Rigging Learning Systems
46109-00

LabVolt Series

Datasheet

Festo Didactic
en 120 V - 60 Hz
04/2020

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General Description

Moving machines is a basic requirement for any industrial plant. With the Rigging Training Systems, students learn how to move and install machines safely. Machines that need to be moved in industrial settings are all different, since they are usually built for special applications. They have different shapes and are often asymmetrical. Their weight, which is not evenly balanced on the machine supports, can create difficulties for the rigger. Therefore riggers need to be highly skilled and qualified to move machines safely and efficiently.

To help acquire these basic skills, the Rigging Training Systems were created to cover the fundamentals of rigging practices, including techniques to help students move and install machines safely.

The mobile beam-style gantry is designed to conform to OSHA and CMAA standards. This heavy-duty, steel crane has polyurethane swivel casters with roller bearings, and pivoting support legs for easy maneuvering in tight places.

Courseware

The courseware consists of a fully illustrated student manual accompanied by an instructor guide. The manual contains a series of work orders. The courseware also includes a reference textbook titled Basic Rigging from Job Training Systems, Inc.

Work orders can be used to evaluate students. Each work order includes a brief description and illustration of the task and the main steps of the work to be done. Some work orders require basic math skills.

The instructor guide contains the measurements and calculation results as well as the answers to the post-tests. It also includes a work assessment table to evaluate the work done by the student.

Topic Coverage

- Ropes and Slings
- Wedge Sockets
- Dollies and Roller Pipes
- Gantry Cranes and Hoists
- Machine Installation
- Machine Movement
- Lifting Objects and Unbalanced Loads
- Estimated program duration: 40 hours

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Features & Benefits

- Storage for all material on the crane
- Work orders for task-based learning
- Industrial-grade, safe equipment
- Includes a student manual and an instructor guide
- Wide variety of components enhance realistic training
- Mobile beam-style gantry crane designed to conform to OSHA and CMAA standards

List of Available Training Systems

Qty	Description	Model number
1	Rigging Training System	580174 (46109-00)
1	Adjustable-Height Rigging Training System	580178 (46109-A0)

Optional Equipment

Qty	Description	Model number
1	Rigging - eSeries	8089944 (80899-44)

Available Training Systems

Rigging Training System 580174 (46109-00)

Moving machines is a basic requirement for any industrial plant. With our Rigging System, students learn how to move and install machines safely. Machines that need to be moved in industrial settings are all different, since they are usually built for special applications. They have different shapes and are often asymmetrical. Their weight, which is not evenly balanced on the machine supports, can create difficulties for the rigger. Therefore riggers need to be highly skilled and qualified to move machines safely and efficiently.

To help acquire these basic skills, the Rigging Training System was created to cover the fundamentals of rigging practices, including techniques to help students move and install machines safely.

The mobile beam-style gantry is designed to conform to OSHA and CMAA standards. This heavy-duty, steel crane has polyurethane swivel casters with roller bearings, and pivoting support legs for easy maneuvering in tight places.

List of Equipment

Qty	Description	Model number
1	Basic Rigging Textbook	583214 (37471-00)

Qty	Description	Model number
1	Rigging Part Kit (1 of 2)	580098 (36819-00)
1	Rigging Part Kit (2 of 2)	595115 (36819-10)
1	Gantry Crane	579898 (46690-00)
1	Storage Rack	579900 (46691-00)

List of Manuals

Description	Manual number
Rigging Basics (Work Orders - Student)	580220 (20560-60)
Rigging Basics (Work Orders - Instructor)	580221 (20560-70)

Table of Contents of the Manual(s)

Rigging Basics (Work Orders - Student) (580220 (20560-60))

- 1 Ropes and Knots
- 2 Building a Sling
- 3 Installation of a Wedge Socket
- 4 Moving a Machine using Roller Pipes
- 5 Moving a Machine using a Dolly
- 6 Assembling the Gantry Crane
- 7 Installation of the Gantry Crane Accessories
- 8 Lifting a Machine using a Hydraulic Jack
- 9 Moving a Machine Using a Double-Chain Sling
- 10 Moving a Machine Using Polyester Slings
- 11 Lifting a Load Using a Choker Hitch
- 12 Lifting a Load Using a Polyester Sling as a Choker Hitch
- 13 Lifting a Load Using a Wire Rope as a Choker Hitch
- 14 Lifting a Load Using a Beam Clamp
- 15 Lifting a Plate Using a Plate Lifting Clamp
- 16 Moving a Machine Using Wire Rope Pullers
- 17 Lifting an Unbalanced Load
- 18 Lifting an Unbalanced Machine Using Lifting Hooks

Optional Equipment

Qty	Description	Model number
1	Rigging Training System (Manuals on CD-ROM)	580219 (20560-A0)

System Specifications

Parameter	Value
Physical Characteristics	
Intended Location	On the floor (stands on casters)
Dimensions (H x W x D)	3200 x 4000 x 1800 mm (126 x 157.5 x 71 in)
Net Weight	TBE

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Adjustable-Height Rigging Training System 580178 (46109-A0)

The Adjustable-Height Rigging Training System is identical to the Rigging Training System, Model 46109-0, except that the height of the included gantry crane is adjustable instead of fixed.

List of Equipment

Qty	Description	Model number
1	Basic Rigging Textbook	583214 (37471-00)
1	Rigging Part Kit (1 of 2)	580098 (36819-00)
1	Rigging Part Kit (2 of 2)	595115 (36819-10)
1	Adjustable-Height Gantry Crane	579899 (46690-A0)
1	Storage Rack	579900 (46691-00)

List of Manuals

Description	Manual number
Rigging Basics (Work Orders - Student)	580220 (20560-60)
Rigging Basics (Work Orders - Instructor)	580221 (20560-70)

Table of Contents of the Manual(s)

Rigging Basics (Work Orders - Student) (580220 (20560-60))

- 1 Ropes and Knots
- 2 Building a Sling
- 3 Installation of a Wedge Socket
- 4 Moving a Machine using Roller Pipes
- 5 Moving a Machine using a Dolly
- 6 Assembling the Gantry Crane
- 7 Installation of the Gantry Crane Accessories
- 8 Lifting a Machine using a Hydraulic Jack
- 9 Moving a Machine Using a Double-Chain Sling
- 10 Moving a Machine Using Polyester Slings
- 11 Lifting a Load Using a Choker Hitch
- 12 Lifting a Load Using a Polyester Sling as a Choker Hitch
- 13 Lifting a Load Using a Wire Rope as a Choker Hitch
- 14 Lifting a Load Using a Beam Clamp
- 15 Lifting a Plate Using a Plate Lifting Clamp
- 16 Moving a Machine Using Wire Rope Pullers
- 17 Lifting an Unbalanced Load
- 18 Lifting an Unbalanced Machine Using Lifting Hooks

System Specifications

Parameter	Value
Physical Characteristics	
Intended Location	On the floor (stands on casters)
Dimensions (H x W x D)	3200 x 4000 x 1800 mm (126 x 157.5 x 71 in)
Net Weight	TBE

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Equipment Description

Rigging Part Kit (1 of 2)
580098 (36819-00)

The Rigging Part Kit contains a large selection of parts (clamps, ropes, cribbings, chains, etc.) for the Rigging Training Systems.

Rigging Part Kit (2 of 2)
595115 (36819-10)

The Rigging Part Kit contains a large selection of parts (clamps, ropes, cribbings, chains, etc.) for the Rigging Training Systems.

Gantry Crane
579898 (46690-00)

The Gantry Crane is used to lift very heavy objects using a hoist fitted in a trolley.

Specifications

Parameter	Value
Capacity	907 kg (2000 lb)
Beam	
Height	150 mm (6 in)
Width	86 mm (3 3/8 in)
Caster	
Diameter	150 mm (6 in)
Physical Characteristics	
Intended Location	On the floor (stands on casters)
Dimensions (H x W x D)	3200 x 3500 x 1800 mm (126 x 139 x 71 in)
Net Weight	TBE

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Adjustable-Height Gantry Crane
579899 (46690-A0)

The Adjustable-Height Gantry Crane uses an “I” beam steel construction with an adjustable-height center section.

Specifications

Parameter	Value
Capacity	907 kg (2000 lb)
Beam	
Height	150 mm (6 in)
Width	86 mm (3 3/8 in)
Caster	
Diameter	150 mm (6 in)
Physical Characteristics	
Intended Location	On the floor (stands on casters)
Dimensions (W x D)	3505 x 1829 mm (138 x 72 in)
Height (Under the Beam)	1778-3048 mm (70-120 in)
Net Weight	TBE

Storage Rack
579900 (46691-00)

The Storage Rack is mounted on the crane leg and provides storage for all the necessary materials.

Specifications

Parameter	Value
Physical Characteristics	

Parameter	Value
Intended Location	Installed on a leg of the Gantry Crane, Model 46690-0, or Adjustable-Height Gantry Crane, Model 46690-A
Dimensions (H x W x D)	TBE
Net Weight	TBE

Optional Equipment Description

Rigging Training System (Manuals on CD-ROM) (Optional) 580219 (20560-A0)

List of Manuals

Description	Manual number
Rigging Basics (Work Orders - Student)	590304 (20560-60)
Rigging Basics (Work Orders - Instructor)	590306 (20560-70)

Rigging - eSeries (Optional) 8089944 (80899-44)

This eSeries course introduces students to the basic principles of moving machines for industrial plants. It is meant to be used in conjunction with the Rigging Training Systems. It contains one course which begins with a pretest and ends with a posttest. The course includes the topics covered in the book-based content and their related hands-on exercises. Exercise procedures are presented in enhanced PDF format. Completed exercises may be printed, saved to a specific location, and submitted (emailed) to the instructor. Exercise presentation of technical content is accompanied by voiceover narration to minimize the amount of onscreen reading.

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