



Having examined not-so-humble fleet tractors last year, Ian Norwell turns his attention to the staple of the construction industry, eight-wheelers - and finds even more useful evolution

asting my eyes over the registration figures for four-axle rigids, looking for a representative brand, I couldn't do much better than select Volvo's current FMX chassis.

And with a proven heritage in tippers, it proved to be an interesting ride.

Perhaps the first point to note: as with fleet tractors, it's the transmissions that have brought the biggest change. That said, the inexorable creep of AMTs (automated manual transmissions) has taken longer to gain traction here.

Martin Tomlinson, transport services
manager at Volvo, in Warwick, agrees
that's mostly been due to a fear of
getting stuck off-road. "When the first
AMTs came out they weren't perfect, no
matter who made them," he recalls.
"Anyone in tipper operations would
have been unimpressed and dismissed
them as only for the long-haul tractors."

First impressions tend to stick, so AMTs have taken time. However, for sceptics, the excuses are running out. Apart from a spot of judicious driver training, there are innovations aplenty to quash the night terrors of getting bogged down, or feeling that an 'honest' manual would have rallied to your rescue. The distribution and construction software package, a switch to disengage ABS (needed for wheel washers at site exits), the rocking function, and a power mode all add to the traction aids. They not only make getting unstuck easier, but reduce the chances of getting mired in the first

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place. With all these embellishments, AMTs for tipper and mixer operations have been transformed. And when you consider that Volvo's first I-Shift AMT was sold in 2001 - having learned from the imperfections of GearTronic - it's hardly new. The result: Tomlinson can't remember when he last saw a four-axle rigid FMX with a manual box.

WEIGHTING GAME

Meanwhile, there are also changes in bodywork preferences. The traditional division - of S&A (sand and aggregates) operators taking light aluminium bodies and muck-away going for steel - is starting to blur. S&A operators formerly wedded to the payload advantages of aluminium tipper bodies are increasingly taking a different view.

"Many are coming to the conclusion that the modest weight penalty of steel is more than outweighed by the residual value advantage and its multi-role ability," confirms Tomlinson. And much the same goes for sleeper cabs. A daywork driver doesn't need a sleeper, but it's a spec item that helps lubricate the move into the used market.

Volvo and stablemate Renault have also been enjoying some success with their tridem. First appearing on the FM, it's an 8x4 with a three-axle, airsuspended rear bogie. The two drive axles have twin tyres, with singles on the rearmost steer axle. The likes of animal feed delivery in the Peak District would be an obvious application, yielding the access of a six-wheeler but the payload of an eight – and with winter traction not offered by an 8x2 rear steer.

How does Volvo fare? Mark Luck runs a company of 85 years' standing from a base in Swanley, Kent. He has a mixed fleet of 45 multi-wheelers and artics with tipping trailers that work off road on waste handling, groundworks and construction. It's a tough operation, and his fleet average on rigid chassis is

around 6.3 mpg. His eight FMX chassis, however, are returning 6.5–7.5 mpg, depending on the work. Luck's philosophy is to buy bigger engines, which he finds give a better return, and keep them for longer.

The figures may not look startling, but the duty cycle is the key and it's the percentage above fleet average that counts. Importantly, though, recent acquisitions at Mark Luck include an FMX-540 tridem 8x4 on a '64 plate, and its fuel performance and that of his other FMXs have led him to "only buy Volvos from now on". Luck's was the first new-series FMX tridem in the UK to have been fully-approved for N3G offroad use, and it was also the first to take Volvo's dynamic steering.

FUTURE GAZING

Meanwhile, Volvo's multi-wheelers are adapting to market movements that may eventually morph to the UK. Ireland allows 46 tonnes on six-axle artics, and 36 tonnes on large rigids. That has spawned a 10x4 chassis from Volvo – although, with only two on order as we go to press, time will tell.

The new beast uses a regular 8x4 layout with an additional steering axle at



the rear. It harnesses Volvo's 'T' ride fiveleaf steel suspension on the rear bogie, instead of the usual three-leaf 'B' ride familiar in the UK. The heavier set-up is almost standard fare in Ireland – widely regarded as a 'robust' environment.

For traditional chassis, though, there are other developments in train. The lambasting eight-wheel tippers have been getting as the top cyclist predator in London is leading to scrutiny. So Volvo is bringing out an all-air suspension 8x4 as an experiment.

The OEM believes this could address the ride height issue blamed for putting cyclists out of drivers' sightlines. Instead of having to work with a high ride height essential for off-road, all-round air drops the chassis in regular traffic, raising its game again only when it gets on site. Apart from cycle safety, there will be roll stability advantages, too.

Driver's view

The working environment and level of vehicle control offered to drivers of all the major manufacturers' four-axle chassis is now as good as their long-haul tractor cousins. Today, a fully loaded eight-wheeler is driven as much with fingers as feet. Cruise control and the ability to set under- and over-speed parameters are probably the greatest aids to holding fuel economy, while still making good progress.

And checking that progress is more efficient than ever: engine brakes and retarders are now so powerful that friction materials can, if the driver has a mind, be made to last and last. For such a high centre of gravity, four-leggers' steering and stability are also remarkable – although I'm not so sure about Volvo's dynamic steering option on eight-wheelers in the UK.

I drove my FMX in Gothenburg at the last new model launch. Like the system on Mercedes' Arocs, the advanced steering delivers very light effort at low speeds. It's certainly a pleasure to drive and it makes progress over even very poor ground effortless. It obviously works when the truck is stationary, too – so I can't help but feel it might add to tyre wear. Volvo says not, but since it separates the driver from the forces at work on his tyre faces, we'll have to see.

It's obvious that eight-wheeler tipper and mixer drivers have never had it so good. Unless, that is, they work in London, where they fall foul of the blame game.