

# SPIROL®

## PIN INSTALLATION TECHNOLOGY

### Model HC Horizontal, Dual Pin Inserter

This lightweight, portable, horizontal Pin Inserter is designed to install **SPIROL Series 550 Coiled Pins** into plastic hinges. The cylinder/driving head modules can be moved in and out with ease, and fixture changes are simple which enables quick conversion from one assembly to another. This machine quickly and effectively delivers the pins automatically to the installation site eliminating the need for the operator to touch them during the entire assembly operation. This machine dramatically increases production efficiency with minimal operator training and effort.

#### Design Features/Benefits:

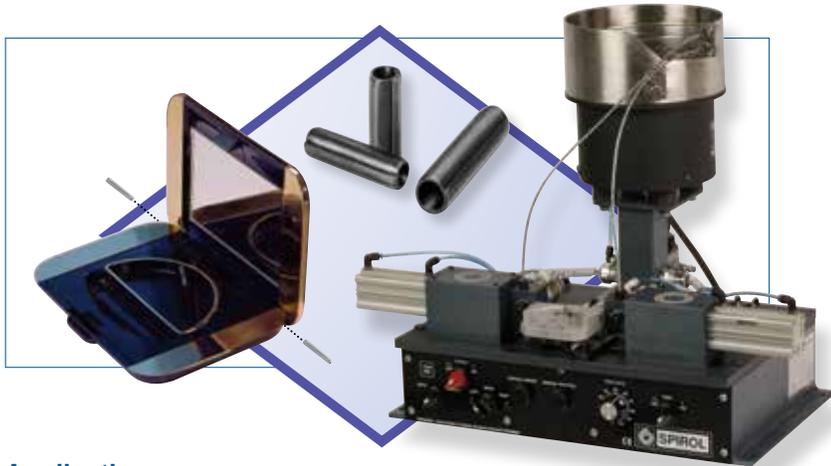
- Precise:** - Fine pin depth adjustment
- Poka-Yoke Design:** - Pin presence sensing
- Built to Last:** - Hardened pin guide bushings
- Tooled stainless steel vibratory feeder bowl
- Efficient:** - Quick clear rotary pin shuttles
- High speed steel insertion rams with integral part sensing actuators
- Versatile:** - Can easily be changed over to install pins in round or rectangular cases
- Quick change pin shuttle allows the operator to change pin sizes with ease
- Low Maintenance:** - Non-lubricating pneumatics



**SPIROL® Series 550**  
Coiled Pins

**SPIROL® Model HC**  
Change-over Kit

**Optional alignment fixtures – fixed position or linear slide style – available.**



### Application:

A world-class plastic molder was mass producing a cosmetic case. The lid and base were hinged together by two pieces of solid cut wire. The installation equipment was worn, the process was slow, and the case was cracking and squeaking when it was opened and closed. The lids also became “floppy” after repeated opening and closing, and they failed to stay open. To remain competitive, the molder needed to decrease the assembly time and eliminate the quality issues of cracking, squeaking, and flopping. They also wanted to be able easily convert the assembly machine to handle a wide number of case styles and shapes.

### Solution:

**SPIROL**'s Application Engineers recommended a total assembly solution. To correct the problems with the quality of the case, a **SPIROL Series 550 Extra Light Duty Coiled Pin** replaced the cut wire as the hinge pin. The Coiled Pin's inherent flexibility eliminated the cracking of the plastic, and its radial expansion resulted in the lid remaining in any position desired by the user with no noise throughout its entire arc. These pins are installed with a **SPIROL** standard **Model HC Dual Pin Inserter**. This unit can install all standard **Series 550 Coiled Pins** with minor change-over and adjustments. It also accommodates nearly any case configuration by moving the insertion heads in and out and changing the cavity tooling in the fixture unit.



**SPIROL** Application Engineers will review your application needs and work with your design team to recommend the best solution. One way to start the process is to select **Installation Systems** in our **Optimal Application Engineering** portal at [www.SPIROL.com](http://www.SPIROL.com).

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