



Up hill and down dale

When MAN launched its New Truck Generation in Bilbao last February, it was clear that beneath the

razzmatazz, some serious technological upgrades had been made. Up to 8% improvement in fuel consumption was the headline, achieved mainly thanks to combining the Euro VI-D engines released in 2019 with a taller drive axle ratio and GPS-guided EfficientCruise.

With that came a completely redesigned interior, guided and tested by drivers, with everything from the position of the steps to more sensibly laid out bunk controls speaking volumes for their input. Then, under the skin, was perhaps the biggest step forward of all: a total rebuild of the CAN-Bus wiring architecture, lighter and simpler than ever before, and future-proofed so further technological advances will effectively be plug and play.

But enough of the marketing-speak. COVID has worked in our favour when it comes to doing the first UK test drive. Instead of everyone trooping to

Lucy Radley gets behind the wheel of a right-hand drive New Truck Generation MAN tractor

Millbrook and running around set routes, MAN has set up a roadshow, taking the trucks around the country. The author's invitation was in Harrogate, and a strictly timed slot so distancing can easily be maintained, and a thorough clean-down performed between drivers.

To look at, MAN hasn't changed the basic cab design for the latest TGX, though it is aerodynamically restyled, and without the extended windscreen and additional upper windows in the XXL version - now called the GX - an omission apparently born of new structural strength regulations. Inside, it feels familiar too, but not entirely. For starters, the handbrake is now electronic and dash-mounted, and the transmission controls are on the right-hand stalk.

The next most obvious change is the addition of the new MAN SmartSelect. A specifically designed hand control, this is mounted below the multimedia

screen to the left, allowing the driver to flick between options without having to look down, as is somewhat inevitable with touchscreen. One criticism of this is UK-specific: in the right-hand drive test truck one uses SmartSelect with the left hand, the non-dominant one for most and not ideal. Otherwise, it's a neat solution.

The engine in our 6x2 test vehicle is the 632bhp version of the 15.2-litre D38, and with the trailer loaded to a full 44 tonnes. The gearbox is MAN's 12-speed Tipmatic gearbox based on ZF TraXon, as is standard for 6x2 tractors. Also on board is the new, lightweight, low friction drive axle that gives direct drive in 12th gear, and improved efficiency thanks to its 1:2.31 differential ratio.

Axle ratios are getting lower as a result of engines down-speeding, so peak torque is now at around 1,000rpm instead of 1,300. Taller axle ratios mean more efficient drivetrains overall, but also need to be geared correctly for the environment the truck is working in.

Unfortunately, this is Britain, so unless a vehicle is on trunking work or similar,

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it's inevitably going to spend at least part of its time exploring our very scenic, but not very truck-friendly main rural roads. We're in Yorkshire, right on top of the A59 cross-Pennine route, a very hilly single-carriageway road which is nevertheless heavily used by HGV traffic north of the heavily-congested and often blocked M62. It'll be interesting to see how this drivetrain will handle it.

To get there, first there is the traffic through town to fight through town, which also gives a chance to adjust to the gearbox. While much better than its predecessor, this version of Tipmatic still needs the driver to both learn where the clutch bite is on the right pedal, and give the software the appropriate instructions via engine speed to ensure it will be ready to go when asked. The payback is that this is a far more controllable transmission than some, something most drivers either love or hate.

It's during this part of the drive that another of MAN's exterior changes comes into play. The shape and mounting of the mirrors has been changed, and now it's clear just how much smaller the blind spot behind them is, and how much less craning is necessary to see at junctions.

Striding out across the undulating but relatively straight first section of the

rural part of our route, the flick of a finger turns on EfficientCruise. With a peak torque of 3,000Nm, the truck does as you would expect, sitting quite happily in top gear at around 1,000rpm. Further on, the gradient changes become more violent, so it's on into performance mode to give it a fair chance.

GEAR FLEXIBILITY

Many modern transmissions are so hell-bent on staying in as high a gear as possible that they end up hunting on roads like this, and with an axle ratio squarely aimed at motorway miles that is expected to be the case here as well. Giving the truck permission to use its power should minimise this, but even so the gearbox indicator drops solidly into 11 on the first decent climb and then stays there, other than a quick hop to raise the revs and engage the automatic engine brake during the nosedive down past Fewston reservoir.

Heading into the steepest and narrowest part of the route through the pass at Blubberhouses, the gearbox drops down into 10th, again sitting there at a steady 1,000rpm. As the speed is forced to drop where the road narrows, the truck allows the rpm to drop as low as 900 in places, but also allows it to rise to around 1,200 without trying

to change gear - a pleasant surprise. Dropping down the other side of the hill to the turning point at Bolton Bridge, the engine brake inevitably fails to hold us on the steep, five-mile descent - for that, experience indicates that a full retarder is required.

The vehicle's final 'test' begins leaving the roundabout at the bottom and retracing our steps, this time heading straight back up the locally notorious Beamsley Hill. A flick back into Efficient mode with the right thumb, re-engaging cruise and setting it to 50mph, the legal limit, sees the truck rapidly drop into 11th gear, followed by tenth and eventually eighth, but at no point does the software try and force us into too high a gear as so many do on this road. It maintains an impressive 35mph even up the steepest section, but it is the smoothness which stands out - it's difficult to tell just how hard the engine is working without looking at the dashboard.

This trip was never designed to be a fuel test, and no figures were available. What we do have, however, is a long-term knowledge of running many different kinds of vehicle over this route, so suffice to say a glance down and a quick mental calculation based on the size of the tank - 460 litres - and the result is impressive.

In conclusion, MAN's new TGX 640 might have been built to eat up the long miles as efficiently as possible, but this is by no means a one-trick pony. GPS and sat-nav guided, it knows how to pick a gear and commit to it away from the motorway too, and isn't scared of sitting in the topographically correct cog rather than allowing such things to be dogmatically dictated, even in its most frugal mode. A rare gift these days, and one that is worth considering. [IE](#)

FURTHER INFORMATION

*New Truck Generation - www.is.gd/ubezeh
All about axle ratios - www.is.gd/opikoz
Transmissions update - www.is.gd/ovafen*