

Industry: Food & Drink /// Building Management

Products Used: Drives

Inverters halve running costs of air handling system

Mitsubishi Electric inverters save more than £9,000 per annum for chilled snacks manufacturer.

Mitsubishi's Intelligent A140 Inverter achieves huge energy savings at Buckingham Foods, part of the Booker Group. It replaces a soft starter on a 3 phase 45 kW motor, driving the fan of the production floor's air handling unit. Buckingham Foods are the UK's largest sandwich and chilled snack manufacturer, with a production area in excess of 3,000 M2 and approximately 200 staff. The air handling system covers 80% of this area and runs 24 hours a day, 365 days a year. It extracts heat generated by workers and machinery and moves it to a refrigeration unit. It is then recirculated, keeping the production floor temperature at a constant 10 C - essential for the manufacturing process.



Prior to the installation of the A140, the fan was running at full speed constantly. Varying heat production rates were not taken into account. Steve Thurston, Chief Engineer at Buckingham Foods, comments, "We are currently looking at ways to reduce energy use in the factory. We looked at several inverters and decided the A140 would be the best for a trial, due to its extra energy saving capabilities."

Application story first released June 1995 by Mitsubishi Electric UK

Using the A140's Time Scheduling function, Buckingham Foods can vary fan speed to suit varying demand. Steve Thurston comments, "As the A140 has Time Scheduling already built in, we did not need any additional control equipment. This reduced the A140's cost far below other inverters we looked at."

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Steve Thurston
Buckingham Foods

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Buckingham Foods are extremely pleased with Mitsubishi's A140 and plan to enter the installation in The Booker Group Environmental Initiative competition. Prizes are given to companies, within the Booker Group, with the best innovation or initiative for improving the environment. With the A140 halving energy used by their air handling system uses, Steve and his colleagues have both improved the environment and saved their company money