

SPIROL[®]

INSERT INSTALLATION TECHNOLOGY

Manual Insert Drivers

As much as 75% of an Insert's performance is the direct result of how well it was installed. Therefore, in order to maximize performance, all of the factors that impact installation must be carefully controlled. **SPIROL's Model HM and TM Manual Insert Drivers** have been designed to eliminate the dependency on the operator to control these factors. The result is nearly perfect flow of the plastic for optimal retention and performance.

Both the Model HM and TM are:

- Easy:** - Simple to operate and easily adjustable
- Accurate:** - Base plate is pre-drilled for simple and precise fixture location
- Reliable:** - Post mount style frame is sturdy, lightweight, and portable
- Precise:** - Micrometer style insertion depth stop for accurate, consistent installations
- Versatile:** - Installs Inserts ranging in sizes from M2 to M6 metric threads and No. 2 to 1/4" unified threads, and the simple up-down adjustment of the machine makes it easy to accommodate various sized components

Model HM Manual Heat Insert Driver

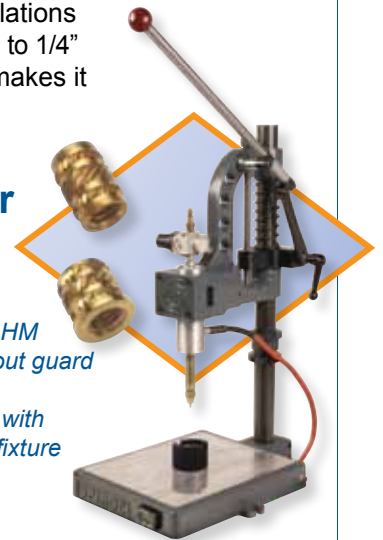
Designed to install virtually any type of Heat/Ultrasonic Style Insert

Standard Features:

- Internal air-spring installation system for infinitely adjustable and consistent force
- Easily adjustable, digital temperature controller
- Easily interchangeable heat tips to accommodate various Insert sizes and applications

Model HM
shown without guard

—
Shown with
optional fixture



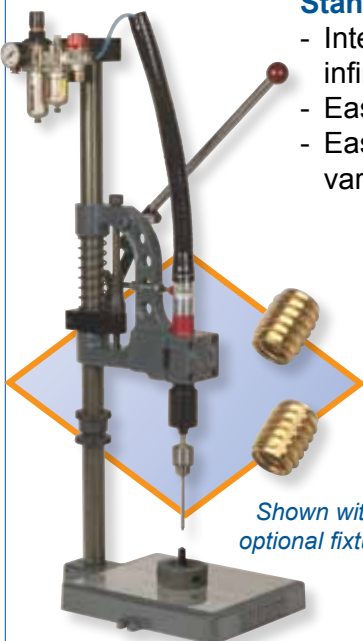
Model TM Manual Driver for Self Tapping Threaded Inserts

Designed to install thread forming and thread cutting Inserts

Standard Features:

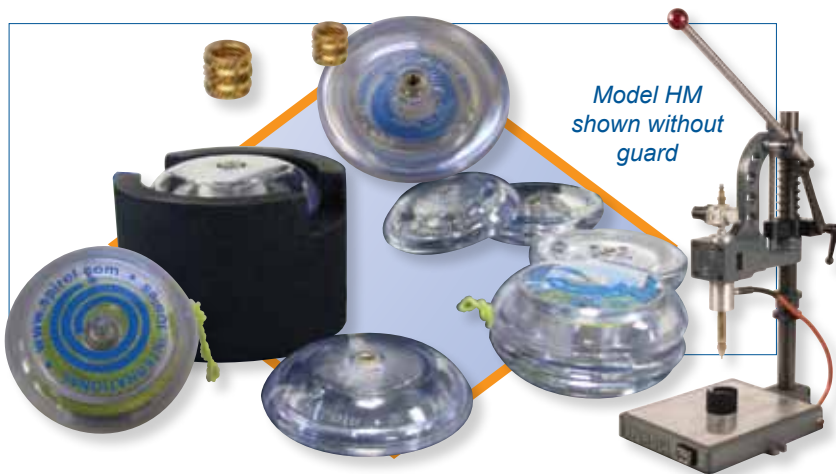
- Pneumatic push-pull style drive tool with flow controls to easily adjust insertion speed for optimal installation
- Easily interchangeable threaded tips to accommodate various Insert sizes and applications

Shown with
optional fixture



Optional alignment fixtures available.

Automated installation machines
are also available from **SPIROL**.



Application:

A molder of plastic yo-yos wanted to introduce a higher quality product to the market. By incorporating threaded Brass Inserts into each half of the yo-yo, a higher quality joint would be created resulting in a truer rotational axis. Inserts also provide reusable threads which would enable unlimited assembly and disassembly without damage to the plastic. The molder wanted to utilize existing molds, as well as minimize the investment required to install the Inserts. The high heat and limited space made manual loading of the Insert into the mold undesirable. There was also the potential for a mis-loaded Insert to cause costly damage to the mold.

Solution:

SPIROL's Engineers reviewed the application, and recommended that a symmetrical brass Insert be used in conjunction with several economical **SPIROL Model HM Manual Heat Inserters**. The HM heat machines were lined up in a portable production work cell. The symmetrical design made placement of the Insert in the yo-yo's hole quick and easy. The HM machine has only two settings, temperature and air pressure, making it extremely easy to use. The operator places the Insert in the hole, pulls the handle on the press until it reaches a positive stop, and holds. The heated tip engages the Insert and transfers heat until the Insert reaches the correct melt temperature of the plastic. The compressed air, created by pulling the handle, then smoothly and consistently pushes the Insert into position. This system delivers exceptionally repeatable, quality installations that result in consistent Insert performance. The HM also provides versatility for future designs as it can easily be converted to install almost any size and style heat Insert.

Challenge Us!

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.

U.S.A. **Spirol International Corporation**
30 Rock Avenue
Danielson, Connecticut 06239
Tel. +1 860.774.8571
Fax. +1 860.774.2048
(US Distributors: Fax. +1 860.774.0487)

**Spirol International Corporation
Shim Division**
321 Remington Road
Stow, Ohio 44224
Tel. +1 330.920.3655
Fax. +1 330.920.3659

Spirol West Inc.
1950 Compton Avenue, Unit 111
Corona, California 92881-6471
Tel. +1 951.273.5900
Fax. +1 951.273.5907

Canada **Spirol Industries, Ltd.**
3103 St. Etienne Boulevard
Windsor, Ontario
Canada N8W 5B1
Tel. +1 519.974.3334
Fax. +1 519.974.6550

Mexico **Spirol México, S.A. de C.V.**
Carretera a Laredo KM 16.5 Interior E
Col. Moisés Saenz
Apodaca, N.L. 66613 México
ó Apdo. Postal 151 de Apodaca, N.L.
Tel. +52 81 8385 4390
Fax. +52 81 8385 4391

Europe **Spirol Industries Ltd.**
17 Princewood Road
Corby, Northants
NN17 4ET United Kingdom
Tel. +44 1536 444800
Fax. +44 1536 203415
(UK Distributors: Tel. 0800 3890034)

Spirol SAS
Rue Henri Rol Tanguy
Z.A. Les Naux
51450 Bétheny - Reims
France
Tel. +33 3 26 36 31 42
Fax. +33 3 26 09 19 76

Spirol GmbH
Brienner Strasse 9
80333 Munich
Germany
Tel. +49 931 454 670 74
Fax. +49 931 454 670 75

Spirol SAS en España
08940 Cornellà de Llobregat
Barcelona
Spain
Tel. +34 93 193 05 32
Fax. +34 93 193 25 43

Spirol S.A.S., organizační složka
Sokola Tůmy 743/16
Ostrava-Mříánské Hory 70900
Czech Republic
Tel/Fax. +420 417 537 979

Asia Pacific **Spirol International Engineered
Fastener Trading Co. Ltd.**
No. 11 Xi Ya Rd. North
Section A, 1F, Building 14
Wai Gao Qiao Free Trade Zone
Shanghai, China 200131
Tel. +86 21 5046-1451/1452
Fax. +86 21 5046-1540

e-mail: info@spirol.com

SPIROL.com