



Real World Problem Scenario

Scenario:	Pressure Vessels
Business:	Plumbers and Pipefitters Marietta Local 168
Business Participant:	Steve Zollar - Apprenticeship Instructor
Career Cluster(s):	Architecture and Construction, STEM
Grade Level:	9-12
Standards & Skills:	G.MG Apply Geometric Concepts in Modeling Situations P.F: Forces, Momentum, and Motion Design and Technology, Topic 4: Evaluate designs using functional, aesthetic, and creative elements 9-12.DT.2.b. Implement, document and present a design process as applied to a particular product, process, or problem

Problem Description:

A realistic, innovative miniature pressure vessel needs to be designed and created to satisfy a particular customer. The pressure vessel must be designed with a specific temperature, pressure, and volume.

Things to be considered or defined for the solution:

- Safety Regulations
- ANSI Standards
- Pressure testing
- Orthographic and isometric design drawings will be needed