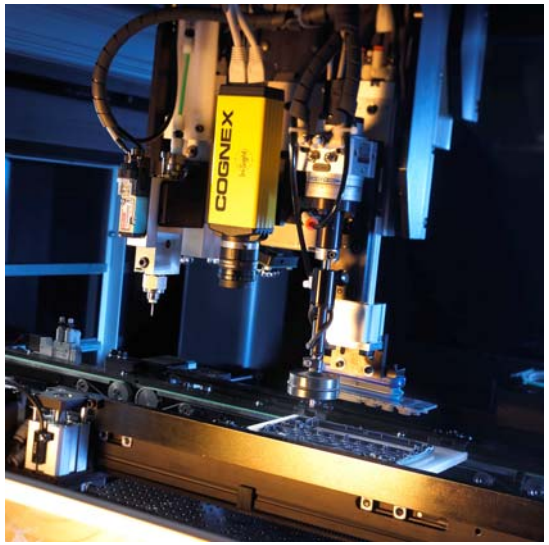
Dispensing, Pick and Place Applications

POLARIS™
Multi-Process

Our customers have used the Polaris for more than a single process machine in many applications, the following pages show a few of the applications where the combination of Dispensing and pick and place processes. These customers realized the value of protecting their investment, and minimizing the front end costs associated with multiple machines in a single line to accomplish what this machine can.



Some of these machines have been converted to other processes as of this writing, and those customers have reaped the benefits of protecting the automation investment. The average cost to convert a single cell from one process to another varies, but it is always less expensive than an additional capital investment.

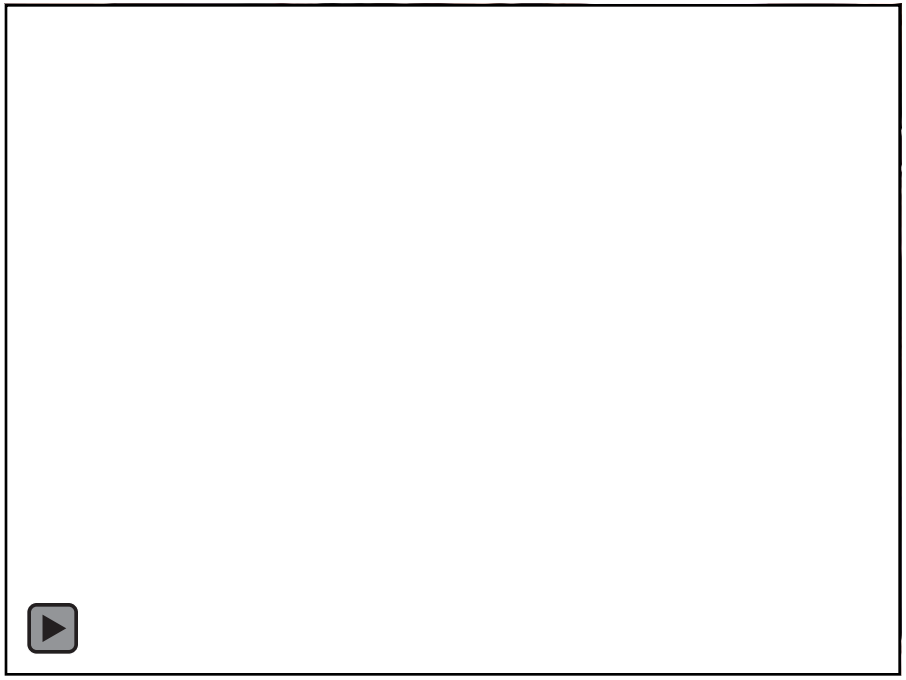
As our economy continues to wain, Universal's Polaris customers have been able to perpetuate their automation strategies without going back to the bank!

If you have any questions about these applications, or the Polaris Automation solutions, Please contact your Local sales representative.

Dispense and Place

Customer Application

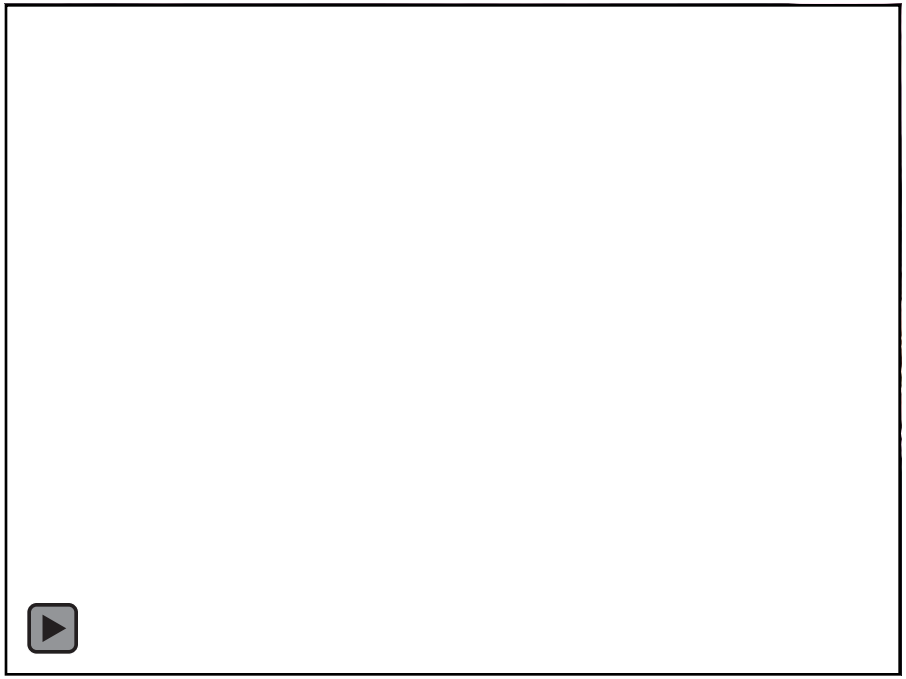
- Two machines in line
- Machine 1 dispenses gasket material
- Machine 2 Optical inspection of the dispensed material and places cover
- The machines are linked to the factory information system for complete traceability



Radial Lead Insertion head

Customer Application

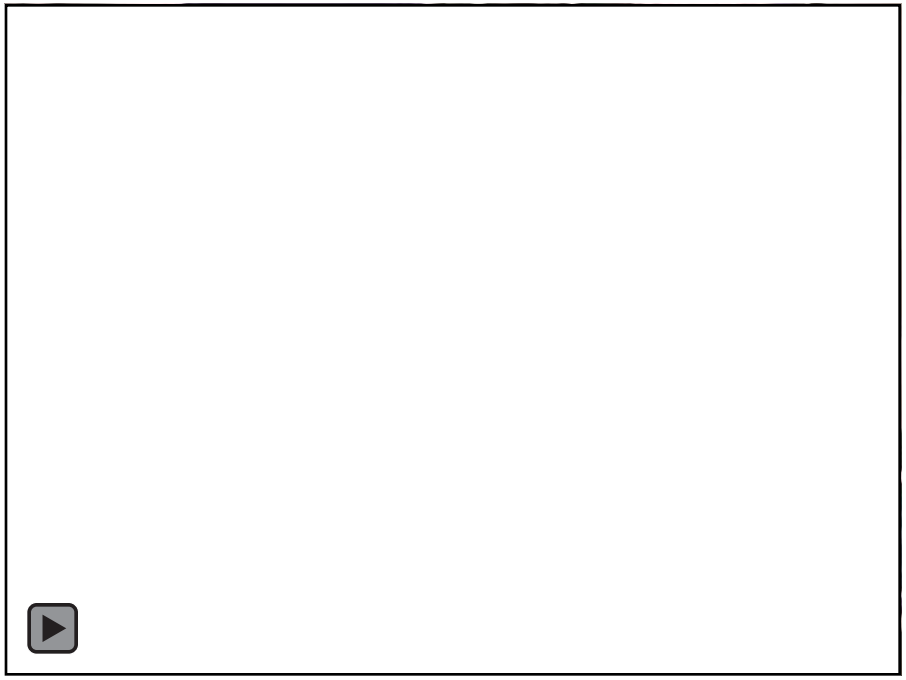
- This machine was configured with a radial head similar to the radial lead machine
- The goal was to contain the leads after being removed from the tape
- The video shows the density capability
- The base machine was a Multi-process cell



Spacer Pick and Place

Customer Application

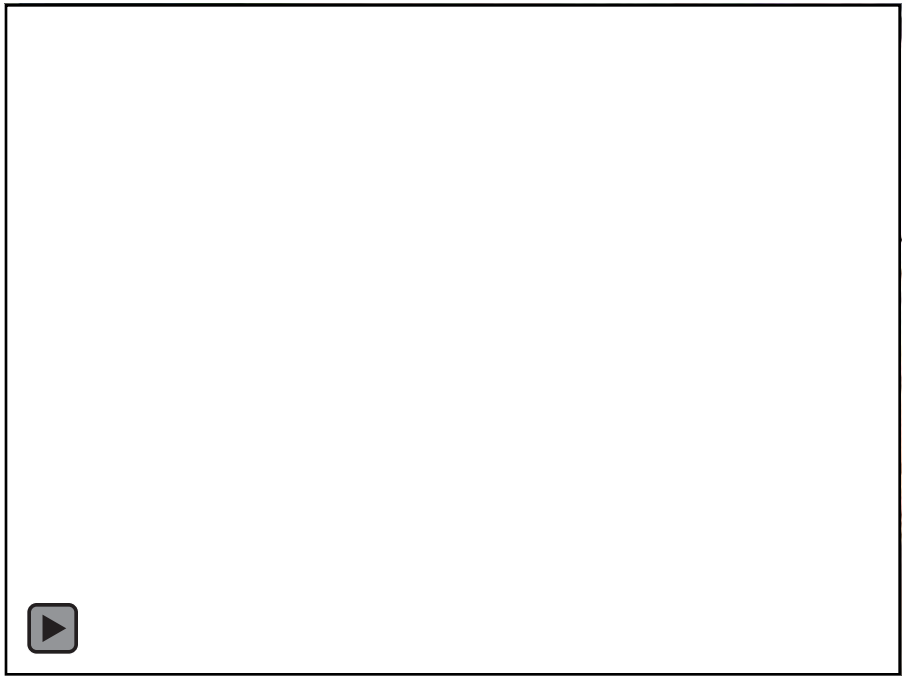
- This machine was configured with a Dispense head and a Pick and Place head
- The machine is also configured with a Weight Scale for dispensed material audit and a needle calibration station.
- There is a bowl feeder to deliver the components to the Pick and place head.
- Takt time is 1.6 seconds.



Component assembly

Dispense and Die Pick and Place

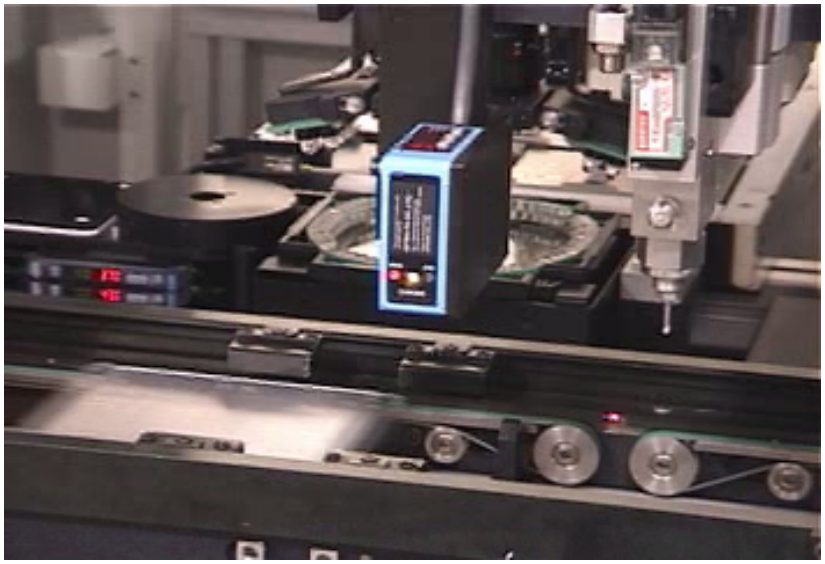
- This machine was a Polaris Multi Process machine configured with a Auger Pump and a Precision pick and place tool
- The dispensed material was a conductive epoxy
- The end product was a 16 pin SOIC



Dispense, Place and press

Customer Application

- This machine was a Polaris Multi Process machine configured with a DC Valve, a Precision pick and place tool, and Laser Height inspection
- Following the dispensing routine, the laser inspects the height of the bead
- The press operation sets the bond line to .003” based on pressure
- The press is a servo auger that is accurate to 2 ounces
- The press stops if too much pressure is sensed to early in the process



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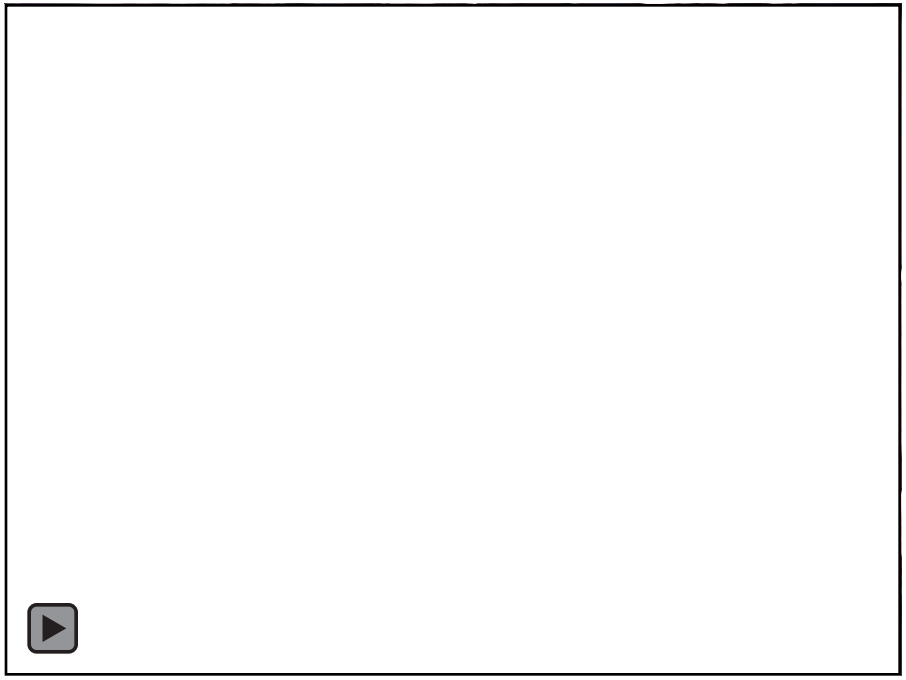

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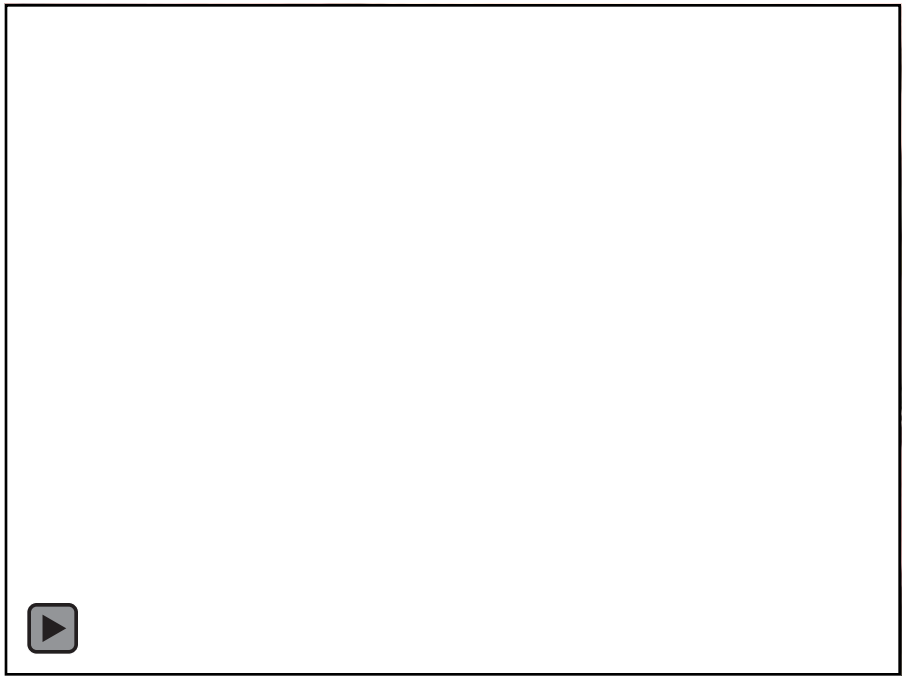

Adhesive Dispense

Customer Application

- This machine is configured with a DL Technologies Auger dispense pump, a pick and place head, weight scales, and Needle Calibration
- The product registers in the machine and a full circle of adhesive is dispensed
- Takt time is 3 seconds