



Tipplers from

While some may consider now to be a bad time to have a fleet of tipplers standing in the yard, it could be the best time to think about purchasing such vehicles, writes Dan Gilkes

Many fleet managers may wonder how on earth manufacturers can be looking to increase tipper prices, in a market that is down around 60% year-on-year. Yet all manufacturers agree that there will be an increase in transaction prices during 2010, as they attempt to deal with the massive drop in value of the pound against the euro over the last two years.

Tipper manufacturing costs and prices to distributors have risen around 25% since 2007, due mainly to the exchange rate. However, many of the trucks sold in the UK in the last 12 months were ordered in 2007 and into 2008, when prices were much lower. As the market fell away, so orders were cancelled and manufacturers found themselves with excess stock for the first time in some years. That stock has continued to sell slowly, reflecting those 2007 prices – but it can't last for ever.

In the tipper market, which these days basically means the eight-wheeler sector, there was a large blip in sales in September 2009, as operators grabbed the last chance to take advantage of the £500 a year RPC (reduced pollution certificate) VED (vehicle excise duty) benefit that came with

registering a Euro 5 truck before the end of that month. More than 300 eight-wheelers were sold in the UK last September, a figure that fell to just 39 in October and 47 in November, once the financial incentive was no longer available.

There seems little doubt, though, that there wasn't a big jump in work for tipplers in September. Canny operators were simply getting in before the VED change came into place, with many of those trucks probably parked up waiting for work now, or steadily working their way through the body fitting process.

However, that sales boost has eaten into what dealer stock was left, which will inevitably lead to orders being placed at the factory – and hence the price rise. How big an increase? Try 20% added to the cost of a new truck, and that is a real addition, not a questionable increase in a barely creditable list price. "We are looking at price increases around 15–20%," confirms DAF Trucks' marketing director Tony Pain. "The exception to that price rise is eight-wheelers at present, because they are still in stock. There are deals to be done on stock new vehicles that were ordered at 2007 prices, but new build trucks will be on average 20% more expensive."

Of course, the rise in new vehicle costs will also



Tipper sales in 2009 peaked in September as operators took advantage of RPC VED benefits

the top

push up the price of used trucks. Indeed, some manufacturers have already reported this, and it is getting harder to find young used tippers, as so few have been sold new in the last two years.

Emissions issue

However, anyone considering a second-hand truck should take into account whether they want to enter the London LEZ (Low Emissions Zone) after 2012. To do so, the truck will need to be at least Euro 4 compliant, which again means it would have to be a fairly young vehicle.

For anyone who has made the decision to buy, there is certainly no shortage of choice out there. While Volvo, DAF and Scania may capture more than 75% of the tipper market between them, there are half a dozen other manufacturers keen to grow their share of the sector.

Euro 5 legislation has been the main driver of change in the last year, with most manufacturers offering increased power from the latest engines. Where 10bhp per tonne used to be a rule of thumb, a couple of manufacturers report that 360bhp is the standard for an eight-wheeler these days, with 400bhp an increasingly popular choice. "We find that those operators wanting to save weight will take a Trakker with the Cursor 8 engine at 360bhp," says Iveco Trucks' UK product director Martin Flach. "But

those less worried about weight want the Cursor 13, with 400bhp to 480bhp available in a tipper."

It's a similar story at Volvo, where UK product manager John Comer says that the firm's 13-litre engine can add up to 100kg to a truck's unladen weight, compared to the lighter 11-litre motor.

Of course, tipper bodies are available on every chassis from a 3.5-tonne van to a 32-tonne 8x4, or indeed a tipping trailer, if you really want to move bulk. In the past, six- and eight-wheelers have shared the tipper market, but recently the 8x4 has come much more to the fore. There is still a split between the lightweight aggregate bodied eight-wheeler and the heavier muckaway truck with a steel body, but the four axle truck is now the dominant force, certainly in construction tipper work.

As for other industries that use tipping bodies, the agricultural sector tends more towards tipping trailers, whether hauling grain or produce like sugar beet, while the recycling and waste sectors also opt for bulk tipping trailers, with even greater load volume capacities.

The difference for these hauliers is usually distance related, particularly in the case of waste haulage,

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where landfill sites can be some distance from the collection point. Transporting maximum volume translates to lowest cost, though, with an artic capable of carrying up to 10 tonnes more than an eight wheeler, even if the vehicle itself uses more fuel.

Also, those using tipping trailers tend to be able to load and unload on firm ground, without the concern of unstable tipping on the rough. In each case, though, many of the criteria for purchase are similar. Good ground clearance, for example – including approach and departure angles – is an important consideration for any vehicle venturing off road. Maximum traction can be a consideration, too, with many waste hauliers opting for 6x4 tractors, rather than the more road-orientated 6x2.

Interestingly, for a sector of the industry that is notoriously conservative with purchasing decisions, the number of rigid tippers that have automated gearboxes is now growing. Most manufacturers now offer some form of automated manual box: indeed, the likes of Iveco and Mercedes-Benz will offer you an automated transmission as first choice, in the EuroTronic and Powershift II – though manuals are still available for those that want them. “Our standard offering is the automated box now,” says Flach. “But there are some customers who still believe that a manual is better.”

Mercedes says that around 19% of its eight-wheelers now have an automated manual box, such as its Powershift II, but Volvo is finding that the number is already moving higher. Volvo’s Comer reports that the growth has been very swift, with around 50% of the firm’s 8x4s now being supplied with Volvo’s I-Shift gearbox.



DAF and Volvo have both seen operators choose more fuel-efficient tipper models in recent months

DAF is not seeing quite such a high take-up, though, for lightweight aggregate work. Pain admits that there is no reason not to have an automated manual. However, he believes that “a regular manual gearbox is still the preferred choice for muckaway work”. Indeed, he estimates that around two thirds of tippers are currently still manual.

Certainly fleet managers should not be concerned about the reliability and durability of electronics on automated manuals any more, with these gearboxes now well proven over many millions of test miles.

They can also be locked in lower gears for more difficult off-road work, when required. Operators new to automated manuals might want to consider a manufacturer’s gearbox familiarisation course, however, to ensure that their drivers are getting the best out of the various systems and are also using them properly to restrict gear changes when off-road. If you can combine this training with part of a Driver CPC course, so much the better.

As for repair and maintenance, tipper operators are turning increasingly to the manufacturer and dealer, with R&M becoming a more popular option. Although full R&M contracts can be notoriously expensive for a tipper – because the manufacturer can never be sure quite what the truck will have to endure when on site – the increasing complexity of engine and gearbox management systems is pushing many operators to take the plunge.

Manufacturers such as DAF – which already offers two years of servicing, as well as the six-weekly inspections free with the truck – are finding that customers get used to having the work carried out by the dealer. And at Iveco, Flach says that around 80% of the firm's heavy trucks, including Stralis and the Trakker tipper range, are now sold with some form of R&M contract.

Watch out

That said, despite the advances in technology, little has changed in the way tippers are used. By their very nature, they spend around 50% of their time fully laden and the remainder completely empty. So there are no part loads and few back loads for tipper operators. Further, mileage is not a major consideration, so the main operating concern is still damage on site – to tyres, suspension springs and other exposed components. Regular inspections are therefore even more important for the tipper operator than the regular haulier.

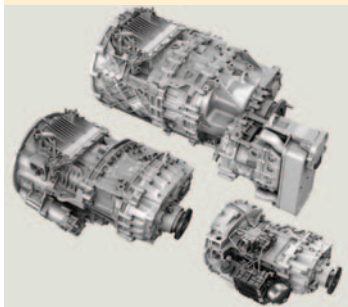
Reversing cameras are now demanded by many quarry operators and are available from the factory on most makes of truck, so that should help with rear end damage – as long as drivers make it clear to the shovel operator that pushing is not permitted. As mentioned, driver training can also ensure that drivers get the most out of their vehicles, both in terms of economy on the road and productivity off it.

Though many companies may be holding onto trucks longer, to weather the current financial climate, this, too, can lead to increasing component wear and breakage as miles climb higher. A positive inspection and preventive maintenance regime will do much to minimise downtime and keep those trucks working when the work does come in.

The signs are that we could be looking at a recovery in 2010, though it will no doubt be gradual. A General Election won't do much for business confidence in the first half of the year, but demand for tippers could well rise as the year progresses. As the manufacturers have said, if operators want to get in on the last of the existing stock trucks at old prices, they need to strike now. Hesitate too long and pay the (much higher) price in the future. **TE**

Tipping the balance with technology

Technical advances on tipper chassis have, for the most part, been well proven on distribution vehicles. However, given the arduous operating conditions that most tippers experience, operators are often understandably reticent when it comes to trying 'new' technology that is not mandated by legislation. Nowhere has this been more obvious than in the adoption of automated transmissions or even in the use of disc brakes on rear axles.



Whether it is Powershift II, EuroTronic, Opticruise or AS-Tronic, the benefits of an automated manual gearbox have by now been very well proven. Near perfect gear changes, at the right time for maximum economy and performance, can significantly improve fuel use across a fleet. Having a gearbox that changes its own ratios also leaves the driver free to concentrate on steering and positioning the vehicle. The technology controlling automated gear shifting continues to improve, with control

units also now happy to drop down through the gears to achieve the perfect revs for an exhaust brake to function, for example, or even to bring into play a retarder, where fitted.

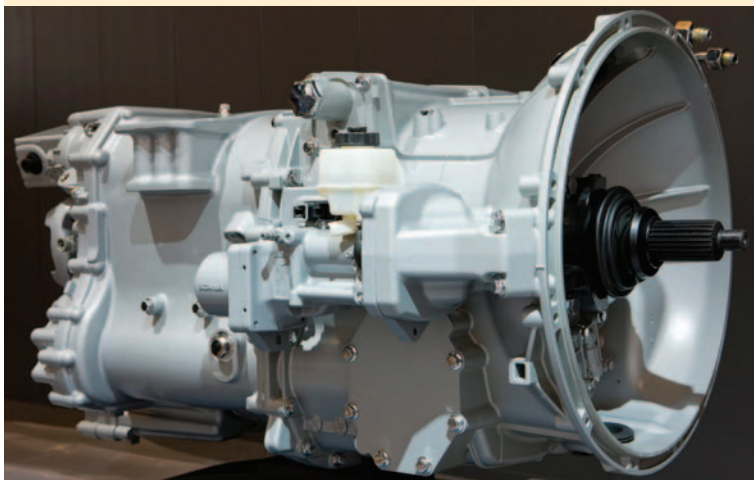
Key to further improving performance, and to reducing fuel and emissions in the future, is integration of components and systems. Manufacturers are designing engines, transmissions, hydraulic and braking systems that not only can communicate with each other through the truck's CANbus electrical system, but in many cases also need to do so, because they have to work together.

In the coming years, CAN wiring is likely to be replaced by Flexray, which is up to 20 times faster, thanks to the use of fibre optics, rather than simple wiring. When components communicate at speeds like that, the human element will inevitably become one of the possible weak links in the chain.

Such technology is not only about improving vehicle operations either. Electronic systems provide for rapid diagnostics, reducing downtime, but they will eventually offer what is increasingly being termed 'prognostics', where information from similar trucks around the world can be compared by the system, in order to predict component wear and warn of potential failure.

This technology is not that far away and tipper manufacturers will not want to build a different wiring specification for construction trucks, as opposed to distribution vehicles – so whatever comes will be applied to everything.

Tipper operators may well be among the most conservative buyers in the truck business, but the march of technology is unstoppable. The good news is that there are benefits in ownership and operating costs that should more than make up for any additional expense at purchase time.



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