

# QUAKER FOODS NORTH AMERICA COMPREHENSIVE COMPRESSED AIR STUDY



## PROJECT SNAPSHOT

Customer	<b>Quaker Foods North America (“QFNA”), a Division of PepsiCo, Inc.</b>
Comprehensive Compressed Air Study cost, fully-funded by ComEd’s <i>Smart Ideas</i> ®	<b>\$16,015</b>
<i>Smart Ideas</i> incentives to customer	<b>\$15,128</b>
Implementation cost, paid by customer	<b>\$19,624</b>
Estimated annual energy savings	<b>620,010 kWh</b>
Estimated annual cost savings	<b>\$51,981</b>
Estimated payback period with <i>Smart Ideas</i> incentive	<b>Less than five months</b>

### PROJECT SUMMARY

QFNA, a division of PepsiCo, operates its food manufacturing facility in Bridgeview, Ill. with two air compressors working around the clock. The plant was built in the 1960s and is approximately 400,000 square feet. Compressed air is used for material transfer, processing, packaging, and warehousing of products. The compressed air designed equipment vibrates for product transfer of ingredients and uses high pressure “blow-offs” to remove products from high-speed lines.

According to QFNA’s Supply Chain Engineering Sr. Manager, Andy Lempera, “Compressed air use was one of the largest opportunities to make a difference in our plant.” QFNA leveraged the Comprehensive Compressed Air Study and its incentives from ComEd *Smart Ideas for Your Business*® to improve compressed air efficiencies. According to Lempera they realized, “the project was aligned with the site’s conservation goals” once they saw a potential savings of \$51,981 a year for initial implementation costs of only \$19,624. The \$15,128 in ComEd incentives and the fully-funded study made the improvements affordable and reduced the payback period for all improvements to less than five months.

### THE SOLUTION

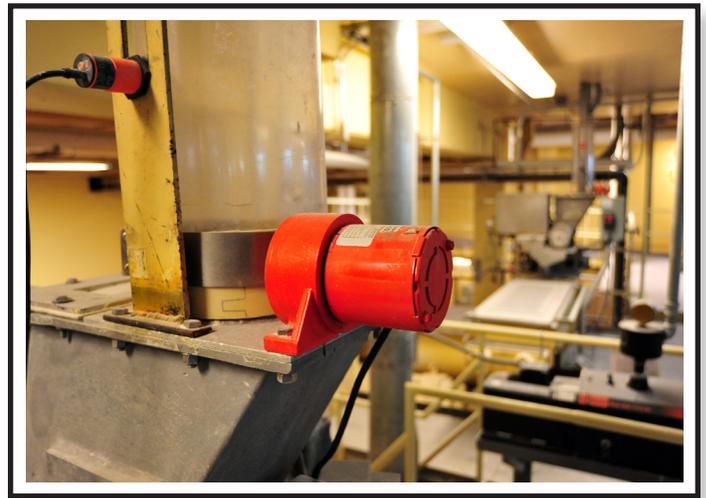
The Comprehensive Compressed Air Study provided the following five recommendations, all of which QFNA implemented:

1. Modified air compressor schedules to operate on only one compressor rather than two. The plant now has two back up compressors, which improves reliability within the facility.
2. Repaired air leaks, which reduces the amount of compressed air produced, thus saving energy.
3. Replaced timer condensate drains with no-loss condensate drains, which open a valve only when signaled by the condensate level control, making it a more efficient option.
4. Engineered nozzles with less compressed air volume were sized and installed on production blow-off applications.
5. Replaced compressed air vibrators with electric vibrators reducing compressed air demand and energy.

## PROJECT BENEFITS

The energy-saving improvement projects at QFNA's facility are saving the company more than \$51,000 in electric costs annually. In addition, the service provider modified the compressor load sequencing. Because of this change, Lempera states, "Behind the scenes we see a huge drop in our energy bills because we're using less air. But to the plant operators, they haven't noticed a decrease in air or performance. To them, things are operating the same as they always have."

Lempera explained he sees the benefits of these projects every day when he gathers the electricity usage data for the plants and sees a reduction. He says, "Plants that aren't using these ComEd incentives are missing out. They can take advantage of big savings for very little cost. It's a great program. I urge other facilities relying on compressed air to look at the Comprehensive Compressed Air Study."



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- Andy Lempera, Supply Chain Engineering Sr. Manager,

## NOT SURE WHERE TO START?

*Smart Ideas for Your Business*® offers cash incentives, technical services and whole-building solutions to help businesses use energy more efficiently. ComEd's *Smart Ideas* Comprehensive Compressed Air Study is available to qualifying customers within ComEd's Illinois service area. The goal of this program is to help you identify opportunities to improve the efficiency of your facility's compressed air system and reduce energy costs without adversely affecting system operations.

For more information, visit [ComEd.com/BizIncentives](http://ComEd.com/BizIncentives), call *Smart Ideas* at 855-433-2700 or email [SmartIdeasBiz@ComEd.com](mailto:SmartIdeasBiz@ComEd.com).

The comprehensive compressed air study was performed by Air Power USA, Inc of Baltimore, Ohio (Columbus area). Air Power is a 27 year compressed air consultant organization and is "Brand Neutral", not selling or participating in the sale of any compressed air equipment. Air Power USA, Inc. also did the pre-project metering and supervised the complete implementation of the projects working with plant personnel.

Air Power USA can be contacted by calling (740) 862-4112 or via their website at [www.airpowerusainc.com](http://www.airpowerusainc.com).