Standard

• 3.5.9-12.QQ Implement quality control as a planned process to ensure that a product, service, or system meets established criteria.

 Key Learning (LTTG) Students will be able to employ hands-on problem solving, i.e., designing, making/building, producing, and evaluating outcomes. 	 Unit Essential Question How can I employ hands-on problem solving, i.e., designing, making/building, producing, and evaluating outcomes?
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Essential Question

• How are various resources used in technology and engineering activities?

Key Vocabulary

• Quality Control, Planned Process, and Criteria

Learning Experience

- Students who demonstrate understanding can implement quality control as a planned process to ensure that a product, service, or system meets established criteria.
- Clarifying Statement: Quality control is concerned with how well a product, service, or system conforms to specifications and tolerances required by the design. For example, a set of rigorous international standards has been established to help companies systematically increase the quality of their products and operations.

(Big Idea) Technology & Engineering Curriculum Framework Big Ideas

• Technology and engineering activities require resources.

(SEP) Science and Engineering Practices

• Planning and Carrying Out Investigations - Plan and conduct an investigation or test a design solution in a safe and ethical manner including considerations of environmental, social, and personal impacts.

(DCI) Disciplinary Core Ideas

• HS-ESS3-4 - Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

(TEP) Technology and Engineering Practices

- Making and Doing Demonstrates the ability to regulate and improve making and doing skills.
- Optimism Shows persistence in addressing technological problems and finding solutions to those problems.

Terms

- (ETS) Engineering, Technology, and Applications of Science Standards applicable across the Science, Environmental Literacy & Sustainability, and Technology & Engineering content areas.
- (LTTG) PDE Technology & Engineering Long Term Transfer Goals
- (Learning Experience) A learning experience refers to any interaction, activity, or other experience in which students acquire new understanding, knowledge, behaviors, or skills.
- (Big Idea #) PDE Technology & Engineering Curriculum Framework Big Ideas
- (SEP) PDE Science and Engineering Practices
- (DCI) PDE Disciplinary Core Ideas
- (TEP) PDE Technology and Engineering Practices