



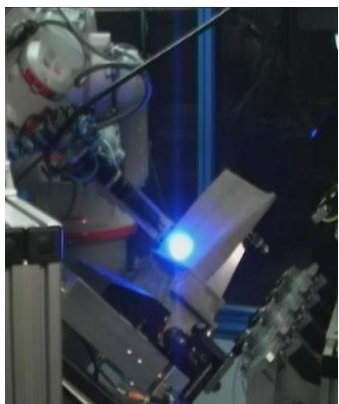
**ACT Robots, Inc.**

Integrated Robotic Solutions

## **DISP3-TBL3 DISPENSING CELL**



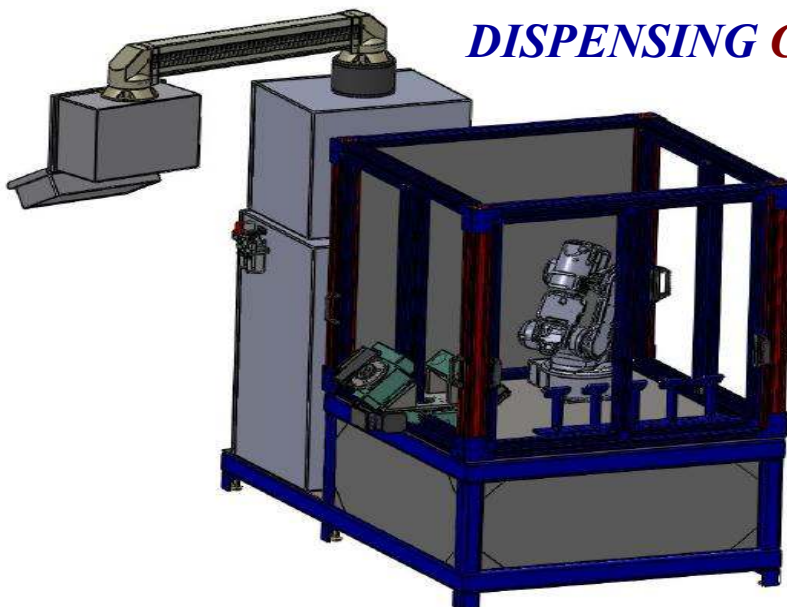
DISPENSING or QC CHECK



UV LIGHT CURING



EDDY CURRENT INSPECTION



**DISP3-TBL3**- is a fully programmable robotic masking and dispensing cell with quality check functions built in. It is designed to handle parts up to 24 inches long with a max weight of 50 lbs (larger models available). Integrated vision allows the system to compensate for inaccurate part features.

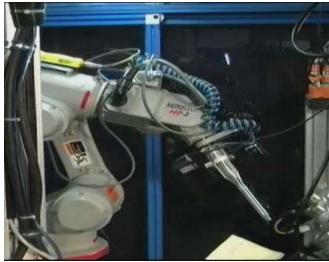
### **Standard Features and Specifications:**

- **Polymer or other viscous material dispensing for application such as:**
  - Masking, brazing, chemical welding, or gluing
- **Ultraviolet Light curing of dispensed material**
- **Eddy current coating thickness inspection**
  - Used for thickness verification of coating such as ceramic.
- **QC Pin check of hole blockage status.**
  - Recognizes and records any blocked holes by pin insertion method.
- **Vision scans allow the system to compensate for part features inaccuracies up to +/- 1mm**
- **Precise dispensing tool with no-drip via adjustable suck-back amount.**
- **Standard syringe life monitoring via cycle count.**

### **Options**

- **Different cell sizes**
- **Multiple tools for redundancy**
- **Fluorescent Polymer**
- **Vision inspection of fluorescent polymer**
- **Empty syringe sensor**

## MAIN CELLS:



**DISP3-TBL3:** complete robotic masking and dispensing cell equipped with a 3 kg 6-axis articulated robotic arm with 27”(700mm) reach, all necessary tools, part presentation, operator interface, and safety enclosure.

**DISP6-TBL3:** cell with 6 kg robot and 54”(1,370mm) reach.

**DISP20-TBL3:** 20 kg robotic arm with 65”(1,650mm) reach.

## TOOLS:



**DISPENSING VALVE:** This tool allows for accurate dispensing of polymers from standard pre-filled syringes. Standard needles are trapped in precision mounting bracket for accurate and consistent placement. The rate of dispensing as well as ‘suck-back’ amount is adjustable. Complete tool assembly includes dispensing valve and tool changer.



**UV LIGHT CURING TOOL:** This wand-type tool combined with robotic programming results in precise, uniform, and controllable curing time at a repeatable distance.



**EDDY CURRENT TOOL:** This tool performs the Eddy Current thickness test and is placed by the robot at programmed inspection points for coating thickness measurements. This tool includes spring loaded compliant probe, controller, and data collection software.



**PIN CHECK TOOLS:** The 90 degree and 180 degree Pin Check tools allow hole blockage inspection even in very tight areas. Sensors integrated in the tools detect hole blockage and data is stored and displayed on the operator interface. Both tools are compliant thus preventing inspection needle damage.

## **PROGRAMMING PENDANT and OPERATOR INTERFACE:**



Programming Pendant and dual touch screen operator interface allows for unprecedented controllability for programmers and engineers and, at the same time ease of operation for the operators.

