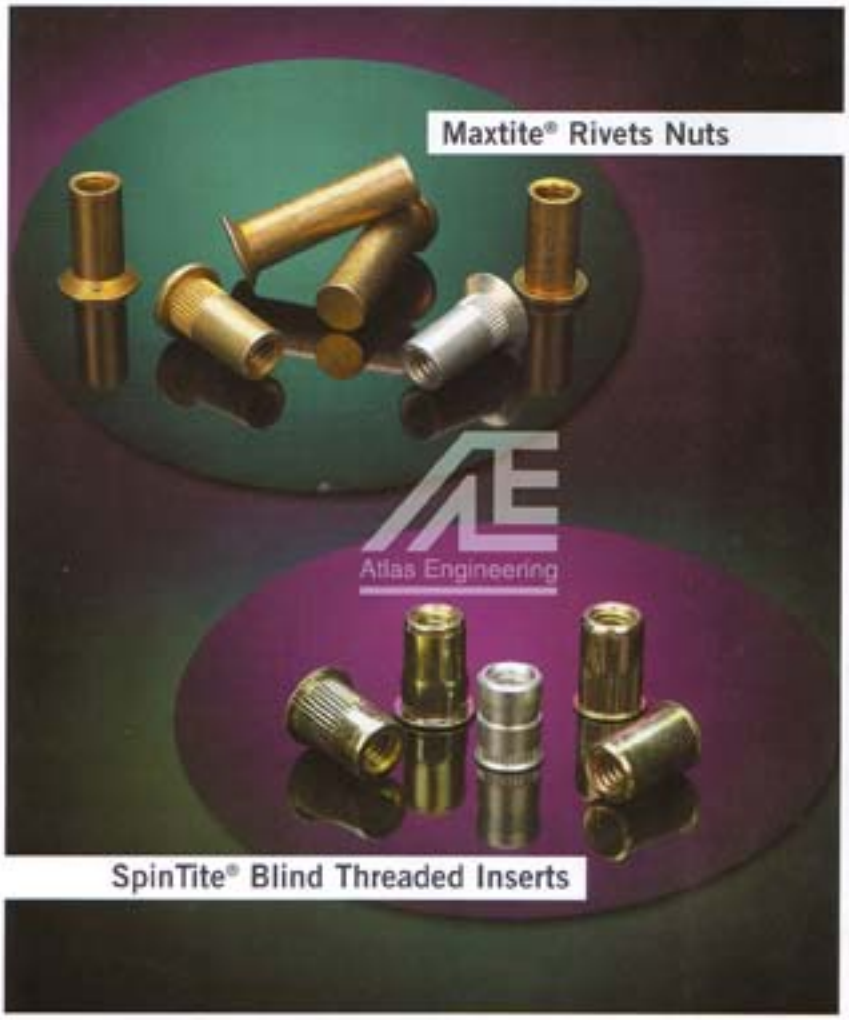


Atlas Fastener Installation Tools

SpinTite® Fasteners

Half-Hex Shank Low Profile Head Series

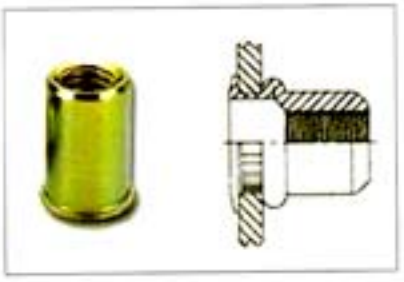
- Features a hex body design
- Improved torque out resistance
- Easy to install using spin/spin tooling
- Able to be installed after finish

AEL Low-Profile Head

- Features a large diameter, low-profile head and knurled shank
- Offers highest all around strength

AEK Minimized-Profile Head

- Same as the AEL but with a minimized-profile head
- Allows near-flush installations with no need for special hole preparations such as countersinking or dimpling



Thin Wall Low-Profile Series

- Features Low-Profile head design
- Achieves flush installations with no need for counter-sink drilling or dimpling of the parent material

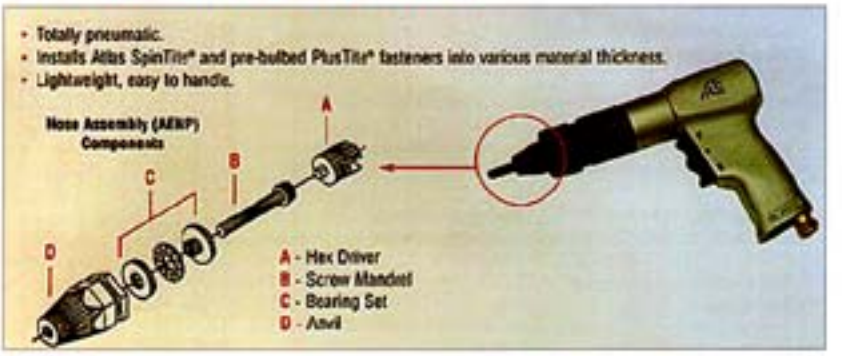
360° Swaging Low-Profile Head Series

- Works in any thickness over .029"/0.76 mm including blind hole
- High resistance to torque out
- Minimal backside protrusion for restricted space applications

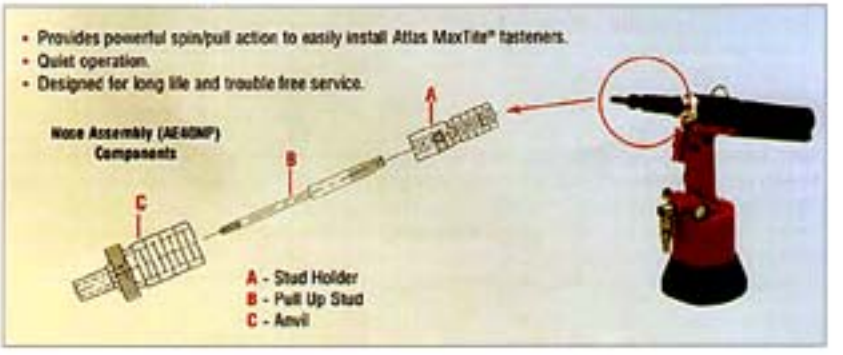
Blind Threaded Studs

- Provide strong external threads in blind applications
- Easy to install using spin/spin tooling

Atlas Series 800 Spin/Spin Tools



Atlas AE 40 Spin/Pull Tool



Atlas L6000 Installation Tool

- Ideal for light production requirements.
- Installs most Atlas SpinTite® fastener types and sizes.

Installation Methods

There are two basic types of installation techniques : Spintite® (standard), and MaxTite® (heavy duty). The standard types are used for most applications where strong threads are required for blind applications. Most commonly known as "blind threaded inserts", they are installed using a **"spin/spin"** technique and tooling. A pneumatic tool is used to draw the fastener in, compressing the unthreaded portion of the fastener wall. The bulge that is created presses against the panel creating a clamping force which tightly grips the sheet. In addition to high thread strength and torque-out, these fasteners have minimal inventory requirements since each size can accommodate many grip ranges.

The heavy duty type, most commonly known as "rivet nuts" are designed for the most demanding applications. They are installed from one side using a **"spin/pull"** technique. A hydraulic/pneumatic tool is used to draw the fastener in, creating the bulge and clamping force as described above.