



SHEET PICKER



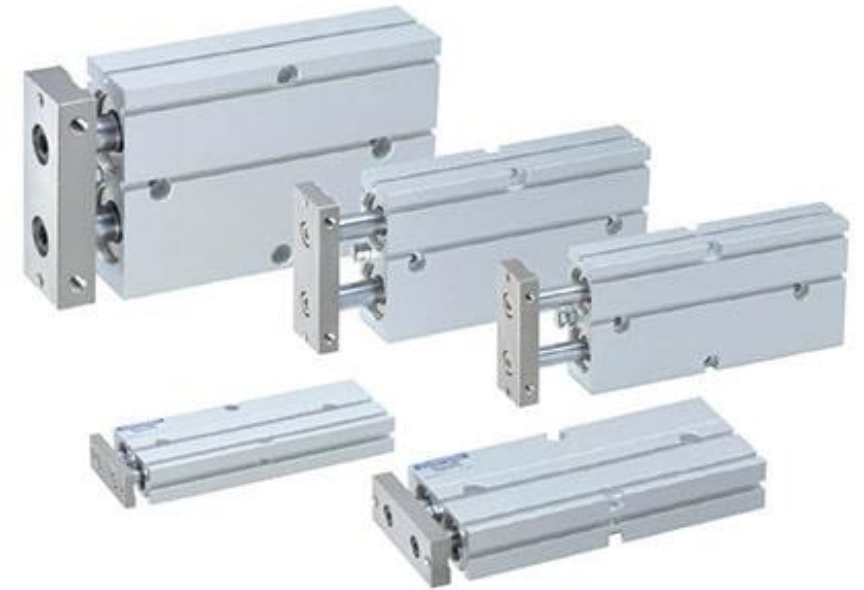
Opportunity

- Customers were previously moving one panel at a time. They were searching for a solution to move multiple panels across the factory and distribute the panels to be mounted.



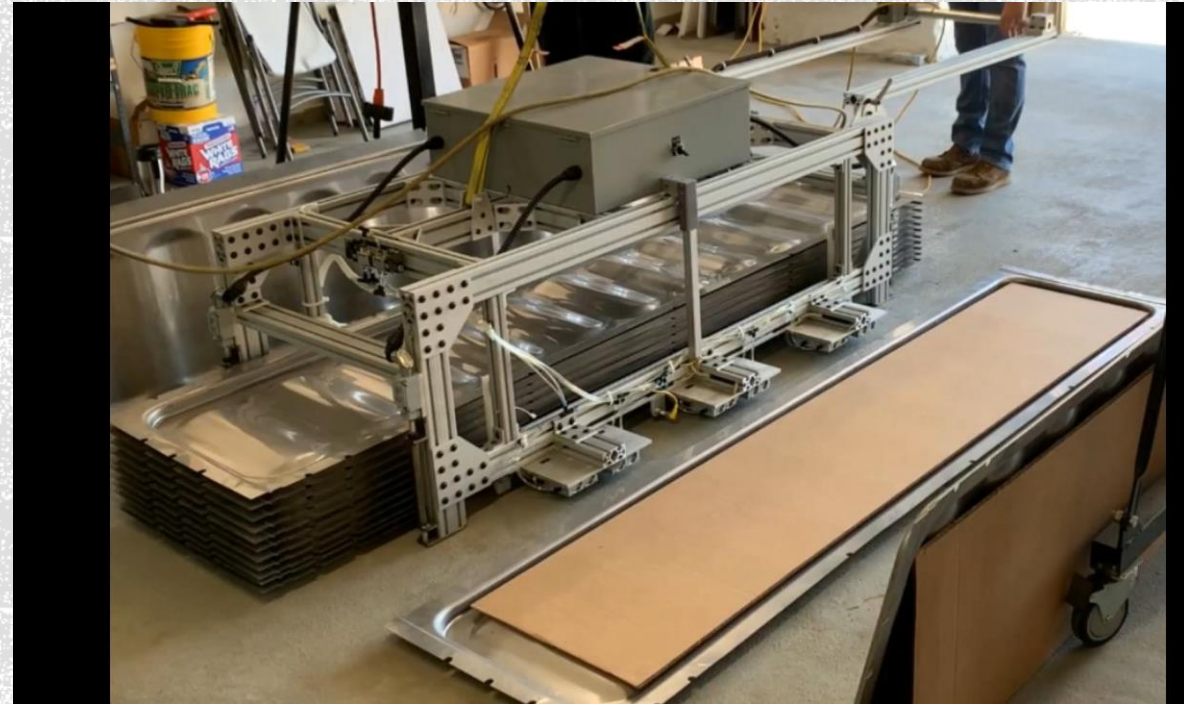
Solution

- We came to the solution of developing a machine that would allow operators to carry a stack of panels. Then drop a single panel to distribute them as needed.
- Used sets of pneumatic actuators at different heights opening and closing in sequence to index down the panels.



Operation

- Machine is carried by overhead crane and guided by operator.
- Load mode
 - Retracts all actuators to be able to load stack.
- Operate mode
 - Operate push button starts the cycle. First it retracts the bottom actuators to drop the bottom most panel while holding the rest of the stack with the top. After lifting off the ground the bottom actuators extend, and the top actuators retract indexing the stack to the bottom most actuators. Finally, the top actuators extend and are ready to catch the rest of the stack once the operate button is pressed again.
- Safety Precautions
 - End switches were installed on legs to verify panel is safe to drop. This eliminates the ability to drop a panel while in air with overhead crane.





Sheet Picker with Panels



Installed Actuators

