

Welding 1

Apply safety principles, practices, philosophy, and guidelines to the work environment. [STS.HS.36.1](#)

- a** Complete applicable safety assessment with 100% accuracy. [STS.HS.36.1.A](#)
- b** Employ appropriate Personal Protective Equipment (PPE) while in the lab setting. [STS.HS.36.1.B](#)
- c** Employ eye protection in compliance with Neb. Rev. Statute 79-715. [STS.HS.36.1.C](#)
- d** Employ the safe application of tools and machines. [STS.HS.36.1.D](#)
- e** Explain the main hazards that are possible in the lab setting. [STS.HS.36.1.E](#)
- f** Demonstrate proper handling and storing of materials. [STS.HS.36.1.F](#)

Explain career opportunities in the welding industry. [STS.HS.36.2](#)

- a** Describe work behaviors needed to be employable. [STS.HS.36.2.A](#)
- b** Identify employment trends in the welding industry. [STS.HS.36.2.B](#)
- c** Identify the responsibilities and characteristics of professionals in the welding industry. [STS.HS.36.2.C](#)
- d** Identify the training, education, certification and licensing requirements for careers in the welding industry. [STS.HS.36.2.D](#)

Explain the use of welding communications. [STS.HS.36.3](#)

- a** Define welding terminology. [STS.HS.36.3.A](#)
- b** Measure metric and imperial measurements with an accuracy of a millimeter or 1/16 of an inch. [STS.HS.36.3.B](#)
- c** Explain mechanical drawings according to the American National Standards Institute (ANSI). [STS.HS.36.3.C](#)
- d** Explain welding symbols according to the AWS. [STS.HS.36.3.D](#)
- e** Explain information from a welding procedure sheet. [STS.HS.36.3.E](#)

Determine the materials, tools, and equipment needed to weld. [STS.HS.36.4](#)

- a** Identify tools and their use in welding. [STS.HS.36.4.A](#)
- b** Identify welding equipment and proper set up procedures according to the manufacturer's recommendations. [STS.HS.36.4.B](#)

c Identify the material used in welding. STS.HS.36.4.C

d Identify the filler material used in welding. STS.HS.36.4.D

e Determine types of fasteners, adhesives, and finishes used for welding. STS.HS.36.4.E

Perform metal cutting operations. STS.HS.36.5

a Perform an abrasive cutting procedure. STS.HS.36.5.A

b Perform mechanical cutting procedure. STS.HS.36.5.B

c Perform a hot (flame) source cutting operation. STS.HS.36.5.C

d Perform an arc cutting operation. STS.HS.36.5.D

Join material using any methods of welding procedure in the flat and horizontal positions. STS.HS.36.6

a Create a pad of surface welds with no welding defects according to AWS standards. STS.HS.36.6.A

b Create groove joints with no welding defects according to AWS standards. STS.HS.36.6.B

c Create fillet welds with no welding defects according to AWS standards. STS.HS.36.6.C

d Produce a product with the welding processes that are available. STS.HS.36.6.D
