

LINE

# Michelin EFFILINER® Liner



Two French companies, leaders in their fields, have teamed up to offer a new exclusive jointly developed liner with a low environmental impact throughout its life cycle.





100% French design and manufacture

Better lateral rope stability in the wind

2 patents

Energy savings\* of **up to 10%** 

**Service life doubled** for an LPO7 LCI roller battery

**Up to 15 tonnes** of CO2 avoided per year on an urban gondola lift in France\*\*

Reduced vibrations, less noise

**Proven** up to 7 m/s

The new MICHELIN EFFILINER<sup>®</sup> liners jointly developed by POMA and Michelin offer improved performance for even more sustainable mobility. Designed for a range of uses, they can be fitted on the rollers of line supports and horizontal deflection rollers in stations.

### Innovation partnership:

On 28 April 2022, POMA and MICHELIN formalised a long-term partnership to put forward innovative solutions for even more sustainable mobility by ropeways.

By combining their expertise, the two companies have reaffirmed their commitment to maintaining industrial know-how in France.







\* the equivalent of 60 European households for every year that an urban gondola lift is in operation \*\* compared with a French urban gondola lift not equipped with Michelin EFFILINER\* liners



# Michelin EFFILINER® Liner

FEATURES & BENEFITS

LINE



## Performance

- Significantly higher load-bearing capacity for use on the Endurance<sup>®</sup> roller battery while maintaining the same service life
- Energy savings of up to 10% thanks to lower roller resistance
- Reduced vibrations for improved dynamic and acoustic comfort on the line and in the station
- Service life doubled during use with an equivalent load on an LP07 LCI roller battery, meaning liner replacement can be postponed
- Additional effort required to slide out of the groove, resulting in much better lateral stability of the rope in the wind
- The Michelin and POMA R&D teams have validated the benefits of performance on test benches and ropeway tests.
- Michelin expertise
- Rubber formulation specifically developed for POMA ropeway transport systems
- 2 patents filed



**ENVIRONMENT** 

#### Design

- Jointly designed by POMA and MICHELIN
- Target for recycled and recyclable materials >40% by 2030
- Allows line configurations with fewer rollers, more compact roller batteries and potentially fewer towers when used on Endurance<sup>®</sup> roller batteries (greater roller load compared with LP07 LCI roller batteries)

#### Manufacturing

- Manufactured by Michelin in France, exclusively for POMA
- Low-carbon manufacturing process

#### Use

- Service life doubled for an LP07 LCI roller battery
- Overall energy savings of up to 10%
- > End of life
- Recyclable and/or reusable materials
- End-of-life recovery and recycling channels