Case Study

> Vodafone UK

Vodafone UK is part of the world's largest mobile community and its operations are focused on the provision of mobile phone services to global customers. Development of its core building structure has seen Vodafone UK invest in a new, UK-based world headquarters with upgrading of existing Data Centres. Airedale used its AsNew facility to strip and rebuild close control units in a key Data Centre which was live at all times, where continuous system operation was crucial and replacement with complete units deemed to be too risky.

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Vodafone UK requirements

The upgrade of the Data Centre required the renewal of ten existing Airedale close control units. As the Data Centre was live, replacement with complete units was ruled out. Extracting the old units in a restricted space and installing complete units would have involved modifications to the floor and replacement of existing pipework involving hot work. Unit refurbishment was deemed to be less risky to the operation of the Data Centre, which would be live throughout the duration of the work.

Business Critical Location: The close control units provided precise cooling to maintain accurate temperature and humidity within the air conditioning space. Continuous system operation required total reliability at all times, including during the refurbishment. An added benefit of refurbishment was improved energy efficiency.

AsNew Solution

AsNew is a complete on-site unit refurbishment facility provided by Airedale, the service and maintenance division of Airedale International. AsNew completely strips and rebuilds units utilising the very latest energy efficient components and controls technology, at the same time minimising operational downtime and eliminating the need to move an entire unit.

AsNew

*A **new** for **old** refurbishment service*

Airedale dedicated a team of engineers to work closely with JDP building services engineering consultants, to develop a refurbishment specification and programme for Vodafone UK which would renew the old units by replacing out-of-date components with new, energy-efficient parts, whilst retaining and recycling the cases which would easily satisfy the lifetime of the new components. Six of the units had full refurbishment, with all their components and condensing units replaced. Twelve condensing units were relocated to a new, purpose-built compound.

Continuous system operation

The Data Centre was live throughout the duration of the contract. Work was carried out on a 'unit by unit' basis and all precautionary measures were taken by the engineers to ensure continuous operation. Components were safely carried through the space without disrupting service and the unit cases remained in situ. Existing pipework was retained and, within the restricted space of the Data Centre, it was pressure tested, cleaned, modified and refrigerant added.

Controls Upgrade

The very latest control technology was incorporated for increased reliability and tighter management control of the air conditioned space. Six units were given a complete controls upgrade and four had their software updated.

CFC Replacement

Given the phasing out of R22 refrigerant, all units were upgraded to non-ozone depleting R407C, which is used as standard across Airedale's entire product range.

"Reliability and the level of service that Airedale offer are key issues for a business critical location such as this," said JDP. "The project ran very smoothly. Refrigeration pipework was installed by MFM Air Conditioning in a neat and tidy manner. Lloyd Blackmore carried out the electrical installation with principal contractor Moss Construction of Kier Group managing the overall project. Close co-operation between sub-contractors was essential."

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Airedale
APPLIED THERMAL INNOVATION

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