

Max factor

Goodyear is promising major mileage and rolling resistance benefits from its latest long-haul tyres. John Challen looks at the science behind the rubber

Across its divisions, Goodyear says it intends to boost growth by 10–15% through 2016. A major contributor to the world's third largest tyre manufacturer reaching this goal will be its commercial vehicle offerings. So, having launched new products for coaches, Goodyear has now shifted its attention to transport operators, fully aware of their cost pressures.

In a recent Goodyear-commissioned survey, one of the findings was that tyre choice is based on proven performance more than application.

Henry Johnson, vice president of the commercial tyre business in emerging markets and Europe, says this, together with rising fuel prices, focused the development team. "We are also seeing stricter legislation, while the introduction of Euro 6 vehicles creates a need for different tyres to cope with heavier front axles," adds Johnson. "And we see growing demand for green technology."

The result: two truck tyre lines replace the outgoing Marathon LHS II and LHD II. Dubbed Kmax and FuelMax, each is claimed to offer up to 35% more mileage, while reduced rolling resistance saves 10% on fuel bills, compared with its previous long-haul radials, according to the manufacturer.

Goodyear's IntelliMax Rib Technology features on Kmax steer tyres (Kmax S), while drive tyres (Kmax D) get IntelliMax Tread. "Rib gives optimal tyre pressure distribution to ensure regular wear and high mileage," explains Henk van Tuyl, Goodyear Dunlop's director of tyre technology. "The tread pattern features a stiffener – a bridge in the centre groove that ensures less movement in the tread pattern – enabling higher cornering forces and giving more handling feel. It also cuts tread slip, allowing higher mileages." And van Tuyl adds that wider shoulder ribs offer greater wear resistance on regional and urban operations.

Meanwhile, IntelliMax Tread uses two tread

compound layers – the top formulated to withstand wear, while the lower layer dissipates heat to reduce rolling resistance. "We have also introduced waffle blade technology to optimise the balance between mileage and traction," says van Tuyl, who claims this will give its drive tyres good all-weather performance.

As for Goodyear's FuelMax fuel efficiency-centred line-up, again there are drive, steer and trailer variants. The drive tyre features a

directional tread design, blades cut into the tread to improve traction and handling, and semi-open shoulders, which help to achieve a 3dBA noise reduction.

"We have also introduced hidden tread patterns to optimise performance and rolling resistance," says van Tuyl. "When the tyre is 50% worn, more grooves appear in the tread and six ribs are visible. By 75% wear, four ribs remain to retain wet grip performance."

In a further development affecting both Kmax and FuelMax lines, Goodyear says that retread versions of the new tyres will be available from launch. Drive tyre retreads – using the brand name TreadMax – will be available in 315/8022.5 and

315/7022.5 sizes, with 295/80R22.5 and 60 series versions to follow. Trailer tyres will be offered in 385/6522.5 and 385/5522.5 TreadMax rubber, with the later addition of 435/50R19.5.

"Until now, truck operators have had to buy new tyres to experience the latest products," comments Leszek Szafran, director of Goodyear Dunlop's retread operations. "With TreadMax Kmax and FuelMax, those benefits are available now." 



Both the Kmax (above) and FuelMax (left) are said to deliver up to 35% more mileage and 10% fuel saving