

Salico - Mech Decisions

11.14.2024

Up-Down Actuation

Average pickable height is 78.5mm, or 3.09 inches

Option #1 Pneumatic: how many states do we want?

- Double acting piston with springs on both sides (3 states)
- 2 pistons in series (3 states)
- Single/Double acting piston with flow control on each end (2 states)
- **Controlling flow controls speed**

Option #2 Electric (Linear): Mechanism to replace the linear motion of pistons

- Linear actuator
- Lead screw
- chain/belt

Option #3 Electric (rotating): Rotating with a large radius to act straight

Tip Transportation

Due to roller z-movement, a secondary collection bin is probably needed

Option #1 Active dumping bin

- Powered with servo or brushed motor
- Powered with air cylinders

Option #2 Passive dumping bin

- Rotated with some kind of mechanical contact
- Small rack and pinion?

Option #2 Flappy Transporter

- Brushed motor that spins and clears out shallow collection bin onto conveyor