



# Success Stories



## Project Details:

### Location:

3249 E. 80<sup>th</sup> Street  
Cleveland, OH 44104

### Project Contact:

Rich Nyce  
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rnyce@clevelandgear.com

### Technologies:

Energy efficient lighting and HVAC upgrades

### Funding Source:

American Recovery and Reinvestment Act –  
State Energy Program

### Incentives:

\$145,037

### Total Project Costs:

\$290,075

### Energy Impacts:

- Reducing electric usage by an estimated 350,000 kWh and natural gas usage by an estimate 6600 MCF annually
- Reduced natural gas consumption by 61 percent

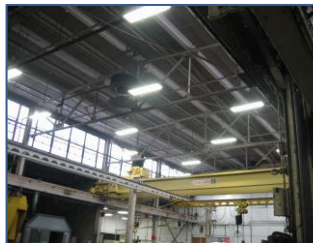
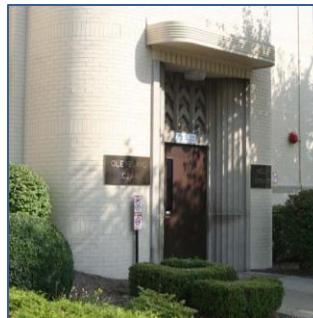
### Economic Impacts:

- Estimated savings of more than \$100,000 annually
- Jobs created or retained: 4 FTE's\*

### Environmental Impacts:

- Reduced CO<sub>2</sub> emissions by more than 1.2 million pounds per year, which is equivalent to taking 112 cars off the road.

## Cleveland Gear



### Background:

Since 1912, Cleveland Gear had been designing and producing worm gearing and enclosed drives in their Cleveland, OH manufacturing facility. Within a few years, its application for industrial needs assumed major importance, and in 1918 the country's first standardized line of worm gear speed reducers was introduced under the name of "Cleveland." Many units built during those early years are still in service.

### Challenge:

Cleveland Gear was using antiquated lighting fixtures throughout their facility. Inefficient T-12 fluorescent and 400-watt metal halide light fixtures were being used to light the office and manufacturing areas. In addition, their present single-stage air-conditioning system was outdated and inefficient.

### Solution:

Cleveland Gear replaced a total of 316 metal halide fixtures and 220 T-12 fixtures with more efficient T-8 fluorescent fixtures. The upgrades are expected to achieve a 53 percent reduction in energy usage for the manufacturing area and a 44 percent reduction in energy usage for the office areas. The new dual-stage compressor replaced the old inefficient model and will cut natural gas usage by more than half.

*"As an international company, Cleveland Gear is expecting this reduction in operating costs to assist in creating jobs and maintaining our competitive position in the gearing and strainer markets."*

- Rich Nyce, Facilities Manager

\*Job creation numbers are based on direct jobs created or retained using Full-Time Equivalent (FTE) hours.



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