ATLT-2520: Socketing

# ATLT-2520: SOCKETING

# **Cuyahoga Community College**

Viewing: ATLT-2520: Socketing

**Board of Trustees:** 

2015-12-03

**Academic Term:** 

Spring 2019

**Subject Code** 

ATLT - AIT-Lifting Technologies

**Course Number:** 

2520

Title:

Socketing

#### **Catalog Description:**

Covers the basic types and fabrication of socket assemblies. Outlines the techniques and processes required to fabricate these assemblies. Features the application and installation procedures of the various types of socketing.

#### Credit Hour(s):

1

#### Lecture Hour(s):

1

# Requisites

#### **Prerequisite and Corequisite**

Departmental approval: admission to Lifting Technologies apprenticeship program.

#### **Outcomes**

#### Course Outcome(s):

Discuss the different types of swage sockets and describe the differences associated with each, including use/application and fabrication.

# Objective(s):

- 1. List and define the terms related to swage sockets.
- 2. List the basic types of swage sockets.
- 3. Explain the critical information required (Plane, CP-CP).
- 4. Describe techniques and processes used in swaging.
- 5. Differentiate between swage spelter sockets

### Course Outcome(s):

Discuss the different types of spelter sockets and describe the differences associated with each, include use/application and fabrication

#### Objective(s):

- 1. List and define the terms related to spelter sockets
- 2. List the basic type of spelter sockets.
- 3. Explain the critical information required (Plane, CP-CP).
- 4. Describe techniques processes used in speltering.

#### Methods of Evaluation:

- 1. Participation
- 2. Assignments
- 3. Quizzes & Exams
- 4. Practical application projects

#### **Course Content Outline:**

- 1. Swage Sockets
  - a. Terminology
    - i. Open
    - ii. Closed
    - iii. Crosby Group
    - iv. Boom Pendant
    - v. Crane Cables
  - b. Basic Types of Swage Sockets
    - i. Boom Pendants
    - ii. Crane Cables
  - c. Critical Information
    - i. Same Plane
    - ii. Opposite Plane
  - d. Techniques and Processes
    - i. Before Swage
    - ii. After Swage
    - iii. Growth
    - iv. Swaging Charts
  - e. Swaging versus Speltering
    - i. Swage
      - 1. Machinery
      - 2. Shank
      - 3. Die
      - 4. Gauges
    - ii. Spelter
      - 1. Resin
      - 2. Zinc
      - 3. Cleaning
      - 4. Brooming
- 2. Spelter Sockets
  - a. Terminology
    - i. Open
    - ii. Closed
    - iii. Crosby Group
    - iv. Boom Pendants
    - v. Crane Cables
  - b. Basic Types of Swage Sockets
    - i. Boom Pendants
    - ii. Crane Cables
  - c. Critical Information
    - i. Same Plane
    - ii. Opposite Plane
  - d. Techniques and Processes
    - i. Brooming
    - ii. Cleaning
    - iii. Wire Lok
    - iv. Zinc
    - v. Safety

# **Resources**

Mazzella Lifting Technologies. Mazzella ISO 9001:2008 Quality Training Manual. 6. Cleveland, OH: Mazzella Lifting Technologies, 2013.

ATLT-2520: Socketing

Wire Rope Technical Board. Wire Rope User's Manual. 4th. Alexandria, VA: Wire Rope Technical Board, 2005.

Wire Rope Technical Board. Wire Rope Sling User's Manual. 3rd. Alexandria, VA: Wire Rope Technical Board, 2007.

#### **Resources Other**

Websites

http://www.mazzellacompanies.com/mazzellalifting

http://www.thecrosbygroup.com/

Other Materials

The Crosby Group Wire Rope End Terminations User's Manual

Mazzella Companies Technical Manual and Commercial Product Catalog - 2013

Top of page

Key: 483