

HAZLETON AREA SCHOOL DISTRICT



DISTRICT UNIT/LESSON PLAN

Teacher Name : Richard Tihansky

Subject : Welding Technology

Start Date(s): Q1 Week 6 Grade Level (s): 10-12

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 require a shielding gas?

What is the purpose of slag?

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 GMAW equipment and accessories.

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

503: The student will set up and operate GMAW 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	The student will make minor external repairs to GMAW equipment and accessories.	3	Read chapter 19 in the Welding Skills Text beginning on page 213 Identify proper PPE to be utilized while operating GMAW equipment. Identify the different parts of the GMAW welding machine and their functions.	S	Welding Skills Text Book Various Personal Protective Equipment GMAW welding Machine	Formative -Upon completion of the GMAW 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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