

Manufacturing of the Coffee De-pulper "Camiseta"



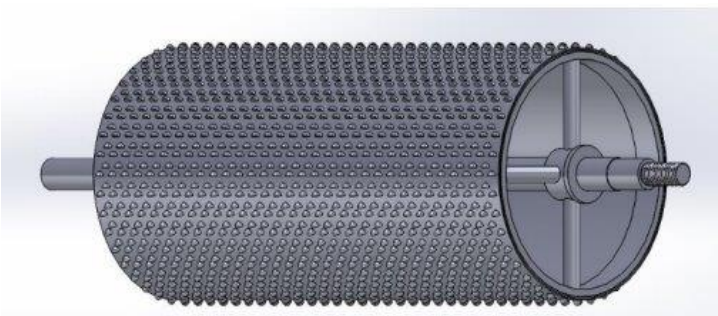
From left to right: Carl Dela Cruz, Malaki-Milton Jackson, Madelyn Wick, and Leif Benson

PROJECT SUMMARY:

Our senior design project focuses on improving the manufacturing process of the *camiseta*, the drum component of a coffee cherry de-pulper used by Peruvian coffee farmers. Manually creating dimples in the *camiseta* is time-consuming and inconsistent, affecting coffee bean quality. Our solution enables the efficient and uniform production of dimples - implementing a hydraulic press attachment - using locally available materials and manual operation.

DESIGN GOAL:

Implement a manufacturing process for the *camiseta* that allows for the consistent and efficient formation of dimples; while remaining feasible for rural farmers and manufacturers in the Sacred Valley in Peru.



THE ANDEAN ALLIANCE FOR
SUSTAINABLE DEVELOPMENT

TEAM 19

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DESIGN CONSTRAINTS:

- **Material Availability:** Must use locally accessible materials
- **Manufacturing Method:** Must function without electricity
- **Cost:** Maximum cost must not exceed \$1,000
- **Quality:** Must have uniform dimples
- **Cultural Relevance:** Must align with the skills and practices of local farmers and artisans
- **Scalability:** Process must be replicable and adaptable for wider implementation

