

Essential Cooling for Aluminium Anodising

ICS Industrial Cooling have successfully prevented Bucks Metal Finishers from stalling their production processes due to old, failing temperature control units.

Critical Cooling for Processes

Bucks Metal Finishers specialises in coating aluminium extruders, for use in a diverse range of industries using a process known as anodising which increases the thickness of the natural layer on the surface of metal parts.

In brief, the raw aluminium is cleaned and degreased in a strong chemical solution ensuring all impurities are removed ready for plating. The metal is then placed in the anodising solution, which needs to be maintained at a temperature of between 16-18°C.

As the chemical reaction takes place, it produces heat which must be cooled in order to maintain the required temperature. In addition to this, the coating is available in various thicknesses which can only be achieved using temperature control; demonstrating how vital these units are to the production process of the business. Once the anodising is complete, the metal is left outside to air dry and harden in the summer months, or placed in a boil tank to harden during the cooler winter months.

The units Bucks were originally using were struggling to meet demand; resulting in a slower service for their customers. What's more, to meet production targets the power supply to these units were required 24/7 producing large electricity overheads.

Flexible Cooling Package

ICS understood Bucks were restricted on budget and worked with them to supply and install two ex-rental units; a TAE 161 evo chiller and heat exchanger. The TAE was fitted with a reverse pump; specifically catering for their open tank set up.



one of the TAE 161 Evo
Chiller units and
Heat Exchanger
supplied by ICS

The water is pulled from the tank, cooled and then pumped back, creating a recirculating process. In addition, the TAE offers precise water temperature control which increases productivity and reduces production cycle times. The unit is designed with a closed circuit; allowing for precise temperature control independent of ambient conditions.

"We wouldn't have survived without ICS, our costs were rising as well as our work load. Originally, we were only managing to process 10 loads per day, now we can produce between 18 and 25, allowing us to keep up with demands. Furthermore, we are now able to turn off the units overnight; saving us energy costs and improving our carbon footprint."

Jacquelyne.
Owner -Bucks Metal Finishers.

Quality Service and Customer Support

Bucks went on to purchase a service package from ICS Service which covers planned preventative maintenance checks, discounts on parts and labour, emergency call out services, access to technical support as well as 24/7 engineer availability. This package is essential for a business such as Bucks, in which its processes are dependant upon temperature control.

With useful alternatives, such as payment options and ex-rental units, Bucks were pleased with the service they received from ICS' Regional Sales Manager, Ben Newman:

"Ben was extremely helpful and took this difficult task in his stride. He recommended the right solution for our processes; allowing us to not only continue with our production but increase it aswell." Added Jacquelyne.

Nationwide Cooling Specialists

ICS are leading specialists in cooling equipment and services. They supply to a diverse range of industry sectors nationwide, providing customers with knowledge and experience they can trust. To speak to a fully qualified engineer today, call **0800 169 3861** or on one of the local numbers below alternatively you can email info@icstemp.com

