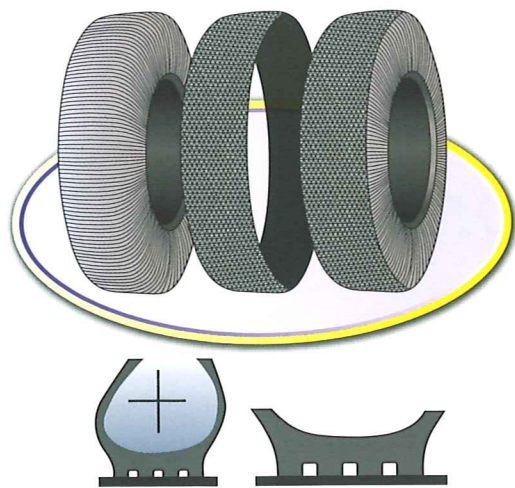


## Why The Michelin Radial?

Michelin introduced a new era in driving comfort with the radial tyre.



- 1 The body ply cords in a Michelin casing are laid radially to the bead, a design feature that makes the tyre's walls extremely flexible. These supple walls "give" under load, absorbing unevenness in the road surface, resulting in a smoother ride.
- 2 Another innovation is the belt around the crown of the casing that braces and stabilizes the tread, helping to improve contact between the vehicle and the road, and to reduce unwanted movement in the tread-road contact area.
- 3 In other words, the two major features are its radial wall and tread bracing belts, which perform their functions independently.

When using the proper tyre pressure for the load conditions, the Michelin tyre offers increased fuel and cost efficiency, better road handling and ride comfort, and reduced downtime.

**Fuel Efficiency:** The steel braced tread and radial casing result in lower rolling resistance and less heat build up from internal friction when the tyre is in motion. This combination translates into lower fuel bills and extended casing life.

**Lower Cost-Per-Mile:** The radial construction of the Michelin tyre reduces friction and heat build up inside the tyre, delaying casing deterioration. This, combined with the radial's proven tread life advantages, helps provide a lower overall cost per kilometer. In addition, the retreadability of the Michelin truck tyre is a significant cost saver.

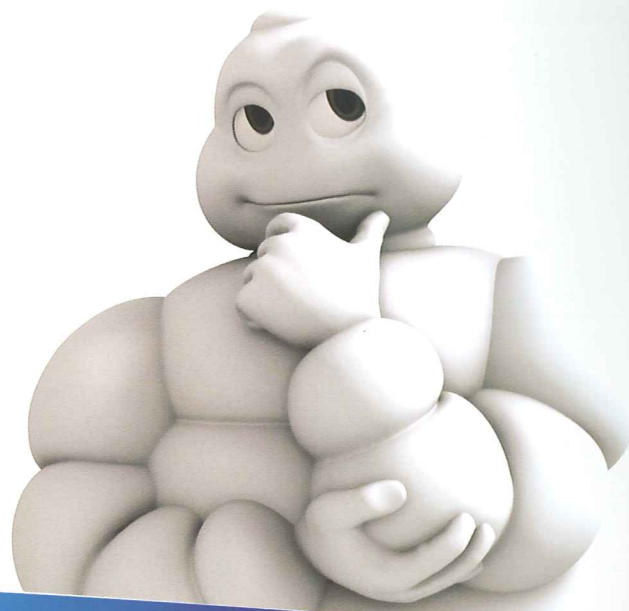
**Road Handling:** A Michelin radial tyre has sure footed grip on the road; its footprint is solid; its sidewalls and its tread work independently, and its contact area on the ground is not distorted. Improved road handling means greater dependability and performance.

**Comfort:** By its construction, a radial tyre deflects under load and this flexibility helps to cushion shocks and give a smoother ride.

**Reduced Down Time:** The steel belts and protector ply help protect against punctures.

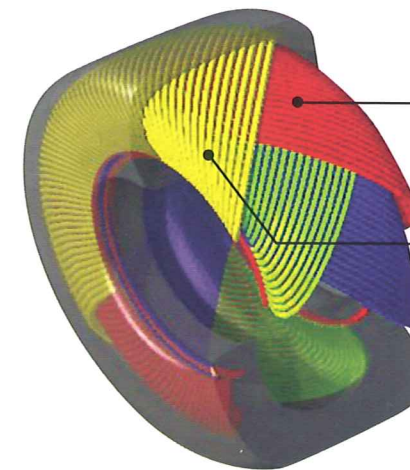
**Repairability:** Proper repairs within specifications can place the tyre back into service, lowering cost.

**Regrooveability:** Michelin tyres are designed with an undertread compound that is thick enough to allow high quality regrooving. This extends the life of the tread and contributes to improved tyre grip and lower fuel consumption.



## Comparing Radial To Bias Ply

**Bias or Cross-Ply Tyre:**



**The casing**

is made up of several crisscross plies.

**The crown**

is not stabilized.



The crown and sidewall are formed by the same ply structure.

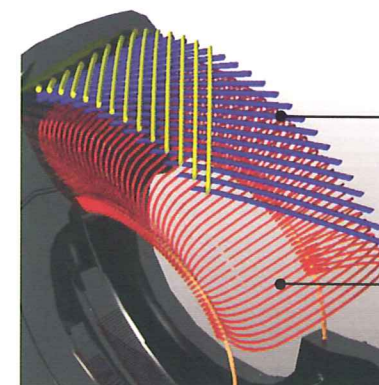
The tread is subjected to any flexing which occurs and this causes :

- deformation of the tyre contact area on the ground
- friction with the ground.

The casing plies tend to "scissor" in relation to each other. As a result, there is :

- Accelerated wear
- Poor grip
- High fuel consumption
- Fair road holding
- High heat built up
- Prone to crown punctures

**Radial Tyre:**



**The crown**

is stabilized by a belt made up of several plies.

**The casing**

has only one radial ply.



The sidewall and tread areas function separately.

The tread is unaffected by the flexing of the sidewalls, so there is :

- less deformation of the tyre contact area on the ground
- less friction with the ground. There is no movement between casing plies.

**Advantages :**

- Longer tyre life
- Excellent grip
- Reduced braking distances
- Even ground pressure over the whole contact area. This provides excellent flotation.
- Lower fuel consumption
- Smoother and better road holding
- Cool running : giving added safety
- Excellent protection against punctures