



### APPLICATION

Electrical Potting  
- Field connectors

### Objective

The customer needed an automated table-top dispensing system to perform a potting application to pallets of electrical connectors.

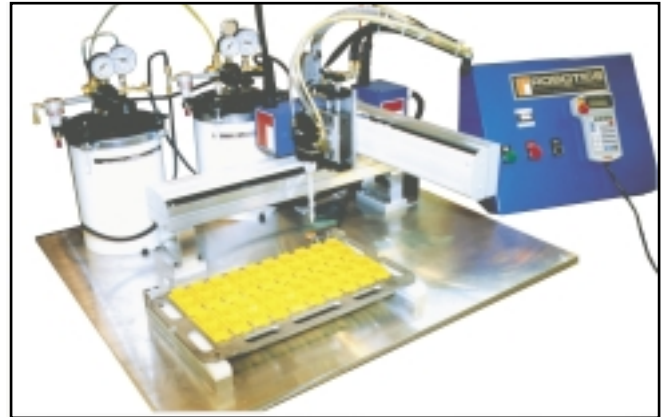
### Dispensing System

BT 1000  
- Two-axis table-top

### Dispensing Material

RTV Silicone

- Two-part material
- Room temperature cured
- 1:1 Mix ratio
- Low viscosity



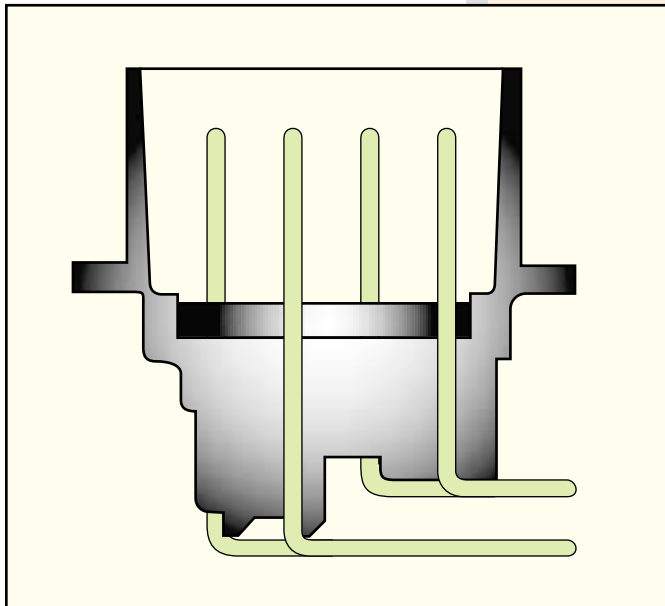
BT 1000 ready to dispense RTV silicone potting material. Pressure reservoirs and control board with teach pendant are also shown.

### Customer Benefits

- Highly accurate programmable dispensing motion
- Compact table-top configuration for minimized space consumption
- Significant production efficiency gain compared to manual dispensing
- Consistent dispensing quality from part to part

### Key System Features

- **BT 1000** 2-axis automated dispensing system with pneumatic up/down z-axis.  
Work envelope: 16" x 12" (x-y)
- Digital 2-axis motion controller with 8 general-use 24 VDC inputs and outputs
- Serial port for off-line programming
- Teach pendant
- 10 variable speed settings
- 20 variable acceleration/deceleration rate settings
- Two DC servo motors with high-speed belt drives
- Pallet-presence and load fault sensing allows dispensing only if pallet is present and properly positioned
- Pallet fixture
- Two degassing & supply pressure reservoirs



Cross section of connector showing four pins. Potting material is represented by the darkest area.

## Sequence of Operations

1. Operator loads 20 parts onto a pallet.
2. Operator loads the pallet into place for dispensing.
3. Operator presses the "cycle-start" button.
4. BT 1000 automatically dispenses two shots of mixed RTV silicone between the connector pins at the bottom of each connector cavity.
5. Operator loads the next pallet while the BT 1000 is dispensing.
6. Operator removes the finished pallet and sets it aside to cure, then loads the next pallet into place for dispensing.

## Systems & Support

Robotics, Inc. has decades of experience designing and building automated dispensing systems. We provide complete system solutions, including start-up and installation assistance, training, field service support, and complete documentation. Dependent on your specific project considerations, Robotics Inc. will design and build a system that is right for you.

## Information

Robotics, Inc. has designed and built hundreds of dispensing systems for a variety of industries. For more information on this application or other products and services, contact a Representative from our Technical Sales Department:



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## Process Specifications\*

<b>Part</b>	Electrical field connector
<b>Dispense Time</b>	15 seconds per part
<b>Dispense Volume</b>	1.05 cc per shot, 2.1 cc per part
<b>Cure Time</b>	10 minutes at room temperature
<b>Jobs per Week</b>	5,000 required
<b>Material Mixing</b>	Static mixer, airless
<b>Supply Reservoirs</b>	2.5 gallons each, 50 psi
<b>Equipment Footprint (approx.)</b>	64" x 32"

\* Values are based on customer's specific requirements and do not necessarily indicate optimum values. Call for further information regarding system capabilities and product specifications.

*Since 1971, Robotics Inc. has designed, built, and supported automated dispensing around the world!*