Egan Food Technologies Dual Slab Forming Line



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Project Scope

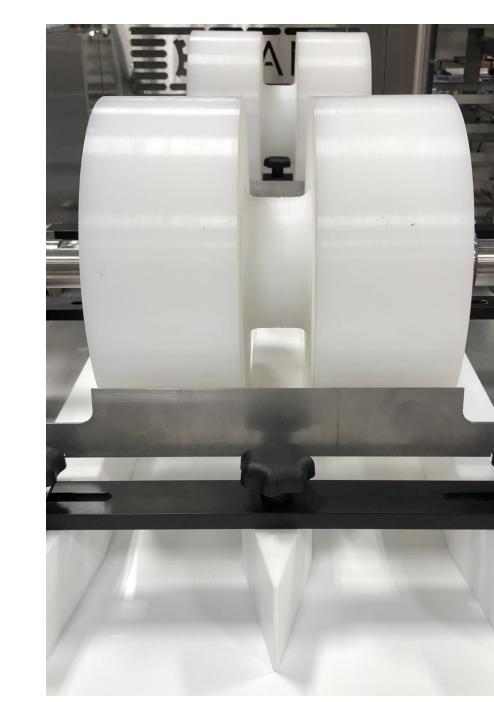
Problem Statement:
Modify an existing slab forming machine design to generate two, single-bar-length wide slabs with adjustable dimensions.

Major Goals:

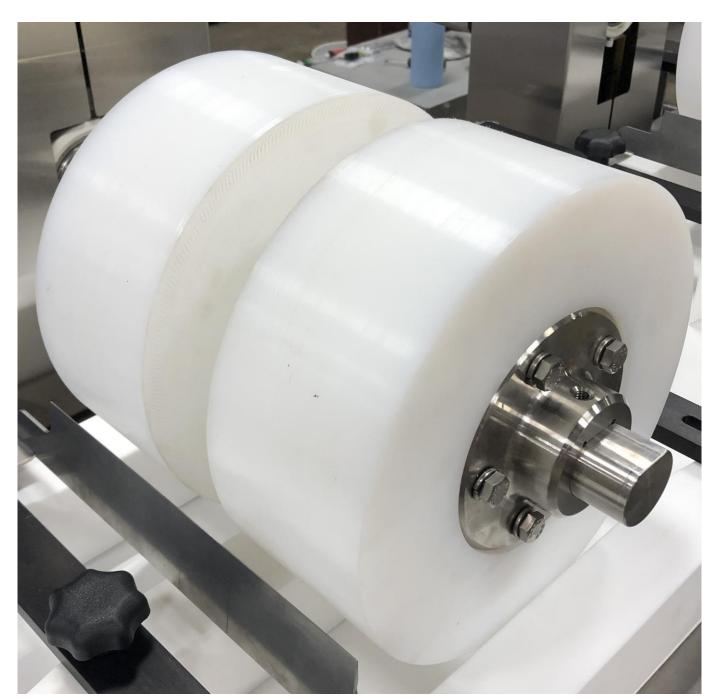
- Incorporate all product dimensioning operations into one processing line
- Improve sanitation efficiency
- Line to be operated by one person

Key Specifications

- Includes two cantilevered pressing rolls
- Includes a servo-driven bar cutter with a 2.25" travel
- Project height and length are manually adjustable
- Product length is configurable between 2.5" – 5.0" in 0.25" increments
- Product height is configurable between 2.5" – 5.0" in 0.25" increments
- Produces 120 products per minute
- Product consists of pre-mixed fluid binder and solid particles
- All materials to be FDA safe and washdown certified
- Schneider Electric PLC and HMI



a. Dual-lane accommodation



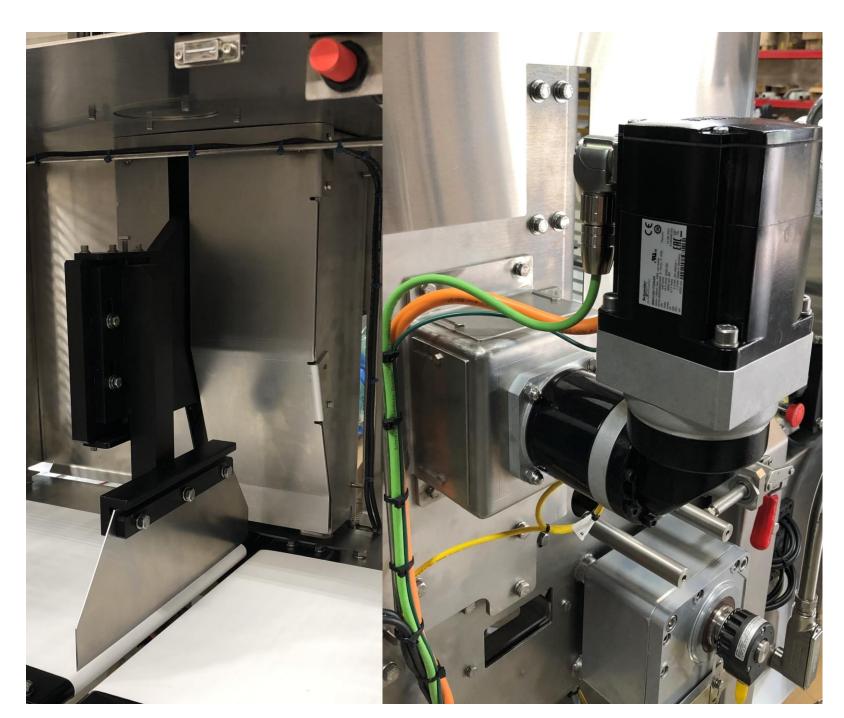
c. Cantilevered pressing rolls



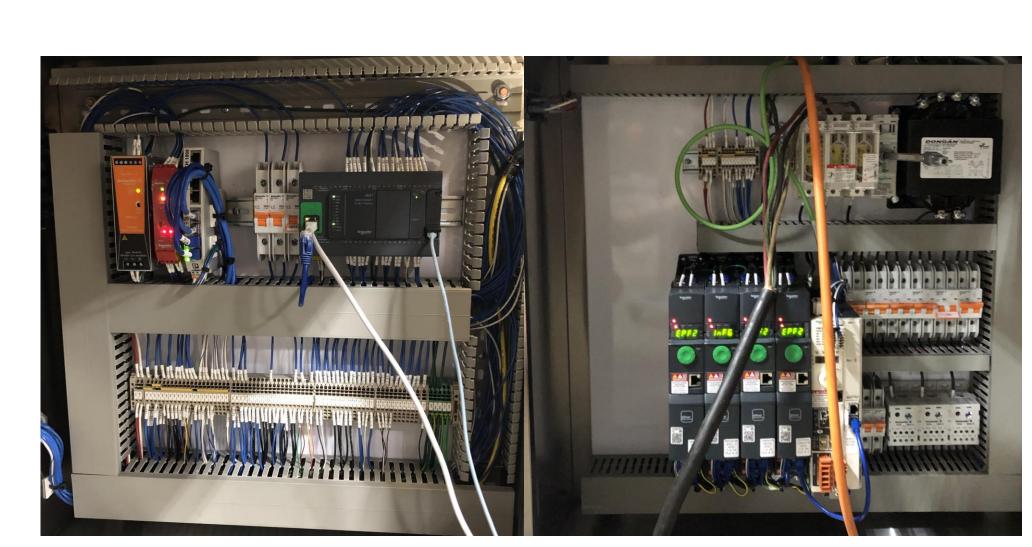
e. Crowned roller belt tracking



b. Adjustable outer lane guides



d. Servo-driven bar cutter



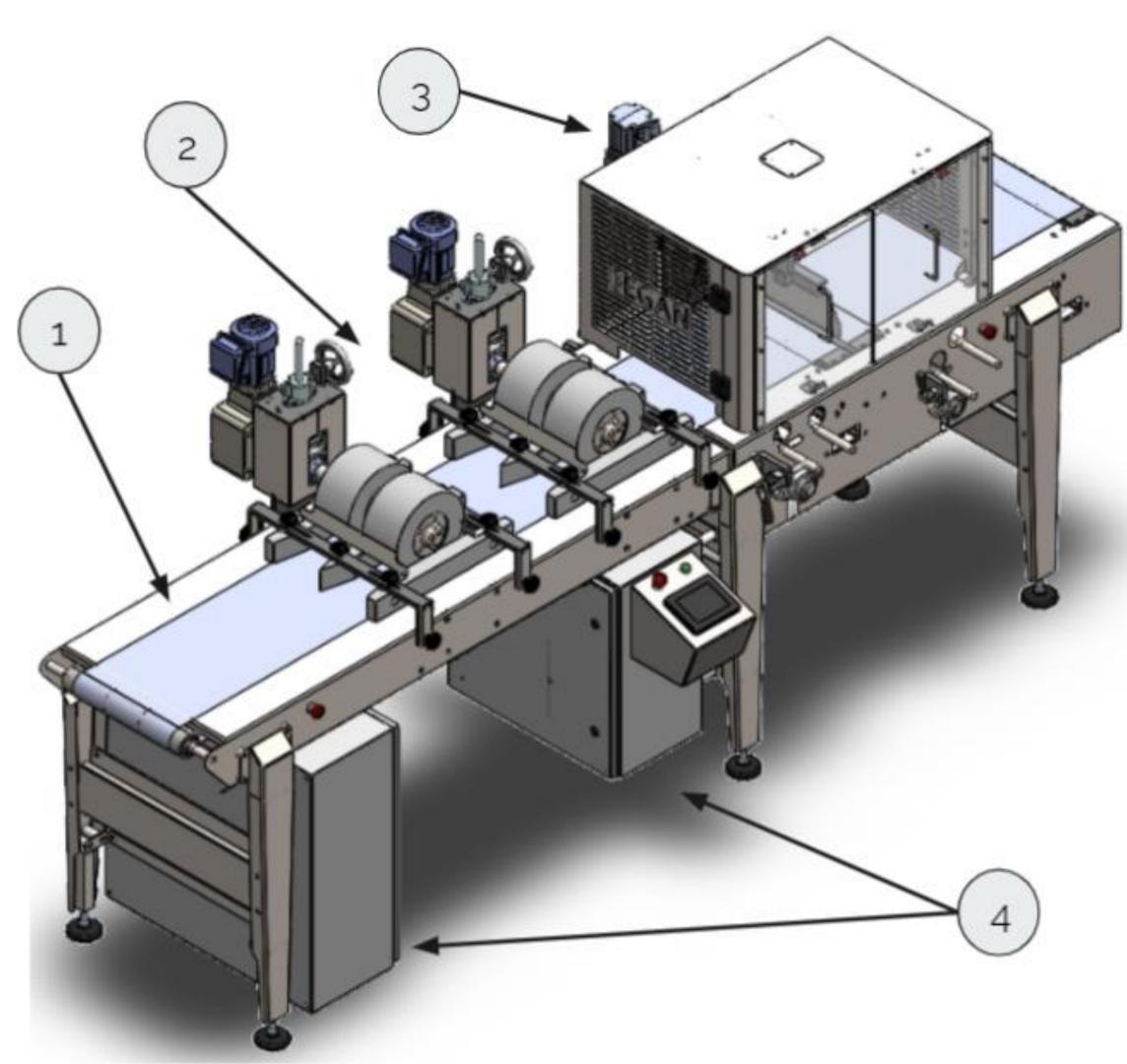
Electrical panels HV (left) and LV (right)

Critical Functions

- a. Dual-lane accommodation
- b. Adjustable outer lane guides
- c. Cantilevered pressing rolls
- d. Servo-driven bar cutter
- e. Automatic belt tracking

Major Subassemblies

- 1. Deck assembly
- 2. Pressing section
- 3. Bar cutter section
- 4. Electrical system



Full CAD Assembly