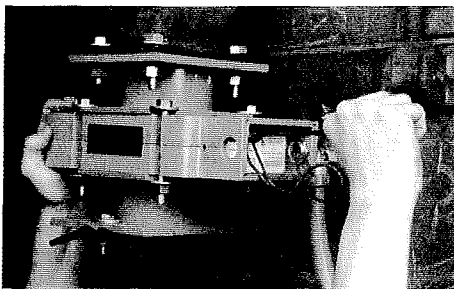


The Low Profile MagnaValve and Controller for wheel machine applications

## What makes the MagnaValve green?

The MagnaValve is an environmentally responsible product—it conserves energy and media. Invented by Electronics Inc. in 1983, the MagnaValve is a magnetic valve that will regulate the flow of steel shot used in abrasive blast cleaning or shot peening applications. The valve has a permanent magnet that stops the shot flow and also an electromagnet that allows the shot to flow by canceling the permanent magnet. There are no moving parts in the MagnaValve so there is nothing to break or wear out.

MagnaValves are used worldwide on wheel type (also called turbine type in Europe)



This MagnaValve was retrofit onto a Pangborn machine at EMI in South Bend, Indiana. According to Jerry Sheyka, President of EMI, "EMI has used MagnaValves for six years. During this period, we experienced no downtime of any kind. However, the major advantage has been the cost savings due to less energy consumption. The wheel units had to work "less hard". The valves literally paid for themselves in the first year of operation. The savings over the next five years enabled us to equip our other machines with MagnaValves. We were able to pass on a substantial savings to our customers as well."

shot blasters and also on air type machines.

The MagnaValves used on air type machines have a built-in sensor to show the actual shot flow rate in pounds/minute or Kg/minute. The MagnaValves for wheel blast machines may be used with amperage control (i.e. no built-in sensor) or flow control using a built-in sensor. MagnaValves work with cast steel shot and grit, cut wire shot and stainless steel cut wire shot. The MagnaValve's benefits include:

- Long life. The MagnaValve doesn't wear out like a mechanical valve.
- Less media. It provides an efficient use of media for less media costs, less disposal fees, less media in our landfills.
- Less maintenance. It's easy to install and maintain. Maintenance crews love it.
- Less operator time. Repeating or establishing a good set-up is easy because the MagnaValve lets you document flow rate and our controllers are very user-friendly.
- Less energy consumption. A MagnaValve can reduce the load on a large horsepower motor and thereby reduce energy consumption.

For more information on the MagnaValve, visit [www.shotpeener.com/EI](http://www.shotpeener.com/EI) or call 1-800-832-5653 (USA and Canada) or (574) 256-5001.

## Welcome Dave Eggleston

"Energy Conservation" is the first of a series of articles by Dave on the benefits of using shot flow valves on high horsepower wheel-type blast cleaning machines.

Dave has tremendous experience in the industry—he was the Manager of the Electric Utility Company in Mishawaka, Indiana and Chief Electrical Engineer for Wheelabrator Frye. While at Wheelabrator, Dave was the project manager of the closed cleaning system for the United States Navy's Trident submarines. He also was responsible for the Boeing Wing Chord Peener. It was a 4-wheel pass-through machine using an overhead conveyor. Each wheel had three degrees of freedom or movement. They could go up or down four feet from center, they could rotate 120 degrees and they could tilt up or down 45 degrees. This machine was built in 1982 and is still in use 22 years later. More than 50 different part numbers were pre-programmed into its computer and the machine would quickly adjust to each individual program.

