

# ENERGY PROJECT CASE STUDY

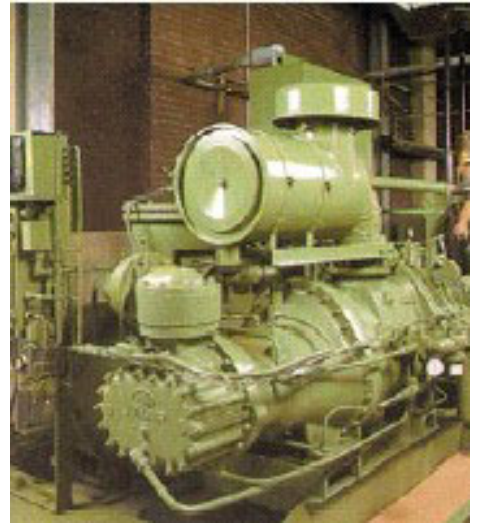
## COMPRESSED AIR SYSTEM

### Financials

- ◆ Total Turnkey Installed Cost: \$79,401
- ◆ Annual Energy Cost Savings: \$27,306
- ◆ Simple Capital Payback: 2.9 years
- ◆ Project IRR: 32%

### Description of Facility

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



### 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/Issues

- ◆ 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

### Project Description

- ◆ Installed compressor sequencing controller
- ◆ Installed additional storage capacity
- ◆ Installed a air flow controller in conjunction with additional storage capacity
- ◆ Installed interlocked shut off valves on production machines

### 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