

# Automation of Production Process for Small Roll Labels

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Project Sponsor: Buckeye Business Products

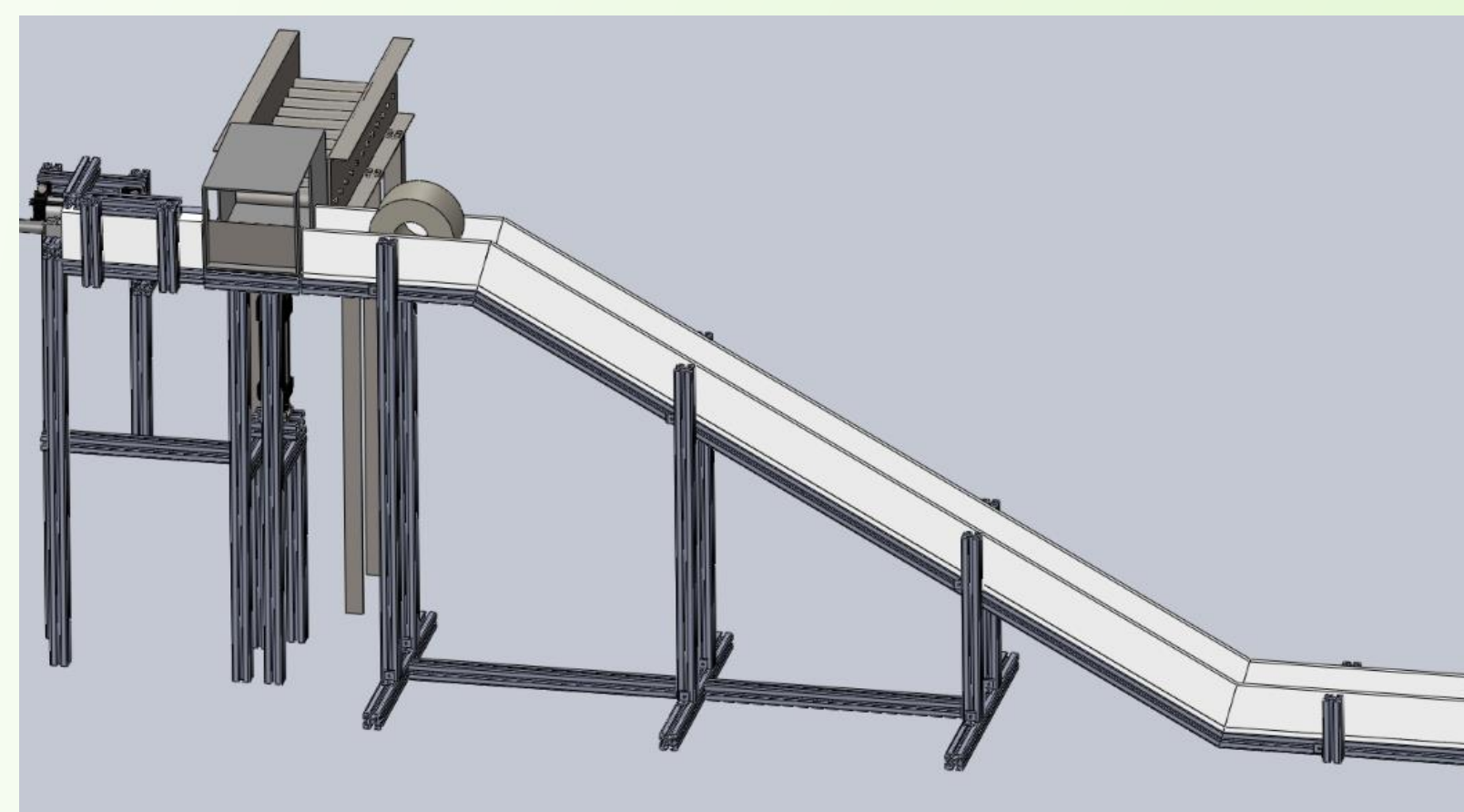
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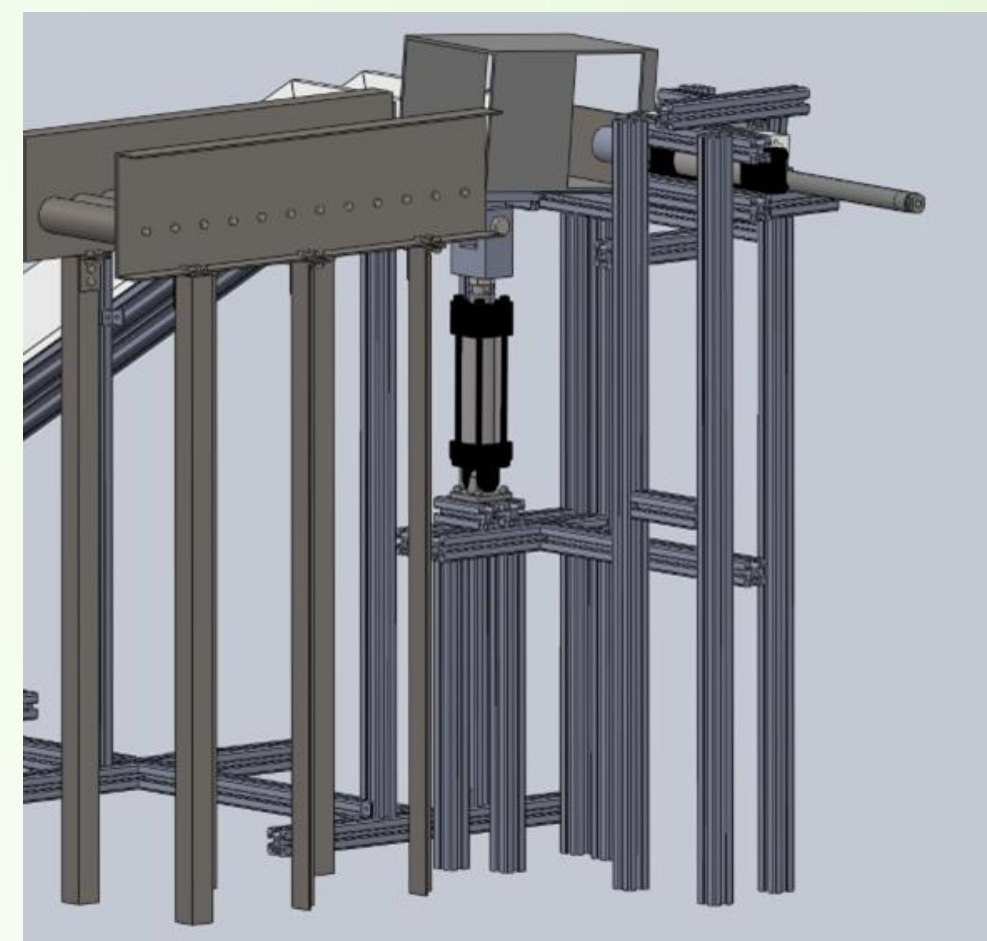
Cleveland State University

- Simple way to move rolls from winding machine to shipping boxes

- Designed specifically for one particular machine at Buckeye



Structure Design



- Sturdy structure to move labels from rolling to packaging
- Aluminum & Plastic composition
- Powered by 1 motor, 3 pneumatic cylinders, & gravity
- Labels pushed down slide or discarded for inspection



Built Structure

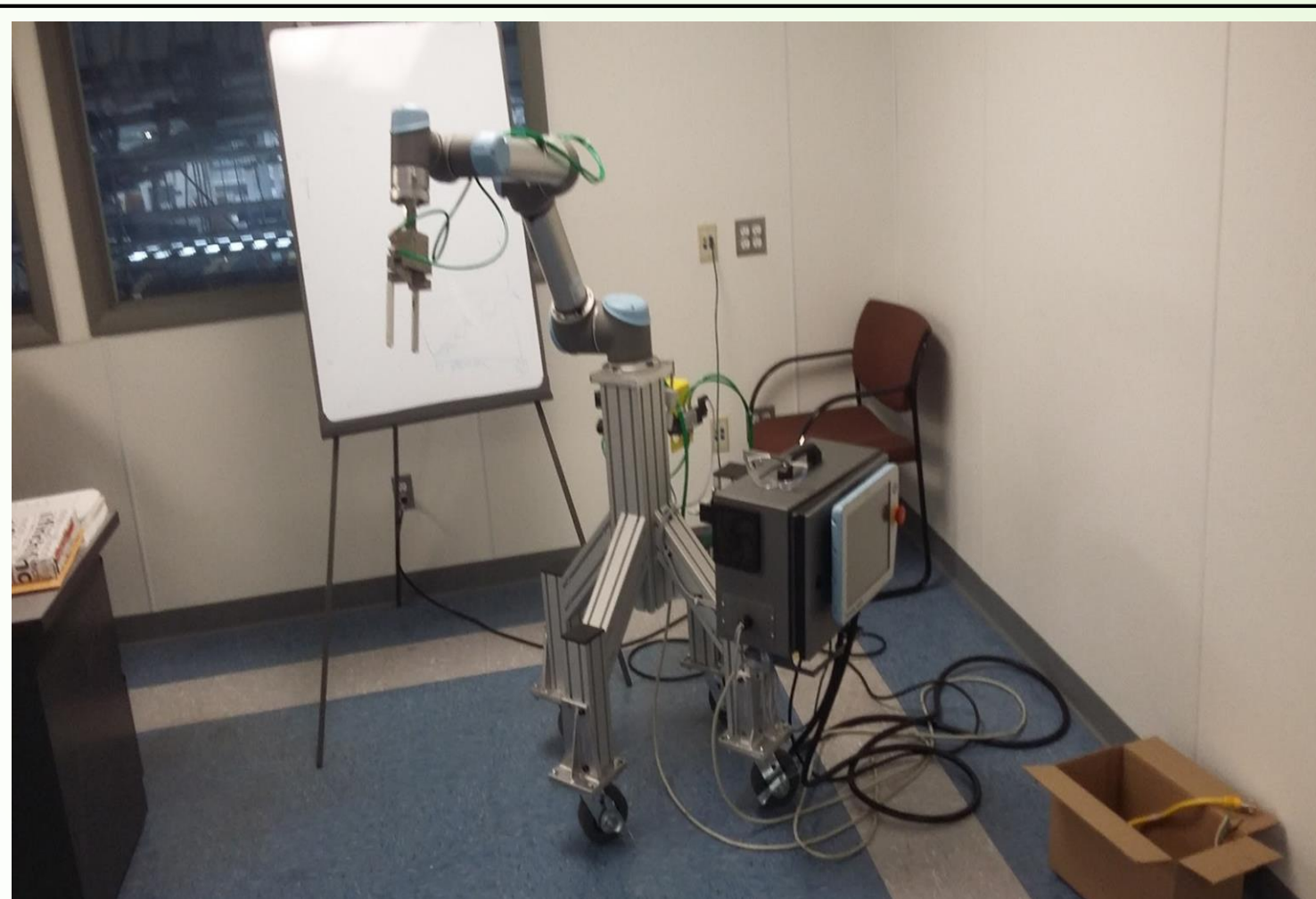


Figure 1 : Photo of the Universal Robot 5

- We used the Universal Robot (Shown in Figure 1) as the packaging mechanism and the controller of this project.
- Includes an I/O Board to interface with sensors/actuators

- Wiring schematic ( shown in Figure 2) details how all electric components are connected to previously mentioned I/O board

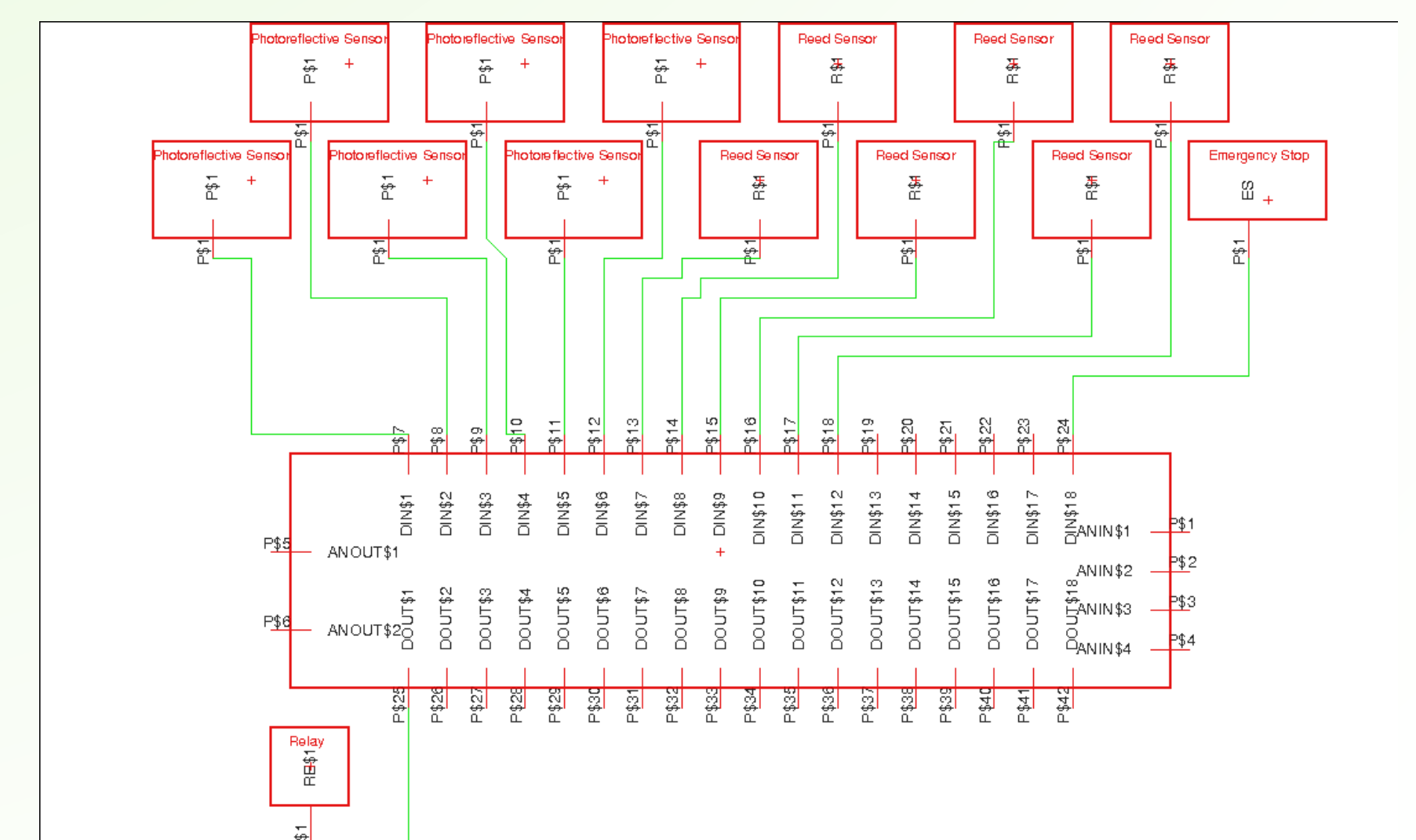


Figure 2 : Wiring Schematic