

# MARCH OF THE LARGE RIGID

In the latest of our series on truck staples, Ian Norwell looks at the distribution sector's large rigid, which has seen much the same migration as other vehicle classes, but picked up innovations on the way

Throughout our truck type reviews I've looked at examples of excellence, with Scania's R450 flying the flag for fleet tractors, Volvo's FMX for eight-wheelers, Iveco's EuroCargo the 7.5-tonners, and now DAF's CF for the larger rigid sector. Usefully coinciding with a DAF presentation of product upgrades in Barcelona, I selected its latest 6x2 CF 310 with rear-steer because that's where the search for productivity in the UK is heading.

A decade ago the 18-tonner was still fairly secure as the regional/local distribution chassis of choice. As with many other weight sectors, however, the trend has been upwards in weight. Six wheelers of yore were usually double-drives, and bolted to tipper or mixer bodywork. But as construction moved to fully embrace eight-wheelers - most spectacularly in mixer fleets - so the three-axle, single drive chassis has taken on its new role.

With a steering and lifting rear axle, it's retained almost the manoeuvrability of its 18-tonne forebear, but with an average 15-tonne payload, representing a massive 50% uplift in productivity over the older two-axle prospect. Yes, there are increases in costs - slightly more fuel, higher chassis purchase price, more tyres on the ground - but with the same single



driver and decreased delivery frequency, fleet managers are making the sums work. A spot of additional driver training for the increased rear swing is advised,

but with shorter turning centres than at two axles, it's not a major issue.

The single drive with a tag lift also arrived at the right time to fulfil the growth in pallet networks. The rise in chilled distribution with segregated and insulated bodies had also been putting the squeeze on smaller trucks. Add a tail-lift, and its payload was starting to look a little shabby.

DAF Trucks marketing manager Phil Moon says that interest in six-wheelers with



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steering and lifting rear axles is coming from above and below. He cites fleets such as Martin Brower UK, a logistics service provider for restaurant chains, which has traditionally operated artics and 18-tonners, but is now moving to 6x2 rigids. A recent order to service McDonald's confirms the trend.

From DAF's perspective, its addition of a model with a single-tyred tag axle that lifts and steers (FAN) has opened doors that were closed to the previous twin-tyred rear axle FAS CF, simply on grounds of manoeuvrability. “The trailing axle on the CF FAN is a 7.5-tonner, with two-bellow air suspension,” explains Moon. “It works with our SR1344, 11.5-tonne, four-bellows drive axle, and it gives fleets a useful option.”

#### DRIVERS' VIEW

So much for the fleet manager's spreadsheets, how will drivers like it? I drove one on a typical urban distribution route in Barcelona, with the usual mix of traffic that calls for sustained concentration - with pedestrian crossings, traffic lights, road furniture and speed humps.

My memories of this class of truck at



work are from some time ago, and they are not good. Manual transmissions and a generally unwieldy feel, with a turning circle not far off that of an eight-wheeler made it almost worse than an artic. But that was then, and this is now. Getting drivers to migrate from an 18-tonner to this DAF three-axle chassis shouldn't be a problem. Yes, they'll be stepping out of far more recent examples than I recall, but there are added attractions over current two-axle chassis, too.

First, manoeuvrability with the steering rear axle is very good, and the Euro 6 PX-7 (6.7 litre) engine is rated at 314bhp. But of greater moment for the driver, this truck now comes with the option of a 12-speed AS-Tronic AMT (automated manual transmission), perfectly matched to 26 tonnes. A nine-speed manual remains the standard

spec, but I would tick this option box.

Any initial disappointment at finding no retarder (only an exhaust brake) soon evaporated in practice. Urban stop-start traffic could be comfortably managed by leaving it switched on and allowing the throttle software to switch it off automatically. In fact, congested urban drudgery could mostly be controlled with just the throttle pedal - meaning constantly juggling between throttle and brake could be avoided. I was alert to the increased rear overhang and also the swing-out created by the rear-steer, but forewarned was forearmed and the result was relaxed progress.

All in all, the CF is a benchmark - the large rigid has come of age. It's dispensed with the double-drive, saving weight and giving a sensible turning circle with a lift-and-steer rear end. Transmission control is transformed and 'silent' models can kick in where operators need to offer day and night deliveries.

Effectively, three-axle rigid sales in 2015 (source, SMMT) tell the story. Of 4,203 registered, the 6x2 took the lion's share with 3,416, leaving the 6x4 with just 787 units put on the road. [TE](#)

#### Engineering innovations

At DAF's Barcelona event, a raft of interesting upgrades was on display, with two in particular catching my eye. First was a new low-deck tractor for the super-cube sector, which must have been a significant engineering project. With a 91cm fifth wheel height, it needed new tyre designs and re-engineered reaction rods to avoid understeer.

The tyres were a joint development with Goodyear and its low-profile Kmax D drive axle tyre size 315/45R22.5 could not live alone. It needed more rubber on the ground for the front axle, too, so a 375/45R22.5 - new to the industry - was added by ETRTO (the European Tyre and Rim Technical Organisation) to the official list of sizes.

On the highway, this unit felt like a normal tractor/trailer combination. The switch on the dash to raise the chassis over aggressive speed bumps was the only exception. The new tyres are currently exclusive OE to DAF.

Elsewhere, eight-tonners don't often excite, but the little LF showed just

how smart they can be. DAF has taken top truck technology all the way down to the LF. Yes, it needs AEBS (advanced emergency braking system) and LDW (lane departure warning) by law. However, as the radar equipment for AEBS is common to ACC (adaptive cruise control), that's been liberally sprinkled over this range, too. Maybe it didn't cost DAF production engineers too much, but it's certainly lifted the spec.

My LF test truck included ACC, and it gave that complete level of relaxation I've enjoyed elsewhere up the range. It means that all DAF trucks where AEBS is mandated (air-suspended two- and three-axle vehicles above eight tonnes gww that are not designated off-road N3G) are now fitted with ACC as standard.

