

## Reliable Heating Solutions for Plastics Manufacturing

A worldwide plastics manufacturer contacted ICS Industrial Cooling for assistance with their temperature control needs. The global organisation specialises in injection moulding, extrusion and vertical insert moulding, working within the electronics, medical and renewable energy industries.

### Plastic Process Moulding

The customer has purchased chiller and heater systems from ICS for over 13 years and has been continually impressed with the quality of units and service they have received.

The customer found that heater units, provided by other manufacturers have encountered a number of what were considered to be failures, while the ICS units have outlasted them thanks to their durable parts and reliable performance. The customer has now requested to replace all of the other units with ICS heaters.

*"They have always been recommended over the years within the company, due their durability. We have had some of these units since 1998 and they're still going strong!"* Facilities Manager, Global Plastics Manufacturer.



For this particular project, the customer required temperature control equipment for the manufacturing process of plastic components in which raw plastic materials or plastic pellets are heated. The plastics require high temperatures in order for it to melt down into a molten compound which is then injected into a mould where it cools and sets. For this process to work, temperatures between 80°C

and 85°C are required for use 24 hours a day, 5 days a week at their manufacturing site.

The customer's production area produces a vast amount of dust and needs continual ventilation; therefore heating units which can withstand dusty environments without continual maintenance checks were essential in order to maintain optimum productivity.

### The Exact Heating Solution

ICS worked alongside its manufacturing company Tricool Thermal to design and manufacture 12x T90s heating units with capacities of **9kW-18kW** and the ability to reach temperatures of up to 95°C. These units cater for the customer's exact needs, thanks to their diagnostic controller which alerts any faults and reduces maintenance time, a leakstopper which enables continuous productivity, direct acting self cleaning solenoid valves which reduce the need for manual cleaning and non ferrous parts used throughout for a longer life.

As well as saving on maintenance checks and costs, these machines are built using solid state relays which are extremely energy efficient due to pulsing every 0.3 seconds (unlike contactors which pulse every 16 seconds). This provides increased accuracy and with no moving parts; wear and tear is eliminated.

Dominic Shepherd, Sales Engineer for ICS commented on the installation:

*"These units are easy to set-up and trouble free to use. They are standard, small units with flexible pipe work; allowing for a quick and simple installation for the customer."*



## Continuous Reliability

Following the simple installation, the customer was able to leave the units running without having to continually carry out maintenance checks; sustaining a continuous production line.

The customer describes their experience of working with ICS and in particular Sales Engineer, Dominic Shepherd:

*"ICS have continually provided us with reliable and durable units. Dominic is very approachable and is always prompt with his site visits. We cannot fault the service received from ICS and plan to continue working with them in the future."*

## Specialists in Temperature Control

ICS Industrial Cooling are specialists in the heating and cooling market, providing essential temperature control equipment for a wide range of industries. For further information on equipment and services provided by ICS call free on 0800 169 3861 or on one of the local numbers below, alternatively you can email us [info@icstemp.com](mailto:info@icstemp.com)

