

Application of Lean Six Sigma to Reduce Repeated Handling of Material at Tobyhanna Army Depot

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Abstract: The Tobyhanna Army Depot (TYAD) focuses on the maintenance and support of command and control systems across the Department of Defense (DoD). Lean Six Sigma (LSS) uses the Define-Measure-Analyze-Improve-Control (DMAIC) process to facilitate improvement in TYAD’s fabrication of components by eliminating waste and streamlining manufacturing. USMA’s LSS capstone team partnered with TYAD to evaluate and reduce the repeated handling of raw materials and end items associated with the Machining Branch in high numbers over short periods of time, resulting in high transportation and storage costs. Applying the DMAIC process, the USMA LSS capstone team reduced the number of repeated material runs for end items and raw materials by 50% in TYAD’s Machining Shop, resulting in an estimated annual cost savings of \$71,500, while gaining insight on stakeholder interactions. The USMA LSS team’s work allowed for an increase of utilization of LSS for Army applications.

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