



Mansfield Pollard is a technology driven company that designs, engineers, and manufactures innovative data centre cooling with hyperscale capabilities.



# INTELLIGENT COOLING & GREENER SOLUTIONS

- As the demand for data storage increases exponentially and the scale and complexity of data centres continues to accelerate at an unprecedented rate, the necessity for efficient precision cooling is essential to protect equipment and safeguard data.
- The power and cooling characteristics of each data centre is different and 'one size does not fit all'. Mansfield Pollard's air management experts are industry leaders in the field of modern data centres with an innovative range of cooling technologies.
- It has been well documented that data centre power usage consumption is increasing. We all have a responsibility to work together and minimise the impact on the environment and a Mansfield Pollard data centre cooling solution is built on energy efficiency to provide more cooling for less power.

## **CRAC / CRAHU UNITS**

Mansfield Pollard CRAHU units have been deployed in some of the most sophisticated data centre facilities around the globe. We design manufacture and install all our specialised solutions in-house to guarantee quality and project accountability, whilst providing exceptional levels of customer service.

Our proven cooling technology delivers precise temperature control, maximum reductions in energy usage and levels of redundancy demanded by any mission-critical data centre environment.



data centre project value to date



super energy efficient cooling systems



maximised uptime with tier 3 specification design



**130MW** 

of critical cooling already delivered

## **BETTER** by design



#### We are trusted

We have a dedicated data centre solutions team who fully optimise and squeeze every last kW of cooling we can, in order to deliver more cooling for less power and footprint. We are trusted by some of the world's most demanding applications.

#### We are Made in Britain

We manufacture in the UK out of our state-of-the-art 250,000ft<sup>2</sup> manufacturing facility in Yorkshire. We have a strong focus on R&D and have consistently been pioneers for innovation in leading-edge technology, energy efficiency & the environment.

#### We go further

We understand that designing, manufacturing and installing a cooling system is just the beginning. We support our equipment and our customers with maintenance, spares, training, upgrades and integrated systems testing.



Fully scalable for any cooling load



Bespoke Acoustic control



Energy & water saving technologies



Smallest unit footprint



Heavy duty construction



Single point electrical and water connection



Variable Speed Operation

## -COOLING options



Free cooling uses outdoor air when the outside temperature and humidity conditions permit. When free cooling is engaged all other cooling is turned off to maximise energy efficiency; only unit fans are active.

Most geographic locations' climate conditions permit the use of free cooling during off-peak temperature and humidity conditions to maximize energy efficiency.

**))** Evaporative Cooling

In using direct or indirect evaporative cooling, air is cooled by evaporation of water in the airstream without the need for compressorized refrigerant-based systems.

Evaporative cooling requires up to 95% less energy than that associated with traditional cooling systems and may handle entire peak cooling loads without the need for extra mechanical cooling.

### **Chilled Water**

In chilled water cooling, air is cooled by passing through a chilled water coil (from a central chilled water plant). This allows full recirculation of data centre air during the peak outdoor humidity and temperature air conditions where evaporative air cooling is not possible. This usually occurs during peak temperature hours during the summer.

## **DX Cooling**

Direct expansion (DX) cooling is a refrigerant based cooling system that is available in both air cooled and water cooled systems. The air cooled systems utilize outdoor condensing units and are used when a central chilled water system is unavailable. Available in a wide range of environmentally friendly HFC based refrigerants

## -ACOUSTIC & ENERGY CONTROL systems

We are market leading specialists in **noise control** with over 50 years of experience and a suite of independently validated product solutions. From ISO and bespoke acoustic containers and enclosures through to attenuators and gas exhaust silencers, our products are independently validated to confidently meet clients exacting specifications.

Our in-house control systems can flexibly adapt to a clients control scheme via a range of programmable logic controllers, programmable controllers, user interfaces, communication and remote management interfaces to offer HVAC/R market flexibility and easy integration with commonly-used building management systems.