Environment

Environment is a new column of The Shot Peener.

Environmental responsibility is no longer an option, whether because of externally-imposed laws and regulations or our own innate need to protect what's important to us. Environment will share with you the wealth of solutions and opportunities that are evolving as industry accepts the challenge of combining growth and profitability with the preservation of our natural resources.

In our first Environment, we feature GMA Industries—a company that was recycling before recycling was part of our everyday lives.

GMA Industries Takes Shot Full Cycle

Recycling works only when there is a demand for product made from recycled materials. That’s the substance of GMA Industries’ success: The company recovers spent steel shot, grit and aluminum oxide, recycles it into good-as-new media, and markets it successfully. What are the forces that keep this cycle in motion? GMA Industries provides a high level of customer support and quality control that makes the burdensome process of industrial waste disposal easy and profitable for their customers and offers a lower cost, high quality alternative to virgin media. Because GMA Industries is an authorized Michigan Department of Environmental Quality recycling facility, customers have the assurance that they are meeting industrial waste standards for disposal without concerns for future liability.

GMA Industries was started in 1982 in Detroit, Michigan. The company concentrated on the recovery and reclamation of cast steel shot and grit. In 1986, GMA moved into a new 38,000 sq. ft. manufacturing and warehouse facility in Romulus, Michigan and added the remanufacturing of aluminum oxide to its capabilities. Even though the processes needed to remanufacture steel shot and grit and aluminum oxide are nearly identical, each occupies a separate portion of the plant and utilize separate production lines and packaging operations to prevent cross-contamination.

Recovery, Recycle, Reuse

GMA Industries developed three programs that can be used singularly or in combination by blast cleaning operations to protect the environment and boost their bottom line.

Recovery

GMA Industries’ Vacuum Acquisition Service Program (VASP) benefits even the smallest of companies by cleaning a shot blast area of spent steel shot or grit. GMA’s certified technicians schedule a time that’s convenient with plant operations and use mobile vacuum machines to thoroughly clean the blasting area and remove all spent steel shot and grit abrasive media from the blasting site. GMA Industries provides VASP to companies throughout the Midwest. If a company doesn’t need recovery services, but wants to get rid of spent media, GMA will pick up and take away used media at a time that’s convenient for the customer.

Recycle

When spent media qualifies for recycling (they don’t accept
hazardous materials), GMA will purchase the used media. Medias that qualify for GMA Industries' services include cast steel shot, cast steel grit, cut wire shot and fused aluminum oxide grain.

GMA provides instructions on how to send in a sample for evaluation. Once the material is verified as acceptable for recycling, GMA contacts the customer about specific packaging instructions, paperwork requirements, and even makes transportation arrangements.

Most of GMA's product comes from the initial user—firms in the metal working industry. Once the media reaches a size that no longer meets specifications, they must dispose of the product. In some cases, good abrasive gets contaminated and can't be used for its original application. In either instance, GMA offers an alternative to disposing of the material in a landfill.

As more and more companies strive for ISO 14001 certification, they turn to GMA to recycle their used abrasive rather than put it in a landfill. According to Carl Stevens, President of GMA Industries, "ISO 14001 has been very good for our business because waste reduction is key to obtaining certification. Plus, customers are assured that what is recyclable in their shot fines will be recycled and what is truly waste will be disposed of in the lawful manner."

Reuse
GMA Industries markets reprocessed steel shot, steel grit and aluminum oxide that meets all industry specifications. The recycled media sells for much less than the cost of new material. GMA meets the following industry specifications:
- Steel shot (meeting SAE specification J-444)
- Steel grit (meeting SAE specification J-444)
- Aluminum Oxide (meeting screen specification ASTM-E11 Table 2 and Table 3)

The company's state-of-the-art facility is able to recover/recycle media using the following processes: remove all non-abrasives/contaminants; surface clean each particle; screen to specification and package to meet customer requirements. GMA also has the capability to provide "special" screening if requested by the customer. GMA is committed to maintaining the highest level of quality control possible in their remanufacturing process so that their product meets or exceeds the same specifications applied to virgin product. Product that doesn't meet industry standards is used in non-blasting applications such as ballast (weights), chemical/filter media or it is remelted in furnaces.

Carl Stevens (center) with Nicole Pomerico and Dennis Denyer of GMA
The company is constantly evaluating new ways to reclaim spent material and provide even better remanufactured product.

For applications that require virgin product, GMA also provides steel abrasive and aluminum oxide grain through its affiliate company, Colfran Industrial Sales. By using virgin media and remanufactured product, GMA's customers enjoy a cost savings that significantly impacts their bottom line.

A Solution Comes Full Circle
Solutions for the future don't come easily, particularly in today's climate, but GMA Industries has struck a balance that is economically and environmentally sound. For more information on GMA's products and services, call Carl Stevens at 1-800-869-9946, send email to cfstevens@gmaind.com or visit gmaind.com.