**Finance package helps bring HQ building services into the 21st Century**

**Leading cloud-based software company Software Europe has marked its 25th anniversary with an overhaul of the building services at its Lincoln headquarters thanks to a new, financed package from Mitsubishi Electric.**

The firm’s head office was being run on a 15-year-old air handling unit (AHU) with a Gas fired LTHW coil and a DX chiller coil ducted air system. But the parts were obsolete and failing, and there was poor temperature control in the building.

Business Support Assistant Fiona Jenks says: “You couldn’t regulate the old system. It was a nightmare, as it was usually too cold or too hot. We really struggled for quite a few years, and some of the parts were obsolete, so we felt that it was time to make the change”.

The company took advantage of Mitsubishi Electric’s new finance offering, MELFinance, to avoid burdening their cash flow with the up-front cost of the project.

“We felt the finance terms were good,” says Jenks. “When we compared the terms to a loan, it didn’t beat the quote we had from MELFinance”.

Shane Suter, Corporate Operations & MELFinance Manager for Mitsubishi Electric says the offering is a better way for many companies to pay for new projects. “MELFinance has been running since January 2014 and Software Europe was the first £100k plus project we have done. We have given customers more choice and offered different ways of funding their projects”.

The main driver for Software Europe was the need to have a newer system that would reduce running costs and provide significant energy savings over a period of time, whilst being better for the environment.

“In fact, they are now saving over £12,000 in costs per year which far outweighs the interest payable”, adds Suter.

For a company at the forefront of cutting edge business software solutions, an upgrade was essential. A £107,000 installation was therefore completed which included three Mitsubishi Electric City Multi R2 VRF heat recovery systems plus a new electrics package and water heater in the toilet areas of the Lincolnshire building.

With increasing numbers of employees in the building – comprised of both open plan and cellular offices, the company needed a solution that would reduce costs and deliver a far more energy efficient solution together with improved controllability for occupants.

Installer Lynx AC got to work on the removal of the old gas-powered system and replaced it with the three City Multi R2 heat recovery units, totalling 95kW of new air conditioning over the two storeys. The installation also included AG150 centralised controllers to allow for greater occupant control over room temperature.

The City Multi R2 series has the ability to provide heating and cooling at the same time in areas connected to the same outdoor unit. Using R410A refrigerant it delivers greater efficiency with its higher specific heat capacity when compared to R407c or R22.

This higher energy carrying capacity also allows for smaller pipe sizes, longer pipe runs and reduces the volume of refrigerant within a system. This is a major factor when complying with EN378, a European standard concerning safety and environmental requirements in the design, manufacture, installation, operation, maintenance and disposal of refrigerating systems.

Lynx AC Director Rob Pygott says: “We hold the City Multi units in high esteem as they are an extremely high-end air conditioning solution. We had installed them for a client in Gainsborough and took Software Europe around that building in order to demonstrate to them that the R2 system would be ideal for their office environment”.

By using this system each office can have its own desired temperature which makes it extremely energy efficient. With this building the sun is on one side in the morning, so the heat produced by that solar gain can be expelled from that side and efficiently transported into the other side of the building.

“They are now achieving a high COP and SEER of between four and six, which means for every kilowatt of energy they put in they are getting four to six kilowatts of useful energy back out of the system”, adds Pygott.

“With the AG150 centralised controller, you are also able to maintain energy efficiency in the building as users can apply temperature limits and use mode selection to ensure they have the right ambient temperature throughout the building”.

The City Multi R2’s efficiency is founded on its ability to use the by-products of cooling and heating to transfer energy where needed. It acts as a balanced heat exchanger, achieving up to 20% cost savings over a conventional VRF system. The number of connection sites needed with City Multi is also significantly lower than those needed for a three pipe VRF. This helps to reduce installation costs, further increasing the savings associated with City Multi.

With the system up and running since the start of July, Jenks says employees are already feeling the benefits: “The temperature is a lot more consistent”, she says. “The position of our building means we don’t get sun on one side of it during the afternoon, so having controllers in each office now means people can set their own ambient conditions.”

Financially, the new system has also quickly proved itself. Software Europe was spending in the region of £1,000 per month on gas, and were also paying approximately £300 month on electric to run the fans and chiller plant. Factoring in their finance repayments for the system, their savings per annum amount to £12,290.00.

“We knew we would be saving a lot of money”, adds Jenks. “The gas bill has gone because we now have no gas coming into the building. The cost of running the previous system was very expensive on the electricity as well so that’s going to reduce significantly. It will pay for itself really. Plus you can’t put a price on happy employees either!”

The new system also boosts the company’s green credentials, explains Jenks. “It helps our own environmental policy which always features when we complete tenders for new business. People like to know you’re green and looking after the environment, which we always look to improve upon where we can”.