

# Lean MACHINE

With a heritage stretching back more than 70 years, Mercedes' Unimog has become a legend in its own time. Ian Norwell tests the latest incarnation at Millbrook proving ground

As an ultra-capable niche vehicle platform, there's no doubting Unimog's credentials - across all its iterations. And there are many: the chassis has been on the receiving end of Mercedes' global parts cache, which covers just about every on- and off-road vehicle type. So upgrades have benefited from developments throughout the truck-maker's empire.

Its latest Unimog series takes a tour of that parts portfolio and lifts everything from the latest engines to drivetrains and interiors. Which gives the clue to how this specialist, standalone truck range can be designed, built and type approved, and

yet still remain economically viable.

For example, the Euro 6 four-cylinder engine - OM934LA - comes from Mercedes' Atego light truck series. That alone not only saved 300-400kg, but also allowed the truck's balance to be improved. The shorter engine has been moved back in the chassis by over a metre, having a dramatic effect on a 3.85-metre wheelbase vehicle. In particular, it contributes to truly benchmark agility, with some of the most impressive approach and departure angles (44° and 51°), a tipping angle of 38° and a climbing ability of 45° - that's 1:1.

Beyond that, an eight-speed AMT (automated manual transmission) with

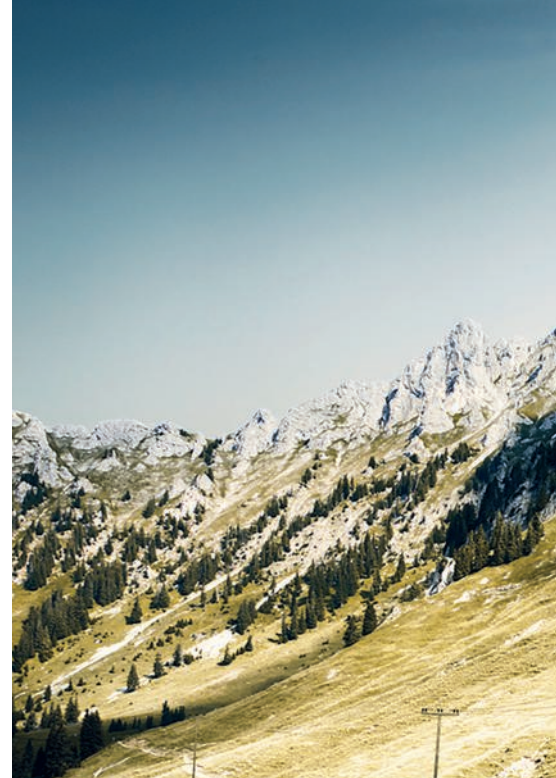
two ranges delivering up to 16 forward speeds and 14 reverse, may sound excessive, but extreme applications call for extreme mechanisms. Anyone familiar with Unimog of times past - where a bewildering forest of levers and gear sticks sprouted from the cab floor - will also be pleasantly surprised with the latest offering. One simple control stalk now manages both the transmission and engine braking.

## TRACTION AND TYRES

What about traction? Dry sand, snow and deep mud require a special approach so Unimog has long deployed portal axles with axle tubes entering the hubs high and off-centre. This is primarily for ground clearance in forestry and mining work, but it has an added engineering benefit. It leaves the centre of the hub clear for centrally controlled tyre inflation/deflation.

Soft sand, for instance, needs a tyre pressure drop, so the driver can now choose one of three pre-sets that go as low as 1.2bar. This is the threshold of tyre grip: any lower and the tyres would need to be bolted to the rims.

In an impressive display of off-road ability at Millbrook, the vehicle proved better able than the average test driver. A very steep descent, executed under instruction from the demo driver, was accomplished with no recourse to the footbrake. The correct gear, and use of the engine brake was sufficient.





Indeed, this is the kind of vehicle that may lead most drivers to wonder about their own abilities, more than those of the truck. So driver training is free when you buy a Unimog - not least because they handle differently once any of an array of bodies and implements has been mounted.

My foray onto the off-road sections at Millbrook was enough to underscore that training should not only be free, but mandatory. My U5023 (5000 series, 230bhp) 4x2 came with a simple dropside body, as well as a Hiab crane mounted behind the three-man cab. So an already high centre of gravity was boosted by the 3.5 tonnes of steel crane - giving an initially rather unsteady feel.

But what an illustration that demo drive was. Angles of lean and descent were tackled with quiet confidence, although I would not have attempted either without the trainer's instruction.

There is no doubt this would be the vehicle to enter a waterlogged Welsh woodland setting to effect overhead

line work - but to do that, training on stability and control would be essential. Incidentally, it's Mercedes' contention that following such a task, Unimog would also be able to travel back to its operating base at 90kph, faster than most other remotely similar machines.

So much for the product: where is it going in the UK? Judging by sales volumes, not very far. But according to Mike Belk, managing director of commercial vehicles at Mercedes-Benz UK, that's about to change. He's behind

a drive to push awareness of Unimog's multi-tasking abilities to a wider audience.

He's expanding the team, too. Bernhard Dolinek, manager of special trucks, now heads up the charge for Unimog. "We will be making a firm business case for this vehicle, and illustrating to customers that a single Unimog, properly specified, can replace several other chassis," he insists. Convincing fleet managers will be the issue. However, with local authorities' ongoing moves to contract out of fleet management - all under the cosh to cut costs - Dolinek may find an open door.

Perversely, to some extent Unimog's vast adaptability plays against it. The result is no mainstream market, but an ability to match the widest range of niches. That said, if buyers are put off by the high chassis price - a 'cooking' U218 4x2 starts at £80,000 - they should look at the maths and factor in not only utilisation, but also the residuals.

In Europe the LHD used market

is many times the size of that for new chassis. Dolinek claims that paying £40,000 for a 13-year-old vehicle is not unusual. That figure acknowledges the fact that a Unimog chassis is just that, something waiting for whatever bodywork and implements, albeit at extra cost.

The agricultural and forestry sectors are probably the biggest current users in the UK. However, sales to all niches in Britain have only run to around 50 units per annum over the last five years. And globally, volumes only manage some 2,500 units. Yes, Daimler has a track record of making niche products pay, but Unimog must be the wildest example.

Either way, those choosing a Unimog will be well advised to take guidance not only on the correct chassis and implements for their intended role(s), but also the impact of DVLA (Driver and Vehicle Licensing Agency) taxation



classes, and appropriate driver licensing. Many will only need a Category B (car) entitlement, but some may require a Category C - and the jobs they will be doing matter, too.

Dealer expertise and recourse to Mercedes-Benz are likely, but, if fleet managers get it right, they may well find that Unimog will cut the mustard. It will get to and from work faster and more

economically, and do several jobs better, while it's there.

I've tested and driven these vehicles on several occasions over the last 25 years and they always impress. Covering any job - from a 4x2 7.5-tonner on light agricultural work, through drawbar operations and up to a road-railer with a towing capacity of 1,000 tonnes - finding a job Unimog can't do is a job in itself. **TE**

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