Going round

The tyre industry is not one to stand still. John Challen discovers a new generation of rubber for commercial vehicle fleets set to bring benefits in efficiency and longevity

abelling might have been the biggest story in the tyre industry in recent months, but the manufacturers haven't let that allow them to take their eyes off the ball when it comes to new rubber. And the evidence of that: the Hannover IAA commercial vehicle show, in September, saw several new tyres reach the light of day, many exhibiting characteristics that go way beyond the labels' myopic focus on rolling resistance, wet grip and noise.

Goodyear, for instance, made a move into coach tyres, with the arrival of the Marathon Coach and Ultragrip Coach tyres. Why? "Our LHS2 long-haul steer tyre was previously used as a fitment for coaches, because it had similar properties to a coach-specific product," comments Adam Stanton, product marketing manager for commercial tyres at Goodyear Dunlop Tyres UK. "But in our research, we found that, while the market didn't want specific coach tyres, they were looking for innovations that we didn't offer in our long-haul truck tyres."

One example is the Marathon Coach's asymmetric tread design, which suits coaches' typically non-uniform load repetition. "You see 15 children on a coach and they all sit at the back. Then, for other journeys, the vehicle is only half-full," explains Stanton. "Such situations lead to irregular wear patterns and also shoulder wear. So we have developed a stronger outside rib, designed to counteract this."

Goodyear tests report a flatter wear profile with the new coach tyre – meaning operators can gain extra tyre mileage and a reduced cost per kilometre. And it doesn't stop there: another technology being rolled out with Goodyear's coach tyres is Silefex – launched in 2011 on its long-haul tyres. Essentially a mix of silica fillers and natural rubber, it is said to help optimise rolling resistance, so putting the tyre right up there in at least one label category.

But Stanton insists that what Goodyear is doing is not solely about topping the grades on the three new tyre label criteria. For example, he points to the



firm's Marathon tyres when coaches tackle snowy road conditions. This, he says, has been developed to be as quiet as possible, offsetting the extra noise generally generated by winter tyres. However, it still only scores a 'D' – not that Stanton is overly concerned.

Fuel saving?

"The new gradings are based on summer conditions, not winter. So it is still a good score for a winter tyre," he insists. "We design all our products to meet more than 50 criteria and would never develop a product just to hit a certain grade. For a mixed service tyre, the primary concerns of the operator will always be traction, retreadability and mileage – none of which is on the label."

The point is well made – although another key operator concern is invariably fuel consumption, too.



in circles?

Hence, the new label's focus on low rolling resistance as one parameter measured. And hence also the fact that all of the major tyre manufacturers offer tyres that score well in that category.

Michelin is among the most vociferous, with its latest long-haul, low rolling resistance offering being the X Line Energy range. Following tests in its home country, the French manufacturer claims that the

new tyres can reduce fuel usage by 515 litres over 130,000km, corresponding to a saving of around €644 (£515), and 1,371kg of CO₂. The test vehicle was a 40-tonne, five-axle tractor-trailer.

Key to the improvements are three new tread designs and a re-optimised tyre casing, designed to help keep the temperature low, thus reducing rolling resistance and risk of tyre damage and/or failure. But there's more: to improve wear characteristics, Michelin has employed a fiverib structure in the tread pattern for both drive and steer variants of the tyre.

This, says the company, is worth a saving in tyre wear of around 20%. The drive tyre also features optimised sipes for improved wet breaking.

Meanwhile, the X Line Energy's trailer tyres have a longitudinal groove, said to improve lateral grip. Also, the addition of a new carbon compound is claimed to improve wear by 12% over the current offering, the X Energy SaverGreen. It is also the first tyre, says Michelin, with an 'A' rating for rolling resistance.

Fit for purpose

Following the development of nextgeneration, fuel-efficient and greener tyres comes maintenance and repair. And although, for onlookers, this may seem the less glamorous, 'necessary evil' side of the business, for those in the business it's timecritical, low margin and unsung.

Bridgestone's Andy Dingley believes that technicians providing tyre services to commercial vehicle fleets feel undervalued – particularly with the transport industry pushing for every possible cost-saving. "Fleet service providers are at the coal face of fleet contracts," he says. "It's always their people who have to respond to call-outs and breakdowns – often also going about their work in potentially hazardous conditions."

But that level of service is not reflected in financial rewards. The current charge for tyre replacement call-outs (around £50) is far lower than the £180-plus for a vehicle dealer breakdown call-out.

And that is leaving tyre service organisations such as TyreWork (a member of the Bridgestone Truck Point network) to operate at ever decreasing margins – something that cannot be sustained in the long term, says Dingley.

"TyreWork provides tyre service for Bridgestone fleet customers in the south east and undertakes the task of keeping them moving, despite tough industry conditions," he comments. "Their work is essential, but not necessarily well understood by the fleets they service. As a result, it is hugely

undervalued. Some middle ground between unsustainably low prices and a total withdrawal can – and should – be found, but no-one welcomes price increases."

For Dingley, context is everything, so comparing tyre fitting call-outs with mechanical roadside attendance helps make the case. The expectation for tyre replacement, he observes, is a 60–90 minute turnaround. On mechanical call-outs, however, drivers might spend hours waiting to get back on the road.

This means that tyre service firms have to hold major stocks to ensure that the correct tyre is available within the required time window. "At any one point, stock covering many brands and 3,500 product lines is held within the TyreWork network. This is an enormous asset, but also a large financial cost," argues our Bridgestone man.

Further essential investment comes in the form of TyreWork's van fleet and its staff training to ensure competence. "Changing fleet tyres carries a large element of risk, as the work is often carried out on the hard shoulder – the most dangerous part of the motorway. So the competence and awareness of the fitter need to be extremely high," explains Dingley.

"For Bridgestone, the top priority will always be the safety of the fleet and service provider, ensuring that we can provide a high standard of roadside care efficiently," he emphasises. "All of this must encompass meeting demand and the guarantee that employees are highly skilled for less than a third of the cost of a mechanical breakdown. But that's a tight and somewhat difficult balancing act to maintain."