


# Breyer-Casting uses energy audit to increase efficiency



## BACKGROUND



Breyer Casting Technologies Inc. is a division of the privately held Canadian company Breyer Industries Ltd. The Brampton Facility and has been in business for over 40 years and employs approximately 100 people. The Breyer Casting Plant produces aluminum castings which are available

in the following three processes; high pressure die casting, permanent mould and sand casting. Breyer is recognized as a North American leader to providing one stop aluminum castings. In an effort to increase operating efficiency and reduce energy consumption Breyer employed **FIREBRIDGE** INC. to perform an energy evaluation. Having an energy evaluation is a great way to identify high rate of return savings opportunities in any organization. The Study was co-funded by **ENBRIDGE** and  Natural Resources Canada through the Industrial Energy Innovator program.

## FOCUS

Reaching energy efficiency goals is often challenging for any industrial innovator. Breyer's Brampton Facility currently operates 23 natural gas appliances to produce a variety of products. It is often found that Facilities such as this are often very complex and formulating an

effective energy evaluation approach is often difficult. By focusing on heat recovery, heat generation, heat containment and heat transfer, **FIREBRIDGE** INC. was able to quickly identify energy saving opportunities that provided cost effective solutions.

## METHODOLOGY

A systematic approach to energy assessment was used that requires the development of a thorough understanding of the process. This comprehensive study of the various processes identified a total of eight projects that were identified for consideration that covered combustion efficiency, maintenance practices and alternative technologies.

## RESULTS

All recommendations put forward in the energy evaluation were implemented with great success. The eight projects combined for a total savings of \$80,000 per year and an annual energy reduction of 260,000 m<sup>3</sup> of natural gas. GHG emissions reductions are in the range of 500 tons per year.