

Temperature Control for Bath Manufacturing

A leading bath manufacturer contacted ICS Industrial Cooling for temperature control assistance with their manufacturing processes. They required a range of temperatures to suit the different stages of their production.



A Dual Temperature Control Requirement

The company manufactures a wide range of baths using acrylic, which is hard wearing with a resistance equivalent to that of aluminium. The material is easy to clean and leaves an excellent surface finish that their customers have come to expect.

In the process the acrylic is first heated in order to take the shape of the bath mould. High temperatures are required for this process to work and these must be maintained without fluctuation. If the acrylic overheats, the material will begin to bubble; resulting in an inferior finish. Once the acrylic has been pressed over the mould, it is then sealed using a vacuum and cooled in order for it to harden.

A Low Maintenance Solution

ICS understood the customer's processes required a unit which could supply a range of temperatures to cater for both the moulding and hardening methods of their production.

The solution was a 12kW P140 unit which can deliver precise temperatures with minimal maintenance requirements and increased energy efficiency.

ICS' manufacturing company Tricool Thermal design and build **12kW P140** units as part of their standard stock. Using non-ferrous parts throughout, the units can reach temperatures of 140°C using pressurised water. The units feature stainless steel heat exchangers allowing for increased efficiency, direct acting self cleaning solenoid valves and a diagnostic controller help to reduce the need for maintenance by showing knowledge of any faults that may occur along with solid state relays which save energy due to pulsing every 0.3 seconds.



The units are also fitted with enhanced EMC protection (electro magnetic capability) which captures the magnetic field around the unit's circuitry; ensuring no interface with other electrical equipment on site. As the P140 forms part of Tricool's standard stock, a fast delivery could be achieved for the customer.

Thanks to the efficiency and minimal maintenance checks required for these units, the line of production can run continuously; providing complete peace of mind for the customer.

The customer found that the units they were using needed to be removed from site when a service was required, which caused significant inconvenience to their production. Tricool's P140 units are manufactured with easy access to heating circuits and components and so units can remain in situ for service.

Simple and Easy to Use

"The units are simple to use and do the job of a heating and cooling unit in one. The project was completed to our required timescale and we will continue to use ICS for our temperature control equipment."

Engineering Manager,
UK Bath Manufacturer.

Commenting on the project, **John Lowe**, ICS Sales Engineer said *"These units are ideal for the customer's application. They simply need to be plugged in and switched on; allowing for a quick and simple installation."*

Temperature Control Specialists

ICS Industrial Cooling are specialists in providing precise temperature control equipment to cater for a wide range of industries and applications. With engineers located all over the UK, ICS can visit your site to provide the best temperature control solution for you and your business.

For further information on ICS's products and services please call free on 0800 169 3861 or on one of the local numbers below, alternatively you can email info@icstemp.com

