

## Hydraulics Machine Cooling

An international hydraulics testing organisation contacted ICS for essential cooling equipment to help with their global processes.

### Specific Cooling Requirements

The organisation provides hydraulic test bench packages for companies across the world. The test benches are used to check hydraulic systems in aircraft. The process involves circulating chilled oil around electronics and high tech equipment whilst simulating the pressure within particular hydraulic units in order to test their ability and safety. This process generates a great deal of heat and requires a powerful and robust chiller unit which can withstand the outside elements.

Hydraulic testing is always performed outside and is normally situated on a runway, for convenience to the customer. Therefore, with customers located worldwide, the benches and cooling units may have to withstand some extreme weather conditions and in some cases can potentially stand idle for 6-8 months.

### Bespoke Temperature Solutions

ICS worked closely with their manufacturing company, Tricool Thermal to design and build special external chiller units to cater for the customer's various site needs.

The units that ICS provided were **bespoke air cooled water chillers** designed specifically for outdoor sitting. These **34kW** machines were built using **dual circuitry**, allowing for no single point of failure which provided the customer with continuous productivity and peace of mind.

The customer also required a unit that didn't interfere with any other electrical devices this was essential due to the proximity of important aviation equipment at site. ICS resolved this by fitting the chillers with enhanced EMC protection (electro magnetic compatibility) which captures the magnetic field around the

unit's circuitry, making sure it has no effect on any other electronics. In addition to this the units omitted the very minimal electrical noise; creating no disturbance for the customer's processes.

ICS individually designed the chillers for locations around the world, catering for ambient temperatures of up to **50°C and down to below freezing**. Inverted fans were fitted on some units to protect from sand storms and other units were built with louvered sides to shield them from horizontal rain.



Bespoke air cooled water chiller

*"ICS have taken each of our projects into careful consideration, providing essential cooling equipment to cater for our specific application whilst being able to withstand extreme weather conditions 24/7."*

*General Manager  
Hydraulic Testing Customer*

ICS continue to work with the customer on their global projects, providing vital cooling equipment for their business.

## Cooling For Any Application

ICS are able to bespoke build units to suit any customer application, catering for the external environment and the materials used within the process.

ICS are specialists in the heating and cooling market, providing essential temperature control equipment for a wide range of industries including plastics processing, metal finishing, food and beverage, chemical and medical, engineering, automotive and aerospace to name but a few.

For further information on the equipment and services provided by ICS, call free on **0800 169 3861**, or alternatively email your enquiry to [info@icstemp.com](mailto:info@icstemp.com)

