



Safety in numbers

It's not only truck launches that command attention. Production improvements that bring better functions and safety are worth keeping up with, too. Ian Norwell reports from a quarry near Barcelona

Scania's construction chassis are getting a number of useful modifications, involving both hardware and transmission software, that add to their strength in extreme operations and improve safety. While not alone in such developments – Volvo is hardly backward in coming forward – it's well worth looking at the detail.

The cab is now better protected, with a front bumper that protrudes 130mm (up from 50mm), and headlamps isolated from the steel to reduce the financial impact of a bump. FUP (front underrun protection) exemption has also been underscored with approach, with ramp and departure angles improved. Approach is up from 18° to 25° and departure makes a similar gain. For tipper, the front bumper tow pin load is also significantly increased, from 24 to 35 tonnes (350kN), and extra shielding now further protects the charge-cooler, radiator and sump.

Clearly, the UK market alone would not justify, or even seek, these upgrades, but Scania's forays into the more remote construction and mining sites of the world – inhospitable places, such as Iraq and Afghanistan – certainly do. It is these extreme markets that have bred the extra beef and UK chassis simply get the resulting spin-offs.

Why? Because, in such regions, it is common for vehicles to be dramatically overloaded – double the design weight is not unheard of – with no regulatory authority to police the issue. Robust official weight limits often only appear much later on.

Euro 5 choice

Scania's engine range has been revised, with the nine-litre, five-cylinder unit adding 250hp and 310hp SCR (selective catalytic reduction) variants to its three EGR (exhaust gas recirculation) engines. The 13-litre, six-cylinder motors, with the four EGR

ratings of 360hp, 400hp, 440hp and 480hp, will also get pure SCR versions at the same power outputs – and all at Euro 5.

The company's rationale is that its Euro 6 engines are embracing SCR and the organisation will need to support the technology in the field. So it may as well offer operators the alternative at Euro 5, too.

Although a previous advocate of EGR-only at Euro 5, the Swedish OEM was not dogmatic when it came to technology choice for Euro 6. A move to SCR provision was seen simply as evolutionary. MAN, which has painted itself into a bit of a marketing corner in the UK with its 'Add nothing' campaign, may have more work to do when it comes to the wet stuff.

That aside, apparent only from a close inspection of the Opticruise stalk, there is now an additional 'O' mode for off-road operations. Here, the software has been tweaked to maximise traction and gradient ability. Also, the hydraulic retarder, mounted on the rear of the gearbox – which already produces a peak of 3,500Nm of retardation in on-highway application – now pumps an impressive 4,100Nm.

Improvements were demonstrated on a number of chassis, including some part-time drives, with a 6x4 rigid that had an engageable front axle to make it an AWD affair and a 6x6 that could be dropped down to a 6x2 for highway duties. The extra control provided by the new 'O' mode certainly increases safety on arduous site work and the power of the retarder makes service brakes unnecessary on even the toughest descents.

These mods have been part of G cab production since December and will appear on P cabs from March. As they appear, dealer staff will need to add these to handover procedures or the operator will need to adjust his training programme – otherwise it may not be deployed and go to waste. **TE**