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

PIROI

SPIROL<sup>®</sup> Series 550 Coiled Pins SPIROL<sup>®</sup> Model HC Change-over Kit

(R)

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.

## **Technical Centers**

#### Americas

SPIROL International Corporation 30 Rock Avenue Danielson, Connecticut 06239 U.S.A. Tel. +1 860 774 8571

#### Fax. +1 860 774 2048 **SPIROL Shim Division**

321 Remington Road Stow, Ohio 44224 U.S.A. Tel. +1 330 920 3655 Eax +1 330 920 3659

## **SPIROL** Canada

3103 St. Etienne Boulevard Windsor, Ontario N8W 5B1 Canada Tel. +1 519 974 3334 Fax. +1 519 974 6550

#### **SPIROL Mexico**

Avenida Avante #250 Parque Industrial Avante Apodaca Apodaca, N.L. 66607 Mexico Tel. +52 81 8385 4390 Fax. +52 81 8385 4391

### **SPIROL Brazil**

Rua Mafalda Barnabé Soliane, 134 Comercial Vitória Martini, Distrito Industrial CEP 13347-610, Indaiatuba, SP, Brazil Tel. +55 19 3936 2701 Fax. +55 19 3936 7121

## Europe SPIROL United Kingdom

17 Princewood Road Corby, Northants NN17 4ET United Kingdom Tel: +44 (0) 1536 444800 Fax: +44 (0) 1536 203415

#### **SPIROL France**

Cité de l'Automobile ZAC Croix Blandin 18 Rue Léna Bernstein 51100 Reims, France Tel: +33 (0) 3 26 36 31 42 Fax: +33 (0) 3 26 09 19 76

#### **SPIROL Germany**

Ottostr. 4 80333 Munich, Germany Tel: +49 (0) 89 4 111 905 71 Fax: +49 (0) 89 4 111 905 72

## **SPIROL Spain**

Plantes 3 i 4 Gran Via de Carles III 84 08028, Barcelona, Spain Tel/Fax: +34 932 71 64 28

**SPIROL Czech Republic** Evropská 2588 / 33a 160 00 Prague 6-Dejvice Czech Republic Tel: +420 226 218 935

SPIROL Poland ul. Solec 38 lok. 10 00-394, Warsaw, Poland Tel. +48 510 039 345

#### Asia Pacific

**SPIROL Asia Headquarters** 1st Floor, Building 22, Plot D9, District D No. 122 HeDan Road Wai Gao Qiao Free Trade Zone Shanghai, China 200131 Tel: +86 (0) 21 5046-1451 Fax: +86 (0) 21 5046-1540

### **SPIROL Korea**

16th Floor, 396 Seocho-daero, Seocho-gu, Seoul, 06619, South Korea Tel: +82 (0) 10 9429 1451

e-mail: info@spirol.com

