# CASE STUDY: COMPRESSED AIR SYSTEM

SYSTEM TYPE: Compressors, Controls

**PROJECT FINANCIALS**

- **Total Turnkey Installed Cost: $ 79,401**
- **Annual Energy Cost Savings: $ 27,306**
- **Simple Energy Funded Capital Payback: 2.9 years**
- **Average Project IRR: 32%**
- **CO2 Equivalent Reduction : 262 tCO2e (Natl. Avg. Emission Rate)**

## MANUFACTURING & INJECTION MOLDING Facility Installs New Equipment and Decreases End Use of Compressed Air—Saves $27,000 Annually

### System Description

- Five rotary screw oil lubricated compressors
- Total of 450 HP installed
- Compressors were located in one central area
- Compressors were connected into a common header
- Compressors were controlled on individual pressure set points

### System Opportunities

- The compressed air system supplied air to the various production and assembly equipment throughout the facility
- The analysis looked at the generation of the air by the compressors, the distribution system, and the utilization of the air by the end use equipment

### Project Description

- Installed compressor sequencing controller
- Installed additional storage capacity
- Installed an air flow controller in conjunction with additional storage capacity

### Project Benefits

- New Sequencing controller
- New flow controller and storage tank
- Increased control of system pressure fluctuations
- Decreased end use of compressed air
- Optimization of overall operation
- Reduction in energy usage and operating cost

## Plant Profile

- Manufacturing facility, injection molding
- Production areas
- Assembly areas
- Warehouse areas

## Key Benefits

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|---|---|
| **Annual Cost Savings** | $ 27,306 |
| **Carbon Reductions** | 262 tCO2e (Natl Avg. Emission Rate) |
| **Payback** | 2.9 Years |
| **Project IRR** | 32% |
| | |

## Financial Data

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|---|---|
| **Investment** | $ 79,401 |
| **System** | Compressors, Controls |
| **Life Expectancy** | N/A |
| **Incentives/Rebates** | N/A |
| **Payback Period** | 2.9 Years |