



Rubber

As fleet management gets more complex, some aspects are contracted out: that's certainly the case with the rubber your fleet rolls on. Ian Norwell looks at the cost of getting it wrong

Busy fleets don't have the luxury of having their trucks and trailers all gathered together at any one time, just for the convenience of a fleet inspection by their tyre service contractor. But speaking to tyre manufacturers and service providers, there are some clear messages about the importance of finding a way.

Continental's commercial fleet sales manager Tony Stapleton confirms that getting access to fleets can be an issue: "Tyre inspections are a vital part of our fleet management service, but actually getting contact with the tyres can be a challenge." And acknowledging that it's also an issue for fleet managers, he adds: "If you run 1,000 vehicles on intensive trunking operations from several sites, we understand that you're not in the business of having vehicles standing still. Even so, managing tyres is a partnership and it needs some co-operation."

Talk to a European fleet manager – who does not have the six-weekly inspection regime to contend with – and you'll discover that their tyre checks are often only done two or three times a year. In the UK,

however, Continental's managed contracts aim at a fleet inspection every 30–60 days, depending on application. Why? Stapleton says there are four key objectives: to complement driver checks; support compliance; plan maintenance; and to schedule tyre replacement. If fleet managers don't actively work to enable access for tyre service providers – instead treating them as a poor relation – it's only their own bottom line that will suffer, he observes.

Most large fleets' engineers agree that the complexity of tyres and their maintenance demand a specialist. The variations of drive, steer and trailer axles, turning them on their rims at the right moment, and specifying the right tyre in the first place all serve to emphasise the point. And when you consider the cost of getting this even a little wrong, it's an attractive route.

Contracts based on PPK (pence-per-kilometre) are the most popular, not least because it's in the provider's interests to ensure good maintenance and sweat that asset. Pay-as-you-go contracts have the operator owning the tyres and paying only for their management, but a PPK contract will leave the tyre ownership with the manufacturer and have them responsible for their management, too. Also, today, more fleets seem to be going for a service provider, such as ATS Euromaster, that is not tied to any one brand. Fleet engineers like their neutrality.

Keeping up the pressure

What about the detail? Well, letting tyre pressures drift will lead to higher rolling resistance, uneven wear, reduced control and longer braking distances. These all impact negatively on fuel consumption, tyre life and safety. Tyre pressure monitoring (TPM) is commonplace on cars, where it is soon to become mandatory. That trend must surely be putting the truck, bus and trailer industry on notice.

Michelin's UK technical manager Brian Porteous says the company is trialling an RFID (radio frequency identification) system for TPM. "The technology is working well, but we are also concerned with how the data is presented and to whom. If you don't get this aspect right, you will fall at the last fence."

Porteous is also concerned that any TPM system should not be regarded as a substitute for the driver walk-around check. "As systems become available, fleets must be careful not to let drivers think that the job of checking tyres has been taken out of their

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hands. This is absolutely not the case.” So, while technology has enabled the driver to confidently check his oil level from his seat, a visual check for tyre defects is still his or her responsibility.

When it comes to who should be developing TPM – which costs money – there’s a risk that both the truck manufacturer and the tyre maker could be leaving it to the other party. Truck makers’ systems tend to use aberrations in wheel rotation, garnered from the ABS sensors, while tyre firms seem to be going for pressure and temperature sensors bonded into each tyre. As volumes increase, the cost must surely drop, but it is currently being absorbed in the name of marketing advantage.

Pirelli’s Cyber Fleet, for example, allows integration with a telematics system, enabling real time data capture and transmission to a database. Any anomalies in tyre temperature or pressure can be signalled immediately to the driver and the fleet manager. That’s one way, but Continental’s Stapleton believes that pressures can be managed at service inspections. “Our inner liner technology can maintain a tyre pressure between six-weekly inspections, without the need for a yard-based fleet check.”

However, technology is moving on there, too: “We have a sensor system that has just started going into UK fleets,” says Stapleton. “It’s embedded in the tyre; it has an eight-year battery life; and it could spell the end of a job for fleet check men.”


Expensive errors?

So far, so good, but what about retreads? New tyres have changed a lot in the last 10 years, but so have humble retreads. Once a quick-and-dirty solution for

those on tight budgets, they now have a strong green card to play and the quality is there, too. Richard O’Connell, director of Bandvulk, one of the UK’s best-known re-treaders, is pragmatic about the image. “It’s true that they’ve been viewed as a lesser quality product in the past, but that’s an outdated perception and the figures speak for themselves.”

He would seem to be right. Of the 2.2 million truck tyres sold in the UK last year, one million were retreads. That’s hardly niche. O’Connell goes on to point out that the figure for retread usage rises to 70% in Sweden – not a country known for sloppy safety standards. He also observes that the aircraft industry uses little else.

Part of the image issue is probably the idea that shabby old cases that have been put through hell on an eight-wheeler get reworked, a rub over with carbon black, and then end up on your drive axle. This was probably never the case, but now the quality gates that tyres need to get through for the second trip around are far tougher than many might believe. “We have acceptance criteria that refuse any case that is defective. We don’t need to take poor quality cases, and our ultrasound and X-ray equipment reveal problems with many tyres that look fine to the naked eye,” comments O’Connell.

Thoughts to mull over, then. So what about those outsource contracts? Michelin’s Porteous says that fleet managers can and should still be involved. “Even though we speak to accountants as much these days, we like fleet engineers to be properly involved in the process and we love to give our knowledge away. It helps them understand why we say what we do,” he insists. 

Above: the Conti PressureCheck sensor inner liner

**Left: retrofitting a tyre pressure monitoring system
Right: all you need for the Conti PressureCheck fitment**

