Purdue Shot Peening Center

The project to establish a shot peening center at Purdue University is progressing to the next phase, which is to ascertain industry interest. A fee-based not-for-profit consortium is visualized that would provide research and development funding into fundamental shot peening theory and practice. The scope of the program could be enlarged to “Surface Enhancement Engineering Center”. Membership in the consortium would allow you early access to the newest technology. Could your company benefit from some of these topics:

1. Non-destructive testing of peening intensity
2. Non-destructive testing of stress-depth profile
3. Computer modeling of peening process
4. Liquid tracers for high and low intensity peening coverage determination
5. Shot and air flow rates through a blast hose
6. Nozzle efficiency (direct pressure nozzle, induction nozzle, gravity fed nozzle)
7. Determination of minimum coverage and optimum coverage requirements
8. Determination of minimum shot size for a given peening intensity (i.e. detrimental effects)
9. Peening intensity determination without use of Almen strips
10. Relation of peening intensity and coverage on stress-depth profile
11. Relation of stress-depth profile on fatigue life

Have you ever wanted to inspect incoming parts for proper peening?
Have you ever wondered how a design engineer selected a particular shot size and intensity for peening?
Have you ever wanted to reduce your costs of compressed air?
Have you ever wanted to reduce the time to run Almen strip saturation curves?
Have you ever tried to describe coverage to a new employee and wanted a better tool for comparison?
Have you ever wondered if you could shave some more weight from a gear and not suffer fatigue failure?
Have you ever needed better (fatigue life) performance from a spring?

Companies that might want to participate in this venture should contact Jack Champaigne for more information. Several companies have already expressed an interest in either cash funding or equipment donations. It’s very important that a broad basis of support is found for this project and your quick response would be greatly appreciated.

Announcement

Join the club. The Ricochet Club. Bounce your ideas off of the other members. Electronics Inc. has added a new feature to the Shot Peening Universe web page. Using e-mail techniques you can send an e-mail message to the Ricochet Club and your message is echoed to all of the other members automatically. Likewise, you’ll receive any message anyone else has sent to the “list”.

The service is free and you can choose to have your name posted on the membership list or you can be “invisible” and just enjoy reading the commentary. It’s easy to join. Just click on the “subscribe” button.

To send a message just click on the “send message” button. This is where you can post those urgent requests for help. (An “unsubscribe” button is provided also, just in case this isn’t for you.)

Join today where the stars in shot peening hang out.

Phil Kurzhal, Electronics Inc., gets an autograph from Lou Holtz at the U.S. Filter/Wheelabrator ISO 9001 celebration. (More on the celebration on page 16.)