

# HAZLETON AREA SCHOOL DISTRICT



## DISTRICT UNIT/LESSON PLAN

# DAILY PLAN

## Unit Plan

**Unit Title: GMAW Gas Metal Arc Welding**

**Essential Questions:** What are the advantages and disadvantages of GMAW welding?  
 In GMAW, which type of welding machine is used and why does it require a shielding gas?  
 What type of current is commonly used to weld ferrous metals?  
 In GMAW, 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. 601: The student will perform safety inspections of GMAW equipment and accessories.**  
**602: The student will make minor external repairs to GMAW equipment and accessories.**  
**603: The student will set up and operate GMAW welding equipment.**

Summative Assessment Objective	Assessment Method (check one)
Students will-Perform safety inspections of GMAW equipment. Make minor external repairs to GMAW equipment. Set up and operate GTAW 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)

Day	Objective (s)	DOK LEVEL	Activities / Teaching Strategies	Grouping	Materials / Resources	Assessment of Objective (s)

1	Students will-perform safety inspections of 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	<b>Formative</b> -Upon completion of the GMAW unit the students will pass a written exam. <b>Summative</b> - The student will pass a performance test on ferrous metals. <b>Student Self - Assessment</b> -The students will analyze their welds for visual defects.
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