The Benefits of a Foreign Exchange by Kathy Levy

“Man cannot discover new oceans unless he has the courage to lose sight of the shore.”
—Andre Gide, French Writer

No matter your role in the shot peening industry, if you’re going to be successful, you have to be willing to learn and share information about your work. What determines your success? I’ll share a few real-life lessons from a French engineering student.

Electronics Inc. (EI) was fortunate to have Julien Jeanneau working at their facility this summer. Julien lives in Nantes, France and attends ITII Pays de la Loire (Institut des Techniques d’Ingénieur de l’industrie) where he is working toward a Mechanical Engineering degree. ITII coordinates the delivery of an engineering degree in cooperation with academic and professional partners. Julien participates in an internship program at Sonats, the manufacturer of the Stresstonic® and a ultrasonic peening solution provider. In addition to the internship program, ITII requires each student to spend nine weeks working for a non-French speaking industrial company outside of France. The objectives of this work period are:

1) Improve communications in a foreign language
2) Develop autonomy in dealing with new and unpredictable situations
3) Increase awareness of cultural issues in the workplace
4) Develop the capacity to analyze and communicate one's experiences

Sonats asked EI if they would be interested in having Julien with them for the summer and EI agreed. I met Julien at the end of his stay in the United States.

Learning by Doing
The EI staff put Julien to work translating data sheets and instruction manuals on Almen strips, Almen gages, MagnaValves and controllers from English into French. The project was beneficial to Julien in two ways: he strengthened his ability to read and understand English and he learned more about Almen products. “Translating these materials really helped me,” said Julien. “Sonats uses Almen strips and gages in their Measuring Department and now I understand them better.” EI felt fortunate to have their technical documents translated by an engineering student and the materials will be available online soon.

ITII also required Julien to complete a technical project and EI’s Operations Manager, Jeff Derda, assigned Julien the task of designing an automated media loader for EI’s MagnaValve test stand. Currently, after shot has run through a MagnaValve, the technician has to lift the buckets to the top of the stand to replenish the hopper.

“Julien designed a media loader in 3D on his laptop computer; I was actually very surprised with the magnitude of his design, said Mr. Derda. “I did not expect something quite that detailed, since the duration of his visit was relatively brief and he was involved with other projects including the translation of product manuals. He has a very good grasp of mechanical systems and how they interface, which was evidenced in his design presentation. There are still a few issues that must be resolved and the...
electronics have to be completed but the basic concept is very sound and we should be able to drive it to completion.”

Julien enjoyed the assignment because it was an open project—the design was completely up to him and he could make all the decisions. However, he was responsible for a functional design that would be economical to build and maintain. He also demonstrated his English-speaking skills when he presented the project to the EI engineering and management team.

**Bridging Communication Barriers**

During Julien’s stay in the United States, Sonats sent him to a client’s facility in Pennsylvania for two weeks. The company peens bridge welds with Sonats’ Ultrasonic Needle Peening units. One of Sonats’ maintenance experts traveled to the U.S. to address a problem and Sonats’ Technical Director, Vincent Defontaines, wanted Julien at the job site for a few days to observe and support the equipment operators.

The operators aren’t metal peening specialists—they typically use a jackhammer—and they weren’t familiar with an ultrasonic impact treatment device. Through training, equipment use and care instruction, and hands-on experience, best practices have been established. “At first, I didn’t understand why there are workshops in shot peening,” Julien concluded. “Now I see why training for the shot peening operators is important even when it doesn’t directly sell products.”

While Julien pointed out to us cultural differences in manufacturer and vendor relationships between French and Americans, his responsibilities at the customer’s site emphasized an opportunity for all manufacturers: Train the people that will be using the product, not just the management or engineering staff. Engineers and equipment operators may be the same nationality, but they don’t always speak the same language. Important product information could get lost in the translation.

**A Sense of Adventure is Required**

If going to a difficult work environment when English is your second language isn’t adventurous enough, Julien didn’t want to spend a weekend in a hotel room so he drove from Pennsylvania to New York city. Alone. Let’s give him an A+ for the internship program’s Objective #2 right here and now: “Develop autonomy in dealing with new and unpredictable situations.” I didn’t know many Americans who have never been to New York that would drive into Manhattan by themselves. Perhaps a better comparison would be an American driving in Paris alone. At least he would be driving on the correct side of the road.

**Being Pleasant is Priceless**

*“Two things reduce prejudice: education and laughter.”* —Dr. Laurence J. Peter

American Educator and Writer

Julien didn’t expect to like Americans. “I was expecting the Ugly American: One that eats too much and talks loudly,” he admitted. But he realized early in his trip that he was going to enjoy working with Americans. (He had the same reversal of attitude when he was in Korea earlier this year.) Jack Champaigne, President of EI, invited Julien to stay in his home and Mr. Champaigne enjoyed introducing Julien to American culture including our food and an all-American summer event: antique car shows. According to Mr. Champaigne, Julien enjoys grilled steak and he makes great Korean dishes. Julien also made crepes for the staff during the monthly EI breakfast.

Immersing oneself in another’s culture doesn’t guarantee that you’re going to like them, but share a laugh and now we’ve formed a bond. I sat in on Julien’s MagnaValve media loader presentation to the EI engineering staff and it was an energetic and enjoyable exchange of information and ideas. Julien even laughed at our “engineering jokes” (that’s a paradox). Julien thought we were going to be loud and piggish; we were afraid he was going to be rude and abrupt. We were all wrong; probably because Julien approached everything and everyone with an open mind and a warm smile.

**Who Was the Teacher?**

ITII doesn’t cover shot peening in its curriculum and Julien’s exposure to shot peening at Sonats and EI has introduced him to a likely career path. However, the EI staff is impressed with ITII’s academic program that prepares students to compete in a global economy and Julien gave us insights on marketing our products and services in Europe. In return, we think Julien saw why training makes equipment operators more accepting and appreciative of new products and work practices. We know for sure that Julien’s engineering skills and ease in new situations will make him a tremendous asset in any work environment. It was a valuable learning experience for all of us. ●

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