

Prompt Steam Generation, Reliability, Fuel Economy, Computer Control, Environmental Benefits, and Compact Size Fits The Needs Of A Popular New York Brand

Word of mouth is a potent ingredient in craft brewing, the fastestgrowing segment of U.S. beer making. Defined as producers of fewer than 6 million barrels annually, craft brewers tend to share best-practice tips with the same enthusiasm that beer lovers have for the unique brands and flavors they create. When Scott Vaccaro, owner of Captain Lawrence Brewing Company, in Elmsford NY, asked other craft brewers which brand of steam boiler they chose, the word he heard most often in reply was Miura. The world leader in ultra-low NOx modular on-demand steam solutions, Miura boilers are microprocessor-controlled for precision operation and employ a unique "once-through" fin-tube design that uses less water and requires less fuel. Miura boilers save an average of 20 percent annually on fuel costs over other boilers for typical installations. They also produce fewer emissions, and can go from a cold start to full steam in less than five minutes to precisely match steam demands.

"The craft brewing industry, as spread out as it is, is a pretty tightknit group of people and when somebody finds something they like

they spread the word," Vaccaro notes. "One of the other breweries told us, 'Our new Miura boiler is larger, we are running it more, but our gas bill actually went down.' We haven't been able to attest to that just yet ourselves, but we're assuming and hoping it will be true for us as well. I know we are happy so far."



"Without our boiler this brewery stops. Reliability is what's most important to us. MOM and Miura's Colormetry feature enable us to be hands-off. It also gives us the peace-of-mind that Miura has our back on one of the most important pieces of equipment we have. It's good to know you're using something environmentally friendly and efficient. Add the advantages of on-demand steam generation and a small footprint, and Miura is second-to-none in

my mind."

Scott Vaccaro, Owner, Captain Lawrence Brewing Company

Vaccaro chose a compact, gas-fired Miura LX-50 for his family-run Captain Lawrence Brewing Company, which produces a line of awardwinning ales distributed throughout Connecticut and the lower 15 counties of New York State. Named after a Revolutionary War hero, Captain Lawrence projects an output of 15,000 to 17,000 barrels this year with the recent addition of 12 oz. bottles for retail sale. Most essential to this small company, however, is the dependability of its Miura LX-50, which enables Vaccaro and his team to concentrate on what they do best. Vaccaro and his team to concentrate on what they do best.

"We make beer, which means we need on-demand steam – fast, and lots of it," Vaccaro says. "Basically, from the time we hit the START button on our LX-50 to when we're at our full operating pressure is about three minutes. That's very important, because we don't want to be sitting around every morning for an hour waiting for a boiler to get up to temperature. Being able to turn the steam on and off quickly is a big plus. Breweries are a fairly water-intensive operation. We are constantly boiling water in the kettle and sending highpressure steam to sterilize the keg line. Thanks to the efficiency and

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Captain Lawrence Brewing Company....

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the quick start-up of the Miura LX-50, we are able to consistently maintain 1,200 gallons of hot water without any worry, whereas our old facility's cast-iron sectional boiler made it was a constant struggle to meet our hot water demand while also maintaining a decent boil."

Green Advantages

Because Miura's unique "once-through" fin-tube design burns less fuel, it also reduces emissions. Miura boilers output reduced levels of nitrogen oxides (NOx), a major contributor to air pollution, as well as carbon dioxide (CO₂), the most prevalent of greenhouse gases. Miura boilers achieve low-NOx performance by reducing the temperature of the boiler's flame, which in turn reduces the amount of excited nitrogen atoms available to bond with oxygen to form nitrogen oxides. As a result, NOx emissions are reduced to around one-quarter of what traditional fire-tube boilers emit. This enables Miura boilers to comply with even the most stringent air-quality regulations. With regard to reduced CO₂emissions, Miura's technology leverages superior operating efficiency to contribute significant carbon abatement with a payback.

"New York State and Westchester County audit emissions, so being able to tell them we have a low NOx, high-efficiency boiler is a huge plus," Vaccaro says. "We feel good about that and about saving money on fuel."

Hands-Off Operation

In addition to its advanced fin-tube design, every Miura boiler also features the BL Micro Controller, which keeps track of multiple individual monitoring points. An advanced diagnostic system, it can identify any potential challenge to smooth operation and recommend a solution on an easy-to-read display. A "sliding-window feature" records events four seconds before they occur for fast and effective trouble-shooting. This system can also be accessed via the Internet using the Miura Online Maintenance ("MOM") feature for remote monitoring and diagnostics. The system can also interface with Miura's Colormetry feature, which monitors water quality to prevent the build-up of scale inside the boiler. (Users can opt to use Miura's own BOILERMATE® water-treatment chemicals, the main ingredient of which is silicate, an environmentally friendly corrosion inhibitor.)



"Without our boiler this brewery stops," Vaccaro explains. "Reliability is what's most important to us. MOM and Miura's Colormetry feature enable us to be hands-off. It also gives us the peaceof-mind that Miura has our back on one of the most important pieces of equipment we have. You hit the START button on the LX-50 and that's pretty much the end of it. The boiler tells us



when it needs to be blown down. The boiler tells us if there is a hardwater issue. The boiler sends back all the reports to Miura, so they know what's going on."

The Industry Choice

Yet another benefit of Miura's advanced design is a compact physical size, as compared to traditional fire-tube boilers. Although smaller, however, Miura's exclusive technology produces BHP outputs comparable to much larger units. "Many craft breweries are tight on space, so the compact footprint of Miura boilers is a huge plus," Vaccaro adds. "Our 50HP unit takes up the same space as our old 10HP sectional."

As craft brewers continue to proliferate nationwide and more consumers come to appreciate the diverse choices offered by smaller, innovative beer makers, the use of Miura boilers continues to grow in this specialized industrial segment.

"It's a feel-good product all-around," Vaccaro says of the Miura LX-50 at Captain Lawrence Brewing Company. "It's good to know you're using something environmentally friendly and efficient, and with the MOM system you know that everything is running properly. Add the advantages of on-demand steam generation and a small footprint, and Miura is second-to-none in my mind."