

Up Close

Behind the Scenes
with the Industry's
Leading Innovators

ACV Triangle Tube offers and encourages training for all contractors on how to properly install and maintain equipment.



COMFORT MEETS SUSTAINABILITY

Meet the leader of innovation in water heaters

By Colleen DeHart

Everyone knows that awful moment. The one where mid-shower, with shampoo-lathered hair, the water turns cold and no matter how high the nozzle is turned the warmth will not return. Leading U.S. manufacturer and distributor of water heaters **ACV Triangle Tube** wants to ensure that never happens, and in the most sustainable way possible.

The family-owned company, part of the ACV Group in Belgium, has been designing water heaters for consumers since 1946, with innovation and energy-efficiency always at the forefront. “We have always aimed to lessen the output of CO2 into our atmosphere, without slacking on comfort,” says **Sjaco van de Sande**, Triangle Tube CEO. “We want to supply at the lowest cost, the best comfort for the homeowner, the best temperature control, and more gallons-per-minute capacity while having the lowest environmental footprint possible.”

A Genius Solution

Triangle Tube's newest **Genius** technology is just another way the company is leading the industry. The patented Genius is an indirect water heater with a “Picanto”—meaning hot or spicy—heat exchanger located inside (the largest model has two heat exchangers), says **Mark Avron**, national sales manager for Triangle Tube. Hot water, heated to 180 degrees Fahrenheit, from the boiler circulates through the heat exchanger, heating the incoming cold domestic water. This method of heating water eliminates the flue gas loss that occurs with a traditional gas-fired water heater, Avron says.

And that's not all. To further enhance the system's efficiency, the Genius tank is insulated with two inches of CFC/HCFC-free foam, bringing standby loss to less than one degree Fahrenheit per hour. “It was about generating the same amount of water, or more, as a typical tank, but more energy efficiently,” Avron says.

The tank is made completely of stainless steel, greatly reducing the likelihood of corrosion and allowing the company to offer a lifetime warranty on the product. “We use stainless steel because we don't need to coat it to protect it—unlike your typical glass-coated tank—and it is inherently resistant to corrosion,” Avron says. “You can't find a glass-coated tank anywhere with a lifetime warranty.”

Always an Innovator

Triangle Tube is continuously working to bring something new and exciting to the market. “We have really been a company that has looked to continually innovate and not just be a follower in the industry,” Avron says.

One of the company's star products—the only one like it in the industry—is a combination of a high

efficiency condensing boiler and a domestic water heater. The storage combination boiler, known as the **HeatMaster TC**, condenses fully in both hot water and space heating modes. It operates by maintaining a consistently high temperature in the upper tank so it's always ready to supply hot water, while allowing the heating system return to enter a low-temperature total condensing tank. Cold water enters through the total condensing tank and is pre-heated before entering the hot water tank. Once it's up to temperature, the system is able to produce heat and hot water simultaneously. The end result is a product that is 96% energy-efficient.

All in the Training

Achieving maximum energy efficiency and reliability is not just on the products themselves; much of it has to do with the installation and control process. “The reality is the efficiency of these products is driven more so by the installation and the setup of the equipment than anything else,” Avron says.

That's why Triangle Tube offers, and encourages, training for all contractors on how to properly install and maintain equipment. “If you buy solar panels and put them on the north side of your house they won't work well. If you buy a condensing boiler and you don't use the proper controls and install it properly you won't achieve what you are looking for,” Avron says. “So how do you do that? You educate contractors that are the face to the consumer.”

The company holds regular training at its U.S. headquarters in New Jersey and at several facilities around

the country. For contractors unable to get to these locations, the company can bring the training to them.

Environmental Awareness

Triangle Tube is not just focused on meeting the growing needs of consumers—who are more educated and aware than ever before—but they also have taken steps to reduce their impact as a business. The

company utilizes a low energy consumption lighting system, a water conservation system for research and development, and reclaims energy from the manufacturing process for heating. They recycle wood, plastic, cardboard, and office paper and have implemented a water-based refrigerant in the foaming process of the water heaters. They also use low-VOC paint. “Every one of us, whether we are individuals or corporations but especially corporations, should be aware of the impact we have on our environment,” Avron says. “It is a small world we

live in, and it is the responsibility of everyone to care for our resources.”

With consumers searching for products that will serve their comfort needs in an environmentally responsible manner, Triangle Tube has strived to make their products attainable by everyone. In an effort to service consumers of all needs and demographics, the company offers “good, better, and best solutions,” van de Sande says, covering a variety of price ranges.

Coming Down the Pipeline

Triangle Tube has big plans for the future. In a world

The ACV Genius tank is made of stainless steel, greatly reducing the likelihood of corrosion.

where everything is connected to the internet, the company is cutting down on the guessing game by giving water heaters Wi-Fi connectivity.

The technology—currently in the works—will allow contractors to receive messages through a phone application from their clients' boiler system informing them of a potential problem. “Right now the only way to know if there is a problem with your boiler is when your house gets cold or you have no hot water,” Avron says. “This preempts that. Before your house gets cold, your contractor will get a text message telling them which part of the boiler is affected. The technician will have an idea of the nature of the problem before he even shows up.”

Leading the Way

“Being a leader in the heating and hot water industry forces us to keep pushing the boundaries of innovation to give our customers the best experience possible while satisfying the demand for environmentally friendly solutions,” van de Sande says.

Over the past three years, ACV Triangle Tube has financially and physically invested in building the next generation of products. The investments include a new production plant, new R&D facility, and renewing the existing production facilities.

Van de Sande says, “We believe that by offering our customers amazing products with higher efficiencies and enhanced technology, we are empowering them to achieve excellence in the communities they serve.”

