

STIFF

competition

Rigids are developing fast as some operators see the value of moving either up or down the weight ranges and adding new technology. Steve Banner reports

For trucks with large cranes mounted behind the cab, 9- and 10-tonne front axles are available

Firms operating rigids that want to boost productivity while drivers are in short supply should think about switching away from 18-tonne 4x2s to 26-tonne 6x2s with rear steers. So says Iveco product director, Martin Flach. “Admittedly, you won’t be able to mount a bigger body on the chassis – maximum overall length remains 12m – but you gain a payload advantage of nearly 7.0 tonnes, even allowing for the extra axle and wheels,” he says. “Furthermore, the truck will be just as manoeuvrable as an 18-tonner and you won’t have such a long rear overhang.”

He’s not the only advocate of 26-tonners. “It means you can get a 6x2 and a bigger load into places where you used to take a 4x2,” agrees DAF product marketing manager Phil Moon. However, Volvo product manager John Comer warns: “Be careful about your axle weights though, especially if you’re operating refrigerated 26-tonners.”

Why? Because they can suffer diminishing load problems, meaning that the front axle becomes overburdened. But there are solutions: “While an 8-tonne front axle is usually sufficient ... you can always go up to 9 tonnes,” suggests MAN marketing manager Les Bishop. And it should be noted that 26-tonners are available with 10-tonne front axles – for example, for rigids with large cranes behind the cab.

Meanwhile, as Flach points out, 6x2 rigids have an advantage over 6x4s. “With a double-drive rear axle, you suffer a payload penalty and your fuel consumption goes up,” he asserts. “An 8x4 has the same drawback, compared with an 8x2.” Double-drives clearly bring extra traction but Flach suggests this is less of an issue for operators than it once was.

“These days, the first thing builders do when they construct a housing estate is put the roads in,” he



observes. And while those roads may not be properly finished, they provide a hard surface for trucks.

“Remember too that if a vehicle is, say, picking up material from a concrete batching plant then, again, it’s going to be on hard standing,” he continues. So traction will not be an issue there either.

Drawbar or artic?

Opting for a 6x2 rigid also gives operators the option of marrying it to a drawbar trailer and running at 44 tonnes. Yet, although there are exceptions (operators on brick and block work, for example), UK transport remains skewed towards artics.

“Most of the 6x2s we supply are for solo work, with very few specified as drawbars,” says Bishop. And DAF’s Moon agrees: “Increasingly, operators want to go to artics wherever possible, with rigids confined to carrying specialised bodywork – such as jetting equipment – unless they’re needed to get into places too tight for a tractor and trailer.”

Because so many rigids spend their lives on urban distribution, these vehicles will be particularly affected by TfL’s (Transport for London) Safer Lorry Scheme, which is likely to come into force this summer. This will require all goods vehicles grossing above 3.5 tonnes entering the capital’s low emission zone to be equipped with side guards to stop cyclists ending up under the wheels, plus mirrors designed to make it



never be as great as on a 44-tonner – given that rigids spend so much time in urban environments – they often make regular runs from outlying industrial estates along dual carriageways into city centres.

“In that situation you can obtain fuel savings of 3–4%, with some operators quoting figures as high as 8%,” says Owens. The only issue: the sweep of the roof can result in a restricted rear door aperture. “To counteract this, we sometimes make the roof slope more acutely at the front of the body, then flatten it out towards the rear,” explains Owens.

Accommodating the emissions technology that accompanies Euro 6 is one factor bodybuilders working on rigids now have to consider. Another, says Comer, is the electrical interface between the

Rear-steer tridems offer excellent manoeuvrability for heavy loads in tight spaces

easier for drivers to spot vulnerable road users.

Supermarket giant Sainsbury's has already responded by unveiling a cyclist-friendly 18-tonne Mercedes-Benz Antos 1824L. This rigid has cameras at the front, rear and sides, as well as proximity sensors and extended side guards, among other measures. The project also involved bodybuilder Solomon, which equipped the Antos with a multi-temperature refrigerated body with a Slipstream aerodynamic package and a Solomon Kamm Tail, designed to improve airflow over the rear of the vehicle. The obstacle the fridge unit might otherwise present has also been eliminated by mounting it underneath the chassis, thereby reducing the vehicle's overall height.

TfL is at the heart of another project impacting rigid design: the CLOCS (Construction Logistics and Cyclist Safety) programme. Involving some of the UK's biggest construction companies, its aim is to ensure that tipper drivers can see pedestrians and cyclists. One consequence has been the appearance of a Mercedes-Benz Econic 2628 26-tonner bodied not as a bin wagon, but a tipper. The idea is that the low-entry cab's low driving position and glazed full-height passenger door make it simpler for the driver to spot cyclists coming up the inside.

Vulnerable road users

Also fitted with a low-entry cab plus a passenger door with additional (although not full-height) glazing, is DHL's new Scania P-280 compressed natural gas 18-tonner. Intended for quiet operation in city centres, this rigid features a PIEK-certified tail-lift and nylon components designed to minimise noise generated by opening and closing the air-operated rear roller-shutter door, among other measures. Again, cameras all round should ensure the driver sees anything that might otherwise be missed.

Like the body fitted to the aforementioned Antos, Scania's Don-Bur Teardrop body is aerodynamic. “We do a lot of Teardrops on rigids,” confirms marketing manager Richard Owens. While the fuel saving will



chassis and the body. “That's becoming increasingly significant, given the desire of operators to use telematics to monitor what's happening with the load as well as with the vehicle itself,” he explains.

Methods for cutting emissions as well as noise may become another issue as city authorities place more emphasis on air quality. CNG (compressed natural gas) may be a solution, depending on restrictions, but it is not the only one. That's why Fuso now has eight lithium-ion battery-powered E-Cell Canter 6-tonners on trial in Portugal.

“We've been able to achieve a range of over 60 miles between recharges and a body/payload allowance of around 3 tonnes,” says European head of sales and marketing Pius Dettling. The Eco Hybrid Canter has already achieved some success in the UK, with over 100 in service with operators ranging from Veolia to UPS.

Canter's comparatively high body/payload allowance also gives it an advantage over more traditionally engineered and usually heavier European-inspired trucks at 7.5 tonnes – something it shares with Isuzu's Urban and Forward 7.5-tonners. Indeed, some businesses that might otherwise have bought, say, an Atego have switched allegiances, although Mercedes can be forgiven if it is not overly concerned. Both Mercedes and Fuso are owned by Daimler. **TE**

Moving up to six wheelers cuts the mustard with carrying capacity