



## New Boiler Is a Breakthrough for the Dry-Cleaning Industry

### Cleaver-Brooks Boiler Saves Pristine Cleaners 21 Percent in Energy Costs

When Cleaver-Brooks introduced its ClearFire® line of high-efficiency, ultra-low emission boilers at the 2009 Clean Show, Tom Janick, owner of Pristine Cleaners in Naples, Fla., and Craft Cleaners in Princeton, N.J., said the new boiler line is helping to bring the dry-cleaning industry into the 21st century. “Quite frankly, we are used to a boiler being a piece of metal with some concrete added for insulation, a burner, a water column and some controls,” said Janick.

*“We haven’t ever seen a boiler like this one in the dry-cleaning industry.”*

—Tom Janick, owner of Pristine Cleaners

In 2009, Janick was in the market for a new boiler and recognized that replacing his current model with a more efficient one was the only way that he was going to reduce his fuel cost, which was sky high in 2007 and 2008. In November 2009, Janick installed a ClearFire boiler, and within months, he reported that his energy bills had dropped 21 percent. Janick attributed the savings to two factors – advanced product engineering and the high quality of steam the boiler produces.

#### **Better engineering yields energy savings**

Howard Hill, manager of the Cleaver-Brooks Laundry and Dry-Cleaning Group, said most boilers available today are not designed to accommodate the widely varied demand for steam required by a dry-cleaning operation. He explained that typically a boiler builds up to a certain steam pressure and automatically shuts off. When it shuts off, the pressure drops, and then the process starts all over again. A boiler wastes heat during the burner start-up and shut-down. When it ignites, the burner performs a pre-ignition purge, blowing potentially combustible gas (and heat) out the stack. In addition, when a boiler shuts down, the burner performs another purge (post-combustion). While these purge steps are an important safety feature required for all power burners, they also remove a significant amount of heat from the boiler.

Hill added that the Cleaver-Brooks ClearFire package boiler line is engineered differently. The fully modulating, premix burner is designed not to shut down completely when it reaches the pressure set point; rather, it idles at 20–25 percent of its rated horsepower when the demand for steam is low. This essentially eliminates the typical boiler cycling and associated burner purges. Cleaver-Brooks has combined its state-of-the-art burner with patented AluFer® firetube heat-transfer technology, enabling the boiler to reach an efficiency level of up to 88 percent. This engineering advancement conserves energy, which saves owners such as Janick money on their monthly energy bills.

The ClearFire boiler utilizes a patented AluFer® heat transfer technology that helps increase efficiencies to 88 percent while achieving ultra-low emissions.

#### **PRISTINE CLEANERS**

##### **LOCATION**

Naples, Florida

##### **PROFILE**

Pristine Cleaners serves residents of Naples, one of Florida’s most affluent cities.

##### **CHALLENGE**

Replace an existing boiler with a more efficient model to cut the cost of escalating energy bills.

##### **SOLUTION**

Install a Cleaver-Brooks ClearFire boiler, engineered to reach an efficiency level of up to 88 percent.

##### **RESULTS**

Energy bills decreased by 21 percent.

Reduction in number of labor hours (due to better steam quality).



Tom Janick, owner of Pristine Cleaners, says the ClearFire boiler is helping to bring the dry-cleaning industry into the 21st century.

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#### **Maintaining quality steam aids productivity**

“The savings to me is not only in the gas bill, but it’s in the quality of steam, which helps our labor costs,” said Janick. “The on/off cycle and resulting lag influences the quality of the steam. Because the boiler doesn’t shut off completely and runs very efficiently, the quality of our steam is where it needs to be all of the time.”

Janick added that his staff does not have to wait around for good-quality steam during the on/off cycle, nor do his pressers have to vacuum as much, which also saves them time. “We have four pressers, and the savings amounts to a couple of labor hours per week between all of them, which is a lot for a dry cleaner over the course of a year,” remarked Janick.

Janick said operating the ClearFire boiler is easy. The integrated, color, touch-screen panel is a first in the industry. He likes the fact that the control panel is equipped with “smart” technology that can tell him if there is a problem and what it is. He said, “No other boiler does that on an LED or touch-screen readout.” Janick said by looking at the control panel he immediately knows what is wrong, adding that he does not have to simulate the issue or consult a code sheet to solve the problem.

The fact that the ClearFire boiler is standard with low emissions was also a plus for Janick, although reducing emissions wasn’t a primary concern for him. “Emissions come into play in California, and other states are going to start curbing emissions, too. I’m glad with this boiler I will not have to worry about it.”

When he installed the ClearFire boiler, Janick anticipated saving approximately 17 percent on his energy bills due to the boiler’s efficiency. The savings have more than exceeded his expectations and benefited his business in ways he didn’t expect. He said, “We’re using the boiler less because the quality of steam is better. I don’t think anyone has really thought about it this way, but I know it’s true.”

Lastly, Janick said that his colleagues often refer to boilers today as being “throwaways,” meaning that they work well for six or seven years, and then they have to be replaced. He added, “That is certainly not the case with the new Cleaver-Brooks model, which I expect will last 10 to 15 years.”

The ClearFire steam boiler from Cleaver-Brooks runs on either natural gas or propane and is available in sizes ranging from 10 to 60 horsepower. It utilizes a patented AluFer® heat transfer technology that helps increase efficiencies to 88 percent while achieving ultra-low emissions. The ClearFire boiler is available in either a vertical or horizontal model. Visit [laundryanddrycleaningboilers.com](http://laundryanddrycleaningboilers.com) for more information.

#### **About Cleaver-Brooks, Inc.**

Cleaver-Brooks, a world-renowned provider of boiler-room products and systems, is committed to providing efficient solutions that help its customers and the industry reduce energy usage, cost, and environmental impact. As the pioneer of packaged firetube and watertube boilers, Cleaver-Brooks is the only manufacturer in the world to offer an entirely integrated boiler-room solution for any size application. Its products are backed by a world-class representative network offering superior aftermarket service and solutions. Visit [laundryanddrycleaningboilers.com](http://laundryanddrycleaningboilers.com) for more information.