MEGA Brands, a leading
global manufacturer
and marketer of
children’s toys and
games, achieves
significant efficiency
improvements and
energy savings by
implementing Quincy
Efficiency Quotient recommendations.

The Client
MEGA Brands Inc. produces innovative, affordable and high-quality products designed to stimulate and nurture creativity in children. The company manufactures over 100 products including a broad assortment of construction toys, play sets, games, puzzles, and craft and activity products, as well as an extensive line of stationery, pens, pencils, markers and crayons. The Mega Bloks® system of interlocking plastic building bricks ranks as one of the top 10 toy brands in North America.

Founded in 1967 and headquartered in Montreal, Quebec, MEGA Brands is the world’s second largest manufacturer and marketer of construction toys and the largest toy company in Canada. Its products are sold internationally in over 100 countries.

The Challenge
MEGA Brands’ toy products are milled, assembled and distributed from its large production facility in Montreal. The plant’s aging compressors required increasing maintenance and repair; management was ready to replace the equipment. Before selling replacement equipment to MEGA Brands based on the capacity of the existing machines, Quincy Compressor’s distributor in Montreal, Compresseurs Quebec, suggested an audit of the plant’s air system to determine the efficiency level of the equipment and the potential for energy savings.

The Quincy Efficiency Quotient, or EQ, is a detailed performance and financial analysis of a facility’s compressed air systems. Using advanced data-logging technology, the EQ monitors and evaluates functions from both the supply and demand sides – including control mode, system storage, compressor sequencing, equipment maintenance, ambient conditions, artificial demand, inappropriate/inefficient uses, leak management and more – and identifies and quantifies energy saving opportunities. At MEGA Brands, the plant’s air system was monitored and performance data was logged for an entire week.

The Conclusion
The EQ analysis of MEGA Brands’ compressed air system uncovered significant opportunities to reduce the system’s operating costs. According to the audit, the system was operating at an Efficiency Quotient of 71%, with the potential to increase overall performance to 81%.

Typically, energy costs account for approximately 80% of the 10-year life cycle costs of a plant’s compressed air system – so efficiency is a key consideration when selecting new compressors or planning system upgrades. For the MEGA Brands system, a Quincy QGV variable speed rotary screw compressor was recommended to provide appropriate turndown for efficiently managing the variations in air demand. The QGV compressor is uniquely capable of accurately controlling header pressure and efficiently managing a stable pressure in the system. Plus, the EQ showed that a smaller compressor could satisfy the plant’s requirements.

continued on reverse
Quincy Compressor specializes in compressed air technology, offering top-notch products and services since 1920. Serving the industry nearly eight decades, Quincy is on the cutting edge, engineering reliability and quality into every offering. Award-winning accomplishments have allowed Quincy to build solid relationships with its customers and achieve compressed air systems best practices. Quincy’s flagship products include the QSI and QGV rotary screw compressors, the reciprocating QR-25, QT and Climate Control packages along with its innovative Royal Blue Warranty, widely recognized as the industry’s strongest warranty program.