**OALCF Task Cover Sheet**

**Task Title:** Understanding the Terminology of Hoisting and Rigging

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| **Learner Name:** | |
| **Date Started: Date Completed:**  **Successful Completion:** Yes\_\_\_ No\_\_\_ | |
| **Goal Path:** Employment\_\_\_ Apprenticeship**✓** Secondary School\_\_\_ Post Secondary\_\_\_ Independence\_\_\_ | |
| **Task Description:**  Learners on the Apprenticeship path will need tounderstand and interpret terminology used in the Millwright Trade that is related to Hoisting and Rigging. | |
| **Competency:**  A - Find and Use Information | **Task Group(s):**  A2 Interpret Documents |
| **Level Indicators:**  A2.1: Interpret very simple documents to locate specific details  A2.2: Interpret simple documents to locate and connect information | |
| **Performance Descriptors:** see chart on last page | |
| **Materials Required:**   * Attached Hoisting and Rigging Terminology Chart * Pen and paper * Highlighter | |

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**Learner’s Instructions and task sets**

Millwrights need to understand and use the terminology related to Hoisting and Rigging when working in this trade. Use the **Rigging and Hoisting Terminology** list attached to complete the following tasks.

**Task 1:** List two types of rope used in rigging.

**Task 2:** What does the acronym ASME stand for?

**Task 3:** When angles of rigging (slings) are equal, the balance point of the load is in the centre. (also known as the Centre of Gravity) Highlight the Centre of Gravity in the following diagram.

Equal Sling Equal Sling

Load

**Task 4:** Name the type of load that has a constant applied force.

**Rigging and Hoisting Terminology**

|  |  |
| --- | --- |
| **Term** |  |
| **ANSI** | American National Standards Institute |
| **ASME** | American Society of Mechanical Engineers |
| **ASTM** | American Society for Testing and Materials |
| **Capacity** | The limits of the rigging equipment |
| **Centre of Gravity** | The point around which an object's weight is evenly balanced |
| **Design Factor** | An industry term denoting a product's theoretical reserve capability; usually computed by dividing the catalog Ultimate Load by the Working Load Limit and generally expressed as a ratio, e.g., 5 to 1 |
| **Dynamic Forces** | Forces that are present that may introduce a higher load limit. Forces may include wind, and/or friction may be present |
| **Hand Signals** | Means of communication between the crane operator and the person directing the lift at all times |
| **Knots** | Bowline, Pipe Hitch, Reef or Square Knot, Two Half Hitches, Running Bowline and Figure Eight |
| **Plumb** | In a vertical or perpendicular line used to test verticality or alignment of the load |
| **Shock Load** | A force that results from the rapid application of a force (such as impacting or jerking) or rapid movement of a static load. A shock load significantly adds to a static load. |
| **Static Load** | The load resulting from a constant applied force of load. |
| **Rigging Hardware** | Hoisting hooks, Wire Rope Clips, Swivels, Shackles, Eye Bolts, Snatch Blocks, Turnbuckles and Spreader and Equalizer Beams |
| **Tackle** | All equipment used in the lift, does not include hook (slings, wire rope, shackles, chain fall, etc) |
| **Types of Rope** | Polypropylene, Nylon and Polyester |
| **Types of Slings** | Wire Rope, Chain, Synthetic Web Slings, Endless or Grommet Slings, Standard Eye and Eye, Twisted Eye, Metal Mesh Slings and Fibre Rope Slings |
| **Unsafe load** | Load is not balanced or rigging equipment is incorrect capacity |
| **Weight** | Weight of load and weight of rigging equipment to determine rigging and craning requirements |
| **Weight of Tackle** | Total weight of all lifting equipment |
| **Working Load** | The maximum mass or force which the product is authorized to support in a particular service |
| **Working Load Limit** | The [load](http://en.wikipedia.org/wiki/Load) that a piece of [Lifting Equipment](http://en.wikipedia.org/wiki/Lifting_equipment) is designed and rated to safely lift. |

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**Answer Key**

**Task 1:**  List two types of rope used in rigging.

**Polypropylene, Nylon or Polyester**

**Task 2:** What does the acronym ASME stand for?

**American Society of Mechanical Engineers**

**Task 3:** When angles of rigging (slings) are equal the balance point of the load is in the centre. Highlight the Centre of Gravity in the following diagram.

**Task 4:**  Name the type of load that has a constant applied force.

**Static Load**

## Task Title: Understanding the Terminology of Hoisting and Rigging

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| Performance Descriptors | | **Needs Work** | **Completes task with support from practitioner** | **Completes task independently** |
| A2.1 | * scans to locate specific details |  |  |  |
|  | * interprets brief text and common symbols |  |  |  |
|  | * locates specific details in simple documents, such as labels and signs |  |  |  |
|  | * identifies how lists are organized (e.g. sequential, chronological, alphabetical) |  |  |  |
| A2.2 | * performs limited searches using one or two search criteria |  |  |  |
|  | * extracts information from tables and forms |  |  |  |
|  | * uses layout to locate information |  |  |  |
|  | * makes connections between parts of documents |  |  |  |
|  | * makes low-level inferences |  |  |  |

**This task:** was successfully completed\_\_\_ needs to be tried again\_\_\_

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| Learner Comments |
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#### Instructor (print) Learner Signature