## **Six Things I Learned** While Working on the **This Shot Peener**

Scott Hatfield is a true "Shot Peening Subject Matter Expert." Scott was nominated as our 2013 Shot Peener of the Year because of his work on the SAE Surface Enhancement Committee and his leadership of a shot peening validation project at Medtronic. I've gotten to know and appreciate Scott through our work on the SAE committee, but I didn't understand the depth of his contribution to Medtronic's shot peening program until we interviewed him for the article on page six. Now I'm even more pleased that he was given the award.



Almen mini-strips and ultrasonic peening **are ideal together.** I was pleasantly surprised **JACK CHAMPAIGNE** to learn about Kelly McClurg's work with mini-strips

and ultrasonic peening (page 10). This is a novel, but ideal, application since both products are well-suited for small, localized repairs in the field.

A new use for Almen strips. I have long championed the use of Almen test strips for the abrasive blast cleaning industry as a quality assurance tool. Now a new application is being researched for the High Velocity Oxygen Fuel (HVOF) process (page 12).

Researchers at MIT have discovered something surprising that could affect our industry. Is our industry heading for obsolescence? Can selfhealing metals replace the need for residual compressive stresses imparted by shot peening? Are we dinosaurs waiting for a meteor impact? Read about the fascinating research done at MIT on page 18.

Dr. Kirk never ceases to amaze me. I remember meeting Dr. Kirk in 1993 at 5 the International Conference on Shot Peening which he organized at Oxford University. He was a professor at Coventry University at that time. I was mesmerized by his skill at explaining processes and concepts. His article in this issue of The Shot Peener (page 24) serves as yet another example of his ability to explain complex theories to laymen. His explanation of graphs on S-N curves (stress versus number of cycles) and residual stress profiles is particularly informative.

I could write an article on intensity and coverage for every issue of The b **Shot Peener.** I have a file folder of emails from engineers and shot peening technicians with questions on intensity, coverage, saturation curves and more. The Shot Peener staff likes to share new and different topics but many people struggle with these concepts, especially when they try to put them into practice on the shop floor. I plan to share more of these "problem and solution" articles in the future.

## THE SHOT PEENER

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