

Welding 2

Apply safety principles, practices, philosophy, and guidelines to the work environment. STS.HS.37.1

- a Complete applicable safety assessment with 100% accuracy. STS.HS.37.1.A
- b Use appropriate Personal Protective Equipment (PPE) while in the lab setting. STS.HS.37.1.B
- c Use eye protection in compliance with Neb. Rev. Statute 79-715. STS.HS.37.1.C
- d Carry out the safe application of tools and machines. STS.HS.37.1.D
- e Explain the main hazards that are possible in the lab setting. STS.HS.37.1.E
- f Demonstrate proper handling and storing of materials. STS.HS.37.1.F

Investigate career opportunities in the welding industry. STS.HS.37.2

- a Describe work behaviors needed to be employable. STS.HS.37.2.A
- b Identify employment trends in the welding industry STS.HS.37.2.B
- c Identify the responsibilities and characteristics of professionals in the welding industry. STS.HS.37.2.C
- d Identify the training, education, certification and licensing requirements for careers in the welding industry. STS.HS.37.2.D

Demonstrate the use of welding communications. STS.HS.37.3

- a Explain welding terminology. STS.HS.37.3.A
- b Describe a quality weld according to the American Welding Society (AWS). STS.HS.37.3.B
- c Measure metric and imperial measurements within an accuracy of a millimeter or 1/32 of an inch. STS.HS.37.3.C
- d Explain mechanical drawings according to the American National Standards Institute (ANSI). STS.HS.37.3.D
- e Explain welding symbols according to the AWS. STS.HS.37.3.E
- f Solve mathematical functions used in welding. STS.HS.37.3.F
- g Interpret information from a welding procedure sheet. STS.HS.37.3.G

Identify the materials, tools, and equipment needed to weld. STS.HS.37.4

- a Identify tools and their use in welding.** STS.HS.37.4.A

- b Identify welding equipment and proper set up procedures according to the manufacturers' recommendations.** STS.HS.37.4.B

- c Identify the material used in welding.** STS.HS.37.4.C

- d Identify the filler material used in welding.** STS.HS.37.4.D

- e Identify types of fasteners, adhesives, and finishes used for welding.** STS.HS.37.4.E

Perform metal cutting operations. STS.HS.37.5

- a Perform an abrasive cutting procedure.** STS.HS.37.5.A

- b Perform a mechanical cutting procedure.** STS.HS.37.5.B

- c Perform a hot (flame) source cutting operation.** STS.HS.37.5.C

- d Perform an arc cutting operation.** STS.HS.37.5.D

- e Perform an automated cutting operation.** STS.HS.37.5.E

Perform welding procedures in the flat, horizontal, and vertical positions. STS.HS.37.6

- a Create a pad of surface welds with no welding defects according to the AWS.** STS.HS.37.6.A

- b Create groove joints with no welding defects according to AWS standards.** STS.HS.37.6.B

- c Create fillet welds with no welding defects according to AWS standards.** STS.HS.37.6.C

Produce a product with welding processes. STS.HS.37.7

- a Use a drawing with welding symbols according to AWS.** STS.HS.37.7.A

- b Cut the materials according to the technical drawing.** STS.HS.37.7.B

- c Weld the materials according to the technical drawing.** STS.HS.37.7.C

- d Finish the materials according to the technical drawing.** STS.HS.37.7.D