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: Poka-Yoke Design:	 Fine pin depth adjustment 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

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SPIROL[®] Series 550 Coiled Pins SPIROL[®] Model HC Change-over Kit

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

SPIROL Application Engineering



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 guality 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 offers complimentary Application Engineering support. We will assist on new designs as well as help resolve issues, and recommend cost savings on existing designs. Let us help by visiting Application Engineering Services on SPIROL.com.

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