

DESIGN • PROTOTYPING • PROJECT MANAGEMENT • GLOBAL MANUFACTURING & SOURCING

## **Inlet & Exhaust Valve Always Evolving**

The technology for heavy-duty truck braking systems has changed considerably over the last 50 years. Although the overall design of the system has remained relatively the same, new regulations have continued to surface in an attempt to make trucks safer. With this in mind, a large manufacturer for heavy-duty truck braking systems has needed us to stay up to date with the changing standards.

The current I.E. Valve component is made from a custom elastomer formula, designed by our own chemists, to meet all of the requirements for the modern day braking system. The rubber compound for this particular component is processed through injection molding, and chemically bonded to an aluminum insert. By molding the rubber directly to the insert, we have eliminated the time and cost of a secondary assembly for our customer. In addition, the bond achieved between the rubber and metal is actually stronger than using a cold adhesive to assemble the component.



Ashtabula Rubber is consistently going back to the drawing board to create new compounds to meet the new regulations for our customers. Keeping that in mind, we have already begun designing another version of I.E. Valve components to meet the new standards that will be introduced in 2007.

This type of forward thinking has kept Ashtabula Rubber ahead of our competition with regards to rubber component design and manufacturing.