



# Tread carefully

There's more to tyre husbandry than some seem to realise. Steve Banner examines recent developments around tyre brands and types, as well as pressure, tread and condition monitoring

Constant calls to monitor tyre pressures have had worryingly little effect on UK hauliers, says Continental general manager Steve Howat. "Approximately 30% of tractor units and 40% of trailers are running on tyres that are incorrectly inflated," he asserts. "By that I mean the pressure is up to 10% above or below where it should be."

Continental's concerns are widely shared - including by tyre services giant ATS Euromaster. This company cites a survey conducted by Texaco last year, which looked at 500 truck fleets and discovered that only 42% even carried out regular tyre pressure checks.

That is despite the fact that tyres up to 20% under-inflated could cost up to £555 extra in fuel per truck per year, according to ATS Euromaster figures. To that can be added concerns over how long such ill-treated tyres will last, the impact on the casing value and the

extent to which under-inflation affects handling and braking performance.

So what should operators do? As a first line of defence they should ensure that drivers carry out a visual inspection of tyres as part of their daily walk-around checks, looking for foreign objects in the tread, suspicious bulges in the sidewalls and uneven wear patterns.

They should also ensure that pressures are regularly checked, either by their own technicians or others employed by a third party, and findings recorded. Goodyear has launched a mobile app under the eJob banner that allows information on (and photographs of) inspected tyres to be sent directly to its FleetOnlineSolutions tyre system.

Such systems work. Pet food and equipment retailer Pets at Home, for example, now relies on ATS to record the condition of every tyre fitted to its fleet, using an electronic data capture system. Results are then analysed, with pressures and tread depth among key metrics. But

the analysis also looks at the tyre brand fitted and the extent to which this reflects the company's agreed tyre policy. "This allows us to monitor our projected costs and usage on a daily, weekly or monthly basis," explains Pets at Home transport manager Campbell Baxter.

Interestingly, he adds that, no matter what sizes are selected, tyres last longer if they are turned on the rim and twinned to ensure even wear is maintained - a service ATS also provides to Pets at Home. It re-grooves them, too, extending their life by 25%. Says Baxter: "We're already seeing a reduction in costs." And he adds that the ATS report also shows any tyre or wheel damage, missing valve caps and broken or missing wheel nut indicators, as well as the percentage of retreads on the fleet.

Why? One drawback of employing retreads is that they may not offer the same wet grip or rolling resistance as the tyres on which they are based. Goodyear is attempting to address this by offering

**The UK truck market is starting to swing towards 315/70 R22.5 and away from 295/80 R22.5 tyres due to the former's greater ability to cope with the extra weight that Euro 6 imposes on steer axles**

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TreadMax hot-cure versions of its KMax and FuelMax tyres, which, it says, use similar materials and identical tread designs to the new tyres they replicate.

Once again, however, performance depends on pressures. There are various aids. Continental has been developing its ContiPressureCheck onboard tyre pressure monitoring system – with Automatic Trailer Learning the most recent addition. The latter enables a tractor unit to identify and monitor all tyres on a trailer every time one is swapped. Meanwhile, Bridgestone reports that its pressure monitoring system, used by Arla Foods as part of a fleet agreement, has contributed to a 30% cut in call-out times.

Another means of alerting fleet engineers to pressure problems is through a depot-based monitoring system, and one such launched by WheelRight is worth checking out. Fitted flush to the floor, it employs software to process data collected by sensors, and calculates tyre inflations as vehicles are driven over it. The results can be emailed

or texted to the fleet engineer seconds later. At time of writing, the system is on trial at Keele Services on the M6. Drivers who use it can see their tyre pressures displayed on a touchscreen or print-out.

**TYRE CHOICE**

But choice of tyre is also important – and there are useful developments. Michelin, for example, recently unveiled the 385/65 R22.5 X Line Energy F long-distance super-single steer tyre, claimed to offer lower rolling resistance than its predecessor, plus an increase in mileage of up to 15%. Also new from Michelin are additional sizes and tread patterns for its X Multi 17.5in and 19.5in range, said to be 50% quieter.

Perhaps the most telling development from Michelin, however, is its offer of a guarantee against financial risks of tyre damage on its on/off-road X Works range. If problems occurs before the tyre is 50% worn, a refund is offered based on the remaining tread and assuming a purchase price of £400.

Michelin's aim is to counteract the

view of many operators working in the construction and waste sectors that they might just as well fit a budget tyre as a premium unit, since both are equally vulnerable to damage off-road. "A Michelin X Works tyre is far more robust," insists commercial director Guy Heywood. "Our on/off-road casings are designed to withstand this punishment."

Heywood is critical of some tyre manufacturers that he claims develop products to meet the mandatory tyre label requirements only when new, disregarding what happens later. "What matters is how a tyre performs throughout its life, from the first to last millimetre of legal tread depth."

He cites tests commissioned by Michelin and carried out in Germany by TÜV SÜD, which pitted X Multis against equivalent tyres from four rival premium manufacturers. All the tyres were two-thirds worn and rated either 'B' or 'C' for wet grip. The tests showed that, on average, the Michelins outperformed their rivals by 13m in wet braking.

Most UK hauliers do not tackle long-distance European runs, so are likely to be more interested in tyres such as Continental's recently introduced Hybrid tyres (steer, drive and trailer), aimed at regional applications. The nature of the work – running up and down A roads and motorways – means tyres have to be durable, so a claimed 20% increase in service life for the Hybrid HD3 drive axle tyre, thanks to a new block design and rubber compounds, sounds appealing. Operators can expect up to 6% fuel improvement, too, Conti adds.

Also claiming better economy is Michelin Solutions, with its pence-per-kilometre tyre contracts: for the first time, these include a fuel-saving commitment. If the savings do not materialise, the operator is reimbursed – assuming trucks are running on Michelin energy-efficient tyres and at least 70% are equipped with telematics. [TE](#)