



**MAGTITE® SCREWS**  
**Thread Forming Screw for Use in Magnesium**



REMINC/CONTI develops products due to needs initiated by the marketplace. The automotive industry has slowly increased their use of magnesium components. We have seen magnesium used for instrument panel tubes, seat frames, etc. For years, these components have been successfully assembled using TAPTITE® screws. Today, the use of magnesium is expanding to larger, more intricate components, where the weight-saving benefit is even more beneficial. Auto companies are now using magnesium for major Powertrain components such as transmission housings, transfer casings and engines! This anticipated increased usage has created greater demands on the fastener. Structural applications will require fasteners that avoid generating debris. Fasteners will need to function over multiple insertion and removal cycles. In order to meet these needs, REMINC/CONTI has developed a thread forming screw specifically for use in magnesium: MAGTITE™ screws.

MAGTITE® screws utilize a version of the radius profile thread form that is successfully utilized on TAPTITE 2000® screws. The radius profile thread, combined with a unique TRILOBULAR™ shape, optimized for use in magnesium, provides effective thread forming. The MAGTITE® screw utilizes compressive thread forming to create an internal thread which does not cause the magnesium to crumble and create debris. The result is a clean, uniform, internal thread which allows for an infinite number of insertion and removal cycles.

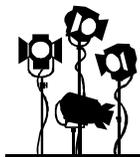
**MAGTITE® screw's  
Radius Profile™ thread**



*(cont. on page 3)*

**REMINC STAFF**

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Bobby Budziskek	Lab Technician
Ralph Barton	Associate



**SPOTLIGHT ON  
BOBBY BUDZISZEK**

Bobby Budziskek joined the REMINC staff on a part-time basis in October 2007. Bobby is currently studying mechanical engineering at the Community College of Rhode Island, and plans to pursue a Bachelor's Degree at the University of Rhode Island. Due to an increase in demand for fastener testing and application engineering work in the REMINC laboratory, we employed Bobby to assist us in getting this work done in a timely manner. It is our hope that after completion of his education, Bobby will consider a career with REMINC in a broadened engineering capacity. We welcome Bobby to the REMINC team!

## **"Marketing Service and Support in Practice"**

*(Excerpts from a presentation given at the Global Licensee Meeting in Europe on April 4, 2008 by Staff Assoc., Ralph Barton)*

I'd like to begin by quickly reviewing the economic situations in the United States, Europe and Pan Asia. The US economy is moving toward recession with some disturbing trends. Several large financial institutions have recently reported billions of US Dollar losses, due to the sub-prime mortgage debacle and the US housing industry is severely depressed as a result. The weak US Dollar is driving up the price of oil and making imports more expensive. The "Big 3" US automobile companies, namely General Motors, Ford and Chrysler, continue to lose market share. This year, being a presidential election year, adds additional uncertainty. All matters considered, the US economy is unstable.

But at REMINC we are not worried, because we're actively looking at new opportunities. The automotive tier companies in the US are still growing, despite the "Big 3's" production decline. The Japanese, Korean and German-owned automotive companies are building several new facilities in the US. To capitalize on these opportunities, we have several initiatives in motion.

As a result, new applications for TAPTITE 2000® and POWERLOK® fasteners are growing. We have also recently introduced our new product for magnesium applications, MAGTITE®. To summarize, we are not daunted by the US economy because we have several weapons to fight it.

The European economy is also slowing, but its slide is reportedly not as serious as in the US. The Euro is very strong, hurting exports. Raw material prices, including those for rod and wire, continue upward. These and many other factors are presenting challenges to those manufacturers that produce product in Europe. However we remain very optimistic, because our sister company, CONTI Fasteners AG, is successfully promoting our fastener technology throughout Europe.

We know, that in periods of adversity, companies will seek ways to reduce costs and will welcome our cost-savings solutions. Our CONTI staff is capitalizing on these opportunities, and we are seeing positive results. One result of this activity, is that sales of TAPTITE 2000®, FASTITE® 2000™ and REMFORM® fasteners are increasing in Europe, so we are quite encouraged.

Four years ago we began an initiative in Pan-Asia to insure that our licensees would share in this market's projected growth. Fortunately, much of Pan-Asia is experiencing economic growth, due in part to the powerful economy in China, and the overall potential for our licensed products in Pan-Asia is huge. So far, the response to our initiative has been excellent and we are seeing positive results in several countries.

REMINC & CONTI's presence in Japan is also proving to be valuable. The effort in Japan is a collaborative one. Our staff has been very active in Japan, introducing our technology to the automotive companies and tiers, but also they are also working with Japanese auto companies in the US.

To summarize our observations, the global economy has some weaknesses, no doubt, and the market environment is more challenging than ever. Therefore we expect some economic sluggishness over the next few quarters, but that will not hold back our efforts at CONTI and REMINC. We will simply travel more and schedule more visits.

It's fitting at this point to share with you a comment that our late founder, Art Bancroft, always made – "When times are bad- sell, sell, sell!". He always viewed a slow economy as a period of opportunity for our program and our licensees.

I would like to offer a few more suggestions for your consideration.

- Re-invest a portion of your earnings from prior years to improve your competitive situation.
- Retain your normal compliment of marketing, sales and engineering personnel.
- Take advantage of this slower period of activity to re-educate and train them.
- Be sure your staff understands our thread-forming technology and is familiar with our full product range.
- Manage your licensed products program to get the maximum benefit from it.
- Focus your marketing efforts on companies where application opportunities haven't yet been exploited.
- Encourage more application engineering, in order to obtain new business for value-added parts.
- Attack competitive and look-alike products, by up-selling the superior quality, consistent performance and global availability of genuine trademarked fasteners.
- Finally, consider working with REMINC or CONTI. Get us involved, have your marketing group contact our offices.

Our marketing and technical staff is experienced, and is well qualified to help you sell the cost-saving benefits of our technology. Be assured that our staff will work with yours on a confidential basis.

We can hold training seminars at REMINC's offices in the US or at the CONTI office in Switzerland. We can go to your facilities, or travel to end-user locations, whatever it takes.

We have several pictorial booklets, showing successful applications, which are available to you, as well as technical reports, test data and samples. We provide the support and service you can utilize, if you choose to do so.

## **MAGTITE® SCREWS** **Thread Forming Screw for Use in Magnesium (cont. from page 1)**

### **MAGTITE® SCREWS MINIMIZE DEBRIS GENERATION**

When thread forming in magnesium, several types of applications cannot tolerate the generation of debris. This is critical in internal assemblies in Powertrain applications, electrical applications, etc. The pictures below compare a MAGTITE™ screw and a thread forming screw, which has formed an internal thread in magnesium. Each screw was driven in and out of the magnesium for three cycles. The cumulative amount of debris generated by each screw is shown in these pictures.

**MAGTITE® Screw**



**Competitor's Thread Forming Screw**



The MAGTITE® screw is designed to fail by screw fracture if the assembly is over-torqued. This feature allows manufacturers to salvage expensive castings, even if screws are inadvertently over-tightened. This is an important feature for Powertrain applications. MAGTITE® screws provide this feature without requiring an excessive length of engagement as other fasteners require.

We do not foresee MAGTITE® screws replacing the use of TAPTITE 2000® screws in all magnesium applications. However, MAGTITE® screws are the fasteners of choice for the many magnesium applications to come.

Please contact our application engineers for any questions you may have about MAGTITE® screws by visiting our website, [www.taptite.com](http://www.taptite.com).

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### **REMINC Responds! Fielding the Questions**

*Q: Where can I find lengths, head styles and part numbers on your website?*

A: Since REMINC is not a point-of-sale location, REMINC does not dictate head standards, lengths or part numbers, to its global licensed producers.

These producers are free to utilize domestic market standards along with their own part numbers. The situation really isn't any different than for a standard metric machine screw for which no universal part numbers or universally accepted global head standards exists.

*Q: I would like to use an M12-1.75 TAPTITE 2000® fastener in a weld nut, but I have limited space behind the weld nut. Can I use the TAPTITE 2000® "SP"™ fastener with its 2½ pitches of tapered lead instead?*

A: While the use of a TAPTITE 2000® "SP"™ screw instead of a TAPTITE 2000® fastener is often a good option for smaller diameter applications with clearance problems, the TAPTITE 2000® "SP"™ fasteners must have a heat treatment suitable for a steel nut member. For M6 and larger sizes that are thread forming into steel, such as your weld nut, using the "SP" version is typically not the best option.

However, a TAPTITE 2000® fastener can be made without the 2 stabilizing threads. The dual out-of-round geometry will provide the thread forming efficiency necessary for larger diameter steel applications, such as your weld nut application. The point length will be 3 pitches maximum.

*Q: I noticed we used a tightening torque greater than the torsional strength of the fastener - how can this be?*

A: If I had to give a one word answer it would be - friction! In a torsional strength check on the fastener, the fastener is effectively clamped in a holding fixture. All the torque is rotationally applied to the fastener body itself. In a typical application, about 80% - 90% of the torque is absorbed by friction, both under the head and along the threads. Only a small amount of the applied torque actually develops clamp load. In an application that has enough length of engagement to result in failure by fastener fracture, this fracture torque will be much greater than the torque necessary to fracture (shear) the screw in a torsional test fixture.

REMINC Training / Brochure Request Form

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Please Check:

- Contact me regarding a training visit
- REMINC General Products Catalog
- TAPTITE 2000® Products Application Guide
- TAPTITE 2000® Product Brochure
- REMFORM® Product Brochure
- TRU-START® Product Brochure
- FASTITE® 2000™ Product Brochure
- "54 Ways TAPTITE 2000® Fasteners Lower the Cost of Assembly" Request Form
- Receive Newsletter by e-mail

Mail this form to REMINC at 55 Hammarlund Way, Tech II, Middletown, RI 02842 USA or fax it to (401) 841-5008

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**1958 - 2008**  
**Celebrating 50 Years Lowering**  
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