



TRI STAR TIMES

"The Inside Thread"

News and Information About Threaded Inserts

A Message from our President...

RESHORING ON THE RISE

Major Companies Bringing Jobs Back to the U.S.

Whether you call it insourcing, onshoring, or reshoring, it is defined as the reversal of outsourcing: the transfer of a business operation back to its country of origin. This relatively recent phenomenon has come to define the rebirth of American manufacturing.

The reshoring trend started back in 2009 and has continuously gained momentum for a variety of reasons – the most common being the problems that come from outsourcing overseas, including:

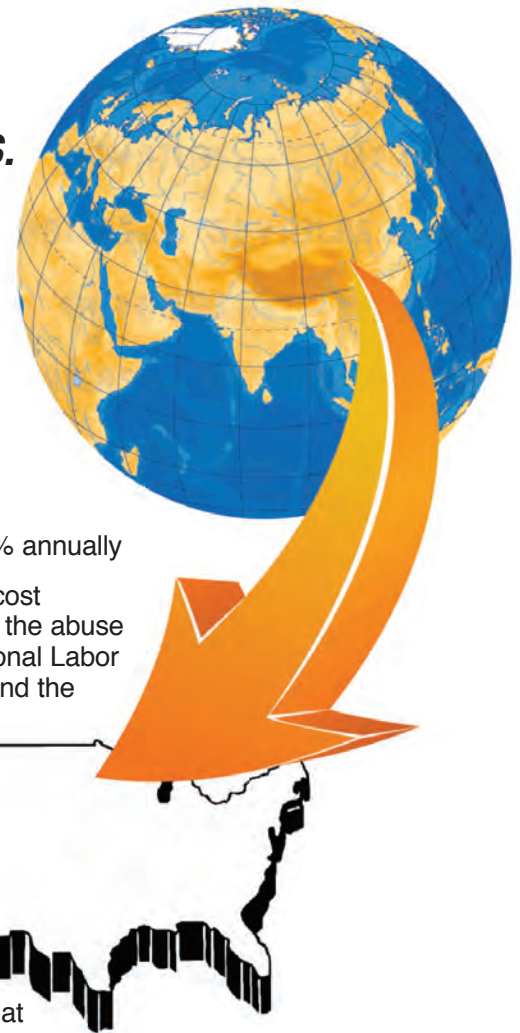
- Extended delivery times
- Customs duties/fees
- Overall risk
- Language and cultural differences
- Rising product costs
- Poor quality
- Customer dissatisfaction
- Transportation costs that increase by 10% annually

Other contributing factors have been the *Buy American Movement*; the narrowing cost differential between China and the US; the much publicized fear of knock-offs; and the abuse of workers' rights and poor working conditions overseas. According to the International Labor Organization, real wages in China rose by a mere 19% between 2005 and 2010, and the Chinese government has set a target for an annual minimum wage increase of only 13% through 2015.

At Tri-Star Industries, we have witnessed industry trends come and go, and we have seen firsthand that the offshoring trend appears to be reversing its course. According to Harold Sirkin, a partner at Boston Consulting Group and one of the co-authors of a recent in-depth study *Made in America*, "There is a pendulum that swings all the time, and it is now swinging back." In a recent New York Times column, journalist Thomas Friedman observed that "CEOs view their businesses globally and are most concerned with accessing the best quality talent at the lowest cost possible, wherever it may exist."

As CEOs review their Total Landed Costs (TLC), many have come to understand that reshoring is worth the exercise. "It's incredible what you find when you step back and seriously

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Our new Tsugami CNC Swiss Automatic Lathe/Screw Machines allow us to achieve tighter tolerances and more machining complexity for applications such as medical, firearms and aerospace – *in house!*

For more information on how your next project might benefit from these new machines, see page 3.



Part Counts are Monitored Throughout Production and Shipping for Accurate Order Fulfillment

Tri-Star Industries has always believed in "Total Customer Satisfaction." To ensure that our customers receive the correct number of parts, we have established a precise system to keep accurate counts.

Sample production is weighed every day – sometimes twice. We do this because the weight per piece, or per 1,000 pieces, varies enough that more frequent sampling is required. In addition to the density variations of every bar, the way the operator prefers to run his work at the mean dimensions – whether they go above or below the mean – affects the weight of the part.

Before final packaging, Tri-Star's shipping department uses three separate scales. These scales are all calibrated on a regular basis to within 99.97% accuracy. Whenever any questions or concerns arise, the three scales can be used for cross-verification and validation.

In contrast, customer sampling is performed randomly, usually with very few pieces and surely not as extensively as at Tri-Star. We understand there can be reasonable discrepancies from time to time, and we honor most – if not all – variances. We are simply trying to educate the buyer that there is (or should be) an acceptable window for these types of counting differences.



Buyer Beware...

Ensure your insert source is truly the manufacturer of the parts you receive – not just a middleman!

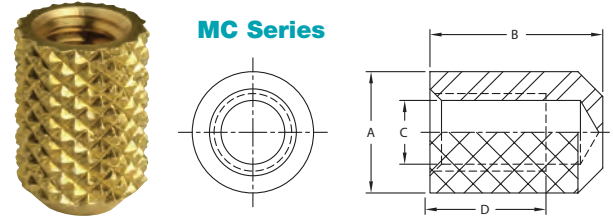
We have been advised by a few customers that there are some companies without any manufacturing capabilities that are passing themselves off as insert manufacturers. These "middlemen" position themselves as manufacturers by posting component photos and molded or assembled product displays on their websites. Nowhere will you see photographs of

MC & MT Series Inserts

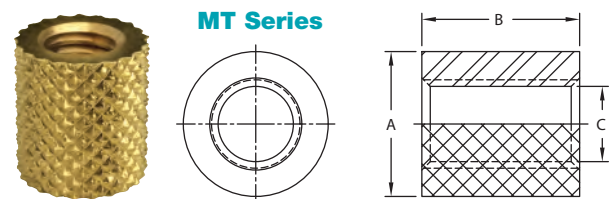
Ideal for Mold-in Applications such as Plastics, Rubber and Ceramics

- ✓ Aggressive diamond knurling ensures maximum hold power
- ✓ High resistance to tensile pull and rotational torque loads
- ✓ Close-tolerance ID for accurate positioning on core pins
- ✓ Manufactured from Brass (Alloy 360)
- ✓ Inch thread sizes starting from 2-56
- ✓ Metric sizes from M2.0 x 0.4

MC Series inserts have a blind, "closed-end" bottom to prevent plastic flow into the threads.



MT Series inserts are ideal for thru-thread mold-in applications.



primary equipment, component processing or support activities involving in-process or final inspections or component cleaning. These companies merely shop the component for the best price through their network of subcontractors. Buyer beware – it is important to know with whom you are dealing!

New Tsugami CNC Swiss Automatic Lathe/Screw Machines

With a larger facility and positive signs of an improving economy, Tri-Star Industries has been preparing to broaden our manufacturing capabilities with new equipment to complement our Davenport line. Recently, all the planning came to fruition with the addition of two Tsugami B0205A single-spindle CNC Swiss automatic lathe/screw machines.

The Tsugamis provide us with the ability to quote much shorter runs than our line of 5-spindle automatic Davenports. The Davenports require extensive set-up times and expensive tooling and offer no CNC capability. In contrast, the Tsugami machines have shorter set-up times and comparatively inexpensive tooling thanks to the single-spindle set-up and CNC functionality. They also hold much tighter tolerances, provide better finishes and can manufacture components from more difficult materials.

Due to the tighter tolerance capability of the new machines – and ability to produce more complex parts – Tri-Star hopes to pursue new markets including medical, firearms and aerospace. With the new Tsugami machines, we are now able to address many of our customers' prototype and short run requirements in-house. In the past, those projects were either not quoted or subcontracted to our local sources.

We have added one full-time employee to our team who is responsible for programming, setting up and running the Tsugamis. He has been working on similar CNC Swiss machines for more than 25 years.

The Tsugamis were purchased from Robert E. Morris of Windsor, CT and were selected over two other competing brands.



TSUGAMI B0205A Machines Feature:

- 5 Axes
- Fanuc CNC System
- Edge Minuteman 320SE Automatic Bar Loader
- TriMist 950 – Mist/Oil Collection System
- MJ Tool Parts Accumulator
- Firetrace Fire Suppression System
- MP Systems 2,000 PSI Coolant System

Reshoring On the Rise ...Continued from page 1

evaluate purchasing the components offshore," reported Columbia Marking Tools CEO Tom Phipps after reviewing his company's TLC. "The paperwork is ridiculous and Customs hold-ups at both ends are common. The crating, handling and shipping costs are becoming out-of-site, and God forbid the parts aren't right when they arrive, making you have to start all over again."

Some reports indicate that 15-20% of product received from overseas is incorrect, damaged or non-conforming. In some circles this is expected and accepted because the base cost of the offshore P/O is lower than the inshore cost. "Somewhere along the way the rules got changed," said Phipps, "If my non-conformance rate was 15-20%, regardless of my price, I'd be out of business. Why is it acceptable for some offshore suppliers to perform in this manner and retain the business?"

Manufacturers are coming to realize that the offshoring model does not always work in today's business environment. According to Sirkin, "Where once Asia was a source of cheap yet productive labor, U.S. productivity is now 3.4 times higher than it is in China... a more flexible workforce makes the U.S. a more cost-effective option. Manufacturers are finding that onshoring reduces lead times, thus reducing inventory

carrying costs, transportation costs, and the hassle of regulatory red tape."

It's a wonderful thing that companies such as Apple, Caterpillar, Ford, Honda, Lenovo and Otis Elevator have recently insourced jobs. GE opened new assembly lines in Kentucky to manufacture appliances, and Wal-Mart has pledged to spend \$50 billion in U.S. goods over the next decade. It's equally refreshing that the national news networks and print media are recognizing these companies for their efforts to bring jobs back to the U.S. However, how about recognizing the thousands of small- and medium-sized businesses that have had the opportunity to source offshore but chose not to? Tri-Star Industries is one of these companies!



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Need a Custom Insert?
Tri-Star can help in 3 easy steps...

1. Tri-Star's engineers review the project requirements, including: application, installation method, strength and component materials.
2. A CAD drawing is then generated, and the engineering department performs a design review to ensure all project specifications are met.
3. A final CAD drawing, detailed dimensions and a quote are provided for review and approval. Once the project is approved, your insert is assigned a part number and production begins!

