TractorTrials

With the latest ranges of Euro 6 tractor units looking so similar, Brian Tinham talks to some shrewd operators about their selections and how they arrived at them

So you're considering another tractor unit or two? Maybe you're looking ahead to that next fleet replacement programme now that Euro 6 is with us? Whatever the numbers, are you attracted by looks and bling? Is Scania's limited edition, half century V8 'Golden Griffin', for example, your ultimate must-have? Image is important and it also has a bearing on driver retention, so while gold might not be your thing, presentation and quality are bound to be factors. However, the importance of function and finance over form is also unarguable, so there's no doubting that responsible fleet engineers' interests should be more than skin deep.

All the truck OEMs' sales people are keen to help here – and with much more than simply selecting optimal engine size/power, torque, drivetrain, cab type and bundled option packs for your duty cycle and operation. So here's your best first port of call. However, given the competing marketing departments' almost identical descriptions of frugal, flexible, technically-superior capability for their latest trucks, it's also worth tapping into your peers' choices and doing some cherry picking. There's plenty of good advice on offer, but here are some thoughts from a selection – Arclid Transport, Brian Yeardley Continental and Clugston Distribution.

Sandbach, Cheshire-based Arclid first and, as a bulk powders operation, its main issue is inevitably minimising truck weight to maximise payload. However, as transport manager Peter Conway says: "Since we run fully loaded at 44 tonnes most of the time, we also have to balance that by ensuring our trucks have enough power and are up to the job."

So while his 6x2 tractor units are ordered with the smaller mid-lifts (17.5-inch, instead of 22.5), alloys all round and one bunk, rather than two, in the cab – together saving nearly half a tonne – he specifies 510bhp engines. "A lot of fleets specify 440 or 460bhp, but that's 10bhp per tonne, which may be fine for them but just not man enough for us. The engine would be working too hard and using more fuel. My other thought is that you never know when government might change the legislation to allow higher combination weights for tankers – say 46 or 48 tonnes. With the higher power, we're future proof."

Hence the latest DAF CF to join Arclid's 25-strong fleet is a 510bhp Euro 6 Paccar MX-13 engined model, which, Conway

says, is already returning 2.96kmpl (8.36mpg). For fully freighted, that's not bad – and it's better than his Euro 5 equivalents, which average 2.75kmpl (7.77mpg). That said, he makes the point that achieving these figures is also about choice of differential ratio. "In our case, because we're less than a mile from the motorway, where our tankers spend most of their time, I always specify a high ratio so they can get into top gear as quickly as possible, keep the revs down and burn less fuel. But, if we were in Buxton, I'd choose a lower ratio to handle all the steep hills."

Longer wheelbase

Either way, he recommends automatic transmissions – in his case the ZF AS Tronic 12-speed on the DAFs – over manual sticks. Quite simply, he says, today's boxes are better at consistently selecting the right gear for best fuel economy.

What about aerodynamics? Conway says his tractors come with DAF's standard collars and air kit, but agrees that air management is less critical for tankers than, say, fridge trailers. What matters more to him is the wheelbase – and he's gone slightly long at 4.05 metres, instead of the standard 3.9, to minimise the tractor-trailer gap while retaining manoeuvrability on-site, and to get the fifth wheel back far enough not to overload the axles (given the 4.5-tonne limit on the small mid-lift).

"We've gone for a fixed fifth wheel, too. Why specify a sliding fifth wheel, if you're never going to move it? We don't swap trailers very often, so it's another way of keeping the weight down," he explains. And it all makes a difference: with all the weight-saving measures, his latest CF comes in at just 7,780kg, including the driver and half a tank of fuel.

Moving on to Brian Yeardley Continental, the picture couldn't be more different. Managing director Kevin Hopper explains that his is a high-cube, long-haul, international operation, with trucks mostly trunking in continental Europe. As a result, the firm specifies left-hand drive, low-ride height 4x2 tractors down-plated to 40 tonnes. Hopper also puts a lot of time into keeping abreast of the tractor market to get the technical detail – particularly fuel-saving and safety technologies – and the deal prices right.

"We're not bothered about payload," he explains. "We don't allow anything over 24,500kg and most of the time it's more like five to eight tonnes transporting automotive parts and white goods. For us, it's all about volume, so 4x2s make sense on both price and running costs. They also give us more room on the chassis, meaning we can fit 1,400-litre diesel tanks [split as 660 and 740], which is just short of ADR [dangerous goods transportation]. That allows us to buy fuel from the cheapest locations and complete our round trips to Italy, Spain or wherever without refuelling – which again keeps costs down."

His logic for low-ride is just as impeccable. "The maximum height for a combination in mainland Europe is 4.0 metres, which means only 2.65–2.75 metres of internal loading height on the trailer. By lowering the fifth wheel from 1,150mm to 950mm, we can get 3.0 metres. On a megatrailer that means 100m^3 of load space." Then completing the base spec, Hopper's latest vehicles are all 3.7-metre wheelbase 4x2s, with full air suspension, Alcoa extra-light polished alloy wheels and Continental tyres – 355/50 R 22.5 on the front and 295/55 R 22.5 on the rear to match the weight requirements of Euro 6.

So what were his choices? "Last year, we ordered 12 DAFs, some Scanias and Volvos as part of our 2013 fleet renewal programme, and we bought a Mercedes-Benz Actros and an Iveco Stralis to trial for this year's." The Mercedes was a low-height Actros Gigaspace 1848, with the Euro 6, 480bhp, six-cylinder engine mated to the latest Powershift 3, 12-speed auto. The Iveco was a Stralis Hi-Way AS440S50TF/P-LT tractor with the Euro 5 (EEV) 500bhp, 12.88-litre FPT Cursor 13 power unit, mated to a ZF 12-speed automated EuroTronic gearbox.

"Following negotiations, this year I've spent £1.4 million on

another 14 Mercedes-Benz Euro 6 tractors. We specified the Solo [single occupancy] comfort cab concept, which has a single bunk and much more locker space for our drivers, who are usually away several weeks at a time. In a few more months I'll be looking for another 15–20 tractors, and those could be Mercedes, DAF or Iveco."

Why Mercedes this time? "Partly, it was because at the time they were the only OEM able to provide us with a purpose-built Euro 6 demonstrator," he answers. "I liked that commitment, but I also liked the fuel performance over the five-week, 12,000-mile trial period, which showed 9.5 to 11mpg, compared to our Euro 5 Volvos, for example, which were averaging 8.5–9mpg." Other factors he cites: the Mercedes safety pack (Lane Assist, Brake assist, Proximity Control Assist with traffic stop/go); advanced technologies, such as the latest predictive shifting automatic box, EcoRoll and the high-performance engine brake; projected strong residuals; and, of course, the deal price.

Multi-purpose tractors

Sound thinking, but now let's hear it from Clugston Distribution fleet engineer Nigel Graham, who runs around 100 tractors and has been specifying his latest additions to serve a range of requirements. Graham explains that the Scunthorpe-based firm, which has depots around the UK, is not only an own-account transport company – catering for everything from bulk powdered food to industrial powders and fuel distribution, steel haulage and inter-modal operations – but also an ATF, third party repairer and full service Renault Trucks dealer.

For him, the big challenge has been working to specify near universal tractors that can be used to haul on as many of the company's operations as possible. And that means having them equipped for both blown discharge and tipping, with a two-line hydraulic system, oil tank, rotary vane blower and the tipping gear. Quite a challenge, given the weight and space considerations, and the imperative to keep a lid on additional cost, which he reckons is now under £15,000 per tractor.

"There were space issues back with Euro 4, because of the addition of an AdBlue tank, but the larger after-treatment on Euro 5 and now Euro 6, not to mention the extra weight, has made finding room on the chassis even harder," observes Graham. "The alternative is putting it on the trailer, but that's expensive, there are payload implications and we lose fleet flexibility. So I've always tried to fit the equipment on the tractor, which also means we can use the engine PTO."

Unsurprisingly, Clugston has long since been an almost 100% Renault operation, so when the OEM brought out its Euro 6 trucks last year, Graham looked first at the Range T – and he says he liked what he saw. "I was at the launch event and I kept thinking, 'They've listened to us. They've built a vehicle range that has the space and flexibility for all our ancillary equipment.'"

He points, for example, to the Range T's option of a 4.1 metre wheelbase. "That stretches things out a bit. It means we don't need to specify the mini mid-lift: the second axle spring bracket isn't in the way of our compressor, because we've got another 200mm in the tunnel at the back of the gearbox. So it's immediately blower friendly, with a drive off the prop shaft, rather than conventional hydraulics. I can also get a factory-fit dual-output PTO with a 1,410mm flange, so I can drive the hydraulic tipper direct and the onboard blower via the flange outlet."

And there's more: locating the AdBlue tank on the rear of the cab creates another 700mm space on the chassis, which Graham uses to accommodate the tipping tank. "Previously, we had to take the OE fuel tank off the Euro 5 chassis and get the likes of Priden Engineering to manufacture and fit a split tank – 400 litres of fuel and 200 litres of oil for the tipping equipment. Now we can leave the OE 450-litre fuel tank on the side and slot the tipping oil tank in the gap. That saves me £2,000. Also, if I want to bespoke a tractor for our flat fleet, steel haulage operation, I can use that same space for the extra-large toolbox they need for tensioners, chains, ratchet straps, etc."

"So I've now got 20 Euro 6 Range T tractors on order: the first two being 11-litre 460bhp and 13-litre 480bhp units, so we can compare fuel consumption on our intermodal, fuel and industrial powder haulage operations over the next six months. The remaining 18 will all be the smaller 11-litre and all are automatics. We'll get meaningful fuel consumption data, because the new engine management system separates out PTO fuel usage, which is extracted via the onboard Renault Optifleet telematics."

Now, how about that for some smart cherry picking? TE