

With so many boxes to tick when specifying new tractor units, it's tempting to stick with the devil you know. However, John Challen talks to three manufacturers and discovers that's not always the best approach

Decisions, decisions



There are many pressures on transport operators to keep costs down and the plain fact is that tractor unit specification can, in some cases, make the difference between profit and break even. Why? Well, in a perfect world, all trucks would be equal, providing optimum levels of fuel economy, performance, running costs, drivability and driver comfort. However, needless to say, it's not that simple.

Most manufacturers have to look at economies of scale and aim for the common denominators – sometimes leaving transport engineers with challenging balancing acts to perform. That said, the big OEMs are mostly singing from similar hymn sheets. They have to. But how does that stack up?

For Volvo, the biggest issues currently concern fuel performance and cost of ownership – so that's where the lion's share of the effort is going. "Volvo has won new business [primarily] based on fuel economy in the fleet segment," says John Comer, product manager at Volvo Truck. "The FM truck, with the 11-litre engine at 410 and 450bhp, is now the most popular model in our range and the one we are promoting this year in the Volvo driver challenge," he adds.

According to MAN Truck & Bus UK chief exec Des Evans, fuel performance is very important, too. That's why MAN is moving to telematics and data analysis as the front line to reducing consumption and hence also one of the largest overheads for operators.

"In my opinion, outside the legislation-led emission changes to the driveline, the biggest development will be on-board fleet management and telematic capabilities," he says.

He's right, of course, and to that list we might add enhancements in terms of maintenance costs, downtime and residuals, to name but three. And the proof of that particular pudding is in the eating. "Developments in vehicle telematics have already shown massive improvements in the critical areas of utilisation, fuel consumption and idle time management," explains Evans. "MAN EcoStyle users have seen up to 12% reductions in fuel consumption, idle times of 15–20% have been halved and safety has been improved."

For him, however, other key tractor unit criteria are those focused on safety, with technologies such as ESP (electronic stability program), Lane Guard and ACC (adaptive cruise control) growing in importance. "These options are increasingly becoming standard on tractor units," he notes.

Meanwhile, DAF suggests that legislation will be a key driver for tractor unit evolution in the coming months and years – giving operators yet another important selection criterion. "Everything from the introduction of Euro 1 in 1993, all the way through to Euro 6, has had a dramatic effect on tractor units," states Tony Pain, DAF's marketing director. "For Euro 3, for example, almost everyone went to electronic control of fuel injection to get the right mix. For Euro 6, most of us will be

adopting SCR [selective catalytic reduction], EGR [exhaust gas recirculation], high injection pressures and a particulate trap."

But that's not all. To meet the Euro 6 NOx requirements, says Pain, major challenges lie ahead when it comes to tractor unit specifics, such as engine cooling. His point: getting the temperature down will determine whether the tractor needs larger radiators, beefed up fans and/or other forced air flow arrangements through the cab engine compartment.

Evans is inclined to agree with Pain's sentiments and, while MAN has not, at time of writing, released details of its Euro 6 engine designs, the forthcoming legislation is clearly on his mind. "Over the next two years, the dominant issue will be this transition from Euro 5 to Euro 6," he says. "However, although this will help reduce NOx and PM [particulate matter], it is still to be proven that fuel consumption will also be improved."

From a design and engineering point of view, Volvo Trucks' Comer sees another, relatively overlooked, issue for vehicle specifiers – the chassis itself. "The 6x2 has become the norm for the UK and 60% of our total production here is based on this configuration," he explains. "But the key question is what drives the use of 6x2 44-tonnes? How much of the choice is driven by 'just in case' thinking, [as opposed to] axle distribution or residual arguments? If you look at many operations, a 4x2

tractor at 40-tonne is the more sensible choice, given that the payload penalty for a pusher axle is 1,200kg, meaning that the real payload advantage is only 2,800kg."

For DAF, however, aside from the emissions legislation, the focus of current tractor design has to be all about long-term fuel economy – and that's not just a matter of engine design. "I'm still a fan of

road tests and would suggest that fuel economy is key, but operationally aerodynamics are also very important, as is the choice of axle ratios," states Pain.

So, what else? Away from on-road specifics, maintenance must surely still play an important part when deciding on tractor units. The good news here, according to our truck OEMs, is that services are continuing to improve, meaning that related operating costs should fall. "Everybody is trying to reduce maintenance costs and raise maintenance standards," comments Comer. "The majority of Volvos sold are maintained by a Volvo workshop, so the requirement is to ensure a good service at the right time and to minimise downtime," he adds.

And, to prove the point, MAN cites increased warranties as symptomatic of both truck build and maintenance improvements. "MAN now offers a three-year warranty as standard and R&M contracts are now supplied on over 80% of new sales," states Evans. "Cover for a million kilometres over five years can now be purchased for as little as 3p/km [pence per km] for a 6x2 tractor unit, and that covers all repairs and maintenance – and includes telematics and fleet management."

With deals like that, it is hard to go wrong, surely... 

