



### APPLICATION

Automotive assembly  
- Automobile interior headliners

### Objective

The customer needed a high speed on-line automated dispensing system to apply six (6) high-profile adhesive beads onto six (6) various size headliners for assembly to vehicle roof.

It was critical to dispense a high profile bead (8-10 mm) for assured contact with the roof of the car.

### Dispensing System

HS Series High Speed Program-A-Spenser™ robot

- Custom engineered on-line station
- Extended y-axis for long reach

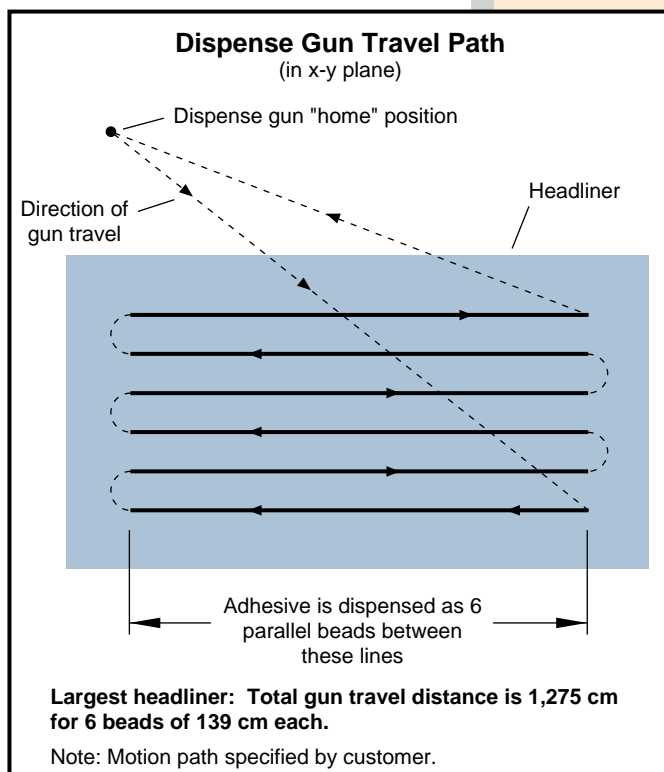
### Material

Structural polyurethane adhesive

- Single-part material
- Moisture-cured



The HS Series Program-A-Spenser™ dispensing system. The headliners are automatically conveyed in front for dispensing, and are automatically conveyed out upon dispensing completion (existing production line not shown).



### Key System Features

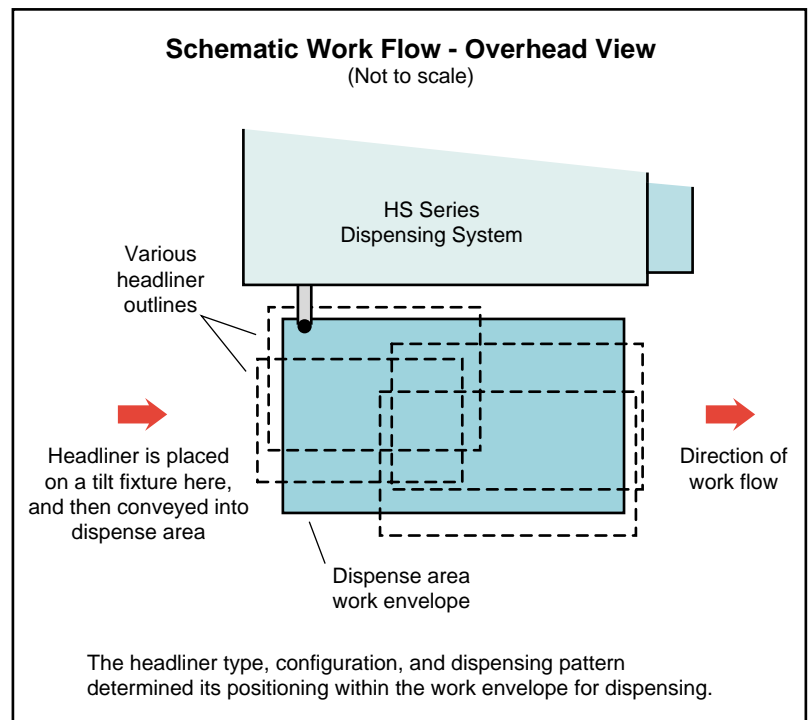
- > **HS Series High Speed Program-A-Spenser™** 3-axis automated dispensing system.  
Work envelope: 66" x 54" x 6" (x-y-z)
- > Highly rigid frame and motion components
- > Single gun dispensing
- > Bar code reader to automatically determine part type and dispensing pattern
- > Manual selector switch for specifying headliner model (overrides bar code reader)
- > Automatic sunroof bypass mode
- > Servomotor driven x, y, and z axes with resolver feedback
- > Pressure controlled material delivery system
- > Part-present sensing
- > Integrated Allen-Bradley 9/230 controller

## Typical Applications

The HS Series High Speed Program-A-Spenser™ automated dispensing system is well suited for many applications involving larger parts requiring very high speed dispensing of relatively simple paths. Some examples include sealing auto body panels and other medium to large automotive components, large appliance housings, and electrical cabinets. Other applications may have manual part loading and unloading, have different configurations, use plural-component materials, or have other significant differences.

## 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. staff 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 Robotics Inc. Sales Representative:



### Headquarters

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## Process Specifications\*

<b>Part</b>	Auto headliner (6 sizes) Approx. dimensions 54.4" x 26.4" (largest, x-y)
<b>Material</b>	Structural polyurethane adhesive
<b>Bead Dimensions</b>	10 mm wide x 8-10 mm high x up to 139 cm long
<b>Dispense Feed Rate</b>	2,200 in/min (5,590 cm/min)
<b>Dispense Motion Time</b>	18 seconds per part
<b>Production Rate</b>	74 parts per hour
<b>Material Feed Pressure</b>	5,000 psi
<b>Part Delivery</b>	Semi-automatic (headliner is manually placed on a "tilt" fixture, automatically shuttled into dispensing position, and shuttled out on a conveyor for manual removal)

\* 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!*

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