# AMERICAN NEWS

## National Machinery Celebrates 150 Years

National Machinery LLC is celebrating its 150th anniversary in 2024. Founded in 1874 by William R. Anderson, National Machinery Company started in Cleveland with a workforce of 10 to supply machinery for manufacturing bolts and nuts. Eight years later, the company moved 90 miles southwest to its current location in Tiffin, OH, on advice of Meshech Frost and other investors.

In 1889, the New York Daily described National Machinery as "a mammoth concern, enjoying the unique distinction of being the only establishment in the world capable of equipping a bolt and nut factory with machinery. They have correspondence and make sales all over the world." In 1900, Frost's son, Earl Frost, became GM. In 2002, the company was renamed National Machinery LLC and became part of the NM Group of companies.

Over the decades, National Machinery has evolved. In 2007, the company opened a plant in Suzhou, China. Half of the machines produced at the plant are sold in China. In 2016, the company took a controlling interest in SMART Machinery, the Tortona, Italy-based thread roller machine manufacturer and pioneer in using servo drive technology. Founded in 2001, SMART's thread roller machinery was developed to replace mechanical drives by high-precision, low-maintenance servo drives for the fastener industry. It also manufactures planetary machines, washer assembly units and pointing machines. National Machinery specializes in advanced cold forming technology, and operates facilities on four continents.

## Fastener Manufacturers Support Fuel Standards

The fastener industry is working with manufacturing customers to seek new ways to reduce vehicle weight by reducing the number, type, and weight of fasteners, Design News reports. In terms of number of parts in a vehicle, fasteners can be up to 50% of the vehicle's bill of material (BOM). Reducing the number of fasteners through innovative fastener technology helps manufacturers meet new Corporate Average Fuel Economy (CAFE) standards, requiring an industry-wide fleet average of 50.4 mpg for passenger cars and light trucks, by 2026.

There are several ways fastener manufacturers are helping automotive OEMs innovate to improve performance, according to Design News.

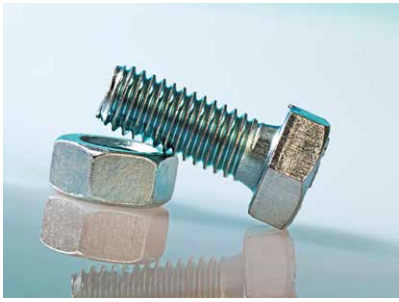
- "Optimizing production with advanced raw materials allows manufacturers to produce high-performance, cost-effective lighter weight products" with better fuel efficiency and enhanced performance.
- More OEMS are asking fastener engineers to work in an integrated fashion that combines design, analysis, and optimization techniques for lightweighting products.
- Redesigning fasteners can be instrumental in helping address this aspect of product production. For example, moving to lightweight materials, such as going from steel to aluminum, can reduce weight in areas such as in non-structural rivet applications.

"The fastener industry is doing its part to introduce methods to reduce weight in vehicles by consolidating parts, redesigning and re-engineering fasteners, using alternative materials, and generally thinking of new ways to reduce weight and increase performance," according to Design World.

## Industrial Fasteners Market to Grow 3.5% CAGR Through 2030

The global industrial fasteners market, valued at US$91.34 billion in 2023, is projected to grow at a CAGR of 3.5% through 2030, according to Maximize Market Research. The industrial fasteners market is witnessing significant trends, including the miniaturization of fasteners to meet demand for compact and multifunctional products in industries like consumer electronics, healthcare, and automotive.

Additionally, there is a growing focus on innovative fastening technologies that enhance functional permanence and operational efficiency. The trend towards sustainability is also influencing the market, with a shift towards using environmentally friendly materials and processes in fastener production.



Opportunities are emerging from the increasing demand for lightweight and durable materials, particularly in the automotive and aerospace industries. The push towards electric vehicles and advancements in renewable energy infrastructure also present new avenues for growth. The adoption of smart manufacturing technologies and the development of customized fastener solutions for specific applications are additional opportunities that market players can leverage.

The Asia-Pacific region accounts for over 45% of total output. The region's manufacturing sector is growing rapidly, driven by significant foreign investments and favorable economic conditions.

## FDI Rebounds on Higher Sales & Deliveries

The seasonally adjusted Fastener Distributor Index (FDI) improved to 53.8 in August (July: 47.5), "mainly on a recovery from last month's abysmal sales reading, much slower supplier deliveries, and slightly higher pricing," wrote R.W. Baird analyst David Manthey (CFA) with Quinn Fredrickson (CFA).

Sales, supplier deliveries, and customer inventories drove the improvement, while employment remained flat. "Looking at the sales index specifically, this month saw a nice recovery from a very soft July."

Nearly 4 in 10 respondents (35%) indicated sales came above seasonal expectations compared to just 22% last month and the 34% average over the past year. An equal amount of respondents said sales were in line with expectations (32% vs. 31% in July) or below expectations (also 32%, July 47%).

## Storied Bay Area Fastener Distributorship Shutters

R.J. Leahy Company Inc., a 96-year-old distributorship in San Francisco, has closed permanently after filing for Chapter 7 bankruptcy. The storied company supplied metal fasteners that "held together WWII-era ships, Disneyland art commissions, and historical renovations of restaurants, residences and San Francisco city hall," according to the San Francisco Business Times.

Founded in 1928 by Ray Leahy Sr., the company prospered in the growing maritime and military industries by offering non-ferrous (non-corrosive) fasteners and copper and brass metal products.

As those industries faded in the Bay Area, R.J. Leahy supplied fasteners and metal products to contractors, architects, artisans, and metalsmiths looking for vintage fasteners.

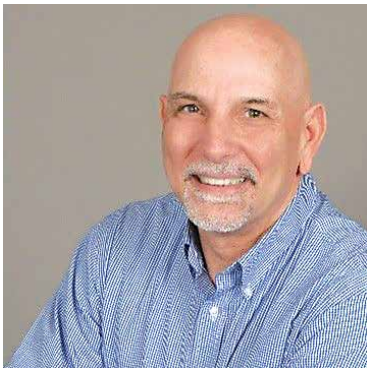
## Field Acquires Cascade Nut and Bolt

Leading provider of fastening solutions, Field, Rockford, IL, USA, announces the acquisition of Cascade Nut and Bolt, a fastener distributor located in Salem, OR, USA. This strategic acquisition will enhance Field's ability to serve a broader range of industries and expand the company's geographical footprint to service current and prospective customers. Field has grown on average 18% per year since 1990 and attributes that growth to its special culture and is helping customers save money through its world-class VMI programs and engineering support. The culture is people-focused and places a high value on team members, customers, and suppliers. Cascade specializes in supporting the structural market and industrial OEMs in the Pacific Northwest. Tom Boline, Cascade President, stays on as Sales Leader to grow the structure of Field's footprint and the Northwest industrial market.

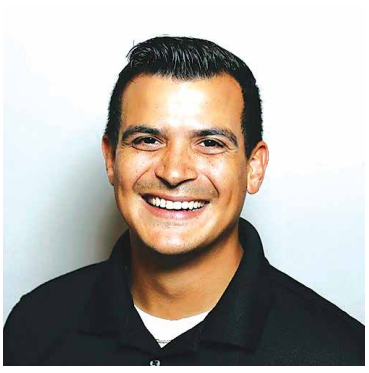
## Fastener Hall of Fame & Young Fastener Professional of the Year Awardees

IFE 2024 unveiled the latest inductee into the Fastener Hall of Fame and the 2024 recipient of the Young Fastener Professional of the Year award on September 10, 2024, in Las Vegas, NV, USA. The 2024 Fastener Hall of Fame inductee, Carmen Vertullo, has made extensive contributions to the fastener industry as an engineer, consultant, teacher, and mentor. He has been a fastener consultant and trainer for over 30 years and is the founder of Carver Labs and the Carver FACT2 Center. His expertise covers the areas of Fastener Quality, Fastener Failure Investigation, Expert Witness Work, Hydrogen Embrittlement, Structural Bolting, Bolted Joint Analysis, and Fastener Design. Vertullo is also a founding presenter of the Fastener Training Institute's (FTI) Certified Fastener Specialist Training Program (CFS) and the 2023 recipient of the NFDA's Fastener Professional of the Year Award.

Recipient of the Young Fastener Professional of the Year winner, Jake Glaser, currently works with Sherex Fastening Solutions. His first role at Sherex was as a Customer Service Representative, handling national and international accounts. In 2015, he was promoted to Strategic Account Representative, which led him to relocate from Buffalo, NY, USA, to Sacramento, CA, USA, to support the company's West Coast customers. By 2016, he took on the role of Technical Sales Representative, focusing on growth in the Pacific Northwest and specializing in the Heavy Truck Market. In 2017, he became the Regional Sales Manager for the Western Territories, where he manages territory growth and key national and international accounts. Glaser joined Young Fastener Professionals in 2017 and served as its President from 2019 to 2022. He is excited to continue supporting the industry as a current NFDA Board of Directors member since 2022.



◀ Carmen Vertullo



▶ Jake Glaser

## Rotor Clip Introduces New Patented Wave Spring Engineered for the EV Market

Rotor Clip, Somerset, NJ, USA, launched its new, patented InterShim™ Wave Spring design. Engineered for high-acceleration electric motor applications, this design features alternating turns between inactive (flat) and active (waved) turns to ensure reliable performance under torsional loads and precise rotational movement. The introduction of the InterShim Wave Spring reflects Rotor Clip's commitment to advancing product technology and meeting market needs. InterShim Wave Spring benefits are:

- Engineered to meet the demands of applications requiring high torsional loads and precise rotational control.
- Increased efficiency by eliminating the need for multiple elements within the assembly line.
- Floating ends and bent ends can help prevent damage to the mating surface.
- Allows for higher preload or softer spring rates to meet specific customer requirements.
- Highly customizable in the number of waves, number of turns, arrangement of shims/troughs, and a variety of specialty alloys.

While initially developed for electric vehicle (EV) applications, the InterShim Wave Spring offers benefits for high-speed and high-stress applications across various industries.

## 3M Has Made & Sold Over 300 Million Friction Shims

3M™ Friction Shims are small, thin steel shims that can increase maximum load and peak torque in bolted connections without additional fasteners or redesigns. 3M announces that it has now made and sold more than 300 million Friction Shims worldwide. 3M Friction Shims increase friction coefficients in torsional and static joints, particularly in demanding automotive applications. Nickel-coated steel shims contain partially embedded diamond particles that resist breakage. When applied with pressure between two mating surfaces, the diamonds "bite" into each surface to create a microform fit. "This is a significant milestone for us because we know 3M Friction Shims help our customers improve their design," said Amy McLaughlin, President of 3M's Advanced Materials Division. "We are very proud that we've now made and sold more than 300 million worldwide. 3M Friction Shims are a simple solution for stronger and more stable bolted connections."


## Wrought Washer Manufacturing Acquires TurnaSure

Wrought Washer Manufacturing, Milwaukee, WI, USA, a leader in the production of high-quality washers and fasteners, announced the acquisition of TurnaSure, a renowned manufacturer of direct tension indicator (DTI) washers. This strategic acquisition will bolster Wrought Washer Manufacturing's product portfolio and further enhance its commitment to providing innovative solutions to the construction and manufacturing industries. The TurnaSure ViewTite® DTI washers are engineered to provide a visual indication of tension in bolted connections, ensuring optimal performance and safety in critical applications. With this acquisition, Wrought Washer Manufacturing will integrate TurnaSure's advanced technology products into its existing product line. "We are thrilled to welcome TurnaSure into the Wrought Washer family," said Jeff Liter, CEO of Wrought Washer Manufacturing. "The addition of TurnaSure's direct tension indicator washers will not only expand our offerings but aligns perfectly with our existing markets. While direct tension indicators are most known in the structural space, we see the opportunity to use the patented product to solve existing bolting issues in the manufacturing sector." As part of the acquisition, Wrought Washer Manufacturing will retain the TurnaSure brand while leveraging its expertise to expand distribution channels and enhance customer support. The company is committed to maintaining the quality and standards that TurnaSure's customers have come to expect. "Joining forces with Wrought Washer Manufacturing opens up new opportunities for growth and innovation," said Jonathan Turner, President of TurnaSure. "With the resources of Wrought Washer, we will continue to set the standard for excellence in the industry." ■

Wrought Washer Manufacturing®

TurnaSure®

*News provided by:*
*John Wolz, Editor of FIN (globalfastenernews.com)*
*Mike McNulty, FTI VP & Editor (www.fastenertech.com)*