



LITHIUM PROCESSING CHAMBER

Project Objective

To design and manufacture a lithium processing chamber to heat and press lithium for Dr. Wood's battery science research project at San Diego State University

Design Specifications

- Ability to control the atmosphere in the lithium chamber (pressure of 1520 mm Hg and vacuum of 200 mm Hg)
- To do heating and pressing of lithium (reach 181°C of melting point)
- A size of chamber must fit inside the glove box used in Dr. Wood's lab
- The chamber materials must be non-reactive with lithium

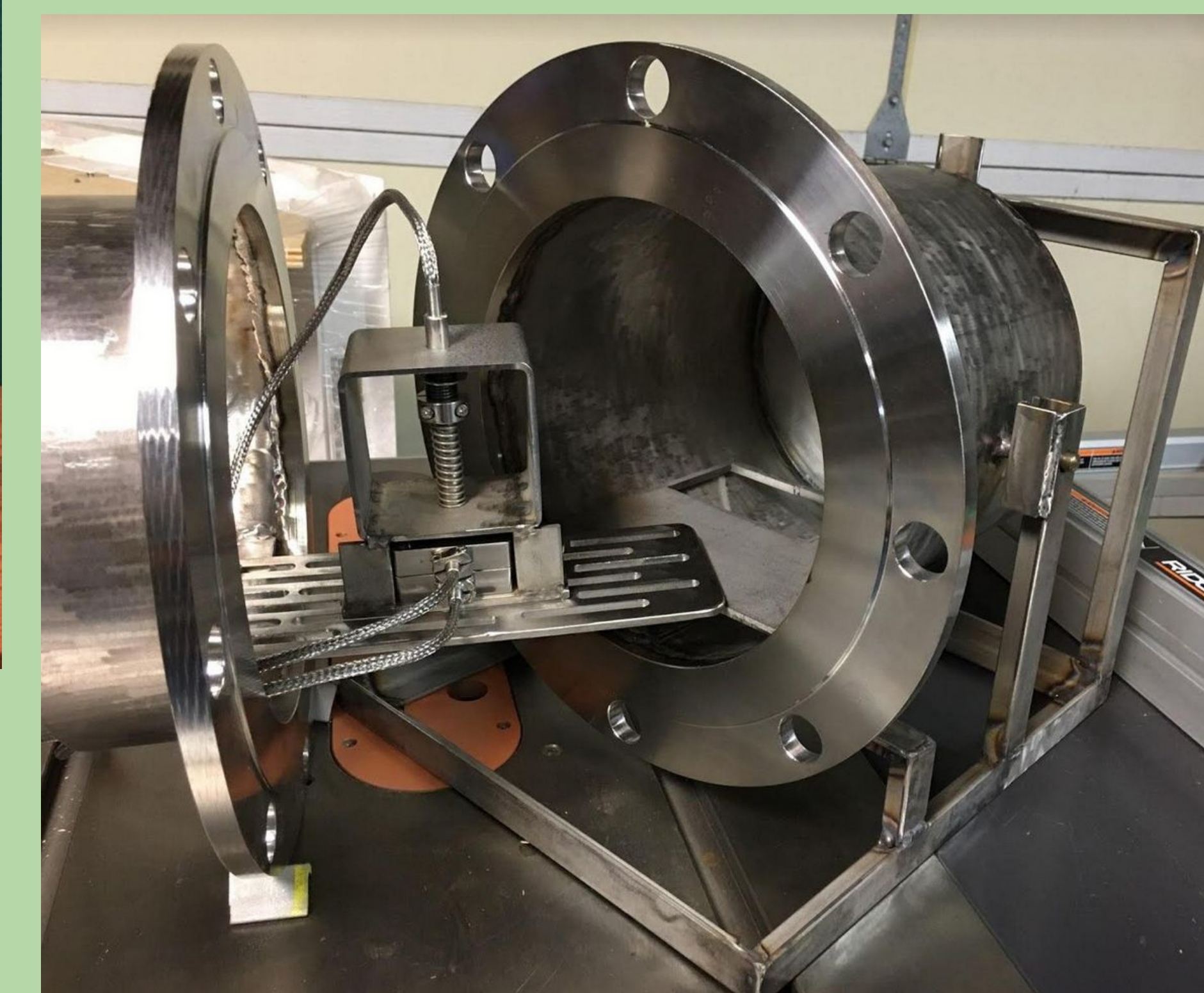
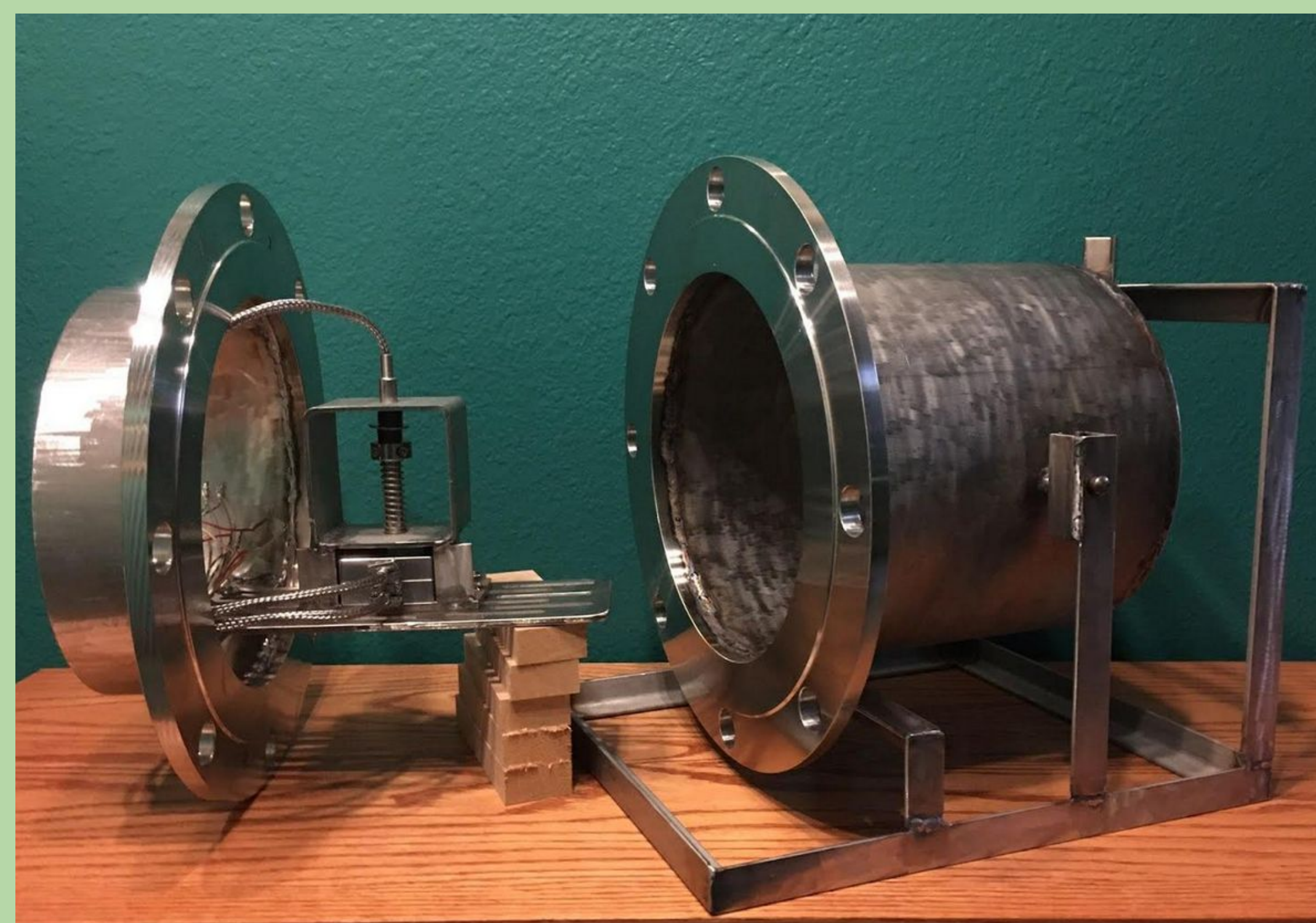
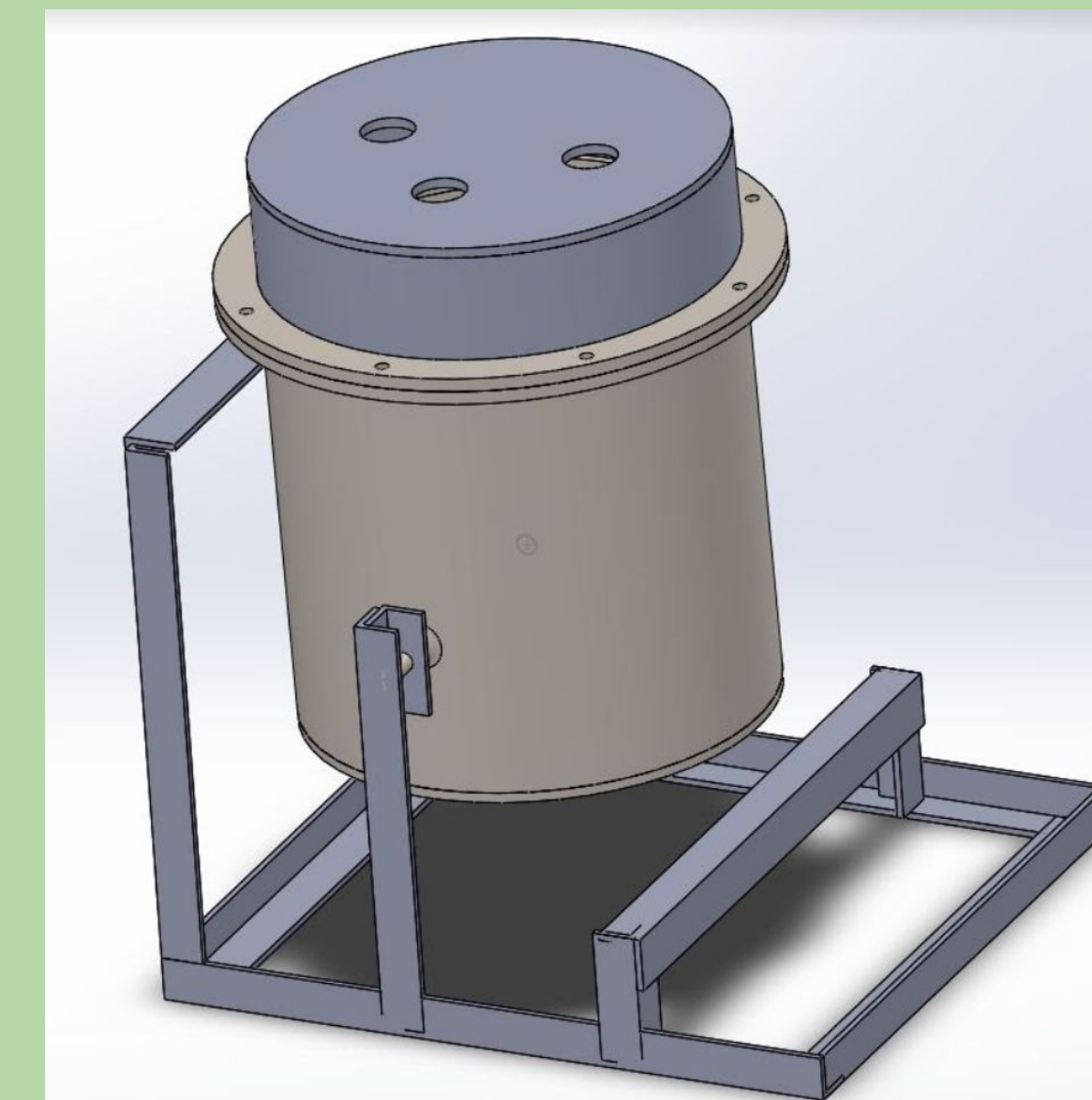
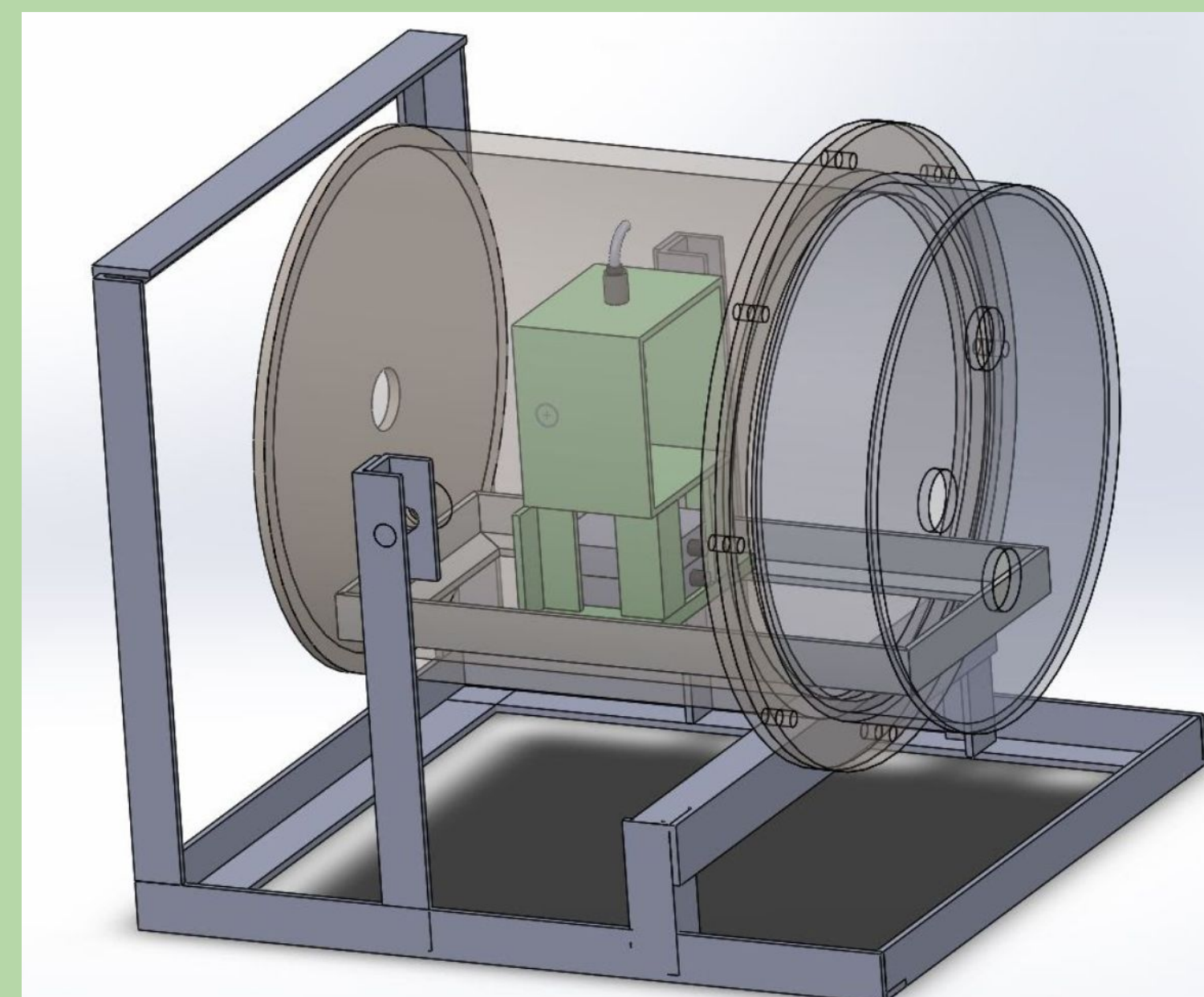
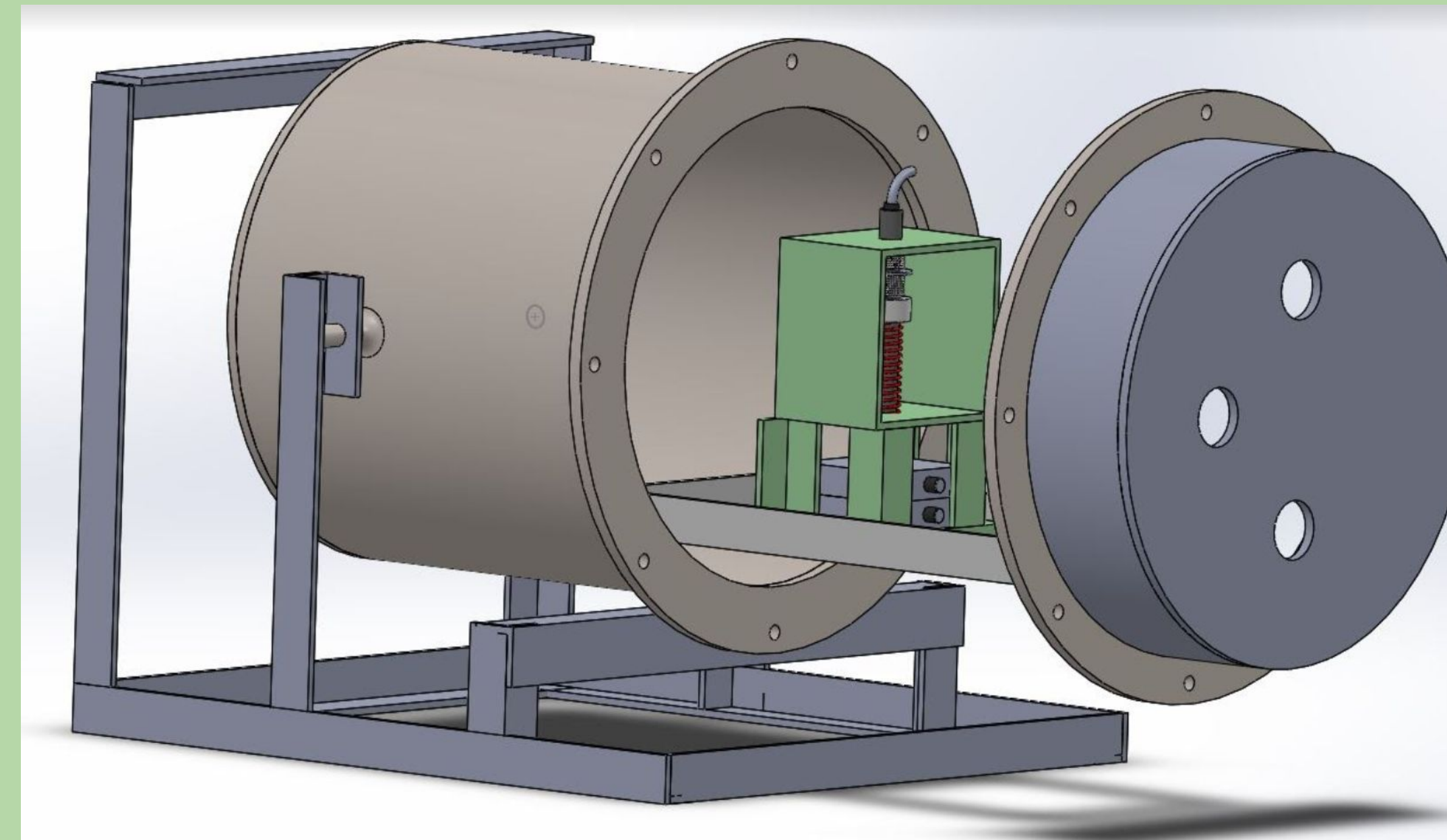
Team



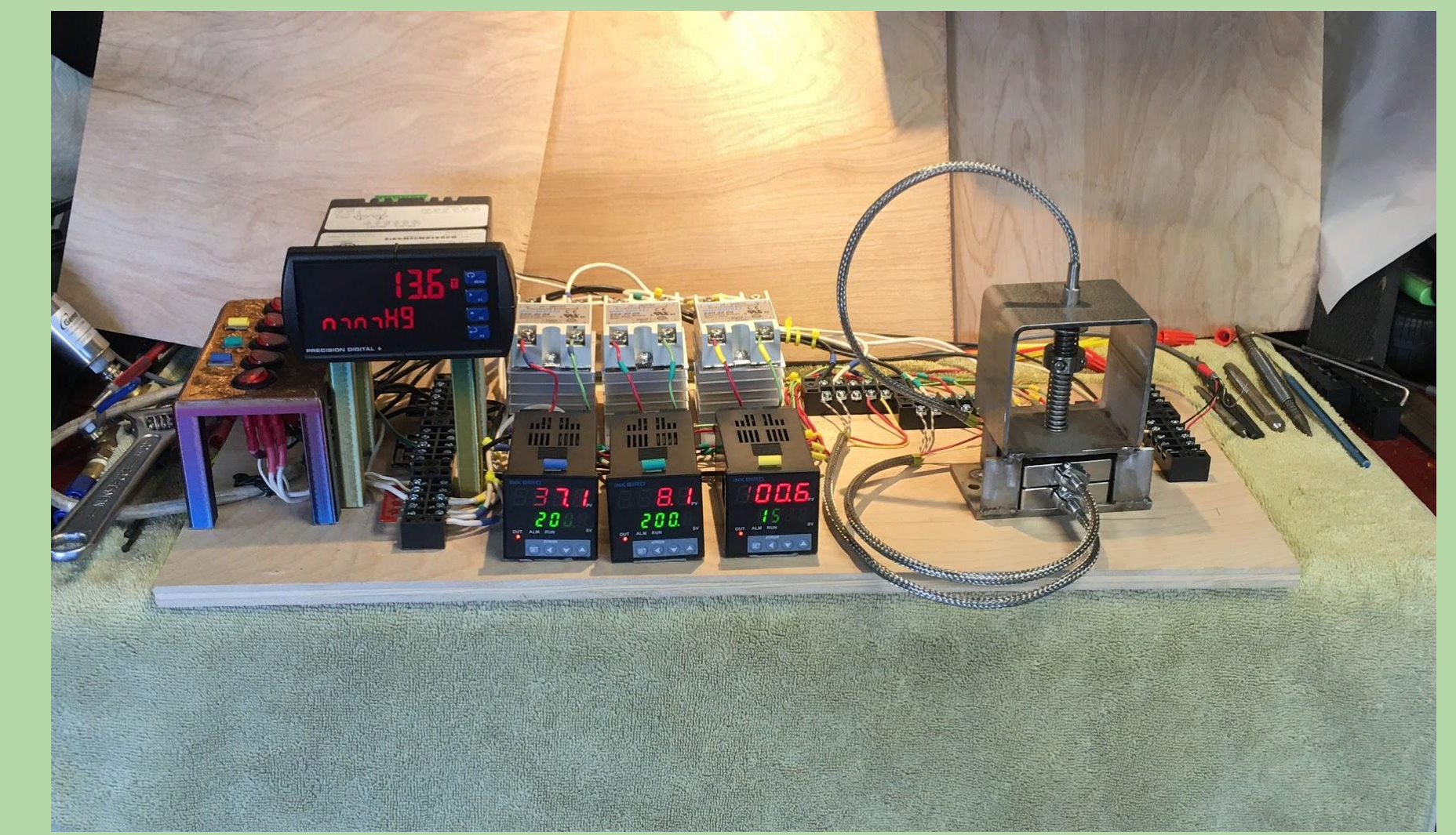
Mike Johansen Ilze Sarma Jack Bowen

Sponsor: Dr. K. Wood, Faculty advisor: Dr. K. Moon

Design



Testing



Results

- Produced chamber met all design specifications
- Tests of pressing process were successful

Fall 2020