

Southeastern Container

Wappingers Falls, NY

Background

Southeastern Container is a blow molding facility that produces plastic bottles for the beverage industry. The Wappingers Falls, NY, facility occupies approximately 250,000 square feet and houses four production lines. Each production line takes a plastic pre-form that is heated and entered in a mold where it is pre-blown with compressed air at 120 psig. After the pre-blow, it moves to a high-pressure blow at 500 psig to blow the bottle to the mold walls and create the final shape of the bottle.

Process Improvements

Southeastern Container applied to the NYSERDA Industrial and Process Efficiency Program for funding to help implement a compressed air recovery system (ARS) on two of the four production lines. The ARS is a machine that is installed between the discharge valve and the exhaust to recover a portion of the compressed air after the high-pressure blow that otherwise would have been exhausted into the plant. This recovered air is then reintroduced back into the low-pressure system. This allows for a reduction in the total flow required by the air compressors, resulting in energy savings.



Program Results and Savings

After the ARS was installed, there was a definitive reduction in the compressed air flow to the plant as well as a reduction in the energy intensity of the product. The baseline energy intensity was 22.40 kWh per 1,000 bottles produced, which was reduced to 18.78 kWh/1,000 bottles produced. This results in a savings of 1,432,956 kWh per year.

Incentives

The project cost to purchase and install the ARS was \$259,000. Through the Industrial Process and Efficiency (IPE) Program, Southeastern Container has been awarded an incentive of \$129,500, or 50 percent of the project cost.

To find out how you can reduce your energy consumption and costs, visit NYSERDA.NY.GOV.