



# Capron Manufacturing Company

## Comprehensive Compressed Air Study – Case Study

### Project Summary

Located in north central Illinois, Capron Manufacturing is an established metal finishing facility. Its 200,000 square foot facility houses plating, powder coat, porcelain enamel, electropolish and vinyl coating systems. Patrick Stanley understood that because business is so energy intensive, improving operational efficiency would have a significant impact on the bottom line. That's why he was immediately interested in the Comprehensive Compressed Air Study offered by the ComEd<sup>®</sup> Energy Efficiency Program.

### The Solution

The study provided a detailed analysis of Capron Manufacturing's existing compressed air system, with the goal of optimizing equipment operation and compressed air end use, without adversely affecting system operations. Opportunities for capital upgrades also were identified in a written report, with estimated energy savings, project costs and incentives calculated for each recommendation.

Capron Manufacturing went on to implement the following:

- Replaced two inefficient compressors with a variable-speed air compressor and central controller
- Replaced a non-cycling compressed air dryer with a cycling dryer
- Repaired air leaks
- Reduced air system pressure to functional levels

(Continued)

### Project Snapshot

#### Customer

Capron Manufacturing Company

#### Cost funded by the ComEd Energy Efficiency Program

\$16,000

#### Implementation cost paid by customers

\$197,002

#### Estimated annual energy savings

643,037 kWh

#### Estimated annual cost savings

\$48,228\*

#### Incentive received

\$41,548

#### Estimated payback period without incentive

4.1 years

#### Estimated payback period with incentive

3.2 years

\*Estimated annual cost savings are based on an electricity rate of 7.5 cents per kWh.

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## Project Benefits

Capron Manufacturing received incentives totaling \$41,548 from the ComEd Energy Efficiency Program after implementing the Comprehensive Compressed Air Study recommendations. The business now uses less air and benefits from an estimated \$48,228 in annual energy cost savings, without adversely impacting the performance of its operations.

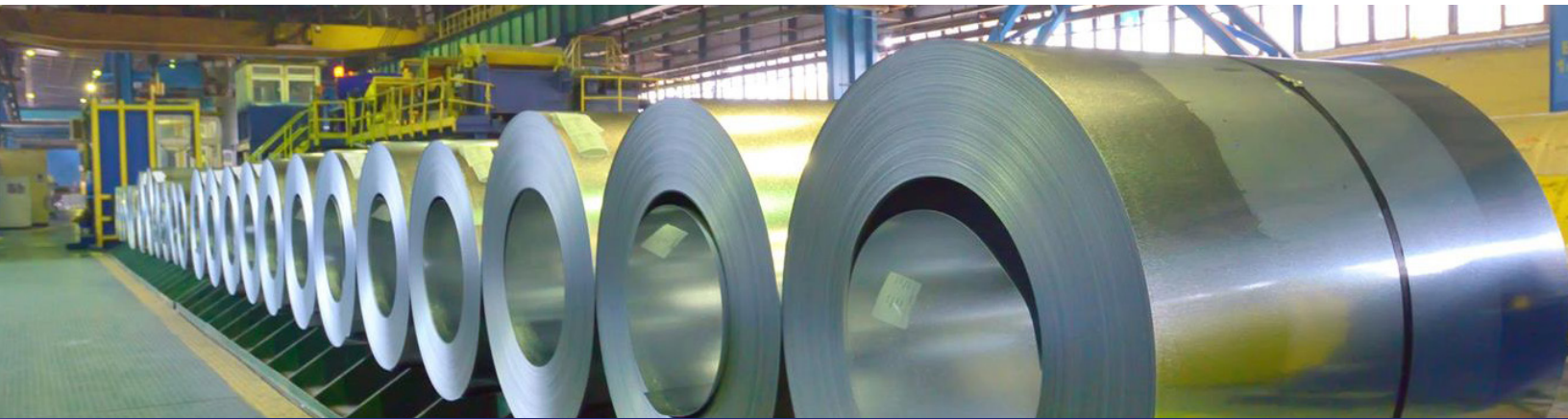
Patrick Stanley found that the report produced at the end of the study made it easy to understand the facility's energy usage. "The project was an eye-opening experience," he said. "The measurable aspects (demand, consumption, base-line energy consumption) were reduced by 50 percent making the savings even greater than we anticipated. This has been a very positive experience."

As a result of further insights gained through the study, Capron Manufacturing has implemented a regular air leak detection program and is actively pursuing other energy efficiency projects.

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## For More Information

The ComEd Energy Efficiency Program offers incentives, technical services and whole-building solutions to help facilities use energy more efficiently.



Learn more about how a compressed air study can benefit your facility.  
Contact us today.

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