

**PROCESS TEMPERATURE CONTROL SPECIALISTS.
SALES. HIRE. SERVICE.**



PROCESS TEMPERATURE CONTROL SPECIALISTS.

ICS Cool Energy are specialists in temperature control solutions for critical and manufacturing processes including rental, capital equipment, planned preventative maintenance and emergency breakdown support across all industries Europe wide.

For over 30 years, we've been providing technical advice and solutions to leading companies, worldwide – helping them to meet compliance, reduce their energy consumption, maintenance and operative costs.

Our technically trained engineers will work in partnership with you to provide the most efficient temperature control solutions for the demands of your facilities or process, constraints of your site and budget.

Through one point of contact, we develop, manufacture, deliver, install, hire and service high quality, energy efficient and reliable temperature control solutions from -40°C to 350°C for your applications.

We offer the widest range of cost-effective temperature control solutions in the industry – enabling us to provide you with the best solution to meet your individual requirement.

- SALES
- HIRE
- SERVICE
- PROCESS COOLING
- PROCESS HEATING
- HVAC
- FAST EMERGENCY SOLUTIONS
- FREE SITE SURVEYS
- ENERGY ANALYSIS
- DESIGN & INSTALLATION
- TURNKEY PROJECT MANAGEMENT
- FREE COOLING SOLUTIONS
- PLANNED MAINTENANCE
- 24/7 BREAKDOWN SUPPORT
- REMOTE MONITORING



SAME DAY DELIVERY



INSTALLATION, COMMISSIONING & MAINTENANCE



TECHNICAL SUPPORT



FULL TURNKEY TEMPERATURE CONTROL SOLUTIONS

KEEPING
INDUSTRY RUNNING

Mission Critical

flex



KEEPING INDUSTRY RUNNING



“KEEPING INDUSTRIAL AND CRITICAL PROCESSES RUNNING WITH EFFICIENT TEMPERATURE CONTROL SOLUTIONS THROUGH EXPERT CONSULTATION”

Any down time in production or public services because of faulty temperature control equipment can lead to serious consequences.

These affects can impact directly on human life & health, for example in the event of an MRI scanner’s cooling supply failing or a district heating network breakdown leaving residents without heating or hot water

There are also significant financial implications if a chiller goes off-line on a food production line or a data centre’s fans are unable to keep their servers cool.

ICS Cool Energy, through our ability to offer Hire, Service and Sales under one fully connected umbrella, means we are ideally situated to get your process or facilities temperature control equipment back up and running both quickly and hassle free.

PLANNED PREVENTION	EMERGENCY SUPPORT
Process specific i-Chiller range	24/7 Breakdown
Planned Preventative Maintenance	Emergency rental
Contingency Plans	Remedial works
Installation & Commissioning	24/7 technical support
Remote Monitoring	National depots and van Spares
Water Treatment & Glycol	
Major Account Asset Management	

- SOLUTION APPROACH, SALES/HIRE/SERVICE
- FULL SERVICE PARTNER
- PPM TIERS, CONTINGENCY PLANS

- PLANT LIFE EXTENSION, REFRIGERANT RECYCLING & CLEANING
- SITE AUDIT
- FLUID ANALYSIS

- RETRO FITTED REFRIGERANTS
- THERMAL IMAGING
- PROCESS SPECIALIST i-CHILLER FIT FOR PURPOSE
- REMOTE MONITORING



PLANNED SERVICE WORK

OPERATE, MAINTAIN & REPAIR

- ✓ SAFEGUARD AGAINST DOWNTIME
- ✓ FAST AND EFFICIENT PROCESS
- ✓ INCLUSIVE REPAIRS THROUGHOUT WARRANTY

- ✓ TRUSTED SERVICE PARTNER
- ✓ SYSTEM FLUID ANALYSIS OPTIONS
- ✓ COMPLETE PEACE OF MIND

PLANNED PREVENTATIVE MAINTENANCE & MONITORING

Benefits from a custom maintenance package:

- Preventative maintenance service visits
- Reduced labour rates for planned and emergency requirements
- Discounted spare parts
- F-Gas Compliant*
- Engineer availability 24 hours, 7 days a week
- Prioritised calls
- Chiller log book on completion
- Glycol Check %
- Direct access to our technical support desk
- 70+ Service Engineers with £15K+ Spares Stock Per Van

**An ICS Cool Energy technician will assess your system for refrigerant type and refrigerant change to ensure the system is F-Gas compliant and fully leak tested.*

MAXIMISE SYSTEM EFFICIENCY

Prolonged hours of system operation can lead to reductions in performance due to wear and tear of components and contamination of water or thermal fluids within the system. In order to combat this, ICS Cool Energy offer additional optimisation capabilities such as water sampling to ensure that circuit fluid is free from particulates and able to maintain optimum heat exchange.

Added value benefits:

- Water analysis
- Thermal imagery
- Fluid Checks
- Remote monitoring

**Are available as required*

CONTINGENCY PLANS & ASSET MANAGEMENT

When your process downtime is not an option, secure your process cooling or heating supply by having ICS Cool Energy deliver a full contingency plan agreement. This includes a full site survey to plan everything required in advance to minimise downtime.

Risk mitigation and contingency planning is ideal for industries that have critical processes including plastics, healthcare, food, beverage, chemical, pharmaceutical, manufacturing, data centres and HVAC.

ICS Cool Energy will work with you to build a plan and prepare your facility to mitigate risks and minimise downtime. Plans may include adding extra valves & pipework into your existing installation to allow a rental unit to be added quickly when needed.

For national, multisite operations, facilities management providers or any business needing to manage multiple temperature control equipment assets, ICS Cool Energy can help.

Our asset management services include enhanced condition based reporting, enhanced regular updates on site activities, critical risk based site contingency planning, energy audits and advice and bespoke SLA's. We take care of everything to keep your industry running.

REPAIR & REFURBISH

ICS Cool Energy have experience with all major brands of chillers as well as our own and we have a high percentage of first fix during planned maintenance visits as we carry spare parts on all our vans nationwide with automatic stock replenishment.

Our goal is to keep your operations running with routine maintenance and planned refurbishment. If things do go wrong, we'll get you back up and running in the fastest most effective way possible 24/7. We can provide temporary rental equipment where equipment can't be repaired, or the parts are on long lead times with a complimentary extended hire promise.

PLAN OPTIONS

	STANDARD	ADVANCED	BESPOKE
Dedicated Service Account Manager Each customer is assigned a dedicated Service Account Manager who will be your key point of contact for all service-related questions and support.	Yes	Yes	Yes
Contactable 24/7 / 365 days During normal business hours our staff are on hand to answer your call. Outside of this time, all calls are handled by our emergency call centre before being passed to our team of on-call Service Engineers supported by escalation management.	Yes	Yes	Yes
Full F-Gas Compliance Each customer is assigned a dedicated Service Account Manager who will be your key point of contact for all service-related questions and support.	Yes	Yes	Yes
100 Point Check Carried out by our team of factory trained, F-Gas and Institute of Refrigeration qualified technicians, checking over 100 aspects of your cooling equipment, from component checks, through to water cleanliness & glycol dosage.	Yes	Yes	Yes
3 Year Fixed Price Giving you the peace of mind of a fixed PPM cost for 3 years and avoiding any unexpected annual increases.	Yes	Yes	Yes
Condenser Clean Dirty or oxidised air-cooled chiller condenser coils can impair the unit's ability to reject heat thereby reducing efficiency and increasing operational costs.	Yes	Yes	Yes
Response to site times We will ensure one of our Service Engineers is on site within 12 or 6-8 hours time of contacting us, day or night.			
12 hour response	Yes	No	No
6-8 hour response	No	Yes	Yes
Water Sampling We will carry out annual or biannual / quarterly water sampling and laboratory analysis to determine the current quality of the water used in your cooling system and provide recommendations where necessary.			
Annual Water Sampling	Yes	Yes	Yes
Biannual / Quarterly Water Sampling	No	No	Optional
Discount on Parts Only available to customers who have taken out an ICS Cool Energy Planned Preventative Maintenance Contract.	10%	15%	15%
Thermal Imaging Thermal imaging allows us to detect electrical and mechanical anomalies that are often not visible to the naked eye and take corrective action before a costly failure and downtime occurs.	No	No	Optional
Asset Management Reporting We create a complete portfolio temperature control asset list so you have a reference point for all works that are delivered by us as well as traffic light condition monitoring to take the pain out of ensuring you are kept up to date about your assets.	No	No	Optional
Enhanced Breakdown Support Ensure that your critical assets have the best response possible with a pre-paid attendance plan, no need to raise and issue purchase orders should you have the need for our emergency response.	No	No	Optional
Contingency Plans We will know exactly what hire equipment you will require, how to connect it to your process and any space and power constraints on site, should disaster strike and you need an emergency solution.	Optional	Optional	Optional
Courtesy Rental Rental included in the service contract for a fixed period for critical equipment on site can be use at any time in the service contract period. (Excludes transport, installation and decom)	Optional	Optional	Optional
Oil Analysis We will analyse the oil in your system to identify early signs of potential failure and help prevent costly breakdowns and replacements.	Optional	Optional	Optional
Water Treatment As part of our planned preventative maintenance contracts, we'll conduct a water analysis – which includes laboratory analysis – and provide a detailed plan for you to implement to help treat the water and return it to the quality required.	Optional	Optional	Optional
Remote Monitoring To help protect our customers production facilities from equipment breakdowns with enhanced thresholds and alarm notifications, we offer the ability to monitor remotely giving access to operational data anywhere, anytime.	Optional	Optional	Optional
Plant Energy Efficiency Check To ensure your cooling plant is working to optimal efficiency, we will provide data to show how efficient it is operating and recommend how it can be improved.	Optional	Optional	Optional



EMERGENCY & SUPPORT SERVICES

BREAKDOWN, RENTAL & SUPPORT

24/7 BREAKDOWN & TECHNICAL SUPPORT

We are on hand to help with all temperature control equipment breakdowns and offer 24/7 technical support 365 days of the year. This is vital to ensure we keep businesses operational, day or night, rain or snow and deliver on our keeping industry running promise.

Our network of 70+ Service Engineers' vans and depots are equipped with spare parts to ensure that when your equipment fails, we don't. Speed of response is paramount to your business, so we have set up our own business processes to deliver just that. We constantly review what we carry on our vans and in stock in Southampton and Bradford to make sure your equipment can continue doing what it needs to.

24/7 BREAKDOWN RENTAL

It is critical that process and facilities temperature control runs efficiently and uninterrupted for manufacturers, FM/M&E companies and healthcare providers.

Any changes in operation, from a chiller failing to cool effectively, to full on hot water or heating breakdowns can be catastrophic.

In the manufacturing sector it is essential to keep processes running smoothly and avoid unwanted and unnecessary costs. Conversely, in hospitals and the healthcare sector as whole, any dips or issues can cause massive disruptions for patients.



Having a planned preventative maintenance contract in place on all chillers and units is highly recommended. Additionally, having a service partner with the necessary infrastructure and 24/7/365 response is especially important ICS Cool Energy have over 30 years' experience providing both.

In an ideal world, any issues with chillers, boilers or temperature control equipment could simply be rectified by either:

- A) a telephone call with a service technician who can troubleshoot remotely, or
- B) a prompt visit from a service engineer (who carries spare parts on their van) when an over the phone solution is not effective.

Unfortunately, there will be instances where a quick fix just cannot be achieved, due to a spare part being on a longer lead time or a repair being more complicated and time consuming.



GLYCOL

Glycol is intended to prevent freezing & damage to systems and equipment that can result in production downtime. It's the preferred alternative to using mains water in heating or cooling systems.

ICS Cool Energy offer a specially formulated FlowCool range of glycol based products which importantly incorporate organic inhibitors (not all glycol products include inhibitors but they are essential to avoid system corrosion).

They are industry recommended and meet the BS5117 standard for use within two way cooling and heating processes. The complete range includes industrial grade glycol, suitable for Food Grade applications and bio degradable glycol. All available for next day delivery in 5l, 25l and 1,000l IBCs.



REPLACEMENT AND SPARE PARTS

ICS Cool Energy stock a wide range of parts and spares on site in the UK and on our Service Engineers' vans (each van carries £15K+ worth of spare parts) for both their own and other manufacturers units, meaning they can be sent to your site quickly or replaced during emergency or planned maintenance helping you to keep your operation running. The Spares Team offer advice on what part you may need, or you can simply get in touch to specify the part you need.

The background image shows industrial machinery, including a large white cylindrical tank with various pipes and valves. The ICS Cool Energy logo is visible on a piece of equipment in the upper left. The scene is outdoors with a clear sky and some greenery in the foreground.

IMPROVEMENT SERVICES

ENERGY, SUSTAINABILITY & UPGRADES

24/7 BREAKDOWN & TECHNICAL SUPPORT

Improve your existing temperature control equipment to reduce energy costs, reduce carbon emissions, extend plant life and mitigate breakdown risk. ICS Cool Energy conduct no obligation energy analysis audits and consultation to illustrate the best opportunities to improve energy efficiency whether through free cooling, heat recovery or efficiency improvements such as adiabatic enhancements or variable speed drives.

We provide data to show how efficient your equipment is operating and recommend ways it can be improved with expected payback periods.

RENEW & UPGRADE

Re-think what is possible when reviewing aged temperature control equipment. For chillers under consideration for replacement, often major components and the base framework are perfectly serviceable. ICS Cool Energy can customise a factory refurbishment on site to replace and upgrade what needs changing but reuse what is serviceable. Prevent the upheaval of replacement where built in and allow us to refurbish and rebuild your equipment in situ for a sustainable economic solution to plan life extension without capital expenditure.





	1 (No Flame Propagation)	2 (Lower Flammability)		3 (Higher Flammability)
A (lower toxicity <400ppm)	A1 – inc. CFC's R-718 (Water) R-744 (CO2) R-22 R-410a R-407c R-513a R-1234zd	A2L - inc. HFO's R-32 R-454b R-1234yf R-1234ze	A2 - inc. HFC/ HCFC's R152a	A3 R-290 (Propane) R600a (Isobutane)
B (higher toxicity)	B1 R-123	B2L R-717 (Ammonia)	B2	B3 R-1140

	Type	Refrigerant	ODP	GWP	
Synthetic	CFC	R-12	1	Very High	10,910
	HCFC	R-123	0.012	Low	
	HFO	R-1234ze	0	Ultra-Low	1
	HFC	R-134a	0	High	1,430
	HCFC	R-22	0.05	High	1,810
	HFC	R-32	0	Medium	675
	HCFC	R-401a	0.027	Medium	
	HFC	R-404a	0	Very High	
	HFC	R-407a	0	High	
	HFC	R-407c	0	High	
	HCFC	R-408a	0.016	Very High	
	HCFC	R-409a	0.039	High	
	HFC	R-410a	0	High	2,090
	HFO	R-454b	0	Low	466
	HCFC	R-502	0.18	Very High	
	HFC	R-507	0	Very High	
HFO	R-513a	0	Medium	631	
Natural	Isobutane HC	R-600a	0	Ultra-Low	
	Ethane	R-170	0	Ultra-Low	
	Propane	R-290	0	Ultra-Low	
	CO ²	R-744	0	Ultra-Low	1
	Ammonia	R-717	0	None	
Water	R-718	0	None		

As members of the Carbon Trust, ICS Cool Energy's mission is to reduce waste heat pollution and save customers' energy through expert consultation and technology leadership. As part of an overall enterprise the challenge is to reduce customers' footprint by one Gigaton (1,000,000,000 metric tons) of carbon emissions (CO₂e) by 2030.

- We offer chillers from 40 – 610kW running on R454B refrigerant, which has an ozone depletion of 0 and a low global warming potential.
- We offer chillers from 320 – 2MW running on R1234ze refrigerant, which has an ozone depletion of 0 and an ultra-low global warming potential.
- Free Cooling projects can save up to 80% of temperature control energy costs
- Heat pumps are a renewable energy and can improve TER (Total efficiency ratio) from 1.5 to 9 giving 600% potential efficiency gain. Why waste "waste heat"?
- Energy efficiency enhancements include: adiabatic, variable speed drives, EC fans, water treatment

RENTAL SOLUTIONS

Renting can bring the best of all worlds. ICS Cool Energy's 500 MW/50M+ fleet is modern, compact & energy efficient; expertly maintained with a 60 point check before certified as ready for hire. Fully trained and dedicated hire team with over 35 years' experience and more than 30,000 hire projects completed.

COOLING

- Cooling capacities from 3kW to 1.4MW
- Air & water cooled chillers
- Low temperature chillers 10°C down to -40°C
- Dry air coolers up to 500kW
- Cooling Towers up to 2MW
- Air handling units & fan coils
- low temperature fan coils down to 21°C
- Heat exchangers up to 1.4MW
- Cold room conversions & Cold Stores to -60°C



Air & Water Chillers
3kW - 1290kW



Dry Air Coolers
& Free Cooler
3kW - 1290kW



Cooling Towers
Supporting duties
up to 2MW



VLT Chillers
Cooling Solutions down
to -40°C



Air Handling Units
10kW - 350kW



Fan Coils & Fan Coils LT
5kW - 50kW



Portable Air Con
& Air Purification



Cold Storage
Cooling Solutions down
to -60°C

HEATING

- Heating capacities from 3kW to 2MW
- Domestic Hot water (DHW)
- Space & District Heating
- Fuel delivery, management and monitoring
- Single or dual circuit
- Containerised or in bespoke framework
- Can be supplied with AHUs or Fan Coils



Oil, Gas & Steam Boilers
Up to 200kW



Diesel Heaters
70kW, 100kW & 200kW



Fan Heaters
3kW to 42kW



Electric Boilers
3kW to 40kW



Domestic Hot Water
150kW to 1300kW



Fuel Tanks 978L, 2900L
& 900L

PORTABLES

- Spot Coolers
- Portable AC
- Air Purifiers (*stand alone & ceiling mounted*)
- Fan Coils
- AHUs
- Portable Heaters
- Radiators
- Fan Heaters
- IDFs



FUEL MANAGEMENT SERVICE



EQUIPMENT SALES SOLUTIONS

ICS Cool Energy has vast experience in the design, manufacture, installation and commissioning of temperature control solutions for industrial and critical process applications as well as facilities and buildings.

We will understand your precise temperature control requirement from the outset and offer consultation & expert assistance right through from solution design & manufacture to SAT & FAT of your equipment. Our aim is to provide high performance, reliable, energy efficient and cost effective solutions that are right for your application and will last.



- i-Chiller packaged process chillers from 1 to 469kW
- APTUS chillers with scroll/screw compressors from 17kW to 3.2MW
- IMPERIUM chillers with screw compressors from 236 to 3.2MW
- Low temperature process chillers
- Low GWP (global warming potential) chillers
- Chillers running on R454B from 40-610kW
- Chillers running on R1234ze from 320kW – 2MW
- Water source heat pumps
- Free cooling, adiabatic & dry air coolers
- Water, oil and steam to water process temperature control units (TCUs)

EXTENDED WARRANTY



A three year extended warranty is available on ICS Cool Energy's best selling i-Chiller units as standard. Extended warranties are provided with safety, efficiency and complete reliability in mind, ensuring that chillers operate at optimal efficiency.

The extended 5 year option is available to offer long-term peace of mind.



i-Temp Compact



i-Temp



i-Temp Max



TURNKEY PROJECT MANAGEMENT, DESIGN, INSTALLATION & COMMISSIONING

Our in house design and project management team will work closely with you to ensure that your process cooling, heating or temperature control equipment is tailored to your site footprint, operation and production requirements.

Wherever we can, we'll make recommendations to save you energy and budget without compromising the quality of your output.

With the largest fleet of hire equipment in the UK, we can provide temporary solutions while we complete your installation.

We understand how important your equipment is to your production and ensure with every installation that it's easily accessible for ongoing maintenance and we can take care of this for you too.

Every project can be completed so you can arrive at site and focus on your production without any hassle.



Our team will project manage:

- Delivery to site
- Lift and shift of chiller/temperature control equipment
- Final positioning of unit(s), including new bases/mezzanine floor builds etc.
- Flat pack chiller builds on site if there are access or space constraints
- New pipework
- Getting the system installed
- Commissioning the system
- SAT (Site Acceptance Test) if necessary

FLEX MEMBERSHIP



WHAT IS FLEX MEMBERSHIP EXACTLY?

FLEX membership allows you to have the latest and most energy efficient temperature control equipment with maintenance and breakdown cover included for a monthly subscription and no capital expenditure.

Equipment and maintenance subscriptions without CAPEX and flexibility to upgrade. Spend your time doing what you do best and let us fully manage your temperature control needs within a fixed monthly subscription.

FLEX is our Fixed Long Term Exchange (Long Term Rental) program for bespoke temperature control equipment without the need for capital investment. Benefit from the latest most efficient chiller technology and low GWP refrigerants with the peace of mind that all planned maintenance and emergency breakdown repairs are included for a known subscription cost. Flex your temperature control capacity and upgrade to new equipment for additional running cost and carbon footprint savings.

Monthly subscription	Temperature control equipment without the need for capital
Bespoke designed long term solution for your application	Options to exchange and upgrade the equipment as technology improves
Options to FLEX capacity add and remove equipment with demand	Fully inclusive of all maintenance, warranty and emergency repairs for the contract duration

THE BENEFITS AND WHAT IS INCLUDED IN FLEX MEMBERSHIP?



No upfront cost, positive cash flow



Maintenance included



Access to the latest technology and refrigerants



All repairs included



Flexible switching to more powerful equipment



All parts included



Minimised running costs and a fixed monthly rate



Warranty included



Total reliability, total availability



Emergency call out included



Zero risk and maximum flexibility



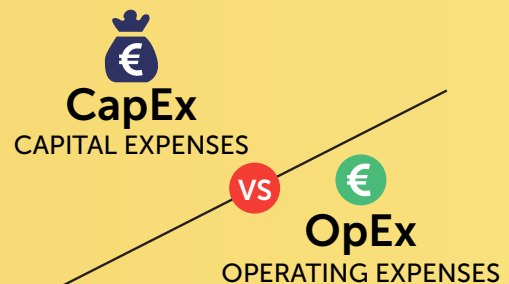
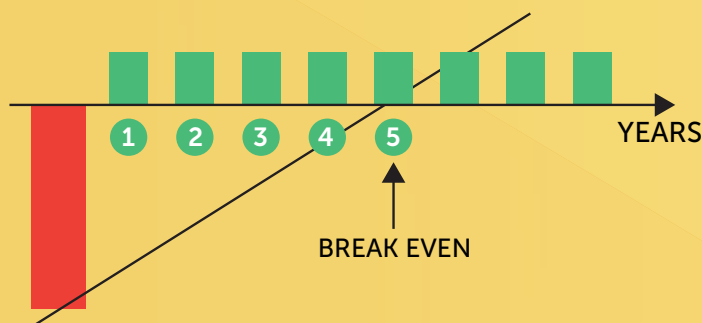
Lowest energy consumption and carbon footprint included



FLEXibility included.

Financial Flexibility

- Capital expenditure upfront
- Long payback period



- Fixed subscription
- Flexible solution

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KEEPING INDUSTRY RUNNING

- Rental, equipment & service
- Consultation & technical expertise approach
- Emergency support 24/7 every day of the year



EMISSION CRITICAL

- Reducing carbon by One Gigaton by 2030
- Free Cooling & Heat Recovery products
- Energy Efficiency enhancements



FLEX

- Zero capital membership solution
- Flex capacity to pay only for what you need
- Built in contingency planning

UK & IRELAND COVERAGE

UK Depots

Regional Offices

- 70+ Service Technicians with Van Stock
- £15K Van Stock Per Van
- Further stock held in our central warehouse
- All engineers have access to a network of suppliers in the field
- 40+ Sales Engineer Consultants
- 30+ Depot Repair Engineers
- Major Account Management Team
- Service Account Management Team
- £50M+ 500MW Fleet
- 6,000+ Customers
- 24/7 Emergency Support

For Service, Breakdown Support
& Emergency Rental:

+44 (0) 800 840 4210 (24hr response)

Local Offices:

Glasgow: +44 (0) 1689 744 540

Bradford: +44 (0) 1274 740 877

Birmingham: +44 (0) 01675 432 270

Southampton: +44 (0) 2380 527 300

Dublin: +353 (0) 4692 52934

ICSCOOLENERGY.COM



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