

## Abstract

This report proposal and progress report will cover the design of an automated mounting station for a portable bandsaw for the Mechanical Engineering Senior Design course at the Marietta campus of Kennesaw State University. The idea behind this mounting station is for it to provide a more cost-effective alternative to other automated cross-cutting systems, while also providing more accurate and precise cuts into different metals and minimizing operator error and material waste. The purpose of this proposal is to add the mobility of having a portable bandsaw with the precise cutting of a mounted bandsaw, but while minimizing the cost of the overall product. This report will cover the whole process from the original design and controls, to its different design and other processes that could be done, and finally to the final picked design and controls to have the optimal outcome for the price.