



On the buses

Darren Roe, engineering director at Stagecoach Manchester, triumphed at the 2010 UK Bus Awards, picking up the prize for Engineer of the Year. He tells John Challen his plans for technicians and apprentices

Stagecoach's Manchester operation may be just one piece in the group jigsaw, but it plays an important role in bus engineering and maintenance. Operating 700 vehicles in and around Manchester, the branch employs 300 engineers, works out of four depots and carries 97 million passengers a year.

Many of those passengers have recently experienced hybrid technology on a Stagecoach vehicle, after the firm's Alexander Dennis double-deckers, featuring BAE Systems' HybriDrive technology, entered service in mid-2010. Darren Roe, engineering director at Stagecoach Manchester, says everything is going to plan and the company has received positive feedback. "More importantly," he says, "there have been no maintenance issues and the introduction has gone smoothly. Also, passengers like the fact that they are quieter and more comfortable, thanks to the seamless gear changes."

The sums might not add up for now, but Roe believes that it

is essential to embrace new technology, especially with buses. "There are [passengers] with a green agenda, and they will convert to green technologies, as long as we give them the vehicle to do it with," he says. "Without the government support, hybrids aren't economically viable, but we need to be running trials so we can properly evaluate them. I am assured, by the manufacturers, that the expensive components have longevity, so the thought of more hybrid buses doesn't frighten me."

Prior to arriving at Stagecoach in 2000, Roe worked across the commercial vehicle industry, which taught him the value of maintaining high standards. Accordingly, one area transformed at Stagecoach is workshop procedures. "We analyse breakdowns to death, to find the root cause of why a vehicle is failing," he explains. "Once we know what the problem is, we put a training plan in to let people know what to do about it."

Roe says campaigns run throughout the organisation to ensure the same problem doesn't happen again. He points to

Who is Darren Roe?

Despite being settled at Stagecoach for nearly 10 years, Darren Roe's career has seen him occupy several positions within both the bus and truck industries.

He started out as an apprentice fitter with Wakefield West Riding bus company, before moving to become a technician at the town's bus station. His next job was technical assistant at a bus firm in Darlington and then he moved into trucks – first as a fleet engineer for P&O's road fleet and then as aftersales manager for a Renault Truck dealership in Leeds.

In 2000, he was appointed assistant engineering director at Stagecoach Manchester, before landing the lead role in the following year.

"I have found the range of roles in my career very beneficial," says Roe. "You see many things. Running a truck dealership gave me the chance to learn about warranties, for example."

cooling-related issues – the biggest headache for bus operators. "Every April, we start a cooling pack maintenance campaign. This involves pressure testing the cooling system and intercooler, checking the fan speeds and electrical switchgear, and cleaning the radiators of leaves etc," he says.

Roe adds that, by June, operators can see that the buses are performing better and lost mileage through overheating is greatly reduced. "We've done this over the years and it has always been very successful," he continues. "It gives the people on the workshop floor an opportunity to see a strategy for dealing with engineering issues."

Living with biofuel

One of Roe's most recent engineering issues concerns biofuels, but he says the change to a B7 blend has worked well. "From our experience, [biofuels have] improved dramatically over the years. We used to have horrendous problems with contamination in the tanks, the overall quality of the fuel and with bulk tank maintenance," he explains. "We have put some effort into fuel tank maintenance, but, providing fuel suppliers keep the quality up, we shouldn't have problems with it."

However, Roe does worry about engine regulations. One of

his gripes is the addition of further technology. "As we move up each Euro level, engines are increasing in cost and complexity, and, while some manufacturers manage to achieve a benefit to fuel economy, others cannot.

"I would ask that someone puts their foot on the ball and asks if we really need [Euro 6]," he says, pointing out the financial implications for companies such as Stagecoach. "A Euro 4 engine costs five times more than a Euro 2 engine. The fuel system alone on one of those engines, taking into consideration SCR [selective catalytic reduction] technology and associated pumps, is roughly the same price as a whole Euro 2 engine. And the warranties for fuel systems are not that generous. So every two or three years, you are replacing thousands of pounds' worth of kit."

The Stagecoach man's solution? Get involved and make a difference by joining technical committees and professional bodies. "People need to go straight to government and question what is happening," insists Roe. "I've got Euro 5 vehicles that achieve the same fuel consumption as pre-Euro standards. Every two or three per cent that fuel consumption suffers, I've got to work out ways of getting that back. And I don't want to bolt on another component, because that costs thousands of pounds, too."

In-house training

Back in the workshop, Roe believes his creation of a technician training programme is revolutionary, not just in terms of cutting costs, but also what is being taught and by whom. "We've identified a number of staff who are very technically competent," he asserts. "I meet with those people every quarter to find out what is happening, and what technologies, systems and procedures are coming in the future."

Any new technology that comes on board goes through the training team, who then pass on information. Also, Roe has established a cascading system, so that, for example, course materials are available to all from the canteen. "Our guys experience new technologies before any of the other technicians," says Roe. "When they find out about a new AdBlue system, for example, by leaving the information out, it creates dialogue and learning."

Roe claims that he no longer needs to use third party training, because technicians pass on the knowledge. He adds that some technicians are now developing their own in-house training courses for apprentices. "They are used to working on our equipment and talking to staff, so they can pick the exact level of training we need," reasons Roe.

A former apprentice himself, Roe has been active, even getting school teachers involved. "I got fed up with people thinking apprenticeships were for the less academic and wanted to do something about it," he recalls. "I phoned the local high schools and we ran some engineering taster days, emphasising the importance of having apprentices in the workplace."

Roe gives youngsters a taste of life in the bus industry, from getting them underneath a bus to looking at the systems being worked on and talking about what technicians do – and emphasising their importance in keeping buses on the road. "There are some really talented youngsters out there. You just need to pick them up and train them... That is why I win Apprentice of the Year awards: I've got the right people." TE