

# Case Study

## Art Institute of Chicago

### Masterpiece Rebates

The Art Institute of Chicago is one of the oldest and largest art museums in the United States. The nearly one million square foot museum in downtown Chicago hosts approximately 1.5 million guests annually. In order to preserve their diverse collections, exact temperatures, humidity levels and ventilation specifications must be tightly regulated. This is a significant challenge when you consider that the original building and infrastructure were constructed for the World's Columbian Exposition in 1893.

### Artful Collaboration

It was determined that some masterful planning and executions were necessary to bring the Art Institute infrastructure into the modern age. A study was conducted, and the results revealed that there was an opportunity to utilize waste heat to preheat makeup water in the boiler house. Boilersource and the team came up with an ingenious solution – the installation of economizers on the boiler stacks to save energy and reduce waste.

### Powerful Savings

Together, a team consisting of Peoples Gas, Boilersource, BEI, McGuire Engineers, and Hill Mechanical, identified a way for the Art Institute to reconfigure their boiler operation. The Boilersource experts recommended the powerful BEI HeatSponge Titan model economizer. This custom designed, extended surface economizer could accommodate the strict physical constraints of the historic building, while also providing huge improvements to the existing system. A horizontal gas flow economizer was designed to provide the performance necessary, while fitting into limited available space. The customized configuration led to greatly reduced project costs, and allowed the Art Institute to meet its payback goals. The Art Institute also took advantage of the Peoples Gas Commercial and Industrial Custom Rebate Program and earned \$154,138 in rebates, along with annual fuel savings of over \$90,000. The value Boilersource brought to the Art Institute of Chicago project is truly priceless. Kind of like a treasured work of art.

HeatSponge Titan Economizers provided the Art Institute with:

Annual fuel savings  
of over \$90,000

An energy rebate  
of \$154,138

Energy savings  
of 94,500 therms/year

