

# Rigging Systems 2 | Slings, Jacks, & Cranes

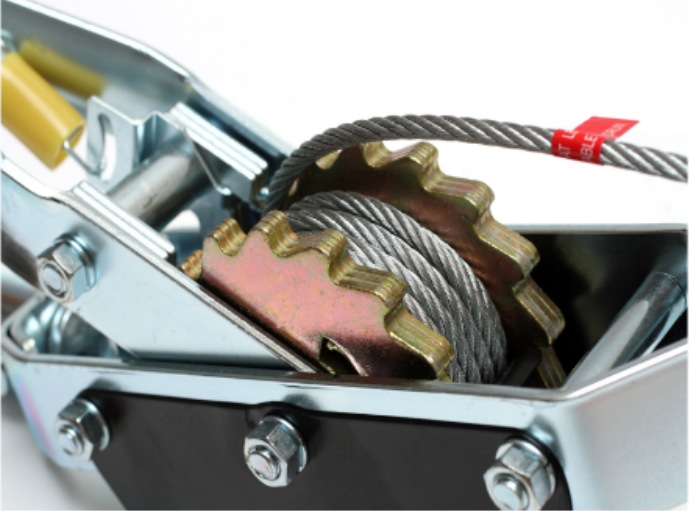
Equipment Movement - WX18690-XB02XEN-E1

Objective 15: Describe How to Use a Ratchet Hoist to Move a Load

Step 2. Select and Inspect Rigging

Inspect the hoist for defects.

**WARNING:**  
Remove from service any ratchet hoist that has a weakened wire rope. A damaged wire rope can fail suddenly and cause severe harm to personnel.



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The image shows a close-up of a ratchet hoist mechanism. A thick, grey wire rope is being fed into the hoist's drum. The hoist is made of metal and has a yellow handle. A red tag is attached to the end of the wire rope. The background is white.

## eLearning Course: M18690

The Rigging Systems eLearning course expands a learner's rigging knowledge to include the function of a tag line, how to limit a load and perform 1-point and 2-point turns. Additional topics include determining synthetic sling type given a sample or part number, describing the function of a jack in raising a load, and describing the construction of three types of overhead cranes.

## Rigging Systems

Amatrol's eLearning curriculum is unique in that it thoughtfully combines in-depth theoretical knowledge with practical, hands-on skills. This powerful combination of knowledge and skills solidifies understanding and creates a strong foundation for pursuing more advanced skills.

For example, the precision gauging eLearning course covers important topics, such as:

### Synthetic Slings

Learners begin with an introduction to synthetic slings, including synthetic sling types, operation, selection, and maintenance. Individual lessons focus on topics like the function of a synthetic sling, synthetic sling specifications, how to assemble the adjusting hitch, proper handling and storage, and how to size and select a synthetic sling for a hitch. Learners will also practice skills, such as identifying various types of synthetic slings, assembling and lifting a load using a synthetic sling, and inspecting a synthetic sling.

### Equipment Movement

In this module, learners will be introduced to AC electric motor troubleshooting, including motor failures, testing single-phase AC motors, testing three-phase AC motors, and troubleshooting AC motors. Individual lessons focus on topics like common types of AC electric motor failures, how to use a multimeter to test a single-phase AC electric motor, how to use a megger to test a three-phase AC motor stator windings, and how to troubleshoot faults in a single- and three-phase AC motor. Learners will also practice skills, such as performing a mechanical diagnosis of an AC electric motor, using a multimeter to test an AC motor's start/run capacitor, using a megger to test three-phase AC motor stator windings, and troubleshooting faults in a single- and three-phase AC motor.

### Industrial Cranes

To conclude Amatrol's Rigging eLearning curriculum, learners will study industrial cranes, including various types,

as well as crane operation. Individual lessons focus on topics like four types of cranes; the construction of three types of bridge, gantry, and jib cranes; requirements for a crane operator; and eight crane safety rules. Learners will also practice skills, such as identifying a crane type, and giving/interpreting eleven crane hand signals.

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