



# SHEREX FASTENING SOLUTIONS

Fastening Systems Engineered for Performance™

## Recommended Tooling Solutions





# FLEX-5P and FLEX-5S with Sherex's Hand Tool Calibration Unit

Sherex is a leader in fastener technology and provides a wide range of tooling options to help manufacturers become more efficient and improve the installation process of their applications.

The FLEX-5P and FLEX-5S are best-in-class tools for rivet nut thread sizes M3 - M10.

## FLEX-5P Pull to Pressure Rivet Nut Installation Tool

- Up to 5,000 lbf (22 kN) of pulling force
- Capability to set nearly all rivet nut styles #4-40 – 3/8-16 (M3 – M10)
- 2-3 second cycle time
- Rugged, yet lightweight (<2 kg / 5 lb); suitable for both low and high-volume applications

## FLEX-5S Pull to Stroke Rivet Nut Installation Tool

- Has the ability to install rivet nuts to a certain length
- Identical to the FLEX-5P in terms of pulling force and installation sizes
- Best utilized when installing into soft or brittle materials

## Hand Tool Calibration Unit

- Reads and verifies the exact pulling force of rivet nut installation tools
- Can be used with both spin-spin and pull-to-pressure spin-pull tools
- Ability to capture data for quality control analysis
- Portable, user-friendly, perfect for any workstation



## SHEREX FASTENING SOLUTIONS

Sherex helps a wide range of manufacturers improve the assembly and performance of their products with its complete line of fastening systems. From a wide-range of blind rivet nuts and threaded insert products, to wedge-locking washers and nuts through its Disc-Lock® and TEC Series® product lines, and tooling solutions to for easy assembly, Sherex is well regarded as a leader in the fastening industry.



Flex-18



Flex-5



# FLEX-5 Split Tool with Sherex's Hand Tool Calibration Unit

The combination of Sherex's Flex-5 Split Tool plus its Hand Tool Calibration Unit allows operators and installers to be efficient and confident in their installations.

## FLEX-5 Split Rivet Nut Installation Tool

- Pull to pressure tool
- Up to 5,000 lbsF (22 kN) of pulling force
- Capability to set nearly all rivet nut styles
- Lightweight handle for easier installations, reducing fatigue
- Hydraulic components held in Booster Box for improved durability
- Ability to install electrical components to upgrade to Process Monitoring



## Hand Tool Calibration Unit

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## How the Hand Tool Calibration Unit Works

The Sherex Hand Tool Calibration Unit works by simply putting the tool into the mandrel and pulling the tool as if you were installing a rivet nut. The Calibration Unit will display the pulling force of the current pull and the previous seven pulls, along with the average of all pulls. A microSD card is provided for historical analysis.



**HAND TOOL CALIBRATION UNIT AVAILABLE FOR IMMEDIATE DELIVERY**

*Sherex Fastening Solutions • info@sherex.com • 866-474-3739 • www.sherex.com*  
AS9100 • ISO 9001:2015 • IATF 16949:2016 Certified

# FLEX-5 Process Monitoring System

Ensure perfect installations and take your quality control processes to the next level with Sherex Fastening Solutions Flex-5 Process Monitoring System

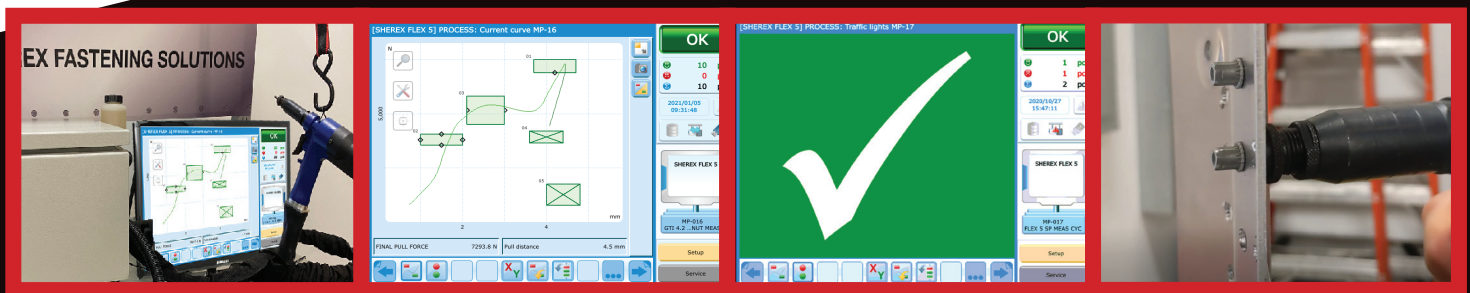
## FLEX-5PM

The Sherex FLEX-5 Process Monitoring System is an innovative installation tool that combines quality assurance with efficiency, ensuring the proper installation of Sherex threaded insert/rivet nuts.

- Configured to evaluate the installation of every rivet nut that is installed in the application.
- OK/NOK evaluation signal is generated for each installation.
- Instantly know in real time if installation is perfect.
- If the system detects an installation fault, a “stop tool” function allows operators to review the installation issue and make corrections to the product

By performing perfect installations, efficiency and quality increase, while waste and costs decrease. This tool can be used for either low or high volume installations, including on an assembly line.

- **Easy to use**
- **View historical installation data**
- **2-3 second cycle time**
- **I/O communication with PLC (Fieldbus and PROFINET)**
- **Ergonomically designed**
- **Maintenance reductions**
- **Improve quality installations**
- **Quality data reporting to USB or file server**



- 5,000 lbsF (22 kN) pulling force at 90 psi
- Installs rivet nuts from M3 - M10 and #4-10-3/8-16
- Lightweight (4.2 pounds)
- Ability to be hung by a balancer
- Single Stage Trigger





# FLEX-18

## Rivet Nut Installation Tool

**Install large, heavy duty rivet nuts using the strongest rivet nut installation tool on the market.**

### FLEX-18

Large, heavy duty rivet nuts are no match for the power of the Flex-18. With the ability to pull up to 18,000 lbs (80 kN) of force, and flexibility to be a pull-to-pressure or pull-to-stroke tool, the Flex-18 is an industry leader for those installing heavy duty, high strength rivet nuts.

- Can install rivet nuts sizes from 5/16 - 18 to 3/4 - 10 and M8 to M20
- 18,000 lbs (80 kN) of pulling force
- 15mm (.591 inches) of available stroke
- Remote booster box has ability to upgrade to process monitoring
- Single stage trigger, automatic reverse with manual reverse bypass

Used for installing Sherex large and heavy duty rivet nuts, including our LRGH series, a fully hex style rivet nut which is the strongest rivet nut on the market.



- *Lightweight, ergonomically designed handle*
- *3 second cycle time*
- *For use in low or high volume installation production*
- *Ability to be hung by a balancer*



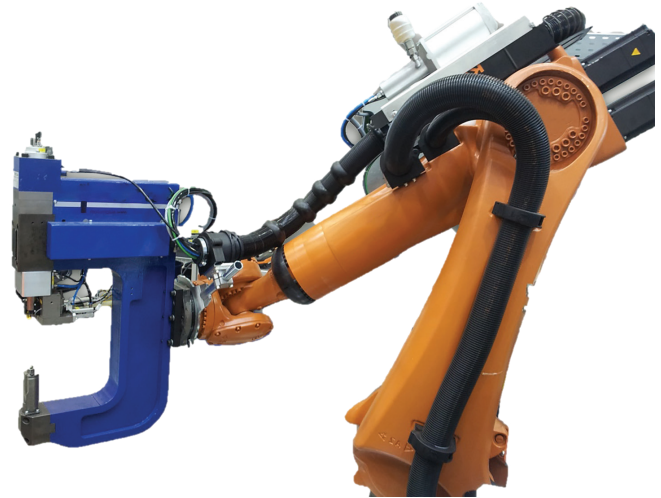
# A230 and A240 Automations Systems from MDS

**Sherex offers automation systems through its strategic partner MDS. These automation systems are ideal for large scale installations and can be used at a human-operated or robotic-operated workstation.**

## A230-BI - Mobile Robotic Tools

The MDS A230-BI is an end of arm robotic attachment (setting head) for installing rivet nuts into the application, eliminating the need for manual assembly. The robot positions the setting head to each installation position on the component where the fastener is then placed into the hole and installed

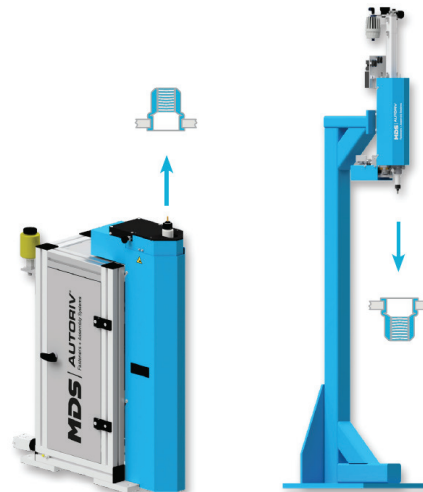
- Rivet nuts are bulk loaded into a feed-cart, automatically feeding each rivet nut to the setting head for installation
- An OK/NOK signal is generated for each installation to ensure a quality product is produced.
- Used in a variety of different industries, including automotive, heavy truck, solar power, and for general industry applications.



## A240-BI - Stationary Robotic Workstation

The MDS A240-BI Workstation is similar to the A230 system except the setting head is in a fixed position and the component is moved to the setting through robotic or other automated handling system.

- Used commonly for lighter weight components
- Can be used as a human-operated workstation
- Can be used where the robot performs part handling



### Advantages of A230-BI and A240-BI Systems

- Extremely short cycle time
- Active tolerance compensation
- Active tool protection
- Compact design
- System technology from one source

### Standard Features

- Process monitoring by final position / final pressure
- Process evaluation via output of insertion process OK/NOK
- AUTORIV® insertion unit for loading working position
- Thread size M5 - M10, 10-32 - 3/8  
(other sizes please inquire with Sherex)

# Sherex Best Practice Rivet Nuts

**Sherex is a leader in rivet nut technology and has the largest selection of quality threaded fasteners that solve a variety of fastening problems. With our full line of rivet nuts and tooling, Sherex is a complete source for rivet nut fastening. See a sample of our offerings below.**

## WHY BLIND RIVET NUTS?

Sherex blind rivet nuts provide load bearing threads in thin sheet materials that are too thin for a tapped thread. They are called "blind" because they can be installed from one side of the work piece. Once the rivet nut is installed, additional components can be attached using threaded fasteners.



## OPTISERT® RIVET NUTS

Optisert® is Sherex's best performing round rivet nut. Its combination of knurled body design and underhead wedges gives it superior strength, performance, and spin-out resistance over typical round body rivet nuts. Ideal applications for Optisert include use in softer material like aluminum, composite, fiberglass, and plastic.



## FULL HEX RIVET NUTS

Sherex full hex rivet nuts provide increased spin out resistance over round or half hex body styles. These products are compatible with Class 8, Grade 5 hardware, and are available in sizes 1/4"-20 to 1/2"-13 and M6 to M12 in small flange and large flange styles.

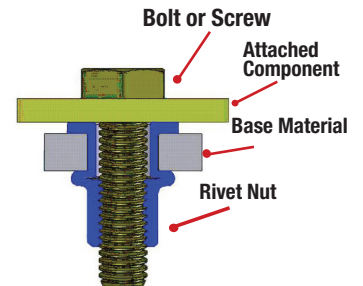


## LARGE SIZE RIVET NUTS

Sherex large size rivet nuts are offered from 1/2"-13 through 3/4"-10, and M12 to M16 sizes. These rivet nuts were developed for applications where critical joint performance and high tensile loads are required.

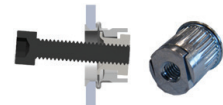


## Roof Rack Attachment



## RIV-FLOAT® RIVET NUTS

RIV-FLOAT® rivet nuts provide easy, accurate, and fast attachment of components in off-center applications. RIV-FLOAT®-SHORT rivet nuts provide the same benefits with a shorter body for increased back-side clearance.



## NAS AND MS RIVET NUTS

Sherex NAS and MS rivet nuts are ideal for aerospace and defense applications that require NAS 1329, NAS 1330, and MS27130 standards. All styles are manufactured in our AS9100-certified Akron, Ohio facility, and are available in several materials.



**SHEREX CAN CREATE CUSTOM RIVET NUTS FOR YOUR PROJECT.  
CONTACT US TO SEE HOW WE CAN HELP.**

## RIVET NUT INSTALLATION SYSTEMS

Sherex offers a broad line of installation tools, from hand tools ideal for prototyping and small volumes to hydro-pneumatic, process monitoring, and robotic installation systems ideal for large production runs.



DLHT Hand Tool



SSG Spin-Spin Tool



Flex-5 Spin-Pull Tool



Flex-18 Spin-Pull Tool



Calibration Unit



Process Monitoring



Robotic Installation





# Wedge Locking Washers and Nuts

## ELIMINATE FASTENER LOOSENING WITH SHEREX WEDGE LOCKING WASHERS AND NUTS

### WEDGE LOCKING WASHERS

**Disc-Lock®** heavy duty, self-locking washers designed to secure safety critical applications against vibrational loosening. Provided in glued pairs; easy installation with standard tools, and vibration-proof according to MIL-STD-1312-7. Available in carbon steel from sizes M3-#6 to M38-1 1/2", and stainless steel from sizes M6-1/4" to M24-1".

**TEC Series®** washers are heavy duty, *reusable*, self locking washers designed to secure safety-critical applications against vibrational loosening. Manufactured using stamping process. Available in standard and large outer diameter carbon and stainless steel M3-M72, #5-3".

### WEDGE LOCKING NUTS

Patented, heavy duty, self-locking nuts designed to maintain joint integrity in high vibration applications. One piece assembly, easy installation and removal with standard tools, and vibration-proof according to MIL-STD-1312-7. Available in sizes from M10 to M22, 3/8" to 7/8". The M22 Safety Wheel Nut is specifically designed to prevent wheel loss from commercial vehicles such as trucks, trailers, and buses.

**DISC-LOCK®**



**TEC SERIES®**



**DISC-LOCK®**



**Disc-Lock and TEC Series wedge locking washers and nuts provide the same performance as similar competitors at a more competitive price!**

**The Sherex sales team is available for training, accompany you on OEM line walks, and assisting in finding solutions to unusual fastening challenges.**

**Please contact us at:  
info@sherex.com | 866.474.3739**

**AVAILABLE FOR IMMEDIATE DELIVERY\***

\* M4 - M39 alloy steel available immediately.

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