



Deciding Between In-House and Outsourced Peening? Seven Points to Consider

1. Many manufacturers give you the best of both worlds

Industry-leading OEMs sell shot peening machines *and* shot peening services. These OEMs are the ideal vendor for three types of customers:

1. **Purchased machine only.** Given that the OEM uses their own machines in their shot peening job shop, customers can have confidence in their machines.
2. **Uses job shop services.** The service provider is an experienced machine builder and therefore is knowledgeable on the shot peening process. Most job shops send their machine operators to shot peening training programs to ensure quality service.
3. **Purchased equipment and uses job shop services.** This hybrid of in-house and outsourced peening provides the ultimate safety net. The OEM's job shop can meet your deadlines when you have high volumes or downtime due to natural disasters or labor issues. They can also duplicate your production requirements with high-quality, consistent processes.

2. An outside vendor can provide several services

Many vendors can provide several services including shot peening, blast cleaning, coating services and non-destructive testing. Working with one vendor simplifies workflow and allows a manufacturer to concentrate on their core offerings. In addition, working with surface finishing specialists provides the benefits of their knowledge, skills and resources.

3. If you are bringing peening in-house, do your homework BEFORE purchasing equipment

This warning covers not only choosing the right equipment but making sure your shot peening team is educated on every aspect of a controlled peening process. Here's an example of why you should do your homework: An aerospace MRO realized that rotary flap peening was the ideal solution for their facility after they sent their team to a shot peening workshop. Unfortunately, they had already purchased a shot peening machine.

4. Outsourcing accommodates fluctuations in volume

How often has this happened to you: You buy a great tool,

thinking it will save you time and money. And then it sits and gathers dust. It's reasonable to outsource your shot peening until it generates a steady and reliable income stream. If you can't justify the expense of an in-house process—equipment and materials, labor, overhead—and you need flexibility, outsourcing is the way to go.

5. Successful outsourcing requires a willingness to invest in a relationship

Employees from Winamac Coil Spring and Metal Improvement Company were willing to invest the time to build a mutually beneficial relationship. (Read "Know Your Limits" on page 6.) It takes trust and communication to build this kind of an association but the outcome is well worth the effort.

6. Industry 4.0 and in-house peening

"Advances in technology gathered into a package called Industry 4.0 will revamp and revitalize manufacturing, potentially bringing outsourcing to an end," wrote Rob Spiegel in an article for *Automation & Motion Control, Design Hardware & Software* on June 20, 2014. Despite the fact that Industry 4.0 won't deliver on its full promise for many years, we can see the potential now. Advanced technology allows real-time data sharing of shop floor equipment through internet connectivity. (Handheld devices are becoming the norm on the shop floor.) Data sharing from and among machines can eliminate downtime by detecting wear on parts and foreseeing bottlenecks. Manufacturers in aerospace, for instance, now have inline shot peening systems that are integral to their automated production lines.

7. Employee morale and in-house peening

Good employee morale is probably never a factor in the decision to develop an in-house shot peening program, but it is a nice bonus. Employees like to see growth and progress. The new shot peening program may require additional employees and training for new and existing staff. Training adds confidence and pride. Again, morale is not a make-or-break component in the decision, but a happy workforce and maybe even a small boost to a local economy are always good things. ●