



(<http://www.vermontbiz.com/ad/redirect/11233/t0453/>)

## Mack Molding works with Efficiency Vermont to install 2,100 energy efficient fixtures

Fri Feb 27 2009

Mack Molding of Arlington has demonstrated its commitment to the triple-bottom line – people, planet and profit – by installing more than 2,100 energy-efficient lighting fixtures in its southern Vermont manufacturing facilities. The comprehensive lighting project is one of the 10 largest energy-saving projects completed by a Vermont company in partnership with Efficiency Vermont.

A leading custom plastics molder and manufacturer for companies in the medical, commercial, computer/business equipment, and transportation industries, Mack Molding implemented significant lighting upgrades in its three Vermont plants totaling more than 600,000 square feet. Goals for the project included improving the level and quality of light, saving energy, minimizing maintenance, and achieving a return on investment in two years or less.

To determine potential energy savings, Mack Molding engaged Lighting Retrofit Services (LRS), specialists in energy-efficient lighting for manufacturing environments, to conduct a lighting audit. After reviewing LRS' design/build proposal, Mack and Efficiency Vermont agreed to install new energy-efficient light sources and implement other energy-saving measures.

Two of the three Mack Molding facilities are each approximately a century old. Although the company has completed expansions and renovations at the plants through the years, significant lighting upgrades were needed. At the Cavendish and East Arlington facilities (built in 1890 and 1910, respectively), almost every lighting fixture was replaced or retrofitted with the latest energy-efficient fluorescent technology to standardize light levels and to save on energy and maintenance costs.

Mack Molding's Arlington headquarters, built during the 1990s, features ceilings that are about 30 feet above the manufacturing floor. When new energy-efficient fixtures (some with motion sensors) were installed, the results were immediate. For example, light levels in the warehouse improved by 175 percent. The high-intensity fluorescent (HIF) technology increased light levels throughout the plant, and eliminated hot spots and shadows.

"This project has resulted in the very rare triple play," said Jeff Somple, president of Mack Molding's Northern Operations. "Not only have we reduced operating costs and improved working conditions for our employees, but we have enriched our Vermont community, saving electricity that can now be used by others."

The estimated electricity savings resulting from the projects at the three Mack Molding plants is 1,747,000 kWh per year – the equivalent of keeping 967 tons of CO<sub>2</sub> out of the air, or taking 167 cars off the road. Based on the average Vermont home using roughly 6,000 kWh of electricity annually, the energy saved through Mack Molding's measures can provide power to nearly 300 homes.

In addition to energy and cost savings, the lighting upgrades improved the comfort and safety of Mack Molding employees. The new lighting has an added benefit for workers – lower operating temperatures, resulting in less cooling and ventilation during the warm summer months.

"I'm out on the manufacturing floor for most of the day," said Bonnie Simon, manufacturing manager at Mack's headquarters plant. "I can't help but notice that my eyes are much less fatigued by the end of the day. The glare is gone, leaving us with even lighting everywhere."

The total cost of the project was nearly \$450,000. Due to the energy and maintenance savings, combined with technical assistance and a financial incentive from Efficiency Vermont, Mack Molding expects to recoup its investment in less than two years.

"Given the prevailing economic news these days, it's great to see Mack Molding taking the long view and devoting resources to improve its manufacturing process while using less energy to benefit both its employees and the environment," said Michael Socks, a senior project manager at Efficiency Vermont.

Efficiency Vermont works with numerous Vermont businesses such as Mack Molding to boost lean manufacturing and continuous process improvement while benefiting Vermont's economy and the environment.

Efficiency Vermont was created by the Vermont Legislature and the Vermont Public Service Board to help all Vermonters reduce energy costs, strengthen the economy, and protect Vermont's environment. Efficiency Vermont is currently operated by Vermont Energy Investment Corporation (VEIC), an independent organization under contract to the Vermont Public Service Board. VEIC is a Vermont-based nonprofit organization founded in 1986. For more information, contact Efficiency Vermont at 888-921-5990 or visit [www.encyvermont.com](http://www.encyvermont.com) (<http://www.encyvermont.com>).

###