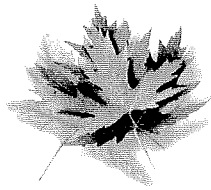
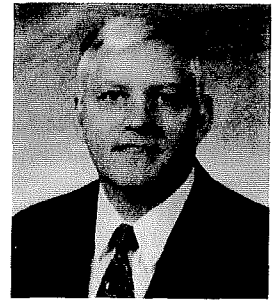


The Parting Shot Jack Champaigne

Past, Present & Future



The shot peening and abrasive blast cleaning communities are making a commitment to the future as shown in our article on GMA Industries. As the urgency for action continues to grow, we can all look for ways to protect our environment. The electronics industries, especially in Europe and Asia, have strong mandates on product manufacturing requiring full life-cycle planning. We cannot continue to dump our "old" computers and monitors in landfills. The same is true of used media, whether it is glass bead, cast steel or cut wire shot. There are many innovative uses for this "spent" material.

For example, US Technology in Canton, Ohio (ustechnology.com) makes dry plastic blasting media for aircraft paint stripping. Their media, which is manufactured from thermoset plastics, replaces chemical paint stripping. That's the first environmental benefit: No chemicals means a more favorable work environment and less hazardous waste. But what's even more interesting is what they do with the recyclable residue—US Technology uses a patented process to manufacture a product called Marblike™. The product has the look of natural marble, malacite and sandstone with the durability of cast polymer. US Technology crafts the product into outdoor tables, benches, planters and birdbaths.

Marblike is made from 100% thermosetting and thermoplastic materials and roughly 15% of the recycled plastics used are plastic coatings removed from aircraft such as the C-5 Galaxy, F-18 Hornet, or the SR71 Blackhawk. As the company likes to say, "Just think, the high tech plastics in your planter or birdbath may have once flown 2,500 miles per hour."

Like GMA Industries, many companies are turning environmental regulations into opportunities. When lead shot became outlawed for waterfowl hunting, the use of steel shot was mandated. Ervin Industries, a pioneer in the technical development of cast steel abrasives, capitalized on its experience to make a special high-grade steel shot which is lead-free, environmentally responsible, and produces ballistics results similar to lead. (ervinindustries.com)

There are many more success stories and we will feature them in every issue of *The Shot Peener*. If you have suggestions or feedback, you are invited to post your comments on our web site at our new forum "Environmental Issues".

News about our annual workshop in October: We are especially excited to have Matt Thurber, editor of *Aviation Maintenance Magazine* attend our workshop and host an exhibit booth. Matt has been very strong advocate of aviation mechanics striving for more education and appreciation (read wages). Our involvement with the aviation industry has deep roots going back to 1978 when we developed the shot flow sensors and MagnaValves used at Boeing for peen forming airplane skins. This was our first project in the aerospace industry. We are proud to announce that our workshop has received recognition by the FAA and each level of examination qualifies for credit in their Inspector Authorization Renewal program. We believe this will go a long way in elevating the level of cooperation between government regulation and industrial practices of appropriate peening practices that will help ensure safe air travel. We are providing the FAA with an exhibit booth at the workshop and this will give you an opportunity to explore their role in aviation safety.

News about our annual European workshop: As you probably noticed, we plan to host our next annual European workshop in Sweden. We appreciate the advance work of our distributor, Pether Englund of CBC Ytfinish in Sweden, and the SPORT group (Shot Peening Operators Resource Team). Europeans have a very diligent attitude about proper peening practices, especially by focusing on compressive stress results instead of just using Almen strips for intensity monitoring. We will present more technological developments like these at our upcoming workshops.

Peening certainly wasn't invented by modern industry—evidence of "hammering" can be traced as far back as 2700 B.C.—but we have articles on our web page (see Learning on-line) that describe the development of shot peening processes from the 1920's and 1930's at Buick and Cadillac. Credit must go to J.O. Almen and his work in Detroit during this time frame as he is recognized as the inventor of shot peening process controls. Our rich shot peening history makes it especially appropriate that we are holding our 2004 workshop in Dearborn, Michigan, the heart of the automotive industry in America. Make plans to join us; this workshop will be a true exploration of the past, present and future of shot peening.