Course eBook

Rigging Gear Inspector Program



TRAINING | FIELD SERVICES | CERTIFICATION | BOOKSTORE | WEBINARS | E-LEARNING | WORKSHOPS

Cranes • Rigging • Lift Planning • Inspection



Table of Contents

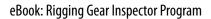
About ITI 3-7
Introduction
Course Outline
 About the Course
Testimonials



Our Customers

The world's leading organizations trust ITI with the education of their personnel.







LEEA

In 2012, ITI underwent a series of audits and evaluations to become an Accredited User (end user) Training Company according to the Lifting Equipment Engineers Association. At this time, ITI is the first and 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 all ITI Instructors.
- 4. Facility audit to determine compliance of ITI Training Centers.



The Lifting Equipment Engineers Association (LEEA) is established as the leading representative body for all those involved in the lifting industry worldwide. The Association has played a key role in this specialized field for over half a century, from training and standards setting to health and safety, the provision of technical and legal advice, and the development of examination and licensing systems.

LEEA was founded in 1944 as the Chain Testers' Association of Great Britain. The name was changed to its present one in 1988 to more accurately reflect the activities of their worldwide Membership. On January 1, 2000 LEEA became a company limited by guarantee and is owned and financed by Members.



Who We Are

A World Leader in Crane and Rigging Training





Who We Are

We serve a variety of industries:

	Aerospace	THE	Nuclear Energy
	Construction		Oil & Gas
- Cartan	Defense Departments		Power Distribution
	Energy Departments		Pulp & Paper
	Hydro Power		Railroad
	Manufacturing		Shipbuilding
	Maritime	4	Utilities
	Mining	Art	Wind Energy

Our Mission

We commit all of our resources and total energy to provide world-class crane and rigging training and consulting solutions to industries and organizations that conduct lifting activities worldwide.





eBook: Rigging Gear Inspector Program

Resources



Showcase Webinar Series

A free, monthly training webinar to help improve your organization's lifting activities

- 10 Audit Points for Your Crane & Rigging Operations: An HSE Perspective
- Tackling the Challenges of Training Site Supervisors, Lift Directors, and Other Leaders
- 4 Major Lifting Considerations in Power Gen Environments

iti.com/showcase





Webinar Training Courses

Instructor-led webinar training courses airing actual ITI course curriculum.

- Lift Director & Site Supervisor
- Critical Lift Planning
- Rigging Gear Inspection for Supervisors
- Advanced Rigging: Load Distribution & Center-of-Gravity
- Advanced Rigging: Multi-Crane Lifts & Load Turns

iti.com/webinars





Workshops

Regional, industry-specific training events for the purpose of improving lifting operations by educating organizational leaders.

iti.com/workshops









ITI Blogs

Keep up with industry news and trends by reading our blogs. 3 Different blogs highlight 3 different facets of the industry. **The ProRigger** highlights technical issues, **Crane & Rigging Success from the ITI Team** gives personal viewpoints, and **Industry Insights** focuses on industry news. If you missed any of these past articles, you can still find them at iti.com/blogs:

ProRigger: Crane Assembly & Disassembly Director - What is that? **ProRigger:** 10 Tips for Better Mobile Crane Operations

C&R Success from the ITI Team: Qualities That Make a Successful Rigging Gear Inspector **Industry Insights:** LEEA Issues New Guidance on Using Hand Chain Blocks

iti.com/crane-rigging-blogs



eBook: Rigging Gear Inspector Program



Introduction

The Rigging Gear Inspector Program is intended to assist the client company's designated, competent person(s) in becoming skilled and efficient in his/her capacity as an in-house rigging gear inspector.

Purpose and Scope

The purpose of this training is to provide the participant with the knowledge and skills necessary to perform competent field inspections of wire rope, wire rope slings, synthetic web slings, roundslings, alloy chain slings and rigging hardware including below-the-hook lifting devices, as required by industry standards.

Program Objectives

- 1. The trainee will be able to recognize and evaluate field damaged wire rope samples, according to the guidelines established by recognized industry standards.
- 2. The trainee will be able to recognize and evaluate field damaged wire rope sling samples, according to the guidelines established by recognized industry standards.
- 3. The trainee will be able to recognize and evaluate field damaged synthetic web sling and roundslings samples, according to the guidelines established by recognized industry standards.
- 4. The trainee will be able to recognize and evaluate field damaged alloy chain sling samples, according to the guidelines established by recognized industry standards.
- 5. The trainee will be able to recognize and evaluate field damaged rigging hardware and below-thehook lifting device samples, according to the guidelines established by recognized industry standards.



Course Outline

Module 1	Wire Rope Wire rope manufacturing, quality control, operating characteristics, lubrication, construction, and applications will be discussed. Participants will inspect running and standing ropes for winch systems, mobile cranes, and overhead cranes. Identification and testing requirements according to removal criteria as established by Provincial Standards and ASME will be presented. Written and hands-on tests are administered to measure knowledge and inspection skills.
Module 2	Wire Rope Slings Participants will review the fabrication of wire rope slings, i.e. hand spliced, mechanical spliced, spelter socket, and multipart braided. Quality control will be discussed and participants will inspect various wire rope slings used in the workplace. Participants will be tested on the inspection removal criteria as dictated by Provincial Standards and ASME. Written and hands-on tests are administered to measure knowledge and inspection skills.
Module 3	Synthetic Web Slings and Roundslings The manufacturing of the webbing and thread, plus the fabrication, sewing, and design of flat web, standard polyester roundslings, and high capacity roundslings will be presented. Participants will learn the assets and liabilities as to the metal end fittings which may be incorporated into synthetic web sling bridle assemblies. All of the current inspection criteria as outlined by Provincial Standards and ASME are discussed in addition to independent studies regarding synthetic web slings' removal from service. Written and hands-on tests are administered to measure knowledge and inspection skills.
Module 4	Alloy Chain Slings The various grades of chain and their acceptable uses (rigging and non-rigging) are discussed. The method of manufacturing and quality assurance is presented regarding Grade 8, 10, and 12 Alloy Steel Chain Slings. Provincial Standards and ASME specific removal criteria are presented along with the methods of inspection. Written and hands-on tests are administered to measure knowledge and inspection skills.
Module 5	Rigging Hardware and Below-the-Hook Lifting Devices The manufacturing process for various pieces of rigging hardware (i.e. shackles, hooks, turnbuckles, cable clamps, master links, and sheaves) is presented, along with acceptable field wear standards once the gear is introduced into the workplace. Custom lifting devices are addressed during the classroom & hands-on sessions. An acceptable system for proof testing and pull testing to destruction is outlined and a test given covering these subjects. Written and hands-on tests are administered to measure knowledge and inspection skills.
Module 6	Hands-On Inspection Forms Hands-on inspections take place at the end of each session. Over 60 pieces of rigging gear are inspected by the participants and they are required to identify all of the reasons that each sample should be removed from service based on Provincial Standards and ASME specific removal criteria. The participants work in teams of two and are required to provide written findings as a final step in the certification process. Written and hands-on tests are administered to measure knowledge and inspection skills.
Module 7	 Supplement Information Resource numbers and websites ASME codes and standards Life's ups and downs Lack of inspections leads to accidents
Module 8	Applicable Federal, State, and Provincial Regulations and ASME Standards



About the course

Who Should Attend

Anyone who performs rigging inspection for an employer as an assigned task such as a tool room check-out/ in person, or a supervisor who is responsible for the quality of rigging gear in a facility. Also, crane maintenance personnel who inspect running and standing ropes, sheaves, drums and associated equipment during monthly and annual equipment reviews.

Which Industries Require Personnel with Rigging Gear Inspector Skills

Any industry that uses rigging equipment to handle loads, objects and product in the normal course of business. If the rigging is present, then it must be regularly inspected to ensure that it is in acceptable condition for general purpose usage.

Where and When is this Course Offered

ITI courses are delivered at customer locations and most employers utilize this method when the class size is greater than six people. Most courses are also offered at ITI Training Centers in the USA, Canada, and Latin America in an open-enrollment format – several employers might send one or two people to these courses. To find the most up-to-date locations and dates of ITI Training Center events, visit iti.com.

Course Duration

This course is typically a 3-day event. Length may vary depending on the number of students, course location, and customized content.





Testimonials

I really have enjoyed the level 1-3 Inspector courses. Both Bob (Schumacher) and Jim (Cox) are excellent instructors. I have learned a wealth of knowledge to bring back to my work place. Hope to continue taking part in some of the ITI courses.

Kevin Duffy, National Defence, Canada

I really enjoyed the rigging gear inspector level one and two class. Devon's experience and knowledge of rigging gear was outstanding.

William Viltz, Naval Undersea Warfare Center San Diego

I recently completed Rigging Gear Inspector training at Memphis training center. Patrick Cotnoir was our instructor. He did an excellent job. He kept the material interesting and was very knowledgeable in the subject matter. I learned a great deal more than I expected to.

Jeffrey Miller, Prairie State Generating Company

The time I attended an ITI training class was in Washington, and it was for my Level II Rigging Inspector. The instructor was Jim Cox. Jim is a great instructor. He keeps the class focused on the subject that he was presenting to us at the time. Hope that Jim will be the instructor again. Great guy. I hope to attend another course this fall.

Johnny Chavez, Los Alamos National Labs

SGS Safety offered rigging inspection training this week which was presented by Industrial Training International, Inc. There were attendees selected from each Maintenance RA [Repair Area], the Training organization and Safety. The completion of the combination classroom and hands-on field training is a 24 hour technical training that will result (upon successful completion / testing), in attendees receiving a designation of "Certified Rigging Inspector". We are already receiving positive feedback from attendees on the quality of the information being shared. The follow-on plan is to have additional rigging inspection training at a less intense level for other rigging.

From Tucson Electric Power's Springerville Generating Station (SGS), the February 2010 Safety Gram.

Excellent field trip. This course is particularly standard/ regulation loaded curriculum and is difficult to teach in a compressed 3-4 day schedule. ITI and in particular the instructor Jim Cox has superlatively organized the course themes into a very understandable and user-friendly way educational experience and the strong point is the very successful way student/teacher interchange. Excellent preparation, course material, and instructor delivery.

I have been to a huge amount of technical training over my 35+ year career and I must enthusiastically say that this course is one of the very best I have attended. Superlative organization and instructor/student interchange. Extremely professional and very capable instructor Jim Cox, who has a very positive connection to the students. Excellent job Jim!! Thanks ITI!!

Dean Faina, SSA International

