



CASE STUDY

Automated Clutch Assembly Pack Machine

Problem:

A company recently contacted Flexible Automation Inc. with a need to assemble clutch packs and be able to run verification tests post assembly to ensure quality. They also wanted to be able to automate the entire process to allow for uninterrupted production.

Solution:

With a deep history of experience to draw on, FAI was confident in its ability to find a solution.

After many design meetings, what came about was a clutch pack assembly machine using a linear assembly process, featuring a servo gantry unit with multiple pneumatic slides to assemble the clutch packs.



Mid-point and post-assembly measurements verify the thickness of the clutch packs using load-cells and LVDTs. This ensures that all packs are produced to the highest standard set forth by the client. With the goal of uninterrupted production, Flexible Automation Inc. integrated part magazines on either side of the machine, allowing for continuous production with minimal human interaction needed.

Additionally, due to its adjustable part magazines and part specific programming parameters, the machine is capable of running multiple different codes (sizes).

About Flexible Automation Inc.:

We are a group of automation, engineering & design specialists that creatively solve assembly problems. Based in Michigan, we have strong mid-west work ethics with a tenacity to do everything it takes to find a solution. We feel this, along with our staff of over 50 automation experts is what allows us to be successful. We'd love to find a solution to your assembly challenges.