

**WE MAKE IT WORK**

For OEM (Original Equipment Manufacturers)

# THE TEMPERATURE CONTROL SPECIALISTS YOU CAN TRUST

ICS Cool Energy is a process temperature control specialist who has been partnering with original equipment manufacturers (OEM's) for over 30 years.

Our world-class process cooling and heating solutions have become synonymous for their build quality, energy efficiency, temperature consistency and reliability.

By using our highly dependable equipment, manufacturers can rest assured their products are being operated at their optimum performance temperatures. This not only helps to protect your equipment when in use, but it also serves to protect the brand name and reputation you've worked hard to build up within your industry.

ICS Cool Energy is part of Ingersoll Rand – a global industrial manufacturing group – which is a great selling point for OEMs selling their products into other global companies who need to be assured of quality and high standards.



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## Protecting your equipment & reputation



## WHY PARTNER WITH ICS COOL ENERGY?



Widest range of industrial temperature control solutions available off the shelf



Bespoke solutions to meet every temperature control need, requirement and budget



We can design, supply and install our products to save you time and hassle



Single point of contact for account management and technical support

Our heating and cooling solutions for process have been tried and tested in many challenging and demanding industries including medical, pharmaceutical, scientific, chemical, food and beverage, plastics and even ATEX environments that have stringent requirements on the use of equipment in explosive environments.

We possess a wealth of knowledge and expertise in these areas to ensure the products you supply to your customers come equipped with the most reliable and energy efficient temperature control solutions available on the market.

## THE ICS COOL ENERGY DIFFERENCE

### REAR PANEL MOUNTED SHELL & TUBE HEAT EXCHANGER TYPICALLY FOR OIL APPLICATION

We don't just manufacture, deliver, install and stock the widest range of off-the-shelf packaged chillers and temperature control units, we also provide engineered skids to modify our standard equipment to your exact project requirements and specifications. This not only saves you time and development costs, it also serves to improve your system reliability by taking our tried and testing equipment and adding reliable modifications to them.



### EXTENDED BASE FRAME MOUNTED RUNS/STANDBY PUMP SET

Our fully packaged chillers and temperature control units are highly adaptable with most modifications being made by our engineers on-site at our UK headquarters. We'll talk you through the options available to ensure the best solution is provided.





### **EXTENDED BASE FRAME MOUNTED GASKETED PLATE HEAT EXCHANGER TYPICALLY FOR WATER APPLICATION**

We can also cater for any equipment modifications that may be required when selling your products overseas. Different electrical supply voltages, water qualities, temperatures, available utilities and extreme weather conditions may affect the constraints and demands put on your equipment, so a 'one size fits all' approach might not be right for your international product ranges.



### **EXTENSION MODULE INCORPORATING ELECTRICAL POWER SUPPLY TRANSFORMER**

Whether you require an additional pump, heat exchanger, water circuit or something completely bespoke, our experienced Sales Engineers and Product Managers are on hand to find a reliable and efficient temperature control solution for each and every project and product you manufacture.



## FLATPACK ASSEMBLY

Do any of your clients sites suffer from poor access? Not a problem for ICS Cool Energy, our highly experienced engineers can dis-assemble and re-assemble our equipment to make your life easier.

## STAGE 1

We'll dis-assemble the temperature control equipment to the minimal size needed to fit through the access space.



## STAGE 2

Once in it's final location, our engineers will carefully transport the parts and re-assemble the equipment.



## STAGE 3

Once fully assembled, we'll connect the equipment to the required utilities and test to ensure its fully operational.



# PACKAGED PROCESS TEMPERATURE CONTROL

## i-CHILLER

-20°C to 30°C | 1.7 to 505kW

The fully packaged, EcoDesign compliant, air-cooled i-Chiller range is designed specifically for reliable and efficient process cooling.

The unique evaporator is immersed within a generously sized storage tank. This design ensures safe and reliable operation even during large fluctuations in cooling demand – something often encountered within various industrial applications.

Each unit comes with a 3-bar pump as standard with the option to customise with a 5-bar pump – allowing for demanding industrial applications.

### i-CHILLER COMPACT

0°C to 30°C  
Process cooling duties from 1.7 to 4.7kW  
4 sizes

### DUAL FREQUENCY (50/60HZ) VERSION

-10°C to 30°C  
Cooling duties from 7 to 65kW

### i-CHILLER

-10°C to 30°C  
Process cooling duties from 7.2 to 233kW  
19 sizes

### i-CHILLER LT

-20°C to 20°C  
Process cooling duties from 4 to 50kW  
R449a Refrigerant

### i-CHILLER MAX

-10°C to 20°C  
Process cooling duties from 243 to 505kW  
8 sizes



- ✓ **ECO-DESIGN COMPLIANT**
- ✓ **STOCK AVAILABLE IMMEDIATELY**
- ✓ **FAST CUSTOMISATION OF STANDARD MODELS**
- ✓ **INDIVIDUALLY FACTORY TESTED**
- ✓ **EFFICIENT R410A REFRIGERANT**
- ✓ **UP TO 5-YEAR WARRANTY**
- ✓ **3-BAR PUMP AS STANDARD**



**i-TEMP**

-20°C to 400°C	-20°C to 220°C
Electric up to 360kW	Steam to water up to 1600kW

The i-Temp range of temperature control units are simple to install and offer unrivalled temperature control on applications such as jacketed vessels, jacketed pipework and moulding machines.

With direct and indirect cooling options available, the water, steam to water and oil temperature control units are provided with advanced controllers for the ultimate control and repeatability for process temperatures up to 400°C.

**i-TEMP COMPACT**

Indirect and direct water TCUs up to 225°C

Heating capacities from 6 to 36kW

Cooling capacities from 23 to 600kW

**i-TEMP**

Indirect and direct water, pressurised water and oil TCUs up to 350°C

Heating capacities from 4 to 72kW

Cooling capacities from 23 to 600kW

**i-TEMP MAX**

Indirect and direct water, oil and thermal oil TCUs up to 400°C

Electric heating capacities from 9 to 360kW

Steam heating capacities up to 1600kW

Cooling capacities from 92 to 1600kW



**STANDARD AND COMPACT  
VERSION IN STOCK AND  
AVAILABLE IMMEDIATELY**



**FAST CUSTOMISATION OF  
STANDARD MODELS**



**ADVANCED CONTROLLER WITH  
LCD SCREEN**



**INTERFACE OPTIONS INCLUDING  
ETHERNET AND PROFIBUS**



**ADVANCED DATA LOGGING**



**FLOW MANIFOLD ATTACHMENT  
FOR GREATER TEMPERATURE  
DISTRIBUTION**



# AFTER SALES

We understand that every customer has unique needs and reliance on their temperature control equipment, which is why we can tailor our service levels and maintenance programme to meet your desired response times, frequency of maintenance visits and requirements.



## EXTENDED WARRANTY

Extended warranties offer coverage for a 3-5 year period, providing service, maintenance and repair to any or all of a company's facilities as a part of an inclusive, planned preventative maintenance package. However, if your process requires a more bespoke approach to maintenance, service level agreements can be put into place, offering businesses additional benefits such as contingency planning and tailored response times.

## ENERGY ENHANCEMENTS

Whether it's retrofitting existing temperature control equipment or providing more energy efficient options on new equipment, we offer a wide range of energy enhancements to lower energy consumption and operational costs, including:

- Energy analysis
- Water treatment and analysis
- Oil and refrigerant circuit cleaning and recycling
- Adiabatic enhancements
- Variable speed frequency drives
- Heat recovery
- Free cooling



### EMERGENCY BREAKDOWN 24/7

In the unlikely event of a breakdown, our factory trained technicians are available 24/7 to repair your temperature control equipment and minimise any downtime and disruption.\*

\*UK customers only. Subject to terms and conditions.





## CASE STUDY:

# COOLING FOR LASER CUTTING MACHINES

## THE CHALLENGE

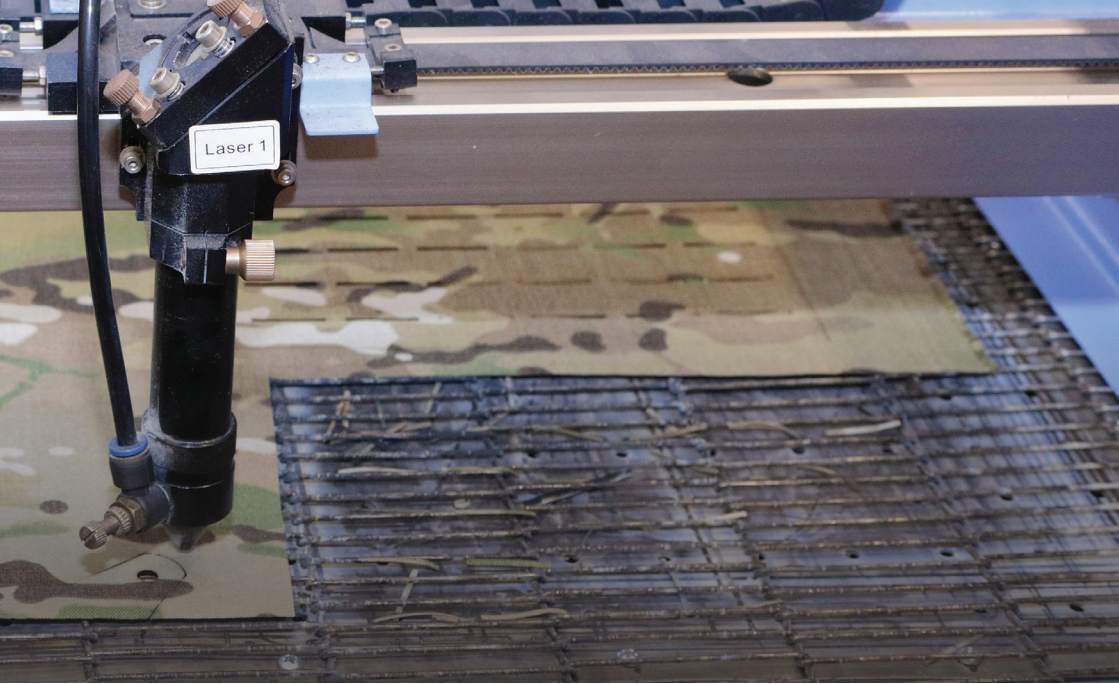
With a focus on sustainability and the environment, our packaging manufacturing customer planned to upgrade their cooling plant across multiple sites to:

- Reduce energy and water consumption
- Reduce operational costs
- Boost and future-proof environmental profile in the food packaging sector
- Operate to industry best practice
- Reduce risk associated with maintaining chilled water systems

## THE SOLUTION

After the ICS Cool Energy Engineer consulted with the manufacturer and understanding the requirements of the production processes and the industry, the engineer recommended the IC10c unit.

The IC10c unit is part of the i-Chiller range, a range of air cooler units that are designed for reliability and efficient process cooling. The large storage tank inside the unit fits the requirements of laser cutting as it allows the unit to deal with the fluctuations in cooling demand that laser cutting requires. The i-Chiller units are also constantly stocked by ICS Cool Energy, meaning they will be available quickly when quick turnarounds are required by the customer.



## THE RESULT

The manufacturer decided to use the IC10c unit that the engineer had recommended, placing an initial order to use with its newly developed machinery and continuing its 18-year relationship with ICS Cool Energy. The customer has ordered over 100 of the units originally recommended by the engineer over a six year period due to its ability to meet the requirements of the equipment they manufacture.



We're very proud of our 18 year partnership with this manufacturer, which demonstrates our commitment to listen to our customer needs and consistently deliver reliable temperature control solutions and excellent customer service.





CASE STUDY:

# COOLING FOR FOOD MACHINERY

## THE CHALLENGE

Food manufacturers and their processes are required to meet stringent hygiene and quality standards to ensure that the customers are safe and satisfied with their products. Manufacturing food products requires specialised equipment, often unique to each product line a business produces that can deliver precise temperatures on the right schedule automatically, or risk spoiling entire batches of food and costing manufacturers money.

A Peterborough based automation food focussed equipment manufacturer required cooling to reduce the temperature of jacketed vessel-based food tumbler equipment that it was building for a specific project presented by one of its customers.

## THE SOLUTION

After consulting with the machinery manufacturer and understanding the application and capacity the equipment was required to handle, the ICS Cool Energy engineer suggested an Aptus chiller for the manufacturer's needs. Able to cover a temperature range from -12°C to 20°C and designed with process cooling in mind, the Aptus can meet the precise requirements of the food industry. The unit also has the added advantage of not requiring glycol on certain models, removing the need for considerations about food safety.





## THE RESULT

The manufacturer opted to use the 100kW Low Noise version of the Aptus unit for it's equipment after reviewing the engineer's proposal. The units are used to feed the buffer tank in the equipment to keep the temperatures within acceptable tolerance. The End User also benefits from increased energy efficiency, saving them further on energy costs used in production.

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The food industry in the UK is governed by stringent laws and regulations. By understanding our customers business and market in which they operate in, we are able to provide temperature control equipment critical to meeting them, helping to minimise waste and achieve greater operating efficiencies.



THE TEMPERATURE CONTROL SPECIALISTS  
SALES | HIRE | SERVICE

**WE MAKE IT WORK**



**CONTACT YOUR NEAREST DEDICATED OEM TEAM TODAY:**

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[WWW.ICSCOOLENERGY.COM](http://WWW.ICSCOOLENERGY.COM)