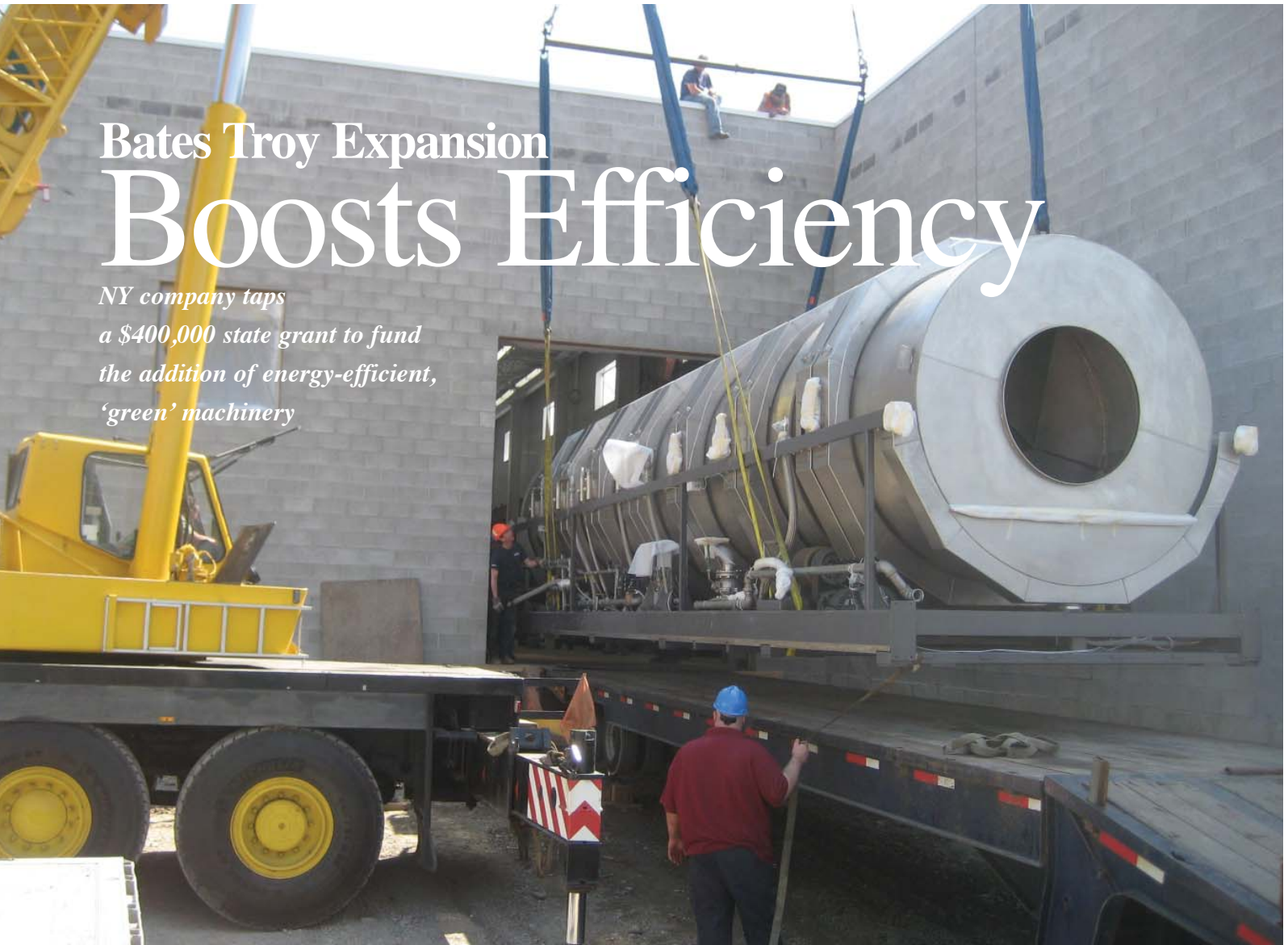


## Bates Troy Expansion

# Boosts Efficiency

*NY company taps a \$400,000 state grant to fund the addition of energy-efficient, 'green' machinery*



*The recent expansion of Bates Troy's plant in Binghamton, NY, (above) has already paid dividends in terms of business growth, while earning the company public acclaim for reducing its water and energy use, and the anticipated addition of 10 new jobs.*

By Colleen O'Mara

**A**s gas and energy prices continue to rise, it's no surprise that companies are looking for opportunities to save energy, reduce costs and maximize plant efficiency. Efficiency can come through a variety of methods, including revamping current equipment and replacing old, less-efficient machinery.

### State-supported addition

Bates Troy Healthcare Linen Service, a company that provides laundry services for seven hospitals and 12 nursing homes within a

90-mile radius of Binghamton, NY, recently completed a \$4 million expansion. Bates Troy worked with manufacturer G.A. Braun Inc., Syracuse, NY, to expand the plant's facilities and install state-of-the-art, energy-efficient commercial laundry equipment that will significantly reduce energy consumption.

Acting on a suggestion from the Braun inside sales and project team, Bates Troy obtained a \$400,000 grant from the New York State Energy Research and Development Authority (NYSERDA). To assist with the costs of such a large-scale expansion, Bates Troy applied for an incentive through NYSERDA's Industrial Research, Development, and Demonstration Program Opportunity Notice 1130.

To qualify, the company had to demonstrate that the project would benefit New York state and had to agree to close monthly monitoring of energy and resource consumption for a full year of

operation and another once-a-year follow-up report for four years. “It truly feels wonderful to receive such a grant from NYSERDA, given the many applicants they review each year,” said Brian Kradjian, president of Bates Troy. “NYSERDA has played an important part in helping reduce our energy usage by helping us invest in our new equipment which facilitated our plant expansion.”

The NYSERDA incentive assisted in the purchase of a 40,000 lb. Braun SmoothFlow 220 lb., 14 compartment Batch Tunnel Washer. The 42-by-12-foot machine washes in excess of 6,600 lbs. per hour and has internal-water and energy-recovery systems that optimize the control of the processing sections in the tunnel.

The tunnel washer uses approximately half of the water and electricity as conventional machines and recycles hot water from one compartment to another, thereby reducing the amount of natural gas needed to heat the water. It also decreases time and labor costs because the wash time is quicker than in a standard washer. Moreover, it can handle the same volume of laundry as eight 250 lb. topside loading washer/extractors.

In addition to the new tunnel washer, the facility added a Braun SmoothFlow 220 lb. Single-Stage Batch Extraction Press, two Braun SmoothFlow Elevating/Nesting Shuttle Conveyor Systems with 2-batch/2-cake storage and transport, and five Braun 500 lb. Pass-Thru gas-fired dryers. The new system also incorporates the

removing much of the water from the goods before the laundry goes into the dryers, thereby reducing the energy and time needed for drying. Meanwhile, the dryers utilize an advanced moisture-removal process that decreases drying time and helps conserve natural gas.

In total, the expansion added more than 12,500 square feet to the existing 41,399-square-foot facility, including a new loading dock, an expanded soil room and a new tunnel washer and dryer area. The new tunnel is expected to reduce per-pound costs, labor, number of hours of operation, energy and chemical costs and water consumption.

Prior to the renovation, Bates Troy processed roughly 11 million lbs. of laundry per year and employed 105 people. The expansion is expected to increase the amount of goods processed to 15 million lbs. per year and will lead to the addition of 10 new jobs. “In addition to creating substantial energy savings, the expansion project is projected to have a \$9 million dollar impact on the greater Binghamton economy, when factoring in the renovations completed by local contractors and new employment opportunities created by the plant’s increased capacity to process future contracts.” says Tom Singe, general manager at Bates Troy.

Singe also commended Braun for its role in the expansion effort. “The magnitude of this project and capital investment on our part required us to seek a supplier who could be a true partner with us,”



A shuttle system (at center/right) services these five 500 lb. dryers with two-batch, two-cake storage and transport, thus saving labor and improving throughput efficiency.

This tunnel with 14, 220 lb. compartments can process 6,600 lbs. per hour and has internal water- and energy-recovery systems that optimize resource conservation.

These dryers are equipped with an advanced moisture-removal process that decreases drying time and helps save energy.

mechanization of the soil-handling process with an overhead conveyor and bags.

### Savings benefits

These machines have been instrumental in the plant’s overall reduction in energy. For example, the extraction press is capable of

Singe said. “G.A.Braun had a performance history of equipment reliability as well as engineering and service excellence. The corporate culture from top management made us feel that they understood our processes and offered numerous solutions to our concerns. Throughout the project, the representatives from the various departments were professional, knowledgeable, informative and extremely

## Plant Development

easy to work with.”

### Adaptive technologies

The new machines added during the Bates Troy plant expansion also incorporate Braun's new WASHNET<sup>®</sup> Data Management Software. This system provides operators with real-time information and the ability to monitor data by machine in order to solve problems and evaluate performance.

By seamlessly linking all networked equipment, the data-management system creates a central operating station and is expected to contribute to the company's bottom line by helping to plan and control an efficient laundry operation. With the software, operators can monitor equipment, manage formulas, back up configurations and view the production and alarm history of the equipment.

“The expansion will help us become the more competitive and more efficient in our laundering process,” said Kradjian. “We also

*“The commercial laundry industry, out of necessity, has always been somewhat ‘green-minded’ long before this current ‘greening of America’ trend,” Kradjian said. “Reducing energy consumption, be it water, natural gas or electricity, is of great concern to laundries and their equipment manufacturers. Given today’s high costs of utilities, these green technologies and their efficiencies achieved have become increasingly meaningful.”*

plan to expand our service area from a 90- to a 120-mile radius. As a small organization, we are fortunate to be able to continuously adapt and implement changes that meet customer demands in a competitive service industry.”

### Racing green

As a result of the expansion, Bates Troy was honored with a Broome County, NY, Green Business Initiative Award in recognition of the company's reduction in energy and natural resources, implementation of new technology, measures to sanitize the soil room and installation of new monitoring and metering equipment for all energy, natural resources and waste.

“The commercial laundry industry, out of necessity, has always been somewhat ‘green-minded’ long before this current ‘greening of America’ trend,” Kradjian said. “Reducing energy consumption, be it water, natural gas or electricity, is of great concern to laundries and their equipment manufacturers. Given today's high costs of utilities, these green technologies and their efficiencies achieved have become increasingly meaningful.”

“Our laundry equipment partner, G.A. Braun, has incorporated green design into the engineering and production of their new tunnel washer by reducing water and natural gas consumed,” Kradjian said. “We are very excited to start enjoying these efficiencies and savings which will ultimately help us be more competitive in the marketplace.”

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