



**REMINC's Education and Training
Facility Outreach** by Ken Gomes

As the developer and licensor of several proprietary fastener designs, REMINC is continuously striving to expand its application engineering activities and expose its training facility to as many licensees and fastener end-users as possible. From experience, we know that being pro-active with this effort is an important component of our global licensing program. Therefore we have an on-site staff of experienced fastener and tooling engineers at our Middletown, Rhode Island, USA facility, which contains offices, a conference room and a mechanical laboratory.

The conference room is primarily used as an education and training center. Representatives from our licensed fastener and tooling manufacturers and fastener end-users or assemblers are regularly invited to REMINC to attend training sessions which focus on one or more of our proprietary products. We have numerous PowerPoint® presentations, which are supplemented by group and one-on-one discussions. The subject matter includes marketing techniques, manufacturing methods and application-engineering analysis. All attendees learn about when and how to use TAPTITE 2000®, REMFORM® II™ and POWERLOK® II™ screws. However, the primary objectives of our training and education seminars are (1) teaching attendees how to identify potential licensed product applications and (2) developing the case for beneficial cost-savings. We know from experience that our products are application specific and their use can only be justified by cost-savings in assembly, as assemblers have no interest in utilizing a new fastener in an application unless cost-savings or quality improvements can be documented.

Our typical training sessions take place over 2-2½ days, but this timeframe can be tailored and the sessions' contents modified to address specific subjects and needs. Training sessions' agendas are established in advance to match the needs and availability of attendees. Typical attendees include product and design engineers, tooling engineers, salespersons, sales engineers and marketing staff.

Part of the training process includes application and performance demonstrations in our mechanical laboratory, which is specifically equipped to perform application analysis and product quality audits.

Licensed manufacturers and/or end-user assemblers often submit components to us in order that we might investigate whether an in-place cost-savings or performance benefit could be achieved using a version of our TAPTITE 2000®, POWERLOK® II™ or REMFORM® II™ products.

(cont. on Page 3)



REMINC Office & Laboratory in Middletown, RI USA

REMINC STAFF

- | | |
|-----------------|---|
| Laurie Mandly | Chairman & CEO |
| Tim Egan | President |
| Ken Gomes | VP - Engineering/Product Development |
| John Reynolds | Manager - Fastener Engineering |
| Dennis Boyer | Senior Project Engineer |
| Bill St. Angelo | Director - Marketing and Licensing |
| Bob Budziszek | Lab Technician |
| Suzanne Lilly | Administrator - Intellectual Properties |
| Beth Rondeau | Director of Financial Administration |
| Kelli Russ | Executive Assistant |
| Ralph Barton | Associate |

SPOTLIGHT ON KELLI RUSS



Kelli Russ has joined REMINC as an Administrative Assistant. In her position, Kelli is responsible for the daily needs of the REMINC office, including correspondence preparation, sample, brochure and newsletter mailings, and licensee training arrangements. Kelli joined REMINC after more than 20 years in the banking industry. She resides in Middletown, Rhode Island with her husband and two sons. Please welcome Kelli to the REMINC family.

R E G I S T E R

CHAIRMAN'S CORNER by Laurie Mandly

Last Spring I completed my first journey to Asia on behalf of REMINC and CONTI. It was quite an eye-opening experience in many respects. My first stop was Beijing, China's historic capital city. The Forbidden City was majestic, the food quite new to me and the people were very friendly and welcoming. The visit to the impressive Great Wall made history a reality for me, taking me back over 2000 years.

In Beijing, I was able to visit a long time licensee of CONTI, although they are relatively new to China. It was my first experience visiting a Chinese fastener plant. It was interesting to see that although fastener plants are similar in terms of screw production, it is the people and culture of the country that make the fastener business unique in each part of the world. It is also the uniqueness of the REMINC and CONTI Licensing Program, around the world, that enables us to understand the different cultures of our licensees and to blend them together to best serve the end-users of TRILOBULAR® products worldwide.

The next stop of my journey was Hong Kong, an amazing and global city, for a quick stopover before I traveled on to Shanghai, where I visited the CONTI office and some licensees. Shanghai appeared to be literally "alive" with activity. My final journey took me to the beautiful cities of Tokyo and Kyoto, where I met with some Japanese licensees and toured their remarkable facilities. All of the licensees I visited could not have been more welcoming and I thank them gratefully!

Traveling to Japan was an especially sentimental trip for me. I was able to visit with many of my father's, Art Bancroft, friends and reminisce about their many happy times in both Japan and the USA. My father was truly fortunate to have had such good friends in Japan. I now understand how the many friendships he formed allowed him to be accustomed to the many great customs and traditions of the Japanese culture.

Although this trip was my first venture to Asia and passed much too quickly, my flight back to the States gave me plenty of time to reflect on what I had seen, heard and learned. Last year almost 38 million automobiles were assembled in the Pan-Asian market, in addition to hundreds of millions of other products such as smart phones, tablets, computers, televisions, home appliances, etc. Production and assembly of all these units is occurring to meet a rapidly growing domestic demand as well as the huge export markets in Europe and the Americas. The application opportunities for our family of thread-forming fasteners are, literally, almost unlimited. CONTI's licensees are well-positioned to supply and support this market for the benefit of end-users.

In comparison, the utilization of TAPTITE® and REMFORM® fasteners in Pan-Asia is presently low versus the markets of the Americas and Europe. As components assemblers are made aware of the cost-saving benefits of our proprietary fasteners, they are discarding traditional assembly techniques using metric screws, washers and nuts, patches and adhesives and converting to the TAPTITE 2000® and REMFORM II® families of products. The driving forces in this transition are as they have been always, the increased productivity and lower overall costs of assembly CONTI fasteners provide to the end-user. CONTI is supporting this effort with its staff members traveling regularly to Pan-Asia and with our domestic staff members based in China and Japan.

I cannot help but reflect on the experience of my father when he started the Licensing Program. At that time, the economies of the United States and Europe were booming, yet high-performance thread-forming fasteners simply did not exist. With the then newly invented TAPTITE® design he saw opportunity and by selling assemblers on the concept of cost-savings, he initiated the first applications for the TAPTITE® family of products. What he began has grown into a formidable market for thread-forming screws and bolts in the Americas and Europe. This same philosophy has caused the current growth trends for Pan-Asia, which is now our fastest growing territorial market. I believe my father would have been very proud to see his philosophies and products become truly global as they have now become.

I would like to thank everyone for their support of, and commitment to, the TRILOBULAR® and REMFORM® Programs. But, more importantly and as my father always told me to do, I hope everyone finds a way to take some time during business travels to enjoy the culture of your destinations. Only by doing this can you see that although we are all unique in our customs, we are all truly the same and should always support one another. Thus, I would like to wish everyone safe travels and success on your business missions!

REMINC RESPONDS! FIELDING THE QUESTIONS

Education and Training

Q. How many candidates can we send to REMINC for training at one time?

A. We would like to keep the number of participants to a maximum of six attendees at one time as our training staff consists of approximately six individuals with engineering and marketing experience. This size group allows for a good interchange of information and discussion.

Q. Can the group be a mixture of engineering, quality, sales and marketing personnel at one time?

A. Yes, REMINC will tailor the presentations to focus on all of these areas in the time allotted for the training sessions.

Applications

Q. If we are having an issue with a particular application, can we discuss it during the training sessions?

A. Absolutely, if possible it would be beneficial if you would be able to bring the application components with you so we can set up in our laboratory to analyze the problem and hopefully recommend a solution.

REMINC's Education and Training Facility Outreach by Ken Gomes *(cont. from Page 1)*

Let's examine a few of the application areas where we have had recent involvement. The automotive industry is contemplating an increased use of unthreaded "pierce-and-clinch nut designs". We are creating a performance study on the use of TAPTITE 2000® screws into these types of nuts.



Figure 1 - Pierce-and-Clinch Nut assembled in HSLA thin-sheet steel

The automotive industry has substantially increased the utilization of HSLA (High Strength Low Alloy steel) in recent years. This material saves weight, because it is stronger and harder than standard grades of steel; therefore, thinner material can be used. However, it is difficult to tap into and attach weld nuts to HSLA. Various designs of pierce-and-clinch nuts, with plain non-tapped holes, in combination with TAPTITE 2000® screws, are widely used to overcome the challenges of HSLA. Using TAPTITE 2000® fasteners eliminates the cost of pre-tapping the nut.

There has been an increased use of aluminum in auto assembly, which requires, in some cases, the use of aluminum nut members in new and different configurations. We have performed tests in extruded aluminum "C" section partial holes. We have achieved success in this area using REMFORM® II™ "F" screws.



Figure 2 - Aluminum "C" Channel suitable for REMFORM® II™ "F" screws

When extruding aluminum components, shown in Figures 2 and 2A, only a partial hole can be generated. REMFORM® II™ "F" screws work very well in these partial holes, providing good performance and eliminating the cost of a tapping operation.



Figure 2A - Aluminum "C" Channel suitable for REMFORM® II™ "F" screws

We have created several reports on various automotive products, including transmission housings, power transfer units, control modules and door and seat assemblies. We also have numerous reports on non-automotive applications, including kitchen appliances, business machines, such as printers, and many others. REMINC has a large report database which we use and make available to keep all interested parties informed on how our products provide performance, quality and cost savings benefits.

Figure 3 - Heavy Steel Extrusion for use with TAPTITE 2000® screws



The automotive industry is using deep-drawn extruded nuts manufactured from steel or aluminum, as shown in Figures 3 & 3A. These extrusions are often integrated into a component, eliminating the need for a weld nut. TAPTITE 2000® screws are used in non-tapped plain holes, eliminating the cost of tapping the nut.



Figure 3A - Heavy steel extrusion for use with TAPTITE 2000® screws

The REMINC laboratory contains equipment suitable for determining torque, torque angle, and torque-tension performance. These tests can be performed at low-speeds for laboratory analysis or at higher speeds by using hand held drivers to simulate actual assembly line conditions. Torque-tension performance can be analyzed using sophisticated ultrasonic testing equipment supplied by Micro Controls, Inc. (MCI). In addition, the REMINC laboratory has screw hardness, dimensional and strength measurement capabilities, which are used to evaluate proprietary product applications and audit products manufactured by our licensed manufacturers.



Figure 4 - Aluminum 4-wheel-drive Power Transfer Unit assembled with TAPTITE 2000® screws

TAPTITE 2000® screws are used to assemble the cover to the housing on an automated assembly line. The stabilizing point of the TAPTITE 2000® screw readily aligns the screw to the hole. The cost-savings benefit comes from eliminating the costs associated with pre-tapping. In addition, there is a major capital cost-saving by eliminating the need for automated tapping equipment.

We hope that this outline of REMINC's education, training and application testing capabilities has attracted your interest and will motivate you to work closer with REMINC, put our resources to work for your company and develop an ongoing relationship for our mutual benefit.

We invite you to contact us to arrange a training session if you feel your company and staff would benefit from visiting the REMINC facility. REMINC's location is convenient from the Providence, RI, Green Airport (35 minute drive) or Boston, MA, Logan International Airport (75 minute drive). Being near Newport, Rhode Island, a renowned tourist destination, allows us to follow up a full day of training sessions with the sights, sounds and flavors of this beautiful ocean-side region.

REMINC Training / Brochure Request Form

Name: _____

Company: _____

Address: _____

Telephone: _____

Fax: _____

E-mail: _____

Please Check:

- Contact me regarding a training visit
- REMINC General Products Catalog
- TAPTITE 2000® Products Application Guide
- TAPTITE 2000® Products Brochure
- REMFORM® Products Brochure
- TRU-START® Products 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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