

Rigging Systems 1 | Interactive eLearning

Introduction to Rigging - W18689-XB01UEN-E1

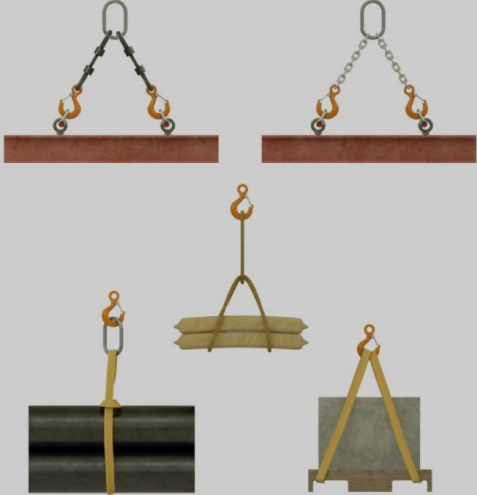
Objective 1: Define Rigging and Give an Application

Rigging Definition

Rigging is the act of safely securing a **load**, such as a piece of **equipment**, to prepare it for movement from one place to another.

Loads are rigged differently based on their size, shape, weight, and type of material.

You can see here that there are many ways to rig objects to be lifted.



3D models of rigging components courtesy of The Crosby Group LLC.

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eLearning Course: M18689

Within the online rigging systems multimedia course, learners begin studying rigging concepts, load and weight calculation, and load balance before moving onto more advanced topics and skills. Examples of these topics include describing two methods of calculating sling force, assembling and lifting a load using a two-leg wire rope bridle sling and shackles, and sizing and selecting a chain sling. Optionally, this curriculum is available in an online interactive multimedia format that provides includes easy, quick navigation and searchable course content.

Teach Various Rigging Components

In-Depth, Comprehensive Rigging Curriculum Connected to Real-World Skills

The mechanical rigging skills eLearning course covers important topics, such as:

Introduction to Rigging

Learners begin with an introduction to rigging, including rigging concepts, load weight calculations, load balance, hooks, and eyebolts. Individual lessons focus on topics like the function of five components of a rigging system, three methods of determining the weight of a load, rigging working load limit, six types of hooks, and two types of rigging eyebolts. Learners will also learn industry-relevant skills, such as how to calculate the volume of a complex object, how to determine the center of gravity for both symmetrical and asymmetrical loads, and how to install an eyebolt for lifting.

Hoists

Learners will study the components and operation of hoists, including rigging safety, block and tackle, manual hoists, power-operated hoists, and hoist selection/inspection. Individual lessons focus on topics like safe dress rules for rigging, the function of a hoist, two categories of manual hoists, the operation of single- and double-reeved hoists, and how to select the proper hoist. Learners will also study industry-relevant skills, such as mousing a hook, using an endless chain hoist to lift a load, using an electric hoist to lift a load, and inspecting a lift hook, eyebolt, and hoist.

Slings and Hitches

In this module, learners will advance to basic components of slings and hitches, including sling force calculations, basket hitch assembly, choker and bridle hitch assembly, and crush force and spreader beams. Individual lessons focus on topics like five types of sling materials, two methods of determining sling angle factor, how to use

blocking and cribbing, how to assembly and life a load using a choker hitch, and how to use a spreader beam with a hitch. Learners will also practice skills, including calculating the rated load of a hitch, assembling and lifting a load using a double-basket sling and bridle sling, and calculating crush force.

Wire Rope

Advancing through Amatrol's Rigging Systems eLearning module, learners will study wire rope components, including wire rope types, slings, selection, and maintenance. Individual lessons focus on topics like five common strand patterns of wire rope, how wire rope is specified, the construction of two types of shackles, and size/selection of a wire rope for a sling in a hitch. Learners will also practice skills, including identifying a wire rope type given a sample, determining a wire rope type given a part number, assembling and lifting a load using a two-leg wire rope bridle sling with shackles, and sizing, selection, and inspection of a wire rope sling.

Chain Slings

Finally, learners will study the components and operation of chain types, including specific types of chains, chain sling operation, and chain sling selection/maintenance. Individual lessons focus on topics like the basic construction of a chain, four types of chain links, how chains are specified, and how to size/select a chain for a sling in a hitch. Learners will also practice skills, including identifying chain type given a sample, assembling and lifting a load using a chain sling, and sizing, selection, and inspection of a chain sling.

Interactive eLearning

Interactive eLearning for 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.

Additional Info

Requirements:

- Computer (See [Computer Requirements](#))

Referenced Equipment:

- Rigging 1 Learning System ([950-RGB1](#))

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