
PRODUCTS AND SERVICES

Paris, September 14, 2026

**Michelin is modernizing regrooving for truck, bus, and coach tires
with the unveiling of NAZCA, a smart automated machine that
benefits professionals**

- Michelin is innovating by offering an automated regrooving solution to modernize the century-old retreading process, reduce ergonomic hardship, and boost workshop productivity.
- The NAZCA innovation is an automated regrooving solution designed for a wide range of tire brands¹.
- With NAZCA, Michelin is reinforcing its multi-life model, which is based on regrooving and retreading, to make tires last longer, reduce operating costs, and limit environmental impacts.





NAZCA: automating a century-old process to benefit tire maintenance workshops

Regrooving has been a key step in truck, bus, and coach tire maintenance for over a century. The manual regrooving process requires specialized know-how, and today, it faces the challenge of ergonomic hardship and skills renewal.

The NAZCA innovation automates the regrooving process in line with manufacturers' recommendations, with the goal of quality and repeatability. It was developed by Michelin engineers to make full use of every millimeter of usable rubber thanks to a high-density laser scanner and advanced algorithms. It adjusts cut depth across the entire width and circumference of the tire in real time, because every tire's geometry is unique.

NAZCA was tested in real-world conditions for over a year and can increase the number of regrooving operations completed by workshops. According to Michelin, it could boost regrooving capacity by 30% to 50%², depending on the workshop's operating conditions.

Each regrooving operation requires less than three minutes³ of hands-on technician time, freeing technicians to focus on other tasks like alignment, repairs, and tire mounting/removal. That means NAZCA can help make workshops more profitable and more flexible.

A solution designed for a wide range of truck, bus, and coach tires

Designed to meet workshops' needs, NAZCA is compatible with a wide range of brands and sizes of tires¹ that have a robust enough casing to undergo the lifespan-extending regrooving process.

Approximately twenty NAZCA machines are currently undergoing pilot testing across Europe. In 2027, Michelin will continue rolling out this innovation in various countries, taking into account the applicable regulatory frameworks. The commercial launch will be gradual and adapted to the specific characteristics of each market.

NAZCA will be on display on the Michelin stand at the IAA Transportation in Hanover on September 14-20, 2026.

NAZCA: a pillar of Michelin's multi-life model

NAZCA is part of the Michelin multi-life model, which pairs regrooving and retreading to maximize the lifespan of truck tires. That approach means a Michelin tire can last up to 2.5 times longer than a single-life tire⁴.



PRODUCTS AND SERVICES

Regrooving makes it possible to use tires up to their legal wear limit, for up to 25%⁵ more mileage and up to 5%⁶ fuel savings.

Michelin retreading completes the model:

- Initial REMIX retreading can double a tire's mileage for about 60% of the cost of a new tire⁷.
- A second REMIX 2 premium retreading, available for 90%⁸ of Michelin truck lines, offers 95% of the performance of a new tire⁹ for about 60% of the cost¹⁰, cutting the cost per kilometer by 33%¹¹.
- Each retreading also saves about 50 kg of raw materials per tire¹².

With NAZCA, Michelin is enhancing its multi-life model for tire and transportation professionals with simpler, higher-performance, more profitable solutions.

Visuals available here:

<https://contentcenter.michelin.com:443/dam/wedia/shared-board/61972e90-f409-4350-96fc-9dd39772f6b6>

Notes

(1) Access to the catalog of regrooving programs with continuous "Recipe" enhancement based on manufacturer recommendations and including the main brands and sizes on the market (premium manufacturers and their affiliated hot retreading and Tier 2 brands). On an exceptional, case-by-case basis, specific recipes that are not in the catalog may be studied by the NAZCA team to evaluate and potentially confirm their feasibility in NAZCA.

(2) In normal production mode, i.e. installed and used in compliance with the NAZCA team's instructions.

(3) Estimate based on tests called technical Proofs of Concept (POC) carried out in operational conditions for a cumulative total of one year at three Euromaster branches (two Michelin Group members and one franchise location). Over 400 regrooving operations were completed during these POCs, which made it possible to define the average hands-on time per technician in normal operating conditions and with no issues.

(4) Elements based on the TNPf recommendations Truck tires: Tire recovery | TNPf - Mileage 250% = 100% new tire + 25% regrooving + up to 100 % retreading + 25% regrooving.

(5) Elements based on the TNPf recommendations Truck tires: Tire recovery | TNPf explaining that regrooving can, when the tire reaches the end of its wear limit, increase the tire's longevity by using all the available rubber.

(6) 5.4% fuel savings: internal study performed under the supervision of DEKRA (report no. 21CPAEXT-030) on May 5, 2021 on the MICHELIN test tracks in Ladoux (France), on two identical Volvo FH 500 trucks fitted with new MICHELIN X® Line Energy™ Z2 and D2 315/70 R 22.5 tires, each hitched to a Schmitz Cargobull semi-trailer fitted with MICHELIN X® Line Energy™ T 385/55 R 22.5 tires, fully loaded (40 metric tons), identical pressures (8.5 b, 7.5 b and 9.0 b), comparison between new and regrooved tires (R5 mm). Findings may vary with weather conditions, road type, tire size, and driving style.

(7) The cost of retreading is estimated at about 60% of the prices of a new tires, based on the CPK modeling hypotheses laid out in the common portions of notes (7), (10) and (11).

(8) The REMIX 2 retreading offer is now available for the following lines:

MICHELIN X LINE: 315/70R22.5 X LINE ENERGY D/. RX2 TL 154/150L MI, 295/60R22.5 X LINE ENERGY D/. RX2 TL 150/147K MI, 315/60R22.5 X LINE ENERGY D/. RX2 TL 152/148L MI

MICHELIN X MULTI ENERGY : 315/70R22.5 X MULTI ENERGY D2/. RX2 TL 156/150L MI

MICHELIN X MULTI : 315/60R22.5 X MULTI D/. RX2 TL 152/148L MI, 295/60R22.5 X MULTI D/. RX2 TL 150/147L MI, 315/70R22.5 X MULTI D RX2/. TL 154/150L MI, 315/70R22.5 X MULTI HD D RX2/. TL 154/150L MI, 315/70R22.5 X MULTI GRIP D RX2/. TL 154/150L MI, 315/80R22.5 X MULTI D RX2/. TL 156/150L MI, 315/80R22.5 X MULTI HD D RX2/. TL 156/150L MI, 315/80R22.5 X MULTI GRIP D RX2/. TL 156/150L MI, 255/60R19.5 X MAXTRAIL/. RX2 TL 143/141J MI, 385/65R22.5 X MULTI HL T/. RX2 TL 164K MI, MICHELIN X WORKS : RECH MI 315/80R22.5 X WORKS D RX2/, RECH MI 315/80R22.5 X WORKS XDY RX2/. 156K, RECH 13R22.5 REMIX X WORKS XDY RX2/. 156K, RECH MI 13R22.5 X WORKS D RX2/.

MICHELIN X INCITY : RECH MI 275/70R22.5 X INCITY ICE GRIP D RX2/. 148/145J, 275/70R22.5 X INCITY EV Z/. RX2 TL 152/149J MI, RECH MI 275/70R22.5 X INCITY XZU RX2/. 148/145J



PRODUCTS AND SERVICES

(9) The tread mix and tread pattern of MICHELIN REMIX tires are largely the same as those for new MICHELIN tires. Furthermore, 90% of the tires in the MICHELIN REMIX range are manufactured from the same mold and the same materials as new MICHELIN tires and so offer equivalent performance. According to internal tests conducted by the Michelin research and development center and customer testimonials collected in Europe since 2015.

(10) The cost of a second REMIX 2 premium retreading is estimated at about 60% of the cost of a new tire, based on the modeling hypotheses presented below.

(11) Per-kilometer cost savings of 33% are estimated based on the CPK modeling below, in line with the TNPF recommendations: Truck tires: Tire recovery | TNPF. Mileage performance and financial costs are given for information purposes only to model the CPK (cost-per-kilometer) approach.

4-life model cost = 100% new tire + 10% regrooving + 60% retreading + 10% regrooving = 180%

4-life model mileage = 100% new tire + 25% regrooving + up to 100% retreading + 25% regrooving = 250%

6-life model cost = 100% new tire + 10% regrooving + 60% retreading + 10% regrooving + 60% retreading + 10% regrooving = 250%

6-life model mileage = 100% new tire + 25% regrooving + 100% retreading + 25% regrooving + 100% retreading + 25% regrooving = 375%

CPK = 6-life model cost / mileage = 250/375 = 0.66, for a CPK 33% lower than the single-life model.

(12) Estimated raw material savings per retreaded tire: Elements based on TNPF publications Truck tires: Tire recovery | TNPF, retreading is based on reuse of the casing, which represents about 70% of the mass of a tire. Therefore 70% of 70 kg = about 50 kg.

About Michelin:

Michelin is building a world-leading manufacturer of life-changing composites and experiences. Pioneering engineered materials for more than 130 years, Michelin is uniquely positioned to make decisive contributions to human progress and to a more sustainable world. Drawing on its deep know-how in polymer composites, Michelin is constantly innovating to manufacture high-quality tires and components for critical applications in demanding fields as varied as mobility, construction, aeronautics, low-carbon energies, and healthcare. The care placed in its products and deep customer knowledge inspire Michelin to offer the finest experiences. This spans from providing data- and AI-based connected solutions for professional fleets to recommending outstanding restaurants and hotels curated by the MICHELIN Guide. Headquartered in Clermont-Ferrand, France, Michelin is present in 175 countries and employs 122,600 people. (www.michelin.com).

Follow all our news on

X@Michelin



MICHELIN GROUP MEDIA RELATIONS

📍 112, avenue Kléber - 75116 Paris

☎ +33 (0) 1 45 66 22 22 | 7 days a week 🌐 www.michelin.com

✉ @Michelin