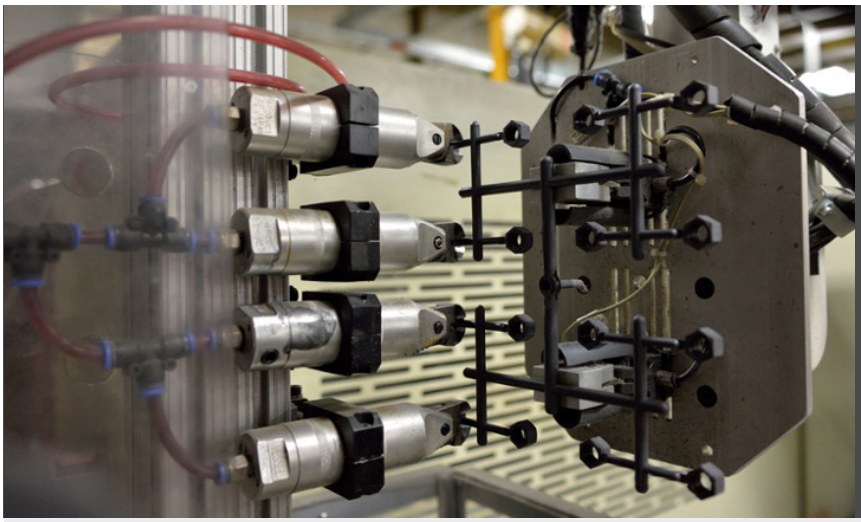
EN-POWER GROUP | Case Study

Energy Procurement and Engineering Study Reduce Costs for Plastics Manufacturer

A two-pronged approach targeting both how energy is bought and used leads to energy savings and increased manufacturing productivity



Industrial

Property Profile

- Location: Mount Vernon, NY
- Square Footage: 60,000
- Year Built: 2000

Services

- Rebates & Incentives
- Feasibility Study
- Energy Benchmarking
- Project Construction Management
- Energy Procurement

Project Achievements

- Annual Utility Savings: 156,600 kWh
- Annual Utility Cost Savings: $32,000
- Demand Saved: 44 kW
- Total Eligible Rebates: $25,000
- Total Project Cost after Rebates: $143,000
- Simple Payback: 4.5 years

Project Highlight

Created and implemented energy master plan that included replacement of process equipment and energy cost reduction

ISO Plastics, a manufacturer of injection-molded plastic components, hired EN-POWER GROUP to develop and implement a comprehensive energy and engineering plan for their 60,000 sqft industrial facility in Mount Vernon, New York. This wide-ranging study incorporated energy benchmarking, energy auditing, and utility and tariff analysis to create an energy master plan for the facility.

To help ISO Plastics identify the most cost-effective energy conservation measures for its manufacturing facility, EN-POWER GROUP's first step was to understand how the property used its energy. We began by enrolling the property in NYSERDA's FlexTech Benchmarking program, which provided a rebate for energy benchmarking and energy auditing. Energy benchmarking is a process that compares a building's current energy usage against its past usage as well as against buildings of similar size and type. The energy benchmarking results revealed the facility consumed higher levels of energy than comparable properties, and the on-site energy audit indicated several process equipment could be upgraded to reduce energy usage.

Using the knowledge gained from our energy benchmarking and auditing work, our engineers helped ISO Plastics enter into a more favorable energy contract. Next, our engineers met with ISO Plastics managers to help create an energy master plan with the goals of selecting cost-effective upgrades that maximized the use of available incentives. ISO Plastics installed a new 700-ton Injection Molding Machine that decreased peak demand, decreased operating costs, and increased manufacturing productivity. The energy upgrade was partly funded by ConEdison's C&I Program.