



REMIX 2
MICHELIN
CONFIRMS ITS
COMMITMENT
TO TRUCK RETREADING

PRESS KIT
FEBRUARY 2025





MICHELIN CONFIRMS ITS COMMITMENT TO TRUCK RETREADING

***A PREMIUM MULTI-LIFE CASING
WITH REMIX® 2 NOW
AVAILABLE FOR THE MICHELIN
X MULTI RANGE***

Backed by over 100 years of experience in retreading and thanks to the robustness and endurance of its casings, Michelin is expanding its **REMIX® 2 RANGE TO INCLUDE A SECOND PREMIUM NOMINATIVE HOT RETREAD FOR THE MICHELIN X MULTI RANGE.**

Combined with regrooving, **REMIX® 2** gives truck tires several lives.

With **REMIX® 2**, Michelin is helping make haulage more sustainable by delivering the best balance between service life, performance, safety and operating costs.

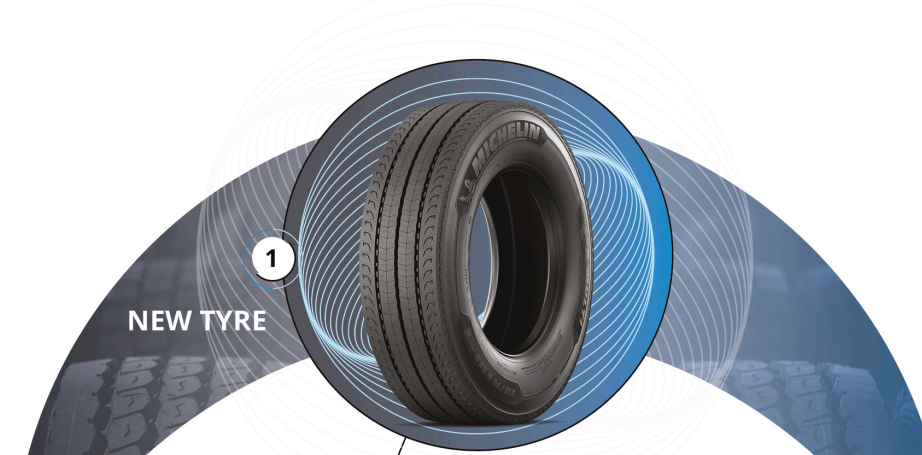
.01

WITH REMIX® 2, MICHELIN IS HELPING MAKE HAULAGE MORE SUSTAINABLE BY DELIVERING THE BEST BALANCE BETWEEN SERVICE LIFE, PERFORMANCE AND OPERATING COSTS

Combined with regrooving, REMIX® 2 gives truck tires several lives!

With REMIX® 2, Michelin extends the life of tires through cycles of new, retreaded and regrooved tires.

This process can increase tire service life by **375%**, providing safe, high-performance tires with reduced operating costs. In addition to extending tire service life, these processes help protect the environment by reducing the use of raw materials and CO₂ emissions.



1ST REGROOVE

- Up to 5% less fuel⁽¹⁾
- Up to 25% more mileage⁽²⁾
- Safety and grip⁽³⁾
- Save up to 251 kg of CO₂⁽⁴⁾



1ST RETREAD MICHELIN ↔ REMIX

- Up to 100% more mileage⁽⁵⁾
- Save up to 115 kg of CO₂⁽⁶⁾



2ND REGROOVE MICHELIN ↔ REMIX

- Up to 5% less fuel⁽¹⁾
- Up to 25% more mileage⁽²⁾
- Safety and grip⁽³⁾
- Save up to 251 kg of CO₂⁽⁴⁾



2ND RETREAD MICHELIN ↔ REMIX 2

- Up to 100% more mileage⁽⁵⁾
- Save up to 115 kg of CO₂⁽⁶⁾



3RD REGROOVE MICHELIN ↔ REMIX 2

- Up to 5% less fuel⁽¹⁾
- Up to 25% more mileage⁽²⁾
- Safety and grip⁽³⁾
- Save up to 251 kg of CO₂⁽⁴⁾

⁽¹⁾ 5.4% save in fuel consumption: internal study carried out at the Michelin test tracks in Ladoux (France) on 5 May 2021, under DEKRA supervision (report No. 21CPAEXT-030). For the comparison between new tyres and regrooved tyres (R5 mm), two identical Volvo FH500 trucks were used, fitted with 315/70 R 22.5 MICHELIN X[®] Line Energy[™] Z2 & D2 tyres and each towing a fully loaded (40 tonnes) Schmitz Cargobull trailer fitted with 385/55 R 22.5 MICHELIN X[®] Line Energy[™] T tyres at identical pressures (8.5 b, 7.5 b and 9.0 b). Results may vary depending on weather conditions, road type, tyre size and driving style.

⁽²⁾ Compared to a worn non-regrooved MICHELIN tyre. Information based on the recommendations made by the French tyre manufacturers' federation (TNPF) in 2019, according to which the regrooving of worn tyres increases tyre life by using all the available rubber.

⁽³⁾ On wet ground, regrooved tyres offer approx. 10% greater transverse grip and traction compared to the same worn tyres. Internal study carried out by Michelin on a polished concrete track at Ladoux (France) in 2010; results may vary depending on the actual conditions of use.

⁽⁴⁾ The CO₂ savings from the Michelin multi-life model, are accentuated thanks to the fuel savings linked to regrooving (up to 5.4%). According to a study under real conditions of use (using 315/70 R 22.5 tyres fitted to the drive and steering axles of a 4x2 truck used for international and national long distance, that have exceeded 50% wear), the average mileage for MICHELIN X[®] Line Energy[™] Z2 and MICHELIN X[®] Line Energy[™] D2 tyres is 232,200 km before regrooving. **Michelin internal source and calculation, based on measurements taken by the Michelin teams during customer inspections on 488 axles, in Austria, Belgium, Croatia, the Czech Republic, France, Germany, Greece, Hungary, Italy, the Netherlands, Poland, Portugal, Romania, Serbia, Slovenia, Spain, and Turkey, over the period from 2020 to 2023), with a simulation based on the results collected suggesting extrapolation of the lifespan until 3 mm remains. The results may vary depending on the weather and road conditions. The view is that our tyres travel up to 25%⁽⁵⁾ further thanks to regrooving, i.e. 58,050 km (232,200 x 25%). The fuel savings are calculated over the distance travelled by the regrooved tyres (58,050 km) at an average consumption of 29.5 l/100 km for new tyres and 27.9 l/100 km for regrooved tyres (source: DEKRA report No. 21CPAEXT-030). 29.5 x 5.4% i.e. a saving of 1.59 l/100 km for an articulated truck and trailer (thus 12 tyres). Consequently, there is a saving of 0.13 l/100 km per tyre (1.59 l/12). i.e. 0.13 l x 58,050 km/100 = 77 litres of fuel saved when driving on regrooved tyres, thus a saving of 77 litres of diesel x 3.24 kg of CO₂ = 251 kg of CO₂. The emissions factor of 3.24 kg of CO₂ for 1 litre of diesel comes from the life cycle assessment conducted by ADEME for pure diesel. It includes emissions during the diesel production stages (17%) and during its combustion (83%). Source: ADEME, Base Empreinte, Etude Carbone, Version 22.0.0, 02/08/2022. Thus 77 x 3.24 kg of CO₂ = 251 kg of CO₂.

⁽⁵⁾ The tread compound and pattern of MICHELIN Remix[®] tyres are largely the same as those used for new MICHELIN tyres. 90% of the MICHELIN Remix[®] tyre range is manufactured using the same mould and the same materials as new MICHELIN tyres and therefore perform equally well. According to internal tests conducted by the Michelin Research and Technology centre and customer testimonials collected in Europe since 2015.

⁽⁶⁾ The CO₂ savings from the Michelin multi-life model are also accentuated by the raw material savings linked to retreading. In terms of material savings, the average weight of a new MICHELIN tyre is 70 kg*. The weight of a tyre ready to be retreaded weighs 50 kg* on average. The CO₂ impact from a retreaded tyre is linked to the material savings, i.e. 50 kg of raw materials saved, or 115 kg of CO₂ at a rate of 2.3 kg of CO₂ per kg of raw materials.

*Internal study based on the MICHELIN truck tyre sizes most sold on the European market: 315/80 R 22.5, 315/70 R 22.5 and 385/65 R 22.5.

**According to a TNPF publication from 2023 "retroding, which, by reusing the casing that represents approximately 70% of a tyre's weight" (sic). As a result, 70% of 70 kg = approximately 50 kg.

***The emissions factor of 2.3 kg of CO₂ for 1 kg of tyre comes from the life cycle assessment calculations for the cradle to gate production of a tyre, conducted internally by Michelin using the calculation rules developed by the tyre manufacturing profession (via the global body, the Tyre Industry Project (TIP), which brings 10 tyre manufacturers together around sustainable development themes). It includes the extraction of raw materials, transportation, manufacturing, and distribution stages. Source: UL Environment Standard, "Product Category Rules for preparing an Environmental Product Declaration for the product category: 'Tyres', v3.05, February 2022. Thus 50 x 2.3 = 115 kg of CO₂.

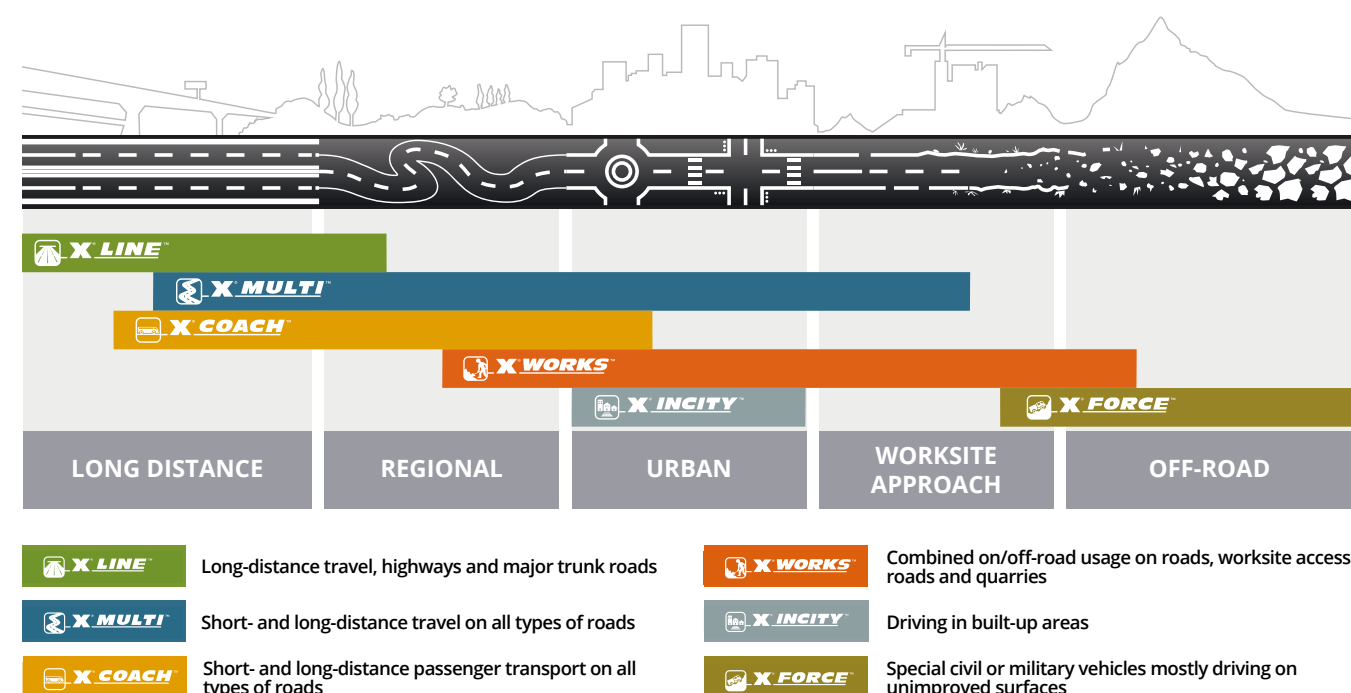
.02

WITH THE EXPANSION
OF ITS REMIX® 2 RANGE, MICHELIN
NOW OFFERS A SECOND PREMIUM
HOT RETREAD ON ITS MICHELIN X
MULTI RANGE

MICHELIN X MULTI range added

Michelin strengthens and expands **REMIX® 2** to the MICHELIN X MULTI range, the most versatile and best-selling range in Europe.

Following on from the X INCITY range for urban transport and the X WORKS range for use on rugged terrain, a second hot retreading process is now available for X MULTI sizes 315/70 R 22.5 and 315/80 R 22.5.



54 original casing profiles with the following tread patterns added to
REMIX® 2: X MULTI D, X MULTI HD D, X MULTI GRIP D.
New drive axle sizes and tread patterns available for the X MULTI range
(multi-purpose, all-road use)

REMIX® 2 now covers multi-purpose uses on all types of roads – highways, trunk roads, short journeys and country tracks – and in all weather conditions. Michelin now offers a complete and diversified range of products for freight transportation.



A second nominative hot retread

Michelin offers its customers a second nominative hot retread by collecting their casings and returning them retreaded as **REMIX® 2**.

To be eligible, original casings must be no more than 10 years old for X MULTI and X INCITY ranges, and no more than 8 years old for the X WORKS range.

Available in Europe







The expanded **REMIX® 2** range is available in France, Benelux, Germany, Austria, Switzerland, Italy, Spain and Portugal, at the same price as a first retread.

Hot retreading is carried out in Europe at plants in Homburg (Germany), Valladolid (Spain) and Stoke-on-Trent (United Kingdom).

Substantial savings, mileage performance, robustness and mobility, sustainability and ecological transition

The Michelin REMIX® 2 range extends tire service life, thereby reducing operating costs for fleet managers ⁽¹⁾.

The cost of a retreaded tire is on average **60% of the price of an equivalent** new tire, for similar mileage, i.e. a **33% improvement in cost per kilometer**. In addition to extending tire service life, these processes help protect the environment by reducing the use of raw materials and CO₂ emissions.

MICHELIN Single-life	PURCHASE PRICE  100% KM TRAVELED  100%	CPK = €1.00 per km
MICHELIN REMIX® Multi-life	PURCHASE PRICE + REGROOVING + RETREADING  180%⁽²⁾ KM TRAVELED  250%⁽³⁾	CPK = €0.72 per km - 28%
MICHELIN REMIX® 2 Multi-life	PURCHASE PRICE + REGROOVING + RETREADING  250%⁽⁴⁾ KM TRAVELED  375%⁽⁵⁾	CPK = €1.67 per km - 33%

⁽¹⁾ Mileage performance and interest cost provided by way of example to model the CPK (Cost Per Kilometer) approach.

⁽²⁾ Cost 180% = 100% new tire + 10% regrooving + 60% retreading + 10% regrooving.

⁽³⁾ Mileage 250% = 100% new tire + 25% regrooving + up to 100% retreading + 25% regrooving.

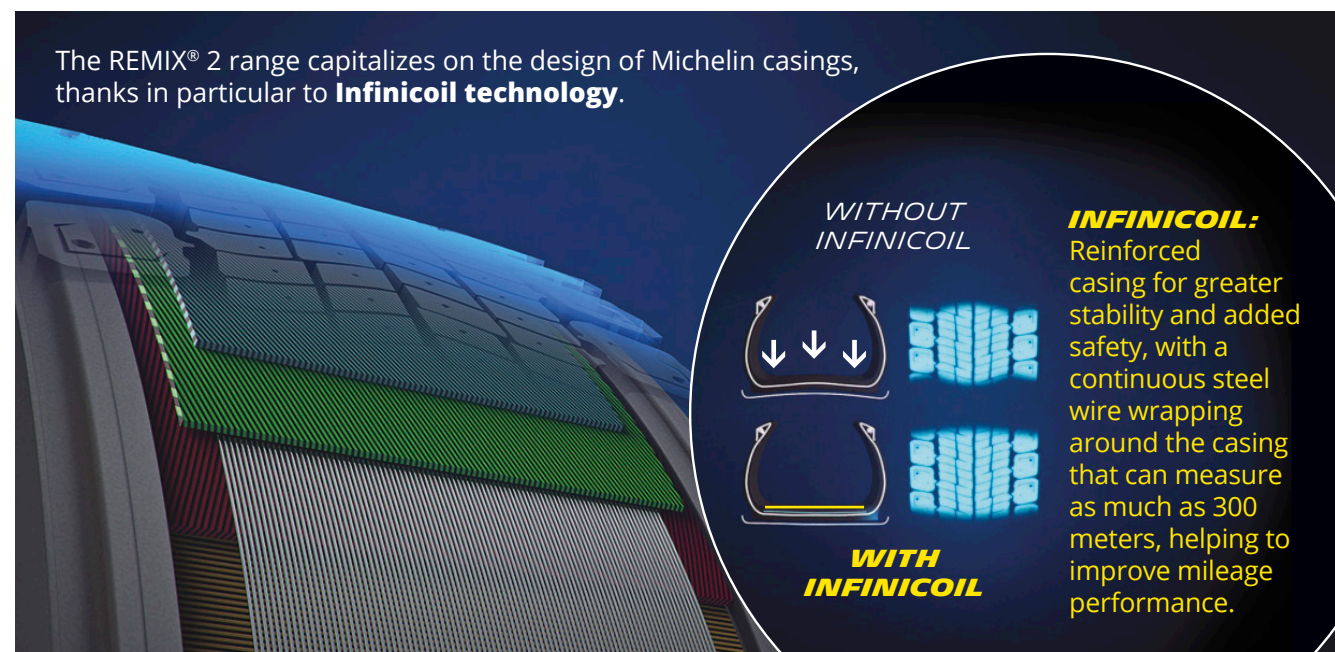
⁽⁴⁾ Cost 250% = 100% new tire + 10% regrooving + 60% retreading + 10% regrooving + 60% retreading + 10% regrooving.

⁽⁵⁾ Mileage 375% = 100% new tire + 25% regrooving + up to 100% retreading + 25% regrooving + 100% retreading + 25% regrooving.

Mileage performance, robustness and mobility

Michelin casings, renowned for their robustness and endurance, can be retreaded multiple times without compromising performance.

Michelin REMIX® 2 tires deliver mileage performance close to 95% of that of new tires, while delivering the same level of grip, traction and safety.



The REMIX® 2 range offers retreaded tires with the same tread patterns and compounds as new tires, while complying with Michelin's rigorous testing, manufacturing and quality control standards.

Produced in the same molds used for first retreads, REMIX® 2 tires carry the same markings as first-retread tires, such as:



3PMSF and M+S
Markings that guarantee excellent mobility in all conditions down to the last millimeter



Sustainability and ecological transition

REMX® 2 retreading makes haulage more sustainable, delivering the best balance between performance and operating costs while paving the way for the ecological transition.

- **Raw material savings:** Each retread saves 50 kg of raw materials, with only 20 kg of materials added – a 70% saving compared to a new tire.
- **Waste reduction:** Retreading 6 tires on a three-axle trailer saves around 300 kg of waste and reduces the number of tires requiring recycling.
- **Reduction in CO₂ emissions through material savings:** Up to 115 kg of CO₂ saved per retreaded tire, equivalent to more than 6 tonnes of CO₂ for 100 tires.
- **CO₂ certificates:** These certificates promote ecological efforts among hauliers, helping customers win tenders and qualify for subsidies.



.03

MICHELIN, MULTI-LIFE TIRE SPECIALIST FOR OVER A CENTURY

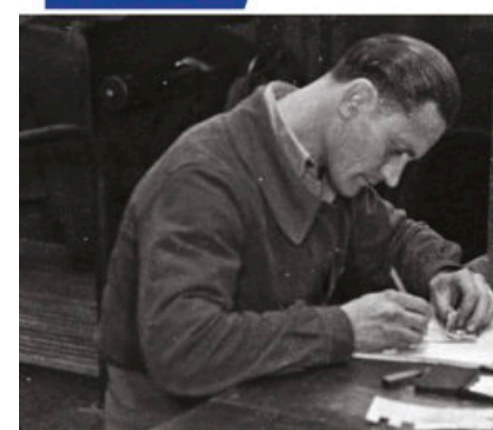
For more than a century, Michelin has been innovating to improve truck mobility by offering high-performance tires and services tailored to its customers' needs.

In 1923, Michelin introduced retreading – a process for reusing tire casings – and this innovation is still relevant today.

A pioneer in the circular economy, Michelin has been retreading tires for nearly a century, continuously developing innovative technologies. Michelin casings, designed to be retreaded several times, help reduce environmental impact and maximize cost-effectiveness without compromising safety.

With the launch of REMIX® 2, Michelin is continuing to innovate, providing solutions that address the challenges faced by fleet managers and support the growth of their businesses. The Group's strategy adapts to changes in the haulage industry, helping the sector meet its CO₂ emission reduction targets while maintaining a strong commitment to safety and service life.

The Michelin multi-life pattern is paving the way for a sustainable, circular economy.



(1) The CO₂ saving associated with the retreading process are calculated based on the corresponding material savings. In terms of material savings, a MICHELIN Remix® retreaded tire covers up to 100% of the mileage of a new Michelin tire (the tread mix and tread pattern of MICHELIN Remix® tires are largely the same as those for new MICHELIN tires; 90% of tires in the MICHELIN Remix® range are made from the same mold and the same materials as new Michelin tires and therefore perform equally as well. According to internal tests conducted by the Michelin Research and Technology center and customer testimonials collected in Europe since 2015). A new tire weighs 70 kg on average. A new tire ready to be retreaded weighs 50 kg on average. The CO₂ impact of a retreaded tire is linked to material savings, i.e. 115 kg of CO₂ for 50 kg of raw materials saved, or a rate of 2.3 kg of CO₂ per 1 kg of raw materials.

The equivalence between CO₂ and a liter of fuel or a kilogram of raw material is calculated as follows: The emissions factor of 3.24 kg of CO₂ for 1 liter of diesel comes from the life cycle assessment carried out by ADEME for pure diesel. It includes emissions from both diesel production (17%) and combustion (83%). Source: ADEME, "Well to Wheel – JEC" study, v4, July 2014. The emissions factor of 2.3 kg of CO₂ for 1 kg of tire comes from tire production (cradle to gate) life cycle assessment calculations conducted internally by Michelin using the calculation rules developed by the tire manufacturing profession (TIP). It includes stages including extraction of raw materials, transportation, manufacturing and distribution. Source: UL Environment Standard, "Product Category Rules for preparing an Environmental Product Declaration for the product category: Tires", v3.05, February 2022.

Visuals and videos available here:



MICHELIN GROUP MEDIA RELATIONS
+33 (0)1 45 66 22 22

About Michelin

Michelin is building a world-leading manufacturer of composites and experiences that transform our everyday life. Pioneering engineered materials for more than 130 years, Michelin is uniquely positioned to make decisive contributions to human progress and a more sustainable world. Drawing on its technological leadership in polymer composites, Michelin is constantly innovating to manufacture high-quality tires and critical components for such demanding and varied fields as mobility, construction, aeronautics, low-carbon energies and healthcare. The care taken with its products and its deep knowledge of their applications equip the Group to offer its customers unparalleled experiences, whether in data-driven, artificial intelligence-based solutions for business fleets, or by finding remarkable restaurants and hotels recommended by the MICHELIN Guide. (www.michelin.com)

www.michelin.com  [@MichelinNews](https://twitter.com/MichelinNews)

