



### **TECH 4398**

# **Appendix I: Design Project Abstract**

## Auto-feed mechanism for rivet & grommet setting machine

### **Product Description:**

An improved/auto feed solution for a manual rivet/snap/grommet setting machine.

#### Abstract:

The current process of manually setting snap rivets has become a bottleneck in the production sequence for key products. A solution that allows for rapid loading/placement of rivets/snaps/grommets for manual setting is desired. Design success will be measured in percent improvement a single operator can process manual rivets/snaps/grommets including any prep or staging (currently 5 per minute).

#### **Deliverables:**

The project design group will be expected to deliver a working prototype validating their proposed solution that addresses the problem described above and meets the following criteria:

<u>Safety</u>: Design shall not introduce or expose the operator to any hazards in excess of the current process.

Ergonomics: Interaction with design solution shall not induce fatigue in excess of the current process.

<u>Form factor</u>: Design solution shall fit within the current production flow real estate without impeding other processes.

<u>Durability</u>: Solution must be capable of being operated for a minimum of 160 hours before requiring maintenance or servicing.

<u>Cost</u>: Prototype budget shall not exceed \$300 USD. Final proposed design solution shall not exceed \$600 USD.





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# **Project Customer:**

## Ivan Kekahuna

Principal Engineer

ClimbTech, LLC.

7303 Burleson Rd.
Suite 901
Austin, TX 78744
P: 512.308.6444
ivan@climbtech.com
www.climbtech.com