

Speed, space

The adoption of new technology and engineering has had a profound effect on trailers and their maintenance. John Challen talks to trailer manufacturers, as well as those servicing them, about what the future holds

“The days of people saying ‘it’s only a trailer’ are long gone.” That’s the firmly held view of Bullwell Trailer Solutions’ engineer Steve Pye. It says a lot about the trailer market in 2012. But it says even more about the tasks being faced by technicians responsible for keeping trailers roadworthy.

“A double-deck, triple compartment fridge trailer can cost twice as much as any truck on the road,” asserts Pye. “The knowledge that some of our service engineers are required to have today is staggering. They don’t have the benefit of a fully-equipped workshop. They’re out in the field on their



Get on the floor

One trailer innovation set to make waves is the fully bonded plywood floor, co-developed between UPM and Dow Automotive Systems, and debuted at the Hannover commercial vehicle show in 2010.

“UPM came to us looking for an alternative to the screwed floor,” recalls Martin Beer, senior account manager at Dow Automotive Systems. “We came up with an adhesive, which means you can bond the wooden panels directly onto the chassis.”

The benefits of this configuration include a lighter chassis, reduced steel thickness and fewer moving parts in the construction process. “Hauliers are also happy, because a lighter chassis enables increased payloads, and lower emissions and fuel consumption levels,” adds Beer.

Two years on, and three prototype trailers using the innovative floor have been operating in the UK and impressing their users. “They are still working perfectly and the floors are in perfect condition, with no damage or loose panels,” he asserts.

“This year, we will build over 600 trailers in Europe using the bonded floor construction, which will be supplied to a mix of hauliers. UPM has



explained the benefits to trailer manufacturers, and many have bought into the concept and committed to using the design.”

By next year, says Beer, the target is to increase output of the floors to around 1,200 units.

“Everything we do is dealt with on PDAs, with most of the work involving electronics”

Steve Pye, Bullwell Trailers

own and dealing with a lot of issues that they simply didn’t used to see before.”

Bullwell Trailer Solutions, which provides trailer repair and maintenance services, recently made a £20,000 investment in diagnostic equipment for its team of mobile engineers, precisely because of the increased complexity with trailers. “Our job was becoming more difficult, because technicians are increasingly reliant on having a laptop at hand to diagnose trailers’ faults,” states Pye. “That’s why we have spent a small fortune in equipping every region in the country with laptops specifically for assessing ABS [anti-lock braking system] and EBS [electronic braking system] faults.”

Pye says that diagnostics play a big part in keeping costs under control – and reassuring customers that technicians know exactly what is wrong with their trailers. “Everything we do is dealt with on PDAs, with most of the work involving electronics,” he explains. “Every job we carry out has a code and time, and we can break that down for customers, and show them where their money is going. For example, our equipment covers the

and security



braking system and damaged electrics. It even allows you to go to change side marker lamps from bulbs to LEDs and show the cost savings.”

Trailer training

Ian Smith, deputy engineering manager at trailer manufacturer Gray & Adams, agrees maintenance throws up challenges and points to the value of getting the best quality workforce. “We realise the importance of skills and training for repairing trailers, which are complex – with their CANbus systems, ECUs, lifting decks and refrigeration control. So we have embraced the irtec technician licensing scheme and I’m part of the expert working group on trailer inspection technicians,” he explains.

“It’s not just the running gear we’re looking at

Recycling revisited?

Schmitz Cargobull’s Derek Skinner recognises that, while scrappage schemes have proved popular in the automotive market, for trailers it’s currently not that big a deal.

“People don’t seem too concerned with end-of-life disposal liabilities or what happens to the trailer,” he says. “But, although it seems to have gone on the back burner – probably because the industry has more pressing issues – I’m confident it will be back at some point.”

And when it does, Skinner maintains that Schmitz and its trailers will be ready. “For us, our fully galvanised chassis construction is great. We also offer a 10-year guarantee and we are the only manufacturer to do that,” he insists. “Also, because our reefer panels are steel, they are recyclable, unlike the GRP equivalents.”

Chatfields buys into trailer diagnostic testers

All Chatfields' locations have now been supplied with TrailerCheck trailer test and diagnostic tools by Aide Automotive. The firm, which repairs and distributes trucks for DAF, Renault Truck, Hino & Iveco, can now handle trailer testing and diagnostic code reading and clearing for all makes of commercial trailers.

"Aide Automotive assessed the type of work our service would undertake and offered advice on the correct model type," explains Chatfields' national franchise director Wayne Edwards. "Technical support was also part of the decision to invest in TrailerCheck, which included on-site training as part of the package," he adds.

And he says that the tools have proved invaluable in the first few months, with hauliers commenting on the improved speed and accuracy of diagnostic repairs, compared with previous suppliers.

now; it's everything," he continues. "With irtec, we try to get the point across that when technicians are accredited, confident and capable, it will help to increase reliability and reduce warranty returns. It will also keep trailers in the best condition for longer."

Smith says the Scottish company is also busy working on engineering solutions to improve efficiencies and keep operators happy. "The trailer market is being driven by customer demand for reduced loading times and ways to make loading easier," he explains. "We've been working on that, but also on increasing payloads. We are the only refrigerated trailer manufacturer that can go above a 40-pallet capacity – loading at 44 [single deck] and 52 [double deck] pallets," he claims.

He explains that this increased capacity has been achieved through a complete re-design of the trailer (wall thicknesses, capping re-profiling etc) to maximise internal load space, while staying within the legal maximum width and length. "Also, with our approach, the loading sequence is straightforward and pallets can be wheeled in without having to worry about whether all of them will fit."

In a similar vein, another recent development in the trailer world has been the introduction of

Schmitz Cargobull's speed curtain design, which is already helping operators to save time, and therefore also money, during loading and unloading. Schmitz uses what it calls micro-stations, guided from above and below by roller slides on the body, in place of the conventional central stations, tarpaulin fasteners and rigging boards. Importantly, these keep the tarpaulin under continuous tension.

"Speed curtain trailers have been out with operations involved in automotive, beverage and multi-drop work, all of which require a lot of opening and closing of the curtain," explains Derek Skinner, technical director, Schmitz Cargobull. "Some were sceptical about the concept, but all have been quite surprised with the end result."

Skinner believes that Schmitz' speed curtain design has also helped allay some operators' concerns about the time taken to achieve load security. "The problem with most EN12612 XL certified bodies is that it can take some time to strip them down, because you have three sideposts and then horizontal slats between them – and, if not that, an inner curtain to help secure the load," he explains.

"Speed curtain deals with those problems, because the slats are effectively the mini-posts inside the curtain. They are always there when you need them, but they're out of the way when you open the curtain."

Double, no trouble

Meanwhile, Bullwell's Pye reckons that the shift from single to multi-deck trailers has been the biggest functional development, as operators look to save on mileages by using the available footprint more efficiently. "Once people get used to multi-deck trailers, they will become much more popular, because operators need that extra space," he insists. "The difference in operational cost between running a standard trailer and having the ability to put extra pallets on the same journey, without the expense of two units, is impossible to ignore."

Indeed, Pye believes that, in time, multi-decks will become dominant in the trailer market. "Beyond driving costs down, the only way people can meet the demand for moving more goods around is carrying more product on the same floorspace," he says. "Hauliers may hate the initial expense, repair costs and the implications of increased electronics, roll stability systems, driver training etc of a moving deck, but, once they take one on, they'll never go back."

And he continues: "The advantages they bring, in terms of moving varying types of equipment within the same payload space, are too great to ignore. We're training our engineers in double-deck trailer maintenance with manufacturers, such as Don-Bur and Cartwright. As the adoption of these trailers grows, so our business will grow alongside it." ^{TE}

Bullwell Trailer Solutions faces many challenges to ensure trailers stay roadworthy

