



OPENING SHOT

Jack Champaigne | Editor | *The Shot Peener*

Products, Processes, and Progress

I STARED AT THE COVER of the fall magazine for a while to grasp the significance of this collection of articles. I looked back at older issues to see what was new back then—not much compared to today. Eddy current non-destructive testing was still only a dream. Residual stress determination was available only as a time-consuming laboratory process. Laser shock peening was in experimental stages using Star Wars laboratory equipment. Shot peening machines were automated but today's shot peening systems are sophisticated enough to more than meet the demands of the aerospace industry. Ten years ago, curve solvers allowed compliance with the 10% rule, but today's version brings even more confidence onto the shop floor.

The Almen strip is also in research and development. I always want to learn more about Almen strips. A project to investigate the influence of strip hardness and thickness is starting soon at Purdue's Center for Surface Engineering and Enhancement (CSEE). Why is the "A" strip used only between .004 and .024A intensity? What is the limit for the "C" strip? What is the limit for the "N" strip? How can we design a thinner strip for fine particle shot peening?

A cast steel shot project is underway at CSEE, too. Researchers are evaluating statistical process control limits on cast steel shot to supplement test sieve procedures. I remember talking to a vendor many years ago and I was asked, "Did you want small S-110 or large S-110?" It turns out that is a valid question since there is such a large range of sizes allowed in the sieve analysis.

Another topic that needed to be addressed is the affect of COVID-19 on the USA Shot Peening and Blast Cleaning Workshop and Tradeshow. I wouldn't call these steps "progress" because we would be better off if we never had to adapt to the cruelty of the pandemic. But the actions will make the event productive and safe. (A big thank you to Dave Barkley, Director of Training at Electronics Inc., for designing these programs.)

The first change is in workshop registration that Dave named "Volatile Workforce Accommodations." As Dave wrote in an email, "We recognize many companies are struggling with maintaining a workforce and may be hesitant to register employees for the US Workshop. Maybe an employee will have moved on by November. Maybe you haven't hired anyone yet. Fear not. Sign up employees now to take advantage of the early registration discount. You can make substitutions right up to the last week of October. You can even register a 'to be determined' (TBD) student and let us know the name later."

The second program implements measures for the safety of participants. Student seating will be spaced three feet apart. Exhibition booths will be spaced three feet apart. Breakfast and lunch seating will be spaced appropriately. Face masks are recommended for non-vaccinated individuals coming within three feet of each other. Hand sanitizer will be widely available.

All in all, we are an industry that adjusts to the world around us and we take every advantage of technological advancements. There hasn't been a day when I haven't been proud and grateful to be a part of it. ●

THE SHOT PEENER

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