

## **Brewing an Energy-Saving Solution**

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Industries that use steam boilers in their manufacturing processes require technologies that reduce variable fuel consumption based on cost-saving and environmental initiatives. In the food and beverage industry, steam is used for processing and pasteurization. To generate steam, fuel in the form of natural gas is a manufacturing cost that can be reduced with specialized, highly efficient boiler technologies.

Recently, Cannon Boiler Works and development partners, along with industry and civic dignitaries, marked the ceremonial startup of the Ultramizer®, an advanced boiler heat recovery system, at the City Brewing facility (formerly Latrobe Brewing) in Latrobe, PA. City Brewing, one of the largest beverage producers in the nation, is the first privately funded test and demonstration installation of the Ultramizer system, which will



optimize City Brewing's current boiler/economizer system to provide a more efficient steam boiler operation and maintain overall peak performance. Prior test results have substantiated a 10 to 20% reduction in fuel cost and greenhouse gas emissions, as well as significant recovery of the exhaust gas water vapor.

## **Technology at Work**



The Ultramizer features Transport Membrane Condenser (TMC) technology, patented by Gas Technology Institute (GTI), to recover both sensible and latent heat, as well as water from the exhaust stream. GTI is a research, development, and training organization that has been addressing the nation's energy and environmental challenges by developing technology-based solutions for consumers, industry, and government. TMC technology is the culmination of concerted efforts by the U.S. Dept. of Energy, GTI, natural gas utilities, state energy and environmental associations, and manufacturing partners.

The City Brewing installation marks a milestone in transforming the energy efficiency of industrial steam generation. The Ultramizer can be used on any fuel boiler to raise

the efficiency to a level of 95% while allowing the return of clean water to the system. This technology provides unequaled performance in its ability to return heat and clean water to a boiler system.



