### Challenges
- Commemorate the opening of Ingram Hall, College of Science and Engineering by designing a penny press machine
- Demonstrate the capabilities of the new Ingram Hall Makerspace by utilizing as many tools in unique ways as possible
- Determine whether to manufacture in house or to outsource due to time constraints and machinery available

### Design
- After calculating the required force to press a penny, a press assembly was designed and manufactured in house
- An all acrylic housing was designed to hold all the components and to provide support for the press mechanism
- A pedestal was created to contain the quarters, and support the assembly. Maroon paint was used to represent Texas State and stone was selected to resemble the Ingram Hall pillars.
- A large quantity of designs were created and polled for the best representations of Ingram Hall.

### Tools Utilized:
- CNC Mill/Lathe
- Manual Mill/Lathe
- CNC Plasma Table
- Welding Shop
- Laser Etchers
- Sheet Metal Brake
- 3D Printers
- Waterjet
- Single Ring Roller
- Table Saw
- Cold Saw
- Band Saw

### M2.5 Ingram Hall Commemorative Penny Press

#### Penny Press Machine
- Wood Shop planed slats
- All internal mechanisms CNC and manual Milled/Lathed
- Laser Etched descriptions and instructions
- Plasma cut plaque
- 3D printed coin delivery system
- Hydraulic rolled and welded tube wheel
- Table Saw cut acrylic housing
- Waterjet cut stone drop pan
- Welded and formed sheet metal base

#### Selected Penny Designs

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**Texas State University**

*The rising STAR of Texas*