

ELECTRONICS APPLICATION



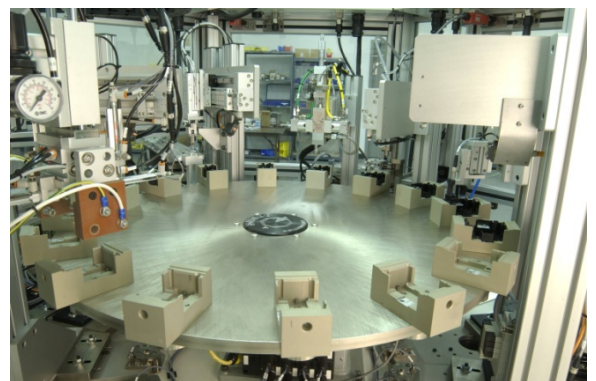
Wall Mount Switch Assembly Line

A scalable, modular, and flexible assembly line with over 40 individual processes

The automation strategy for this program was to develop a turnkey assembly line to assemble and inspect a wall mount switch, consisting of over 40 separate operations. The equipment needed to be flexible enough to accommodate ongoing design changes as well as assemble new products being developed in the product category. Demco Automation utilized both rotary dials and in-line chassis from its Assembly Line product family coupled with a Bosch power-and-free pallet system.

The result was a robust assembly line that improved cycle time, exceeded yield requirements, and was delivered in 26 weeks. The line was installed in one week.

Since the initial installation, additional processes have been added to replace manual operations. Additionally, complete new products within the switch family have been successfully introduced and assembled on the line by adding several new Demco Wedge™ stations and through re-arranging of some existing Wedge stations.



System Details

Base Machines:

- 16 Station Assembly Line Rotary Dial (1)
- 10 Station Assembly Line Rotary Dial (2)
- 8 Station Assembly Line In-line (2)
- 4 Station Assembly Line In-line (3)
- 2 Station Assembly Line In-line (2)

Wedge Stations:

- | | |
|-----------------------|-------------------------|
| • Pick and Place (14) | • Screw deformation (1) |
| • Dispense (2) | • Triac form (1) |
| • Flip and Rotate (2) | • Press (2) |
| • Solder (3) | • Electrical test (2) |
| • Laser Etch (1) | • Crimp (2) |
| • Laser Calibrate (1) | • Washer load (1) |
| • Vision Inspect (1) | • Spring insert (1) |
| • Rivet (1) | • Tab bend (1) |
| • Screw insert (3) | • Torque check (1) |

Cycle Time:

5 seconds

Location:

USA