

Link-Belt
C R A N E S

PREFERRED TECHNICIAN TRAINING
CUSTOMER TECHNICIAN TRAINING





A message from Link-Belt

Welcome to Link-Belt Training. We're delighted that you are interested in attending some of the training we offer. We are committed to providing the highest quality training in a safe environment that is conducive to learning.

Our goal is to provide you with the necessary skills, knowledge and abilities to perform your job effectively and efficiently. To accomplish this goal, we have added more in-depth courses and redeveloped the curriculum to include more hands-on training and troubleshooting scenarios.

We are proud of our cranes and the training programs that support them. We hope that after you attend training at the factory, you will know why. From the knowledgeable instructional staff, access to modern Link-Belt equipment and top notch accommodations, we are dedicated to providing the best learning experience possible.

Again, thank you for your interest in Link-Belt training.

Contact Information

Jamie Adams
Training Administrator
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Link-Belt Cranes
Phone: (859) 263-5200
Address: 2651 Palumbo Dr. Lexington, KY 40509
www.linkbelt.com

Level 2: Factory Cont.

Level 2 All Terrain Crane (ATC)/Hydraulic Truck Crane (HTC)

Class Size: Minimum 4/Maximum 8

Duration: 3 days

Prerequisite: Level 2 Telescopic

This course will focus on the hydraulic suspension, closed loop winch circuits and electronic control systems of the ATC-3210 / 3275 and the HTC-3140. The specific topics covered are:

- Hydraulic suspension/outriggers
- Rear steer
- ATC fly erection
- Closed loop winch circuits
- Parker IQAN control systems
- ATC/HTC troubleshooting and diagnostics

Level 2 Telescopic Crawler Crane (TCC)

Class Size: Minimum 4/Maximum 8

Duration: 3 days

Prerequisite: Level 2 Telescopic

This course will focus on the assembly/disassembly, hydraulic circuits and electrical circuits used on the TCC product line. The specific topics covered are:

- Assembly/Disassembly
- Linde Pump Controllers
- IQAN Engine Display
- Hydraulic Systems
- Electrical Systems
- TCC Troubleshooting and Diagnostics

Additional Training

All Terrain Crane (ATC) Operator/Technician Orientation

Target Audience: Crane Owners/Crane Operator

Class Size: Minimum 5/Maximum 10

Duration: 3 days

Prerequisite: Company must be receiving an ATC within 30 days

The ATC class is intended to familiarize operators, oilers and technicians with carrier and upper operations and practices that are unique to Link-Belt ATC cranes. At the end of the course a student should be able to properly set the crane up for a job, break the crane down and prepare it for travel after a job. The specific topics covered are:

- Intarder Operation
- Suspension Operation
- Rear Steer Operation
- Outrigger Operation
- Crane Rating Manual Familiarization
- Latching Boom Familiarization
- Pulse Familiarization
- Electronic Crane Controls
- Fly Erection
- Emergency Mode Operation
- Engine Regeneration

Boom Inspection and Welding Course

Target Audience: Crane Technicians and Welders

Class Size: Minimum 4/Maximum 6

Duration: 5 days

Prerequisite: None

Materials Fee: \$250

Specific topics covered are:

- Boom Repair Manual
- Lattice Boom Inspection
- Telescopic Boom Inspection
- Lattice Boom Repair/Welding



Level 2: Factory

The second level of our technician training is instructor led training, held here at the Link-Belt factory in Lexington, Kentucky. Level 2 consists of two distinct categories: telescopic cranes and lattice cranes. Within the telescopic category, there are two primary courses and three secondary courses. Technicians must complete the primary course before they are eligible to proceed to the secondary courses.

Primary Course:

- Level 2 Telescopic

Secondary Courses:

- Level 2 Large Rough Terrain Cranes
- Level 2 All Terrain/Truck Cranes
- Level 2 Telescopic Crawler Cranes

Primary Course:

- Level 2 Lattice

COURSE DESCRIPTIONS

Level 2 Telescopic

Class Size: Minimum 5/Maximum 12

Duration: 4.5 days

Prerequisite: Successful completion of Level 1

Set-Up, operations, lubrication and maintenance of Link-Belt HTC and RTC product lines (100 ton and below). At the end of the course students will have an understanding of the electrical and hydraulic systems used in the Link-Belt telescopic product. The specific topics covered are:

- Machine Overview & Set-Up
- Fly Erection
- Hydraulics
- Electrical
- Full Power & Latching Booms
- RCL Navigation
- Troubleshooting
- Crane Rating Manual & Lift Concepts

Level 2 Lattice

Class Size: Minimum 5/Maximum 12

Duration: 4.5 days

Prerequisite: Successful completion of Level 1

This course will focus on H, HII, H5 and HSL lattice cranes. At the end of the course students will have an understanding of the mechanical, electrical and hydraulic systems used in the Link-Belt lattice product. The specific topics covered are:

- Machine Overview & Set-up
- Machine Assembly/Disassembly
- Boom Assembly/Disassembly
- 2 Shoe Clutch Theory
- HYLAB Hydraulics
- HYLAB Electrical
- SML-10 Operations and Troubleshooting
- HSL Hydraulics
- HSL Electrical
- HSL Winch
- HSL-1 Operations and Troubleshooting
- Crane Rating Manual & Lift Concepts

Level 2 Large Rough Terrain Crane (RTC)

Class Size: Minimum 4/Maximum 8

Duration: 3 days

Prerequisite: Level 2 Telescopic

This course will focus on the hydrostatic travel circuit, closed loop winch circuits and electronic control systems of the RTC-80110 II / 80130 II / 80150 II. The specific topics covered are:

- Hydrostatic Travel
- Suspension
- Closed Loop Winch Circuits
- Parker IQAN Control systems
- Linde DVC 10 Pump Control Module
- RTC Troubleshooting and Diagnostics



Link-Belt Technician Training

The Link-Belt Preferred Technician Training program was designed and developed to meet the needs of technicians who work on Link-Belt Cranes. The training program is provided to technicians who work for a company that owns at least one Link-Belt crane. The training program consists of 8 courses which are grouped into two levels.

Preferred Technician Training:

- Level 1: Basics (Online Training)
- Level 2: General Knowledge & Skills
 - Telescopic Course
 - ATC/HTC Course
 - Large RTC Course
 - TCC Course
 - Lattice Course

Program Fee

There is a one-time administrative fee of \$537 to enroll into the Preferred Technician Training program. This enrollment fee covers taking the online training and attending all of instructor led training courses here at the factory.

Program Completion

To complete the Preferred Technician Training program the technician must complete the following courses:

- Level 1 Online courses
- Level 2 Telescopic
- Level 2 RTC, Level 2 ATC/HTC, or Level 2 TCC
- Level 2 Lattice

Program Registration

Enrollments into the Preferred Technician Training require approval through a Link-Belt Distributor. To enroll contact your local Link-Belt Distributor and provide the following information:

- Technician's name
- Technician's email address
- Company approver (person within your company that approves the training)
- Company approver's email address

Once you are enrolled in the program, you will receive an email with the details of how to begin the Level 1 online training.

Online Training Access

You must be enrolled in the Link-Belt Online Training to be able to access the online training. The online training is accessed through the Link-Belt website: www.linkbelt.com

1. Click on the "Sign in to Link-Belt Preferred" button on the lower left side of the main page.
2. Sign in with your user name and password.
3. Click on the "Training" tab.
4. Click on the "Online Training" menu option on the left hand side to access the online training system

Note: Only people who are enrolled in the Preferred Technician Training can see the "Online Training" menu option.

Course Registration

Once the technician has completed the Level 1 online training, they can register for the instructor-led training held at the Link-Belt factory in Lexington, Kentucky. The course schedule is posted on the Link-Belt Preferred "Training" tab. Please plan ahead when registering for courses. Most of the training courses fill up several months in advance.

To register for instructor-led training, send an email to JAdams@linkbelt.com with the following information:

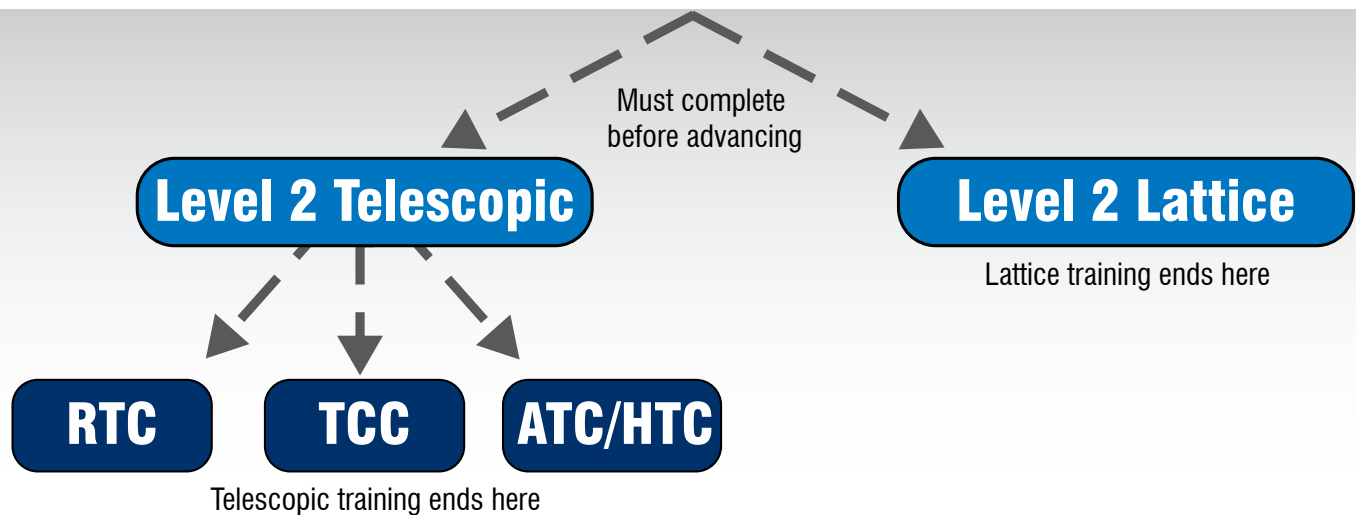
- Technician's name
- Course name
- Date of course

Courses are confirmed 30 to 45 days in advance. It is recommended not to make travel arrangements before the course is confirmed due to the possibility of a cancellation. Once the course is confirmed, the technician registered for the course will be e-mailed a confirmation letter with class and hotel information.

Preferred Technician Training

Level 1 - Online Training

Must complete, test-out or show proof of previous training for all before attending either the Level 2 Telescopic or Level 2 Lattice courses.



Level 1: Online

The first level of our technician training is taught through a series of online courses. The Level 1 courses help ensure that every technician that attends factory training has the same base of knowledge and is ready for the technical depth of our training courses. Technicians must pass all the assigned online learning courses to complete Level 1. Once the Level 1 online courses are completed, the technician is allowed to register for the instructor-led training sessions at the Link-Belt factory in Lexington, Kentucky.

COURSE DESCRIPTIONS

Basic Electrical

Estimated completion time: 2 hours

- Ohm's Law
- Wiring and Symbols
- Introduction to Electrical Circuits
- Using a Multimeter

Basic Mechanical

Estimated completion time: 4 hours

Fundamentals of Mechanics

- Actuators
- Clutches
- Brakes
- Bearings
- Gears
- Belt/Chain Drives
- Couplings

Basic Hydraulics

Estimated completion time: 4 hours

- Introduction to Hydraulics
- Hydraulic Pumps
- Hydraulic Actuators
- Hydraulic Valves

Link-Belt Crane Fundamentals

Link-Belt Preferred Website Overview

Estimated Completion Time: 50 minutes

- Website Access
- Link-Belt Crane Catalog
- Distributor Search
- Link-Belt Company Information and News
- Sales and Parts Information
- Services
- Training
- Logo Gear
- Technical Manuals and Parts Search

Link-Belt Cranes General Lube and Maintenance

Estimated Completion Time: 30 minutes

- Link-Belt Crane Operator's Manual General Information
- General Lubrication Information
- Overview of Lubrication and Maintenance Charts

Crane Nomenclature

Estimated Completion Time: 60 minutes

Part 1 – The Basics

- Link-Belt Cranes
- Link-Belt Serial Numbers
- Terms for Sections of a Crane

Part 2 – Beyond the Basics

- Boom Types and Their Components
- Upper Components
- Carrier Components for Each Crane Type

Link-Belt Crane Operating Safety Series

Estimated Completion Time: 90 minutes

- Safety Decals and Captions
- General Safety Overview
- Working Near Power Lines
- Crane Safety
- Luffing Attachment Operation
- Personnel Handling Guidelines

Link-Belt Crane Rating Manual (CRM)

Estimated Completion Time: 30 minutes

- Overview of CRM Notes Section
- Overview of CRM Charts
- Utilizing the CRM Charts

Travel/Lodging

Traveling to Link-Belt

DRIVING

Link-Belt Cranes is located in Lexington, Kentucky. Drivers can get to Lexington via Interstate 75 from the north or south and Interstate 64 from the west or east.

FLYING

The Blue Grass Airport is located within Lexington and is serviced by Allegiant Air, American Airlines, Delta Air Lines, United Airlines and US Airways. For more information about the Blue Grass Airport please visit <http://www.bluegrassairport.com/>.

LODGING IN LEXINGTON

Link-Belt has contracted with the Homewood Suites by Hilton Hotel to provide rooms for our students. The student's employer is responsible for the hotel cost. During the enrollment process Link-Belt will contact the hotel to reserve rooms. We will send the confirmation numbers to each student.

Homewood Suites by Hilton Lexington-Hamburg

2033 Bryant Road
Lexington, KY 40509
Telephone: (859) 543-0464
Fax: (859) 543-0255

TRANSPORTATION

Airport to Hotel

The Homewood Suites has made arrangements with a local taxi/cab service to provide transportation from the airport to the hotel. Details will be provided in the course confirmation letter as to what service to use.

Hotel to Training Center

Link-Belt will transport the students from the hotel to and from the Link-Belt Training Center daily. The van will depart the hotel at 7:45am and bring the students back to the hotel once the training day is complete.

Training Center to Airport/Hotel

On the last day of training, Link-Belt will transport the students to the airport or back to the hotel.



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