

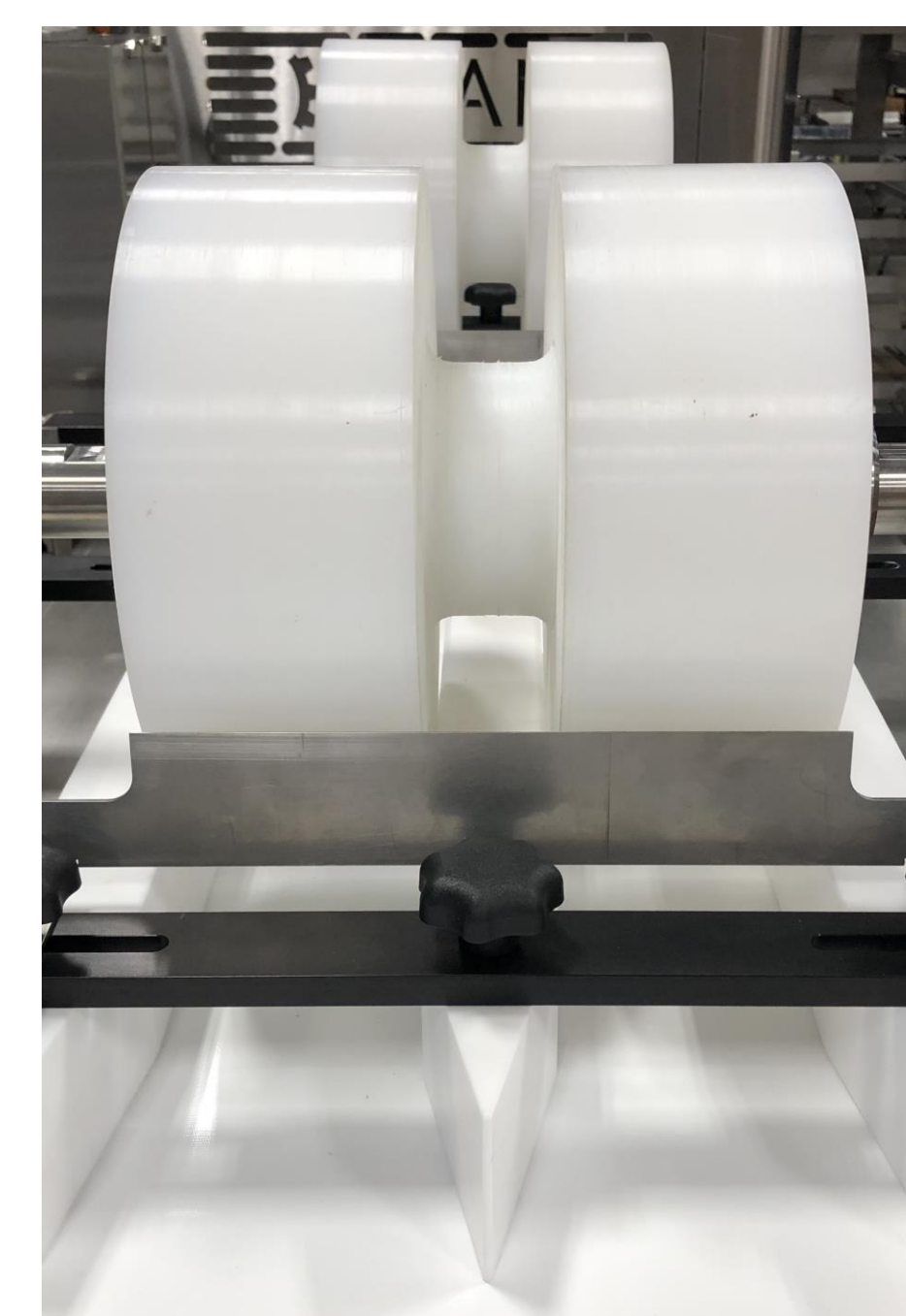
## Project Scope

### Problem Statement:

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

### Major Goals:

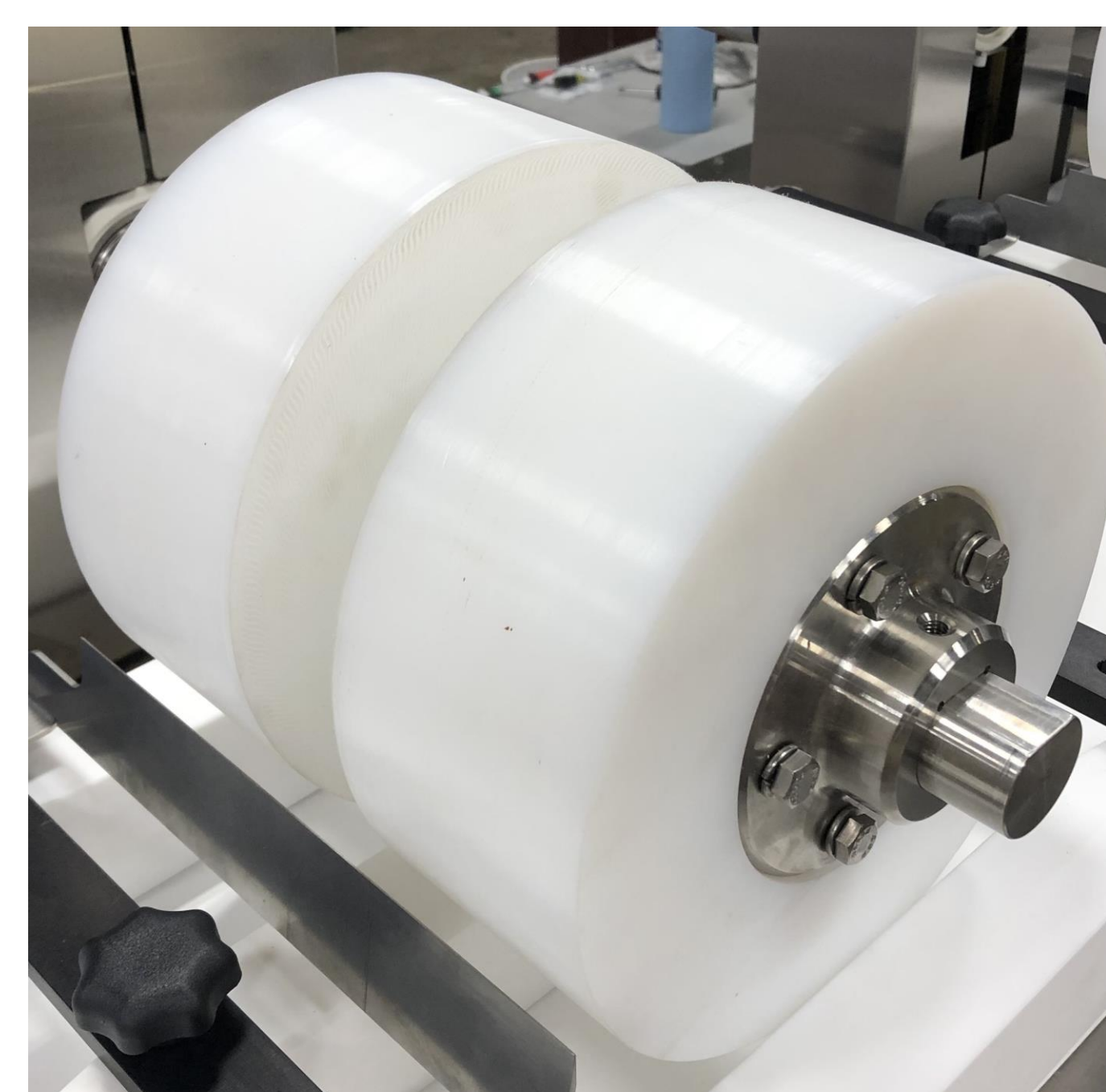
- Incorporate all product dimensioning operations into one processing line
- Improve sanitation efficiency
- Line to be operated by one person



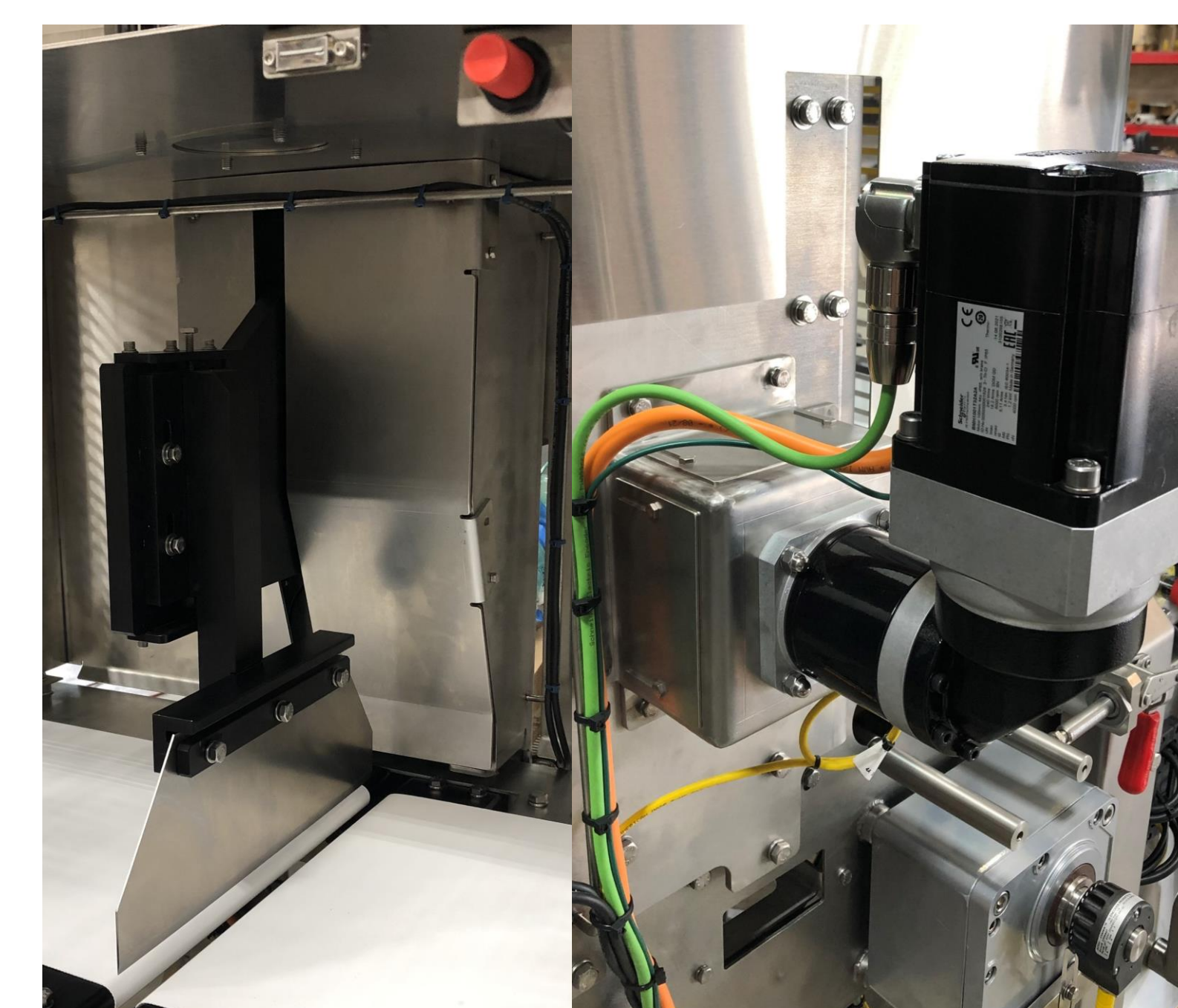
a. Dual-lane accommodation



b. Adjustable outer lane guides



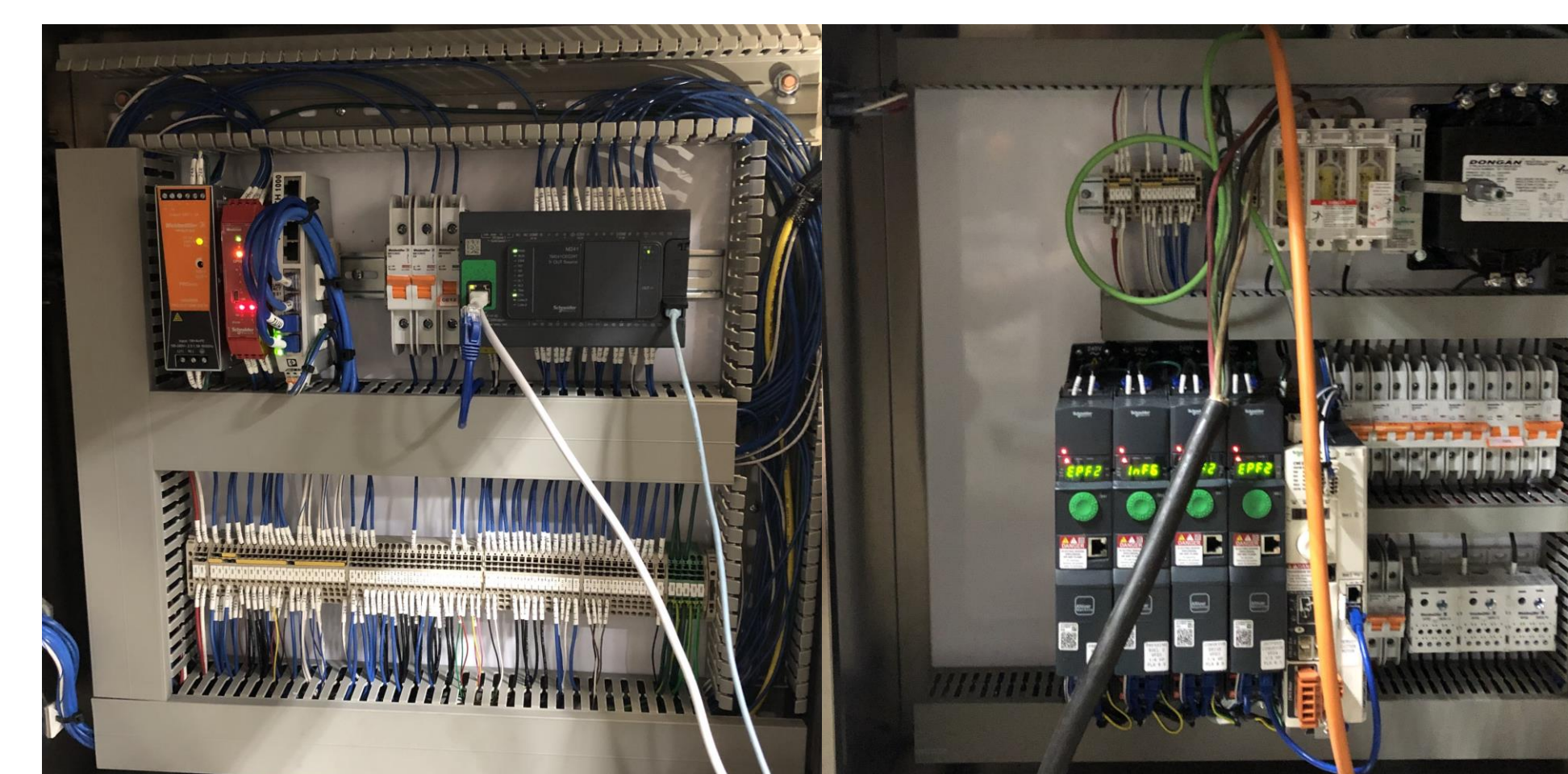
c. Cantilevered pressing rolls



d. Servo-driven bar cutter



e. Crowned roller belt tracking



Electrical panels HV (left) and LV (right)

## Critical Functions

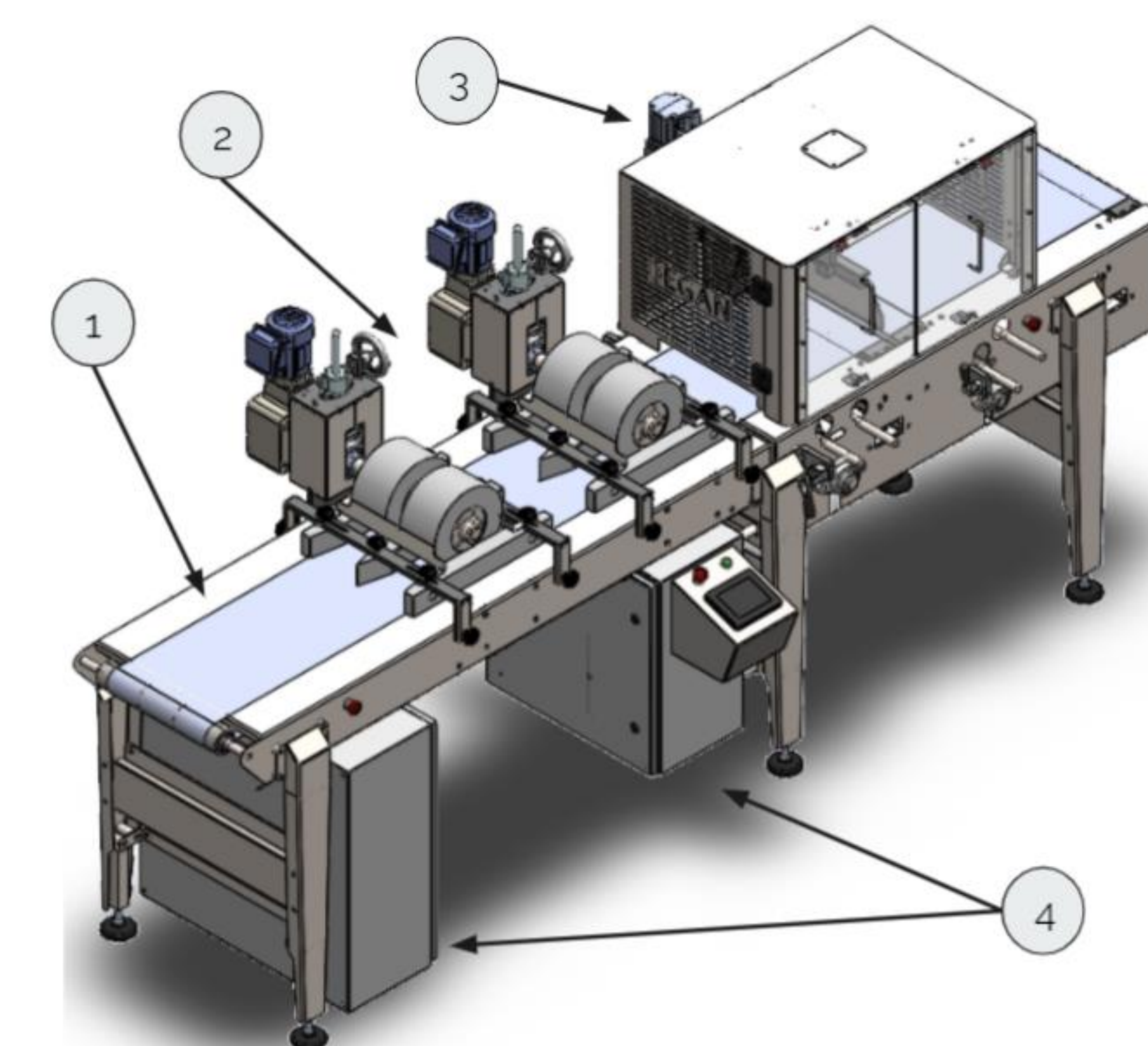
- a. Dual-lane accommodation
- b. Adjustable outer lane guides
- c. Cantilevered pressing rolls
- d. Servo-driven bar cutter
- e. Automatic belt tracking

## Major Subassemblies

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

## 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



Full CAD Assembly