

Temperature Control for soup processing

Working in close collaboration, Tricool Thermal and a long-established process equipment manufacturer have supplied a custom-built temperature controller for one of the UK's leading soup manufacturers.

"Water doesn't become steam until it reaches 100°C, therefore the T90s is ideal for this type of application where accurate temperature control of hot water is required," Dave Palmer Tricool's Manufacturing Director.

The Need

The customer had a specialised requirement for maintaining the temperature of a soup product whilst being transferred from the cooking vessel to the filling machine. A number of alternatives had been investigated.



Dual cooking vessel for soup application

Although steam is widely used in many food-cooking applications, it was essential to maintain the soup at no higher than 90°C so that it would not cook any further.

The design criteria stipulated a thermal duty of 6.3kW using mains water with a supply temperature of 95°C sited internally within a wash down area.

The Solution

Tricool's solution was to use its T90s temperature controller (previously called the COMBI). This unit features solid-state relay control, diagnostic controllers and corrosion free construction with a compact footprint making it ideal for applications where space is at a premium.

Based on a start temperature of 21°C a finish temperature of 90°C and a cycle time of one hour, a stainless steel T90s C4.59kW temperature controller capable of generating and extracting 9.0kw/16,000kCals/hr @ 70°C was customer built to the customers' specifications.

Unit Features

Features included auto fill level switch, regulating valve and solenoid valve for water only, cooling solenoid valve, safety stat set at 95°C and low audible alarm fitted as standard.



Instead of using valuable space within the production area, the unit has been installed in the roof in order to free up floor space. It supplies hot water to the pressure vessel via jacketed pipe work on coaxial tube at 95°C.

"The closed loop system doesn't waste water and thermostatically controlled heating makes the COMBI a very economic solution." Dave Palmer Tricool's Manufacturing Director

About Tricool Thermal

Tricool Thermal is proud to have been manufacturing precision process temperature control equipment in the UK for over 30 years and we have built our reputation on this.

We are supported and controlled by our ISO 9001 accreditation within our UK based design, engineering and production facility - to exacting CE standards.

We remain at the forefront of the industry in developing scalable, cost effective 'off the shelf' and bespoke solutions with an operating temperature range of -80°C to 350°C.