

Winter warmers

This winter's appalling weather brought local councils' road clearing efficiencies into sharp focus. Brian Tingham talks to fleet managers about their vehicle choices in difficult economic times



For as long as many of us can remember, local councils have bought gritters, based more or less on standard trucks, and just lived with the cost implications of poor utilisation and significant annual maintenance. That was just the way it was, and maintenance departments will all recognise the yearly ritual of relieving seized pins, bushes, door hinges and chutes, brakes sticking to corroded drums, seized clutch shafts etc. But recent years of appalling winter weather, coming on top of the tightening squeeze on finances, have led some councils to think rather differently.

Take St Helens Council: transport manager Colin Smith says his starting point was that there had to be a better way than gritters left idle for more months than they're working. "So, a few years ago, we bought some quick-swap road patch equipment [standard hot box and crane] and gritter bodies from Econ, mounted on Iveco 18-tonne chassis. Those worked well and replaced a couple of tippers. If there was a frost or ice warning, we could just demount the hot box and fit the gritter."

So pleased was Smith with their performance that last year, when two of his gritters and two gully emptiers fell due for replacement, he decided to look at another combination – pointing out that, if the weather is that bad, gully emptiers tend not to be used. "We'd heard about a joint venture between Econ and Whale Tankers, but, when it came to it, we wanted something slightly different to their demonstrator. That was a short wheelbase unit with a fairly high tank, to match standard gritter dimensions, and we were concerned about axle loadings and stability."

Bespoke development

Smith encouraged Econ and Whale to build their demount systems on a 4.75m wheelbase chassis, in line with its road mender vehicles, which they did using DAF LF55 18-tonners. "That allowed Whale to put a combination jetter and long, low tank on the body, which brought the centre of gravity lower. And Econ increased its body size to eight cubic metres, with the latest specification body for gritting and ploughing."

He explains that changing the body takes about half an hour and involves first raising it off the chassis hydraulically, using controls inside the cab. Support legs are then manually inserted and the chassis driven away. Power for the hydraulic lift system and to operate the equipment comes from the truck's engine-mounted PTO, which was fitted on the production line during build at Leyland.

Smith concedes he was slightly concerned that the dual-role vehicles might be too much of a compromise, but insists that hasn't been the case. "All our feedback is that they're as good as, if not

better than, the gritters and gully emptiers we had previously," he says. "The only thing we had to do was install load monitoring systems. But now we can optimise the use of these vehicles throughout the year and we've saved around £25,000 capital cost and halved our maintenance."

He's not the only transport man convinced of the approach. Fife Council's fleet transport manager Tom Robertson says his authority started moving over to a mix of multi-role and dedicated winter service vehicles a couple of years ago – and has recently been patting itself on the back for their performance in the worst winter since 1963.

"Like everyone else, we used to have gritters all based on conventional 4x2 trucks. Not only did that mean they were out of action for seven months every year, but also, when you get the extreme snow conditions we've had since last November, they

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can't plough. They can manage slush, but not six inches or more of frozen snow and ice that we have to get off before we can even start gritting."

Robertson says that, to handle these conditions and get the traction, the only solution is dedicated heavy 4x4 gritters. Fife went for 12 new Mercedes-Benz Axor 18-tonners, with Econ bodies and serious snow plough attachments.

"We would have been in a real mess without those this winter. However, we also selected a fleet of 15 18-tonne DAFs and 6.5-tonne Iveco trucks, all with demountable specs, capable of running gritter bodies in winter, but also tippers or flatbed-based general jobbing bodies for the rest of the year. They're also all Econ units on quick release hooks with hydraulic couplings," he says.

For Fife, that selection provides the balance and best value for money. "The 4x4s and dual-role 18-tonners are ideal for keeping the main trunk roads clear, whatever the conditions. But, when the worst is over, they're too big to get up the narrow side roads for the clean-up. So then we can bring in the 6.5 tonners, having lifted off the bodies we use for the rest of the year."

Getting the right vehicle specifications

Whichever way you decide to jump, when it comes to buying specialist vehicles you need to exercise common sense. Bob Ritchie, transport services manager at Tayside Contracts, which operates a large and diverse fleet for Dundee City Council, and the councils of Angus and Perth & Kinross, is good value here. He recently bought seven DAF 18-tonne 4x2 six-cube gritters and four 6x4 Volvo 26-tonne nine-cube gritters, all from body builder Cuthbertson.

"You need to look for a vehicle specific to your area that meets your needs," he explains. "Obviously, that means thinking about the engine size and gearbox spec, specifying the minimum and then reviewing what the suppliers offer. The other main thing you have to watch is the axle weights."

Ritchie says it's much the same as for any large truck, with the emphasis on fitness for purpose, but also price, maintenance and whole life cost – but agrees that can be a problem when you're not regularly buying similar equipment. "So your tender document needs to take everything into account. For example, we assess a basket of replacement parts, such as clutch assemblies, exhausts, brake parts, windscreen and headlight units. Service intervals are also a big feature and so is warranty."

Ritchie warns fleet managers to watch for clutches, which can be a problem, "because of the nature of the job in heavy winters", but then says that his most recent purchases were manuals anyway.

"We bought semi-automatic boxes last year, but the upfront price on the autos this year wasn't going to offer the savings we'd hoped for. It's got to be a balance."

So let's run through some of the specifications from our correspondents. St Helens Council's LF55 18-tonners' front axles were uprated to 7.5 tonnes, to avoid axle overloads

when the Econ bodies are fully loaded. Power comes from DAF's 6.7-litre GR184 engine, rated at 250bhp and delivering 950Nm of torque between 1,200 rpm and 1,700 rpm.

Each also has a six-speed manual gearbox and a single reduction rear axle, rated at 11.5 tonnes. Smith says that the council chose manual gearboxes, because road sweepers, gully emptiers and gritters tend to have dedicated drivers who rarely have clutch problems. Beyond that, he also specified vertical exhaust stacks to reduce the corrosive effects of salt, as well as green tinted and heated windscreens, which help keep the cab cool in summer, while clearing ice fast in winter.

Moving on to Fife's 4x4 Axors, they were all specified as standard 3.5–4m wheelbase trucks for six cube gritter bodies having snowplough subframes. Transport manager Tom Robertson says the rest was standard stuff: corrosion-protected, cold formed steel chassis, with reinforced front bumper; 9,000kg rigid drive front and 10,500kg rigid drive rear axle, with twin rear wheels and diff lock; day cab; a minimum Euro 3 250bhp engine, matched to a six-speed manual box, with high and low ratio transfer box; etc. In fact, his Axors are 1829s, equipped with the Euro5 OM906LA 7.2-litre, six-cylinder engines, delivering 286bhp at 2,200rpm and 1,120Nm at 1,200–1,600rpm, through a nine-speed box.

Meanwhile, the 7.5-tonne Mitsubishi Fuso Canter 7C15 that filled a vacuum in North Lincolnshire Council's gully emptying fleet is fitted with equipment from Rioned Wards UK. Head of fleet provision John Luty says: "Its dimensions are similar to some of the 3.5-tonne vans we operate, but it has a payload greater than most 7.5-tonne trucks. This allows it to carry all the jetting equipment, plus a tank of water, while still being manoeuvrable enough to get in and out of our tight terraced streets."

But if money-saving is the primary objective, there are other ways – and it's horses for courses. John Luty, fleet manager for North Lincolnshire Council, says this unitary authority's money-saving breakthrough came when it set up framework agreements with North East Lincolnshire Council, including one to cover all specialist vehicles above 3.5 tonnes.

"When I started here, we had a huge mix of vehicles, so the goal was to start standardising our fleet profile," explains Luty. "Most important, though, we decided we wanted to deal with a chassis supplier, not the body suppliers. Most local authorities buy RCVs [refuse collection vehicles] from RCV body builders, and it's the same for their gully emptiers, gritters and so on. But all the body builders then source whatever chassis. We wanted to turn that on its head. With around 120 fleet vehicles, that would make a big difference to our purchasing power and standardisation."

The authority went out to tender and Mercedes-



Benz secured the contract with its local dealership H&L Garages, Scunthorpe. "So, for the last three years, whether it's been a 7.5 tonne tipper, an 18 tonne road sweeper, a gully emptier, whatever, everything has gone through the Mercedes dealer,"

“There must be plenty of local authorities that could use demounts. You’ve just got to be careful that swap bodies are feasible for the service you have in mind.” Colin Smith



says Luty. “As a result, we’ve enjoyed good prices, great aftersales service, and we’ve saved money on maintenance, training and spares stocking.

“The only downside is that, because we’ve signed a sole supplier agreement, we’re not market testing, so some will say it might not be best value for money. Against that, we’re not putting the man-hours in to evaluate all the permutations every time – and we constructed a good framework deal upfront. Also, we only need to train our gully tanker drivers on one vehicle type and it’s the same for our gritters. And our mechanics have got used to working on specific engines and vehicles, and we know exactly what equipment and spares to hold.”

But has the approach worked, given the specialist body building required? Luty says it has, pointing to his gully emptiers by way of example: “Before the framework deal, we used Fuller Tankers’ bodies, so H&L asked them and others to quote. Since the price difference wasn’t significant, we adopted them again, to maintain standards. Now we’ve got three

18-tonners on Mercedes Axor 1824 chassis and one 7.5-tonner for access around our terraced housing. That’s on a Mitsubishi Canter chassis, again through Mercedes, and I would recommend it for local authorities, because it’s small, economical and maintenance is fairly easy.”

What about multi-purpose trucks? Luty isn’t convinced – at least not for Lincolnshire. “We’ve looked at swap body equipment for alternating between winter salting and gritting, and summer road repairs. But the truth is we don’t do much of that work now, because central government wants us to act as a facilitator, buying services from local construction companies. So they now look after the major road repair schemes and we just use small tippers to repair potholes after winter.”

Luty also suggests that, in this region, although there are periods of low use for gully emptiers, they are operated throughout the winter, so the scope for swap bodies is reduced. Again, vehicle choice is always a case of horses for courses. **TE**