

# The Surprising Benefits of a Shot Peening Workshop

**SURPRISE!** This article has nothing to do with shot peening training. It won't promote classes in intensity, coverage or machine maintenance. It will, however, address three specific groups of people—Decision Makers, Exhibitors, and Employers—but please read ahead to see if you can take advantage of the same benefits they receive from participating in an Electronics Inc. (EI) Shot Peening Workshop.

## #1: BENEFITS TO DECISION MAKERS

The “decision makers” in the context of this article are the people challenged with the task of bringing shot peening in house. I can't stress this strongly enough: The decision makers should attend a shot peening workshop **BEFORE** making big decisions, especially equipment purchases. The following are three scenarios that highlight the reasons decision makers should attend a workshop.

### *This is more complicated than we thought*

A process engineer who was given the responsibility of developing an in-house shot peening program attended an EI shot peening workshop. Afterwards, he expressed his astonishment over the complexity of the shot peening process to Dave Barkley, the EI Shot Peening Training Director. The engineer went back to his company with a much different impression of shot peening. Regardless whether the company decided to bring shot peening in house, the investment in the workshop was worthwhile. If the company decided to move ahead with an in-house shot peening program, they had valuable information for mapping out a successful strategy. If they decided to continue to send their components to a shot peening job shop, they now have the knowledge to better evaluate the work.

### *We bought the wrong equipment*

A company purchased a shot peening machine from a leading manufacturer but after attending a workshop they confided to Dave that a rotary flapper peening program could handle their needs. Don't let this happen to you. Research is crucial when developing a shot peening program and this leads nicely to my next point.

### *The exhibitors and instructors were so knowledgeable and helpful*

The environment is friendly and relaxed at an EI Shot Peening Workshop and the exhibitors look forward to answering your questions. Under no other circumstances can decision makers

meet with so many leading OEMs at one time. In addition, workshop instructors are experts in their fields and they are generous with their time. A typical EI workshop has several social events where students, instructors and exhibitors can talk. A workshop is also a rare opportunity to meet attendees that already have an in-house shot peening facility. They have a wealth of experience to share.

## #2: BENEFITS TO EXHIBITORS

This sharing of knowledge isn't a one-way street. Two exhibitors with industry-leading companies recount how they benefit from talking with students.

### **Jim Whalen, Progressive Surface**

Every year at the workshop we learn something from attendees on how we can make improvements in our products. We have incorporated these ideas into our PRIMS user interface, Saturation Curve Solver and, most recently, more and more customers are asking about the tools and technology that would minimize the chance for operator error when loading a part, nozzle or program. These requests for error proofing have helped us justify the investments we have made into developing “intelligent” peening machines that incorporate vision and measurement technologies.

Sometimes as equipment builders we assume that everyone who buys a shot peening system knows the process and applications as well as we do. Year after year, however, we see how many new faces are coming to learn the process. They don't learn about the shot peening process in school so we have taken a much more active approach to assure that customers have basic process





understanding as part of our machine training, that they understand how to complete a saturation curve, and what the difference is between coverage and intensity. If they have not been to a workshop to really understand these process basics, we make sure we cover that with them.

Being an exhibitor at the workshop provides the perfect setting for conversations with equipment users outside of the typical procurement process. These discussions have really helped us understand customers' needs, the issues they have running peening equipment in production, and the things that if incorporated into machines would improve the quality of their shop output. They share good experiences as well as bad and it's all great information to help us to become better equipment providers. It is hard, if not impossible, to have these types of honest discussions under the restrictive procurement process.

### **Phil Waser, Ervin Industries**

Ervin's philosophy is to "Never Stop Improving" and the shot peening conferences continue to be events from which to draw inspiration. At EI workshops, we present non-partisan facts about peening media and combine it with a description of Ervin's unique processes that allows conformance to SAE and AMS specifications. During these presentations, it's very common for participants to express their realization of the importance of using and maintaining good quality peening media in their process.

As an example, an engineer from an aerospace MRO came up to us during a workshop to discuss our recent test procedure for a new shot they were using. His company had sent us their media sample to test for durability and other attributes with the Ervin Test Machine at our lab in Adrian. He told me that the Ervin material was found to be more durable than the competition. Though this was an expected result, we learned from the engineer that increased durability meant more than just a reduction in operating costs. To them, media quality had a direct impact on repeatability and accuracy of their peening

process. Ervin thrives on such validation of our product quality and acknowledgement from the end users.

On yet another occasion, we were able to help out an aerospace customer we met at the workshop develop a very specific grit blast media at Ervin Technologies in Tecumseh. Ervin Technologies is the R&D center for our North American operations and this interaction enhanced its profile within the aerospace industry.

### **#3: BENEFITS TO EMPLOYERS**

Recent surveys of American manufacturers support a feeling common in our industry—many manufacturers are thriving and embracing innovation.\* Unfortunately, a lack of skilled workers is the biggest impediment to growth at this time. Obviously, training creates skilled workers but it's also an effective way to keep good employees. Here are three positive messages an employee receives when she/he is sent to a shot peening workshop.

- 1. I'm valuable to this company.** It's a good feeling to know you are worth the investment of training.
- 2. Shot peening is a great industry.** An underlying message of shot peening training is this: Shot peening makes a valuable contribution to many industries. Participants leave the workshop with a sense of pride in what they do.
- 3. I am an achiever.** When a student earns a Certificate of Achievement, he/she feels a sense of accomplishment. It can also put them on a career path within your company.

Appreciated and motivated employees are much less likely to move to other companies or leave manufacturing for other fields. And finally, the most obvious benefit of training to employers is peace of mind—the peace of mind that comes from knowing your employees are implementing a controlled shot peening program. ●

\*A recent survey on American manufacturing can be found at [www.thomasnet.com/pressroom/Industry\\_Market\\_Barometer.html](http://www.thomasnet.com/pressroom/Industry_Market_Barometer.html).

*Photographs are from the 2016 USA EI Shot Peening Workshop in Indianapolis, Indiana.*

