

HAZLETON AREA SCHOOL DISTRICT



DISTRICT UNIT/LESSON PLAN

Teacher Name : Richard Tihansky

Subject : Welding Technology

Start Date(s): Q1 Week 5

Grade Level (s): 10- 11-12

Building : HACC

Unit Plan

Unit Title: SMAW Shielded Metal Arc Welding

Essential Questions: What are the advantages and disadvantages of SMAW welding?

In SMAW, which type of welding machine is used and why does it not require a shielding gas?

What type of current is commonly used to weld ferrous metals?

In SMAW, what result can be expected with respect to heat distribution between the base metal and the electrode with DCEN as compared to DCEP?

Standards: Standard CC.3.5.9-10B Determine the central ideas or conclusions of a text; etc....

Standard CC.3.6.9-10.B Write informative or explanatory texts, including the narration of technical processes, etc.

Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities

Summative Unit Assessment: P.O.S. 501: The student will perform safety inspections of SMAW equipment and accessories.

502: The student will make minor external repairs to SMAW equipment and accessories.

503: The student will set up and operate SMAW welding equipment.

Summative Assessment Objective	Assessment Method (check one)
Students will-Perform safety inspections of SMAW equipment. Make minor external repairs to SMAW equipment. Set up and operate SMAW equipment. Make fillet welds in all positions.	<input checked="" type="checkbox"/> Rubric <input checked="" type="checkbox"/> Checklist <input type="checkbox"/> Unit Test <input type="checkbox"/> Group <input checked="" type="checkbox"/> Student Self-Assessment <input type="checkbox"/> Other (explain)

DAILY PLAN

Day	Objective (s)	DOK LEVEL	Activities / Teaching Strategies	Grouping	Materials / Resources	Assessment of Objective (s)
1	Students will-perform safety inspections of SMAW equipment and accessories.	3	Read chapter 8 in the Welding Skills Text beginning on page 91 Identify proper PPE to be utilized while operating SMAW equipment. Identify the different parts of the SMAW welding machine and their functions.	S	Welding Skills Text Book Various Personal Protective Equipment SMAW welding Machine	Formative -Upon completion of the SMAW unit the students will pass a written exam. Summative - The student will pass a performance test on ferrous metals. Student Self - Assessment -The students will analyze their welds for visual defects.
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