

# FOCUS ON INDUSTRY

## SOUTHEASTERN CONTAINER: COMPRESSED AIR RECOVER SYSTEM

### BACKGROUND

Southeastern Container is a blow molding facility that produces plastic bottles for the beverage industry. The Wappinger Falls, NY facility is approximately 250,000 square foot and it houses four production lines. Each production line takes a plastic pre-form that is heated and then enters 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 IMPROVEMENT

Southeastern Containers 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 would have otherwise been exhausted into the plant. This recovered air is then re-introduced back into the low-pressure system. This allows for a reduction in the total flow required by the air compressors, resulting in an energy savings.

### RESULTS

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 (kWh/1,000 bottles produced). The baseline energy intensity was 22.40 kWh per 1,000 bottles produced and was reduced to 18.78 kWh/1,000 bottles produced. This results in an annual savings of 1,432,956 kWh per year.

### INCENTIVES

The project cost to purchase and install the ARS was \$259,000, and through the Industrial Process and Efficiency program, Southeastern Containers has been awarded an incentive of \$129,500, 50% of the project cost.

Contact us today at **1.866.NYSERDA**, visit our website at **[www.nyserdera.org/ipe](http://www.nyserdera.org/ipe)**, or e-mail us at **[IPEOutreach@nyserdera.org](mailto:IPEOutreach@nyserdera.org)**.

