3663 case study

Vehicle refrigeration systems

3663 aim to provide a ‘one-stop-shop’ to its customers by offering delivery of frozen, chilled, and ambient goods efficiently in one vehicle. Offering this capability enables multiple customers with smaller orders to be served by a single vehicle. The challenge is to accommodate these multi-temperature goods efficiently in the same refrigerated vehicle.

Working with vehicle bodybuilders Gray & Adams and refrigeration suppliers Frigoblock and Govet, 3663’s vehicles now have the capacity to accommodate two or three individually-controlled longitudinal lanes or are fitted with a partition system which can be used to divide the unit into at least 18 different configurations. This means that goods of up to three different temperatures can be transported, meeting the customer needs.

The benefits

Urban delivery efficiency and customer service have improved significantly following the introduction of these new fridge bodies units. The new refrigeration units have significantly reduced fuel consumption; reduced carbon emissions associated with refrigeration, and negated the need for an additional auxiliary diesel engine to power the refrigeration system because they are powered by the truck engine itself. The environmental impact of 3663’s activities has also been reduced because the numbers of vehicles and deliveries required are less.

Accurate specification of 3663 fridge bodies has resulted in greater operational efficiencies, improved fuel performance, saving cost and CO_2. Initial savings to the transport operation have been estimated at 128,000 litres of diesel per week, this would equate to an annual saving of approximately 17,500 tonnes of CO2.

The figure above does not include additional significant savings that can potentially be achieved by operating fewer vehicles as a result of correct fridge specification, reduced fridge body maintenance costs and better multi-temperature load consolidation per route.