

INTEGRATED VEHICLE TIRE MONITORING

Install WABCO IVTM™ on your trucks, trailers and buses
for cost savings and safer fleet operation



DEVELOPED IN CO-OPERATION
WITH MICHELIN

WABCO

WABCO INTEGRATED VEHICLE TIRE MONITORING

WABCO IVTM™

WABCO's Integrated Vehicle Tire Pressure Monitoring (IVTM™) system is a simple, cost-effective solution that **lowers fleet running costs** while improving vehicle safety. It provides the driver with constant updates of tire pressures directly from each monitored wheel.

Operating with correct tire pressures sounds like a straightforward task but the reality is frequently very different – especially for large fleets operating many multi-axle vehicles.

It isn't always easy to spot incorrect pressure but the effects of failing to correctly inflate tires are all too apparent. Research by Michelin shows that a **15 percent over- or under-inflation can reduce the lifespan of a tire by 10 percent**. Moreover, an under-inflated tire is likely to see sustained heat build-up and be at much greater risk of terminal damage to the carcass. And, when it comes to replacing tires, the costs are significant.

COST SAVINGS

Using IVTM™ reduces the risks of tire failure from incorrect inflation and thus reduces the number of replacement tires fleet operators need to purchase. IVTM™ also **detects slow punctures** early, giving the fleet operator a better chance of repairing – rather than replacing – a damaged tire.

But tire life isn't the only cost saving associated with tire pressure monitoring. **Fuel costs** are the largest variable cost for fleet operators, and with diesel prices rising, good fuel economy is more important than ever. Industry research confirms that the greater rolling resistance of under-inflated tires leads to a significant decrease in fuel economy – as well as an increase in CO₂ emissions. Conversely, ensuring tires are correctly inflated provides a fuel saving of up to 2 percent.

ENHANCED SAFETY

Incorrect tire pressures not only are expensive but also **dangerous**. In the most extreme circumstances, the risk of a sudden tire failure is considerably higher in a vehicle that doesn't have its tires correctly inflated. It is dangerous not only for the vehicle but also for other road users who may encounter debris. More common is the deterioration in handling characteristics and the **longer braking distances** caused by under-inflated tires.

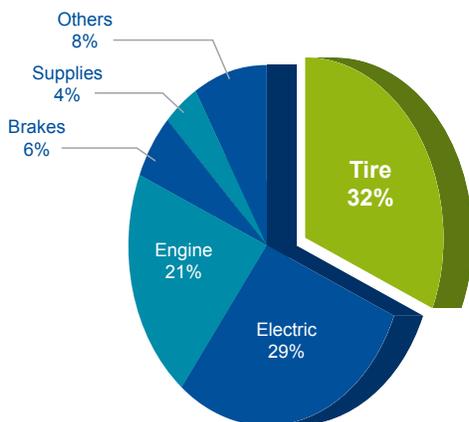
TPMS Technologies show significant promise for improving safety and reducing costs in the commercial vehicle industry. Improving tire pressure management directly relates to improved vehicle stability, reduced tire wear and damage, better braking, improved fuel efficiency and fewer roadside breakdowns – and thus enhanced safety and cost effectiveness. Improving tire pressure maintenance and general tire management can have a direct and substantial impact on carrier productivity as it relates to downtime and road calls. Source: FMCSA

“A constantly 17% under inflated tire can lead to 2% fuel increase”

Source: Michelin

VEHICLE DOWNTIME

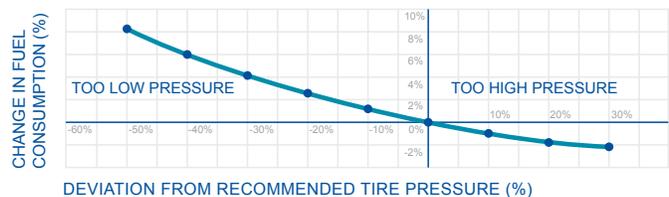
Tire defects are the most common reason for commercial vehicle downtime



85% of tire pressure loss starts with a small leakage that could be detected with an IVTM™

FUEL EFFICIENCY

17% tire pressure reduction leads to about 2% increased fuel consumption



SOURCE: MICHELIN

TIRE LIFE

A deviation of 15% from the recommended tire pressure leads to a reduction of tire life of > 10%

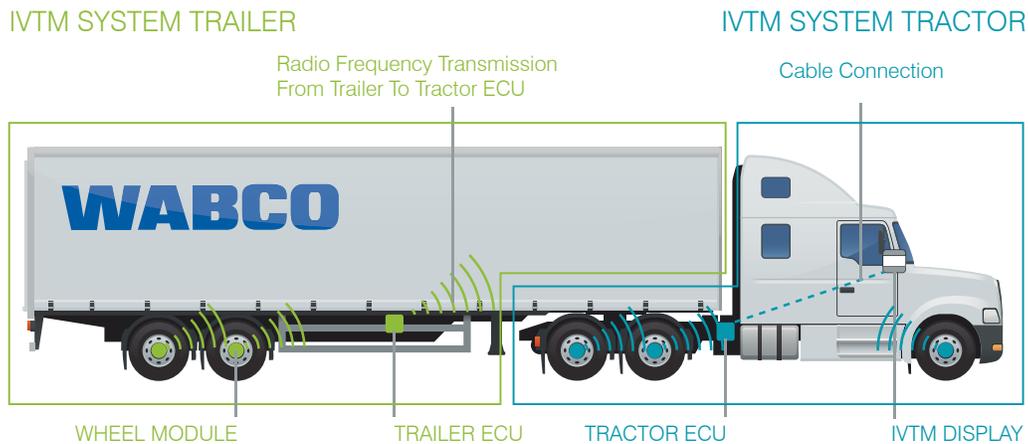


SOURCE: MICHELIN

FAST AND EASY RETROFIT

Retrofit can often mean 'complicated' but in the case of WABCO's IVTM™ it really couldn't be simpler. Wireless technology as well as easy integration with existing systems assures that installation of IVTM™ can be completed within the normal maintenance cycle. Tires aren't removed from the rim in the process, and the external sensors do not risk damaging tire integrity. In fact, fleet downtime to fit the system is negligible.

The WABCO IVTM™ solution uses wheel-mounted sensors to monitor tire pressures in real time. The information is transmitted wirelessly to the Electronic Control Unit; the driver is informed about incorrect pressure either through an easily-affixed dedicated WABCO display or an integrated display (if available).



FOR A WIDE RANGE OF VEHICLES

WABCO's IVTM™ system is designed to work with different commercial vehicles from light trucks up to combinations with 92-wheels. No matter the size, Integrated Vehicle Tire Pressure Monitoring can deliver a safer driving environment while reducing operating costs and lowering fleet downtime. When used with telematics IVTM™ will deliver information directly through the J1939 data bus.

ORIGINAL EQUIPMENT MANUFACTURERS' CHOICE

Fleet operators choosing to retrofit the WABCO IVTM™ system can do so with the confidence of knowing they are

buying parts approved by Original Equipment Manufacturers. Indeed, as a preferred supplier to the Original Equipment market, many compatible WABCO systems are also installed by Original Equipment Manufacturers as factory-fit options.

EASY OPERATION

Thanks to long-life batteries, IVTM™ has an industry-leading operating window of up to nine years. For many fleets the only time the WABCO IVTM™ system requires attention is when swapping it to a new wheel or on to new vehicles – both of which are straightforward processes.



THE BENEFITS OF WABCO'S IVTM™ SYSTEM:

EFFICIENCY

- Tire life increased by up to 20 percent
- Fuel consumption reduced by up to 2 percent
- CO₂ emissions reduced
- Slow leaks spotted early, allowing for tire repair rather than replacement
- Reduction of vehicle downtime

SAFETY

- Improved vehicle handling
- Shorter braking distances
- Reduced risk of sudden tire failures
- Reduced risk of vehicles stranded at the roadside

OPERATION

- Simple to fit
- Wireless operation
- Long-life batteries – up to nine years before replacement
- Easily transferred to other wheels or other vehicles
- Trusted and approved by leading OEMs

INTEGRATION

- Links trailers seamlessly to IVTM™-equipped truck
- Works with telematics to report directly to Fleet Managers
- Compatible with many other WABCO systems



CALCULATE YOUR SAVINGS

To use our ROI calculator for a calculation of how WABCO IVTM™ can save you money and keep your fleet safely on the road, visit wabco-auto.com/ivtm



WABCO (NYSE: WBC) is a leading global supplier of technologies and control systems for the safety and efficiency of commercial vehicles. Founded over 140 years ago, WABCO continues to pioneer breakthrough electronic, mechanical and mechatronic technologies for braking, stability and transmission automation systems supplied to the world's leading commercial truck, bus and trailer manufacturers. With sales of \$2.5 billion in 2012, WABCO is headquartered in Brussels, Belgium. For more information, visit:

www.wabco-auto.com

DISTRIBUTOR:

IVTM™ is a trademark of Michelin

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