

CASE STUDY



Modernizing Compressed Air Systems: Efficiency Study and Upgrade Supports Global Manufacturer

SEGMENT

Compressed Air

DIVISION

JHFOSTER

CUSTOMER

Fluid-Handling Systems
Minneapolis, MN

A global manufacturer of fluid-handling systems and products, this company operates a major facility in Minneapolis, MN, and maintains a strong focus on production efficiency and long-term infrastructure planning. JHFOSTER has been their trusted compressed air and automation partner for more than a decade, providing design expertise, system integration, and ongoing support across multiple facilities.

THE CHALLENGE

During a routine site visit, JHFOSTER engineers identified that several compressed air units were nearing the end of their lifecycle, and the system was not operating at peak efficiency. The outdated equipment risked increasing energy costs, reducing system reliability, and limiting operational flexibility.

Given the manufacturer's reliance on compressed air as a core utility, they needed a proactive solution to improve energy efficiency, increase system longevity, and ensure rebate eligibility—without disrupting production.

THE SOLUTION

JHFOSTER initiated a full compressed air efficiency study to establish baseline performance and identify areas for improvement. Based on the results, a turnkey upgrade was developed to optimize operations and prepare for future expansion.

The solution included:

- Installation of new energy-efficient compressors and updated piping, valued at over \$900K
- Engineering collaboration with the customer's internal team and third-party design firms to customize the system for both existing and future facilities
- Turnkey installation and preventative maintenance plans for long-term reliability
- Updated compressed air energy studies to validate efficiency and qualify for rebates

In addition to the compressed air system upgrade, JHFOSTER supports the customer with:

- Automation component supply, including stocking key parts used in the manufacturer's equipment builds
- Aluminum machine guarding and custom workstation framing for multiple facilities, including those in Sioux Falls and the Twin Cities

THE RESULTS

The new compressed air system provided a major operational upgrade, reducing energy waste and positioning the manufacturer to scale production with confidence.

- \$900K+ investment in energy-efficient compressed air infrastructure
- Improved system reliability and performance across primary production buildings
- Enhanced rebate eligibility through validated compressed air studies
- Streamlined service and parts availability through JHFOSTER's local inventory and 24/7 support
- Peace of mind from having one expert partner for compressed air, automation, and system integration

CUSTOMER FEEDBACK



"JHFOSTER has proven they will handle all the project details accurately and professionally – giving us peace of mind. They're more than a vendor; they're a trusted solutions partner."

— Engineering Leader,
Global Fluid-Handling Manufacturer



LOOKING AHEAD

This case highlights how even well-established manufacturers can benefit from routine system audits and proactive planning. JHFOSTER continues to serve as a long-term partner, supporting ongoing compressed air system upgrades, energy efficiency projects, and automation improvements.

With additional engineering collaboration planned for upcoming facility builds, the manufacturer trusts JHFOSTER to deliver scalable, high-performance solutions across all sites.

EXPLORE COMPRESSED AIR UPGRADES

Looking to cut utility costs and increase system reliability? Talk to a compressed air expert at JHFOSTER today: www.jhfoster.com



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