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On-demand hot water solves production headaches for Bendicks

Chocolate manufacturer Bendicks (Mayfair) Ltd. now has an unlimited supply of hot water for washing down its equipment, thanks to the installation of a Spirax Sarco EasiHeat™ Engineered System. The new system has eliminated the disruptions that were caused by an unreliable hot water supply.

The Winchester-based factory's previous water heating system struggled to keep pace with demand, especially at peak times. As a food manufacturer, it's important for Bendicks to be able to wash down its equipment with water at 63°C or hotter to prevent microbial growth, so any disruptions in the hot water supply would disrupt plant operations.

"Our old calorifier system used to give us lots of problems," says Bendick's engineer Keith Wallace. "It would heat up the water in the vessel, but as it was being used and replaced by fresh cold water, the temperature would drop and often run cold during peak usage times. Now the EasiHeat system gives us instant hot water that's always available."

EasiHeat systems rely on a compact plate heat exchanger that uses plant steam to produce hot water on demand. Not only does this ensure a constant supply at peak times, it also eliminates hot water storage and increases energy efficiency. "We don't meter the steam used so we can't quantify it, but I'm confident we're saving energy," says Mr. Wallace.

Spirax Sarco supplies each EasiHeat system as a skid-mounted package, complete with all the pipework and ancillaries. This makes it very simple to install and commission. “We just placed it in position, connected it to an electrical supply and piped all our services into it,” says Mr. Wallace. “Unlike the old calorifier and its large buffer tank, we now have a neat, compact installation that fits into the corner of the boiler house.”

Opting for EasiHeat has also given Bendicks flexibility for the future. In addition to washing down, the company is also planning to install a ring main that allows the system to supply hot water for hand washing throughout the plant. The hot water will be mixed with a cold feed at the point of use to bring it to a safe temperature.

Furthermore, EasiHeat can be adapted to suit any future expansions at the site by adding further plates to the heat exchanger, according to Mr. Wallace: “It was sized for use across the factory at the time, but if there are any future expansions, the plate pack can be doubled.”