Overhead crane operator training is conducted at client locations and ITI Training Centers upon request.

The course is designed to increase the participants' level of knowledge in proper use and pre-operational inspection of overhead cranes. The course utilizes hands-on sessions in which loads are moved by participants using the Operator's Checklist. Course available at Houston, Cleveland & Edmonton Training Centers. ITI Qualification is available.

**The course is 12-hours in Alberta and meets the provincial requirements for Overhead Crane Operators including hands-on, load-moving sessions, written exam and practical operating evaluations.*

Course Subjects:

- Inspection Requirements
- Crane Components
- Proper Operating Practices
- Load Weight Estimation
- Rigging Gear Selection
- Load Control
- Hand Signals
- Applicable Federal, State, and Provincial Regulations & ASME Standards

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ITI Overhead Crane Inspector

2.4 CEUs • 3 Days • \$1,395 per registration



The course is designed to increase the participants' level of knowledge for inspection of overhead lifting devices, which include bridge, gantry, monorail, fixed hoists and jib wall mounts. Overhead crane inspection training has grown rapidly over the past few years in several industries. ITI serves many global leaders with this course including BP and the US Army Corps of Engineers.

The 3-day course consists of classroom workshops and hands-on inspection sessions. Practical learning is incorporated on client's overhead cranes and is followed by a written exam and hands-on inspection evaluations. Course available at Houston & Cleveland Training Centers. ITI Qualification is available.

Course Subjects:

- Hoist Chain Inspection
- Wire Rope Inspection
- Daily, Monthly, Annual Checklists
- Brakes
- Limit Switches
- Structural
- Drive Trains
- Applicable Federal, State, and Provincial Regulations & ASME Standards



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OVERHEAD CRANE TRAINING



INDUSTRIAL TRAINING INTERNATIONAL

ITI Pedestal Crane Operator

0.8 CEU • 1 Day



ITI's Pedestal Crane Operator course is recommended for client employees who use shore or ship-based pedestal cranes. The participants are introduced to the core subjects listed below in both classroom and hands-on settings, and are tasked with operating assignments that help to establish and/or demonstrate operating proficiency. ITI Qualification is available.

Course Subjects:

- Pre-use Inspection
- Operating Controls
- Manufacturer's Instructions
- Machine Characteristics
- Limit Devices
- Operating Techniques
- Applicable Federal, State, and Provincial Regulations & ASME Standards

ITI Pedestal Crane Inspector

2.4 CEUs • 3 Days



This course is recommended for client employees needing to improve their skills, knowledge and abilities as inspectors of pedestal cranes.

The participants are introduced to the core subjects listed below in both classroom and hands-on settings, and are tasked with inspection assignments that help to establish and/or demonstrate inspection proficiency.

Qualification is available. A written exam and hands-on inspections are administered. A three-year ITI qualification is issued to participants who successfully pass the exams.

Course Subjects:

- Lower Structures
- Manufacturer Inspection Requirements
- Safety Devices
- Upper Revolving Structure
- Wire Rope
- Daily, Monthly, Annual Checklists
- Testing Electrical, Hydraulic & Air Systems
- Applicable Federal, State, and Provincial Regulations & ASME Standards



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PEDESTAL CRANE TRAINING

ITI Tower Crane Safety & Inspection

2.4 CEUs • 3 Days • \$1,395 per registration

Safety and Inspection is a course covering general tower crane knowledge. This 3-day course is aimed at those involved in inspection and safety compliance for tower cranes.

Course Subjects:

- Erection
- Dismantling
- Climbing Systems
- Tower Crane Drive Technology
- Overload Systems
- Limit Switches
- Bolting Requirements
- Certification Procedures
- Load Testing
- Tower Crane Communications
- Structural Inspection
- Foundation Requirements
- Transport
- Anchorages and Recognizing Electrical Hazards
- Hands-on Field Inspections of Working Tower Crane

ITI Tower Crane Technician

4.0 CEUs • 5 Days • \$2,250 per registration

Prerequisite: Tower Crane Safety & Inspection, equivalent training or experience, or with Morrow Equipment consent. A 4 ½-day advanced course in tower crane service intended for dedicated service personnel with advanced knowledge of tower crane mechanical and electrical system troubleshooting and repair. The course combines theory and practice using audiovisual presentations with hands-on training utilizing fully functional crane components.

Course Subjects:

- Tower Crane Classifications
- Configuration and Applications
- Electrical Power Supply & Grounding
- Structural Bolting Installation & Inspection
- Top Climbing/Bottom Climbing Procedures Review
- Climbing Support & Anchorage
- Tower Crane Drive Systems
- Load Testing & Movement Limits
- Overload Safety Systems
- Counterweights & Test Weights
- Tower Crane Electrical Schematics Basics
- Basic Fault Tracing
- Crane Controls & Functions
- Work Area Limitation Systems
- Safety & Accident Prevention
- General Inspection & Maintenance
- Applicable Safety Standards and Regulations

ITI Tower Crane Management

1.6 CEUs • 2 Days • \$995 per registration

Tower Crane Management is a 2-day course covering a wide range of areas including crane applications, project planning, operation and maintenance requirements.

Course Subjects:

- Tower Crane Applications
- Tower Crane Configurations
- Project Planning
- Crane Operations
- Site Preparation Requirements
- Counterweight and Ballasting Requirements
- Safety and Accident Prevention
- Electrical Power Supply & Grounding
- Loading and Transport of Crane Components
- Erection and Dismantle Procedures
- Top Climbing and Crane Anchorage
- Bottom Climbing and Crane Support
- Rail Traveling Requirements
- Automatic Overload Safety Systems
- Maintenance, Inspection, and Record Keeping
- Applicable Safety Standards and Regulations

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ITI Tower Crane Training is carried out by partner, Morrow Equipment, at their state of the art training center in Salem, Oregon. Courses include management, safety & inspection, technician, and operator certification through NCCCO.

Morrow is the exclusive distributor of Liebherr manufactured tower cranes in the United States, Canada, Australia and New Zealand.

TOWER CRANE TRAINING



ITI Management Bootcamp Courses are hard hitting, highly focused sessions specifically designed for management/supervisory personnel in the load handling industry.

ITI Crane & Rigging Management Bootcamp

0.8 CEUs • 1 Day • \$495 per registration

The Crane & Rigging Management Bootcamp will provide all attendees with the foundational knowledge necessary to oversee employees conducting load handling activities.

The session is an ideal learning environment for safety manager/professionals, training managers, and procurement personnel with a limited background when it comes to cranes and rigging.

Course Subjects:

- Lift Director & Site Supervisor
- ASME B30.5
- Load Handling Procedures
- Crane & Rigging Manual Best Practices
- Crane Assembly & Disassembly Director
- 10 Audit Points for Crane & Rigging Operations - HSE Perspective
- OSHA & ASME Overview
- Accident Investigation - Mobile Crane

ITI Lift Planning Bootcamp

0.8 CEUs • 1 Day • \$495 per registration

The Lift Planning Bootcamp Course focuses on the process of planning a lift, and the baseline knowledge required to do so according to best practices. Attendees will begin their day focusing on rigging applications, crane load charts, and ASME P30 Standards; culminating with a lift planning workshop where a complete lift plan is developed.

Course Subjects:

- Advanced Rigging Foundations
- Mobile Cranes & Load Charts
- ASME P30 Lift Planning Standard
- Compressor Module - Critical Lift Plan
- Multi-Crane Lifts
- Lift Plan Development



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LIFT MANAGEMENT BOOTCAMPS

ITI Lift Director & Critical Lift Planning

2.4 CEUs • 3 Days • \$1,695 per registration

The Lift Director portion of the course addresses the responsibilities of a Lift Director as identified by 29CFR1926.1400 (Federal OSHA), ASME P30.1 Lift Planning and ASME B30.5 Mobile and Locomotive Cranes. Participants are provided an outline of the recommended knowledge and skill subjects that should be mastered in order to become a competent Lift Director. A hands-on session is offered that involves the completion of a lift plan.

The Critical Lift portion of the course focuses on the process of assessing risks, the compilation of crane and rigging data, crane operating areas, rigging methods, a safety checklist, personnel competencies and assignments, a proposed sequence of events, contingency plans and other category items as recommended in ASME P30.1 Lift Planning. Participants will formulate a series of lift plans based on multiple scenarios and then will be challenged to solve a variety of problem-solving workshops related to partially completed plans (quiz format).

Course Subjects:

- ASME B30.5 Responsibilities
- OSHA requirements for Lift Director
- ASME P30.1 Lift Planning
- Site Preparation
- Traffic Control
- Crane Load Chart Data
- Rigging Capacity Data
- Hazard Recognition
- Risk Assessment
- Multiple Crane Lifts
- Lifting Personnel
- Lift Data Sheet
- Load Schematic, Rigging Method and Selection
- Pre-Lift Safety Checklist
- Crane Set-up Schematic
- Load Travel Path and Personnel Placement
- Load Handling Sequence and Procedures

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ITI NYC Lift Director Supplement

Local Rules & Considerations: New York, NY • \$450 per registration

The NYC rule RCNY 3319-02 adopted April 14, 2017 by the Department of Buildings (DOB) of NYC mandates that a lift director be present at a construction site while a crane or derrick is performing certain tasks, and identifies the responsibilities for the lift director. The requirements defined by the DOB for a Lift Director in NYC are more stringent than those of ASME or OSHA, and there are also additional requirements regarding the use of cranes in NYC such as those outlined in RCNY 3319-01 as well as other NYC DOB Rules and the 2014 Building Code.

At the end of the course, each participant will have a better knowledge and understanding of:

- Lift Director special duties and responsibilities in NYC vs. ASME and OSHA
- NYC Crane & Rigging additional regulations
- NYC operating environment particularities and potential challenges
- Setting up, operating a mobile crane/tower crane/derrick in NYC



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ITI has partnered with Howard I. Shapiro & Associates to house a Training Center at the company's headquarters in Lynbrook, NY. This ITI Training Center focuses on training to the new Lift Director requirement rule recently passed by the New York DOB for NYC construction sites.

The ITI Lift Director & Critical Lift Planning course is offered along with a NYC Lift Director Supplement that covers local rules and considerations specific to NYC.

LIFT DIRECTOR & CRITICAL LIFT PLANNING TRAINING

ITI Accident Investigation: Cranes, Rigging and Material Handling Operations

2.4 CEUs • 3 Days • \$1,995 per registration

ITI's Accident Investigation course is designed for accident investigators, safety and regulatory professionals, crane, rigging and material handling supervisors, and safety committee members.

The Accident Investigation course begins with a series of workshops that focus on three disciplines related to load handling; crane operations, rigging activities and forklift operations.

Problem-solving workshops help solidify participants' understanding and knowledge concerning equipment set-up, proper application, capacity information, inspection, hazard recognition and operational safety.

Participants will then be exposed to three full-sized accident sites. Each site is accompanied by a document packet complete with eye witness accounts, sheriff's report, machine/equipment data, and other vital information. Teams will evaluate the sites and document packet, then formulate a 'root cause' summary based on the facts and their findings. Additionally, the team will compile a list of possible violations and propose a recommended corrective action plan.

Course Subjects:

- Understanding Equipment Operations
- Operator/Rigger Assignments & Performance
- Fact vs. Fiction
- Leading Cause Identification
- Violations of Corporate and Jurisdictional Requirements
- Corrective Action Plan
- Applicable federal, state and/or provincial regulations and ASME standards

Host this course at your location.

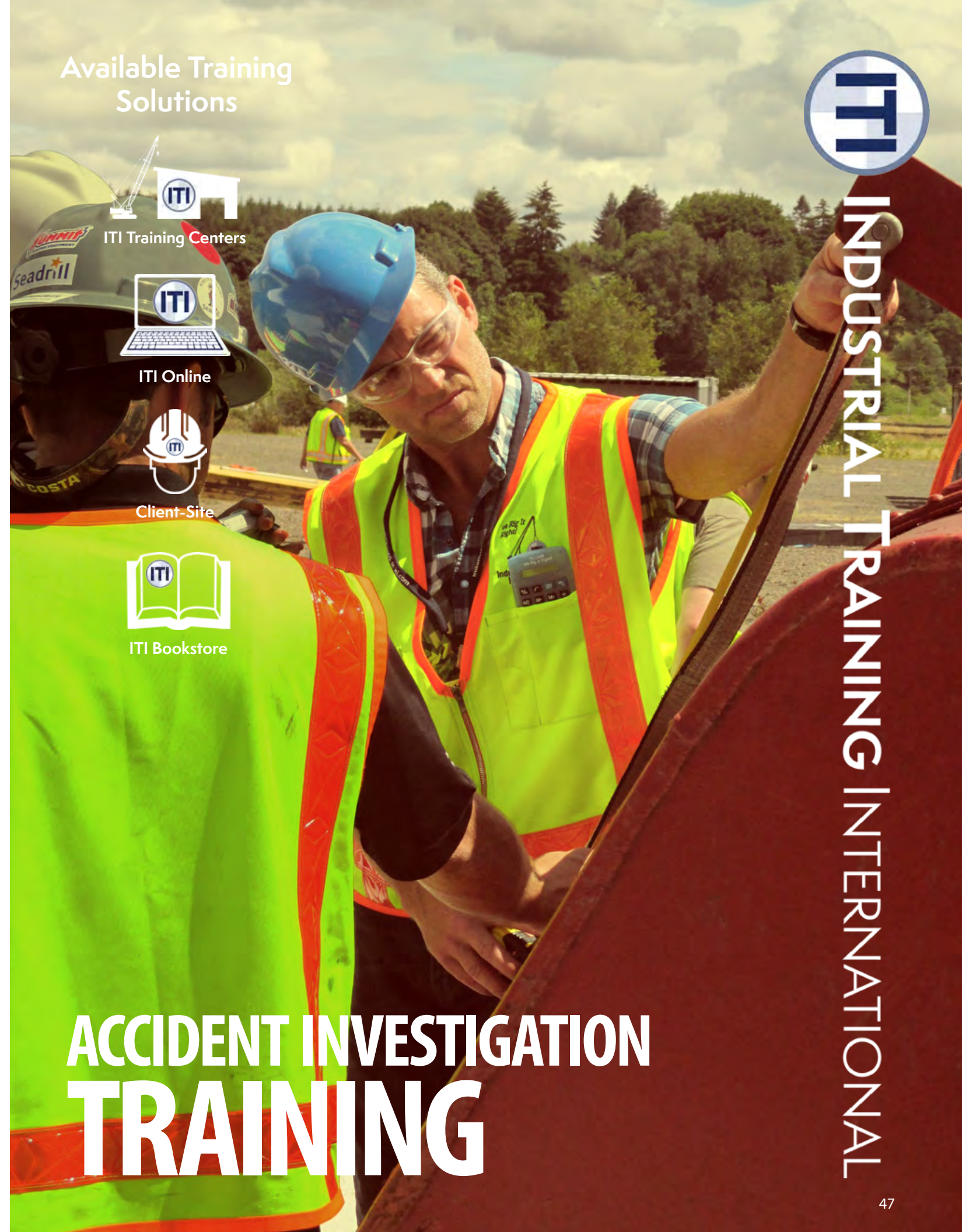
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**ACCIDENT INVESTIGATION
TRAINING**



INDUSTRIAL TRAINING INTERNATIONAL

ITI Crane Assembly & Disassembly Director

1.6 CEUs • 2 Days • \$1,095 per registration

The A/D (Mobile Crane) course addresses the assembly and disassembly of lattice boom cranes as required by 29CFR1926.1400. As a supplement to this course, ITI also involves participants in the A/D work related to jibs and boom extensions for hydraulic, telescoping type cranes.

This course is a blend of classroom and hands-on activities. Addressed in the classroom are the manufacturer's warnings, prohibitions, cautions and hazards, the OSHA A/D regulations, the recommended corporate A/D procedures and the step-by-step assembly and disassembly instructions necessary for a crew to perform the erection or dismantling of a lattice boom.

The participants work in teams to perform A/D work during the hands-on sessions by reviewing the A/D field instructions, conduct a pre-job briefing addressing the hazards, tasks and sequence of events, followed by actual A/D activities. A post-job review and inspection will be conducted to ensure all required steps have been accomplished for the activity.

Course Subjects:

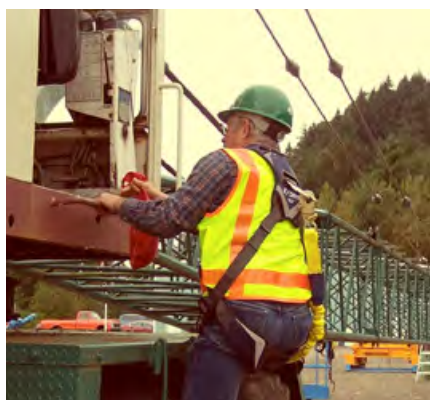
- Components and Configuration
- Lattice Boom A/D
- Boom Extension/Jib A/D (best practices)
- Manufacturer's Prohibitions, Warnings and Instructions
- Recommended Corporate Guidelines
- OSHA 29 CFR 1926.1400 Assembly & Disassembly
- Applicable federal, state and/or provincial regulations and ASME standards



Hands-On Session

Over 50% of the course involves assembly and/or disassembly sessions that focus first on lattice boom cranes and secondly on hydraulic cranes with jibs or boom extensions.

Host this course at your location.
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MOBILE CRANE ASSEMBLY & DISASSEMBLY TRAINING

ITI Human Performance Improvement: Workshop

1.6 CEUs • 2 Days • \$1,995 per registration

Why is an understanding of Human Performance necessary? We keep score in business with dollars. Consequently, our people are our biggest asset and can be our biggest liability in generating results – their successes create positive results, and their failures can cause catastrophic losses.

When our front line employees physically touch the company, how do we know that the outcome is what we expect? The role of managers is to control risk to their companies by putting in place systems and defenses to assure that their employees will have the tools to be successful.

By participating in this course, students will be introduced to:

- The business case for understanding Human Performance Improvement (HPI)
- Five Principles of HPI
- An understanding of how errors happen
- An understanding of error producing systems
- Management's role in leading resilient organizations
- An understanding of how drift from management expectations, and accumulation of hidden hazards can lead to consequential accidents
- Tools for reducing errors
- Management tools to support a healthy safety culture

ITI Human Performance Improvement: Accident Investigation

0.8 CEU • 1 Days • \$995 per registration

Why are accidents and events investigated by companies? Most company executives will say it's because their regulators require it, and they are looking for corrective actions to prevent the accident from happening again.

This workshop acknowledges the need to meet regulatory requirements, but goes further to promote learning and improvement throughout the organization. The workshop gives managers and professionals the tools to look beyond fallible front line humans and into error producing systems that generate the conditions necessary for accidents and events.

The reality is that companies that are good at investigating the variation that leads to accidents, are good at other things that lead to increased profitability. They can achieve world-class levels of performance in cost attainment, schedule, and safety.

By participating in this course, students will be introduced to:

- The evolution of investigations from linear cause and effect, to non-linear complex adaptive events.
- How to get beyond fallible workers and into system-generated problems.
- The effects of hindsight bias and confirmation bias on investigations.
- How to factor in context and mindset into investigations.
- How to ask 'how' instead of 'why'.
- How solutions emerge from investigations.
- How to use accident investigations as a means to gain foresight in a company's risk management strategy.



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ITI Bookstore



Bill Rigot - Course Manager

- Consultant, *Fluor*
- Fellow Technical Advisor, Washington Savannah River Company & Savannah River Nuclear Solutions
- Former Chief Engineer, USS NIMITZ Aircraft Carrier
- Graduate, US Naval Academy at Annapolis

HUMAN PERFORMANCE IMPROVEMENT TRAINING



ITI Specialized Transport & Heavy Lift Master Class

1.6 CEUs • 2 Days

The efficient and safe execution of heavy transportation involves specialized load handling equipment and various modes of transport. This course is designed for personnel involved in specialized transport from contract transport organizations and original equipment manufacturers (OEM) to engineering companies and project owners in the oil and gas, power generation, and other plant-environment industries.

The engineering principles of hydraulic platform trailers (HPTs), like self-propelled modular transporters (SPMTs), are delved into along with a variety of other load handling equipment. Heavy lift, jacking and skidding, and load-out (roll-on/roll-off) project case studies are utilized for students to gain a broad understanding of the art and science of specialized transport and heavy lift operations.

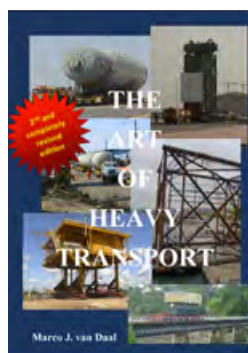
Course Subjects:

- Introduction & Terminology
- Dimensions & Weights
- Center of Gravity
- Heavy Transport
- Heavy Lifting
- Jacking & Skidding
- Anatomy of an Accident
- Maintenance

Host this course at your location.

Call our Training Solutions Advisors or request a quote online:

iti.com/quote



Optional Reference Book:

The Art of Heavy Transport is available for purchase per participant via the [ITI Bookstore](http://iti.com/bookstore). This book is a reference guide and engineering base for a safe execution of all heavy transports. It covers every aspect such as: Hydraulic stability calculations, structural stability calculations, axle groups/suspension, dunnage and lashing, external forces such as wind, curve impact, center of gravity, and much, much more.



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ITI Bookstore



INDUSTRIAL TRAINING INTERNATIONAL



Marco van Daal - Course Manager

- Owner, The Works International
- Author, *The Art of Heavy Transport*
- Formerly with Mammoet and Fagioli

SPECIALIZED TRANSPORT & HEAVY LIFT
MASTER CLASS

ITI Project Execution for Lift Planners & Rigging Engineers

1.6 CEUs • 2 Days • \$1,995

This Course is 2 days in duration and will be held at scheduled times throughout the year, in various cities throughout the world. It offers students an in-person, interactive option to collaborate and develop engineered lift plans alongside other students and ITI Rigging Engineering Instructors.

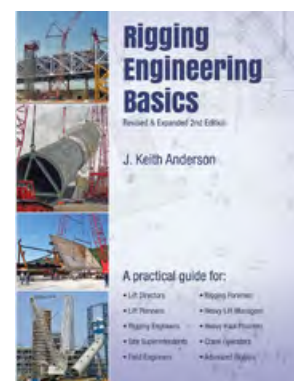
Course Outline:

This Course is "project-oriented" and involves minimal instructor lecturing. Students will select from several project scenarios to execute in an array of working environments and load choices.

Students are encouraged to utilize the computer systems that they are familiar with (e.g. AutoCAD, LiftPlanner, 3D Lift Plan).

Projects will be designed for execution with a variety of load handling equipment including:

- Mobile Cranes
- Tower Cranes
- Telescopic Hydraulic Gantry Systems
- Hydraulic Jacks
- Strand Jacks
- Modular Lift Towers
- Hydraulic Skidding Systems
- Industrial Rolling Systems
- Winches & Blocks
- Hydraulic Platform Trailers
- Spreader Beams & Complex Lifting Arrangements
- Customized Load Handling Equipment



Related Reference Book:

Rigging Engineering Basics, 2nd Edition is available for purchase via the [ITI Bookstore](#). Newly revised & expanded, Rigging Engineering Basics is a practical guide for Lift Directors, Lift Planners, Rigging Engineers, Site Superintendents, Field Engineers, Rigging Foremen, Heavy Lift Managers, Heavy Haul Planners, Crane Operators, and Advanced Riggers. This book is intended to inform people planning rigging operations and point them in the direction of best practice, to alert them to pitfalls and how to avoid them, to instruct in how to do certain basic rigging engineering tasks.

Host this course at your location.
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J. Keith Anderson
CEng MIMechE | BDES
Program Manager

- Chief Rigging Engineer, Bechtel
- Author, *Rigging Engineering Basics*
- Formerly with Mammoet and Sarens

PROJECT EXECUTION
TRAINING

ITI Forklift and Telescopic Handler Operator

ITI Qualified • 0.8 CEU • 1 Day



All participants will be required to prove proficiency in pre-op inspection, control knowledge, machine handling, load retrieval and placement, working on inclines and parking.

ITI Forklift Inspector

ITI Qualified • 0.8 CEU • 1 Day



The Forklift Inspector Course is conducted at client sites on client equipment and is designed to increase the inspector's knowledge, skill, and proficiency level through classroom and hands-on training. Those inspectors who successfully pass would receive an ITI qualification that is valid for 3 years (in-house inspections only).

ITI Skid Steer Operator

ITI Qualified • 0.8 CEU • 1 Day



The skid steer training curriculum requires participants to conduct practical and theoretical demonstration of the knowledge that they've gained from the course including pre-operational inspection and efficient operational activities. In this course, work assignments must be performed using the loader bucket while traveling and turning with the bucket loaded and empty. The skid steer operator course also includes a three year ITI Qualification issued to participants who successfully pass written and practical exams.

ITI Aerial Work Platform Operator

ITI Qualified • 0.8 CEU • 1 Day



The Aerial Lift Work Platform Course is designed to increase the participants' knowledge of proper and efficient elevating work platform operations through classroom and hands-on training. A written exam and hands-on evaluations are administered. Those operators who successfully pass the written and practical exams will receive an ITI qualification that is valid for three years.

ITI Aerial Work Platform Inspector

ITI Qualified • 0.8 CEU • 1 Day



The Aerial Lift Inspector Course is designed to increase the inspector's knowledge, skill, and proficiency level through classroom and hands-on training. A written exam and hands-on evaluations are administered. Those inspectors who successfully pass receive an ITI qualification that is valid for 3 years (in-house inspections only).

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iti.com/quote

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ITI Qualified Fabricator

ITI Qualified • 1.6 CEUs +/- • 1-3 Days



The Fabricator course consists of theoretical and hands-on instruction followed by fabricator qualification.

This course ranges from 1-3 days based on the learning objectives of the client and the items that they fabricate. Classroom instruction, procedures and documentation are followed by hands-on demonstration and training. Written and practical exams are administered to qualify fabricators.

Course Outline:

- Wire Rope Socketing: Zinc or Resin
- Wire Rope Slings: Hand Splice
- Wire Rope Slings: Mechanical Splice
- Alloy Chain Slings: Welded
- Alloy Chain Slings: Mechanical Assembly
- Synthetic Web Slings: Flat & Round
- Fiber Rope Slings: Hand Splice
- Metal Mesh Slings
- Proof/Pull Testing
- Applicable federal, state and/or provincial regulations and ASME standards

Qualified Fabricator Courses are conducted at client sites on client equipment.

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The following courses are offered by ITI and fulfilled by our partner Capital Safety-3M. If you are interested in any of these training courses, contact your Training Solutions Advisor today or visit iti.com for more course details.



Authorized Person 0.4 CEU • .5 Day • \$295

This course offers an awareness of the issues involved with fall protection. A focus on the best practices in fall protection and the need to protect workers at height highlights this informative training course. Participants are introduced to the legislation governing fall protection as well as the components of a fall protection system including body support, anchorages, connectors and rescue.

Upon successful completion of this course the student will receive a certificate acknowledging they have met or exceeded OSHA, ANSI and CSA requirements as an Authorized Person.

Equipment Inspector 0.4 CEU • .5 Day • \$295

This is a comprehensive inspection course which after completion will allow those responsible for the inspection of fall protection equipment to make educated decisions on the suitability for use.

The training will also include standards and regulations, incorporating what they require and how they relate to the inspection process. Upon completion the student will receive a certificate acknowledging they have met or exceeded the requirements of the OSHA and ANSI standards.

Confined Space Training

Confined Space Entry Supervisor 2 Days • \$1,295

Confined Space Entry Rescuer 3 Days • \$1,890

Confined Space Trainer - Confined Space Entry Supervisor 4 Days • \$2,530



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Competent Person 1.6 CEUs • 2 Days • \$1,175

The Competent Person training enables the attendee to be responsible for the immediate supervision, implementation and monitoring of a managed fall protection program. Upon completion of this course, you will receive a certificate acknowledging you have met or exceeded OSHA and ANSI requirements as a Competent Person and Competent Inspector.

This course includes in-class lectures including slides and video and hands-on scenarios applying theory discussed to practical workplace situations. This Competent Person training is a pass/fail program incorporating both written and practical examinations and is based on the requirements of the OSHA Regulations, ANSI Z359.2, as well as local legislation that will be discussed and reinforced. Attendees will learn practical solutions to difficult fall protection problems using appropriate tools and equipment.

Competent Person Trainer 3.2 CEUs • 4 Days • \$2,735

The Competent Trainer program focuses on practical teaching and techniques that allow the graduate to teach select fall protection courses. This course is a pass/fail program and incorporates extensive classroom and hands-on training and incorporates both written and practical examinations that are based on the requirements of the OSHA Regulations and the ANSI Z359.2 standards.

This course enables the attendee to have documented fall protection experience, knowledge and training to conduct Competent or Authorized Person training within your company.

Upon completion of this course, the student will receive a certificate acknowledging they have met or exceeded OSHA, ANSI and CSA requirements as a Competent Person and Competent Person Trainer.

Competent Industrial Rescuer 1.6 CEUs • 2 Days • \$1,070

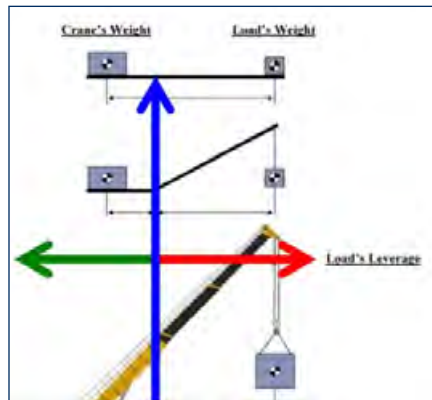
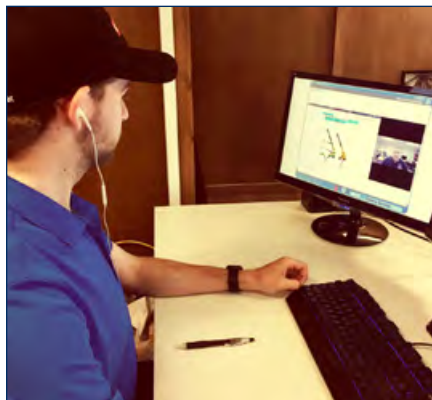
This is a pass/fail program that incorporates extensive classroom and hands-on training and incorporates both written and practical examinations that are based on the requirements of the OSHA and ANSI standards. This course will involve a high degree of hands-on scenarios and will require workers to actively participate in rescue operations.

Students attending this course will expand their knowledge and ability on how to utilize pre-engineered rescue equipment and rescue techniques for safe and efficient rescues. Upon successful completion of this course, the student will receive a certificate acknowledging they have met or exceeded OSHA and ANSI requirements as a Competent Rescuer.

Competent Tower Rescuer 1.6 CEUs • 2 Days • \$1,070

This is a pass/fail program that incorporates extensive classroom and hands-on training and incorporates both written and practical examinations that are based on the requirements of the OSHA, ANSI and NATE CTS standards. This course will involve a high degree of hands-on scenarios and will require workers to actively participate in rescue operations.

Students attending this course will expand their knowledge and ability on how to utilize pre-engineered rescue equipment and rescue techniques for safe and efficient rescues. Upon successful completion of this course, the student will receive a certificate acknowledging they have met or exceeded OSHA, ANSI and NATE requirements as a Competent Rescuer. Capital Safety is listed on the NATE site as a NATE Certified Training Partner.



ITI Online courses consist of video, animation, imagery, and student interactions delivered directly to the student in a modern HTML 5 format that is cross browser compatible.

ITI Online features four unique content libraries of training; the ITI Crane & Rigging Library as well as the ITI Rigging Engineering Library were developed and produced in-house by Industrial Training International and are taught by subject matter experts in their respective fields. We also offer an extensive list of online training courses covering the areas of Industrial Safety, Technical Skills and Plant Maintenance via our partnership with TPC Training Systems.



Basic Rigging & Inspection

This course is designed to provide participants with a basic level of knowledge of rigging gear inspection, proper rigging procedures, and load control using typical rigging techniques.

Course Contents:

- Rigging Introduction
- Rigging Inspection
- Rigging Selection & more



Advanced Rigging

The Advanced Rigging Course provides workshop based lessons to assist students in the calculations used in standard to complex rigging applications.

Course Contents:

- Load Weight Estimation
- Center of Gravity
- Sling Tension & more



Introduction To Rigging

This course is the quintessential introduction to crane and rigging activities throughout a bevy of industries. Rigging identification, inspection, and basic theories are covered in this course.

Course Contents:

- Rigging Identification
- Rigging Hardware
- Steel Slings
- Synthetic Slings
- Hitch Capacities
- Sling Protection



Signaling for Mobile & Overhead Cranes

This course prepares personnel to work with and around mobile and overhead cranes, from communication and signaling, to crane dynamics and operations.

Course Contents:

- Crane Operations
- Hand Signals
- Knots, Hitches & Taglines
- Voice Signals
- Working Near Power Lines



Mobile Crane Operator Certification Test Prep

To assist crane operators that need to comply with the newly revised OSHA 1926.1400 regulations, which requires crane operators working in construction or performing construction-related activities to be certified through a nationally accredited agency, ITI offers an Online Mobile Crane Operator Certification Test Prep Course.

This program is designed to prepare participants to take the general and crane-specific exams for national accredited agencies.



Overhead Crane Operator

The course is designed to increase the student's level of knowledge in proper use and pre-operational inspection of overhead cranes.

Course Contents:

- Inspection Requirements
- Safety Procedures
- Inspection Components
- Mechanical Systems
- Structural Components
- Applicable Federal, State, and Provincial Regulations & Standards



FUNDAMENTALS OF RIGGING ENGINEERING

Approved by ASME



The World's Only Accredited Rigging Engineering Program

Fundamentals of Rigging Engineering was developed for personnel who plan and oversee lifting and load handling activities including Lift Planners, Crane & Rigging Managers and Engineers.

The FoRE program offers an accredited, comprehensive introduction to the engineering behind complex rigging, lifting, and transport activities. Over 20 of the world's finest rigging engineers and some very influential organizations have assembled to build the first training program of its kind.

The Fundamentals of Rigging Engineering program is powered by an online learning management system which showcases instructor lectures, quizzes, workshops and exams. Available on-demand, online with instructor-led learning so that you can access and complete the program content from virtually anywhere.

Instructors & Contributors

Over 20 of the world's finest rigging engineers and industry thought leaders have assembled to build the first training program of this kind, ITI's *Fundamentals of Rigging Engineering*.



J. Keith Anderson, CEng FIMechE | BDES Program Manager
 • Chief Rigging Engineer, Bechtel
 • Author, *Rigging Engineering Basics*
 • Formerly with Mammoet and Sarens



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 • Author, *Mike's Rigging Mysteries*
 • Author, *Master Rigger Workbook*
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 • Fmr. Chief Engineer, USS Nimitz



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 • Member, ASME P30 Lift Planning Committee



Roger "Skip" Ohman, Jr., P.E.
 • Technical Adviser, The Crosby Group
 • Former Chief Engineer & Director of Training, The Crosby Group

Pricing

Completion of the full FoRE program is achieved by passing the five required courses and two electives. Courses may also be purchased individually.

Required Courses	List Price
Engineering Principles for Rigging & Load Handling	\$1,795
Crane & Derrick Engineering, Installation & Planning	\$2,195
Rigging & Load Handling Equipment Engineering & Applications	\$2,195
Alternative Load Handling Equipment Engineering & Applications	\$1,795
Lift Planning Procedure, Considerations & Execution	\$1,295
Elective Courses ¹	List Price
Specialized Transport Planning & Engineering Considerations	\$2,195
Standards & Regulations for Load Handling Equipment	\$995
Offshore Lifting for Lift Planners & Rigging Engineers	\$1,795
Project Execution for Lift Planners & Rigging Engineers	\$1,995
Master Rigger (regular price \$1,895)	\$495 ²
Rigging Gear Inspector (regular price \$1,695)	\$495 ²
Mobile Crane Inspector (regular price \$1,595)	\$495 ²

Fundamentals of Rigging Engineering
 FULL PROGRAM PRICE
\$9,995

- Course Available Online & On-Demand
- Course Provided On-Site at our ITI Training Centers
- Global Locations Scheduled

Payment Conditions

- Purchase courses individually at full price.
- Pay as you go for Full Program - Training Center Discount for Elective Courses applies after five Required Courses are paid for and completed.
- Lump Sum Payment - Full program price is \$9,995 when paid in full prior to the beginning of the first course.

¹ Two Elective Courses are required to complete the full FoRE Program.
² Discounted pricing available for full FoRE Program students only (FoRE Program equals 5 required and 2 elective courses).





LEVERAGING TECHNOLOGY TO IMPROVE LEARNING



ITI VR ushers in a new generation of industrial training simulation. The ITI VR Crane Simulator focuses on three key factors to achieve the best training experience possible:

- 1) **Full Immersion** - Virtual reality (VR) is an incredible technological leap forward. The improvement over traditional screen-based simulation is practically immeasurable.
- 2) **Content Subscription** - Starting in the early 2000s we collectively stopped buying our software in a box at the computer store. Instead, SaaS, or "Software-as-a-Service, became the norm. Rather than physically installing new software via a CD-ROM, we would simply 'subscribe' to receive access and automatic updates. ITI VR follows the same basic premise. The VR simulation hardware is a one-time purchase with a very low entry point, but the training content is accessed via subscription. All you pay for is the service tier that makes sense for your team.
- 3) **Growing Content Library** - The ITI team is constantly working with SMEs (subject matter experts) and active users in the industry to determine operator training needs. The result is new crane types, new crane models from OEMs, new environments, and new scenarios added to the training library available to all subscribers.
 - Portable Assessments
 - Practice Dangerous Scenarios Risk Free
 - Certification Test Prep
 - Candidate Screening
 - Operator Skill Verification
 - Track Progress
 - Pricing Options for Every Use Case
 - Adjustable Control Pods
 - Real Crane Models



For more information, visit us at iti.com/vr



Product Overview

The ITI Mobile Crane Virtual Reality Simulator is the most comprehensive and widely used VR crane training system in the world. Developed in partnership with global industry leaders Bechtel, Mammoet, Nucor and more, no other technology comes close to the hands-on experience that ITI VR training provides.

- 1) Comprehensive lesson plans, practice modes and operator assessments
- 2) Variable conditions, terrain and lift plan complexity
- 3) Unlimited usage and per-operator pricing

VR Simulator Hardware

ITI offers two system types to choose from, each with their own advantages:

Desktop VR

Convenient, Cost-Effective

The desktop VR simulator can be set up on almost any desk surface. Units are completely portable and can be checked as standard luggage on any passenger flight.

Motion-Base VR

Fully Immersive, Full-Body Control

The motion base VR simulator provides a crane cab experience that includes an operator chair, responsive foot pedals and fully articulating platform.



ITI is committed to continuously adding content to the VR Content Library as expressed in the following VR Simulations Content Roadmap. For more info, visit us online at iti.com/vr.

Mobile Crane (Available Now)



Aerial Work Platform (Available Now)



Overhead Crane (In Development)



Pedestal Crane (In Development)



Tower Crane (In Development)



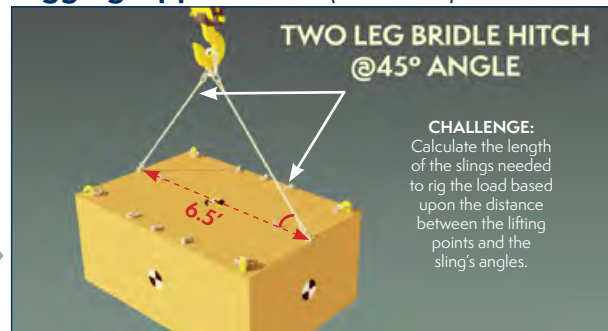
Boom Truck (In Development)



Large Crawler (Planned)



Rigging Applications (Planned)



INDUSTRIAL SAFETY TRAINING

FROM OUR PARTNERS AT TPC TRAINING



The Industrial Safety Training Library contains over 120 topics and provides your employees with essential - and often mandated - safety skills pertaining to general health and regulatory compliance.

Visit us online at iti.com/safety for full Industrial safety Training course library.



PLANT MAINTENANCE TRAINING

FROM OUR PARTNERS AT TPC TRAINING



The Plant Maintenance Training Library provides course-specific information needed to help you select the technical skills courses necessary to address your facility's specific maintenance training needs and impending skills gaps.

Visit us online at iti.com/maintenance for full Plant Maintenance Training course library.

Case Study: Nuclear Station Audit

About Nine Mile Point Nuclear Station:

Nine Mile Point Nuclear Station (Nine Mile Point) is a two-unit nuclear power facility located in upstate New York, just outside the city of Oswego on the shore of Lake Ontario. Nine Mile Point covers 900 acres and is owned and operated by Constellation Energy Nuclear Group.

About Constellation Energy Nuclear Group (CENG):

CENG is a leading producer of safe and reliable nuclear power. The company owns and operates five nuclear reactors at three sites in New York and Maryland. CENG's core values are nuclear and personal safety.

Why ITI?:

To improve efforts to protect the health and safety of employees, Nine Mile Point enlisted the support of **Industrial Training International (ITI) Field Services Division** to perform a 5-day audit over the course of two site visits in November 2012. The call to ITI was prompted by less than adequate load handling practices.

Nine Mile Point set out to accomplish three clear objectives by going through the audit process:

1. To decrease incidents and accidents
2. To build the skill levels of all employees and minimize future risks and hazards
3. To revise/update Nine Mile Point's load handling document

To accomplish these objectives, ITI instructor Joe Kuzar was dispatched to Nine Mile Point. The audit consisted of a summary of the findings and recommended actions concerning load handling activities conducted. Additionally, a variety of Nine Mile Point employees were interviewed, tested and observed while completing load handling operations.

The results of the audits conclude that Nine Mile Point has made tremendous effort and strides of improvement in a short period of time. Over 95% of the opportunities for improvement from the initial audit were completed in approximately four months. The commitment to the betterment of hoisting and rigging activities at this facility was evident in every action taken.

To learn more, visit <http://www.nrc.gov/info-finder/reactor/nmp2.html> or <http://www.constellation.com/pages/default.aspx>

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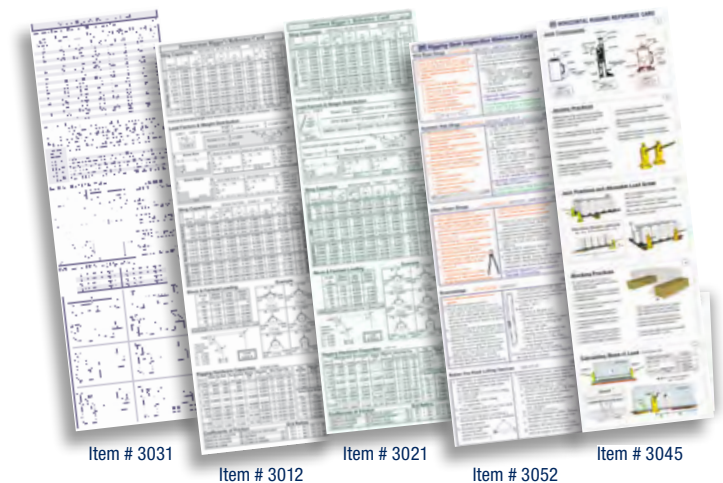
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