Changes to the SAE “J” Standard Practices are again under way. Our last meeting on May 12 in Troy, Michigan resulted in changes to several documents. The word “Determination” was added to SAE J2277 so that it now reflects more accurately its intention “Peening Coverage Determination.” A nomograph was added to provide estimates of number of passes required for 98% coverage when the percentage of coverage of a single pass is estimated. Several illustrations were added to show the concept of percentage of coverage and there is now more information on how to document and verify coverage.

SAE J2597, Computer Generated Saturation Curves, will soon be published. This document describes how computer algorithms can be employed in spreadsheets to generate the saturation curve and identify “Intensity” (the arc height value (T1) and its corresponding 10% higher value at twice the T1 time). A table of sample arc heights Vs exposure time values is included to assist users wishing to develop their own algorithms. The use of SAE J2597, Computer Generated Saturation Curves, is recommended but not required for previously approved technical plans.

Some very important changes were made to SAE J443. The use of computer generated saturation curves (SAE J2597) is emphasized in an effort to improve consistency of declaration of intensity. Also, a new method of determining intensity when a fixture has multiple holders is introduced. This technique allows a great reduction in time required to both determine intensity and later to confirm that intensity is still maintained.

The graph depicting arc heights Vs exposure time was redrawn and the terminology for the intensity value was changed from “10% or less” to “10%”. Allowing the “or less” provision offered too much leniency in interpretation. A second saturation curve was added to the document to illustrate the interpretation of saturation curves where the exposure time is shown as number of passes or table rotations etc. There are situations, such as use of very small media, when the first strip presented to the shot stream is, in essence, saturated. Additional exposure to more table rotations or passes reveals essentially the same value. The method of interpreting this condition is now explained in the document.

The next meeting of the Surface Enhancement Committee will be held on the Monday before the annual EI Shot Peening Workshop in Albuquerque, New Mexico on October 26. Please contact me if you would like to attend this meeting (9:00 AM to 5:00 PM on Monday). Also, the next meeting of the AMEC Shot Peening Committee will be January 26-27 at the Asilomar Conference Center in Pacific Grove, California.

We note with sadness the passing of two long-time friends and work associates: Bob Ford with Abrasive Blast Systems and Greg Rabel with Midwestern Industries. Both will be deeply missed by friends, family and colleagues.