ventus V12 evo²

Extreme running

Contents

Extreme running

A tire designed for drivers who like to express their own personality and style which delivers outstanding performance in sports driving.

The sophisticated sidewall design matches the tread pattern which adds a sports style.

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- Excellent safety when driving at high speed.
- Shorter braking distances in dry and wet conditions.
- Excellent protection against aquaplaning by applying unique aqua jet groove design.
- Enhanced eco performance while maintaining wear-resistance.

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Technology icon

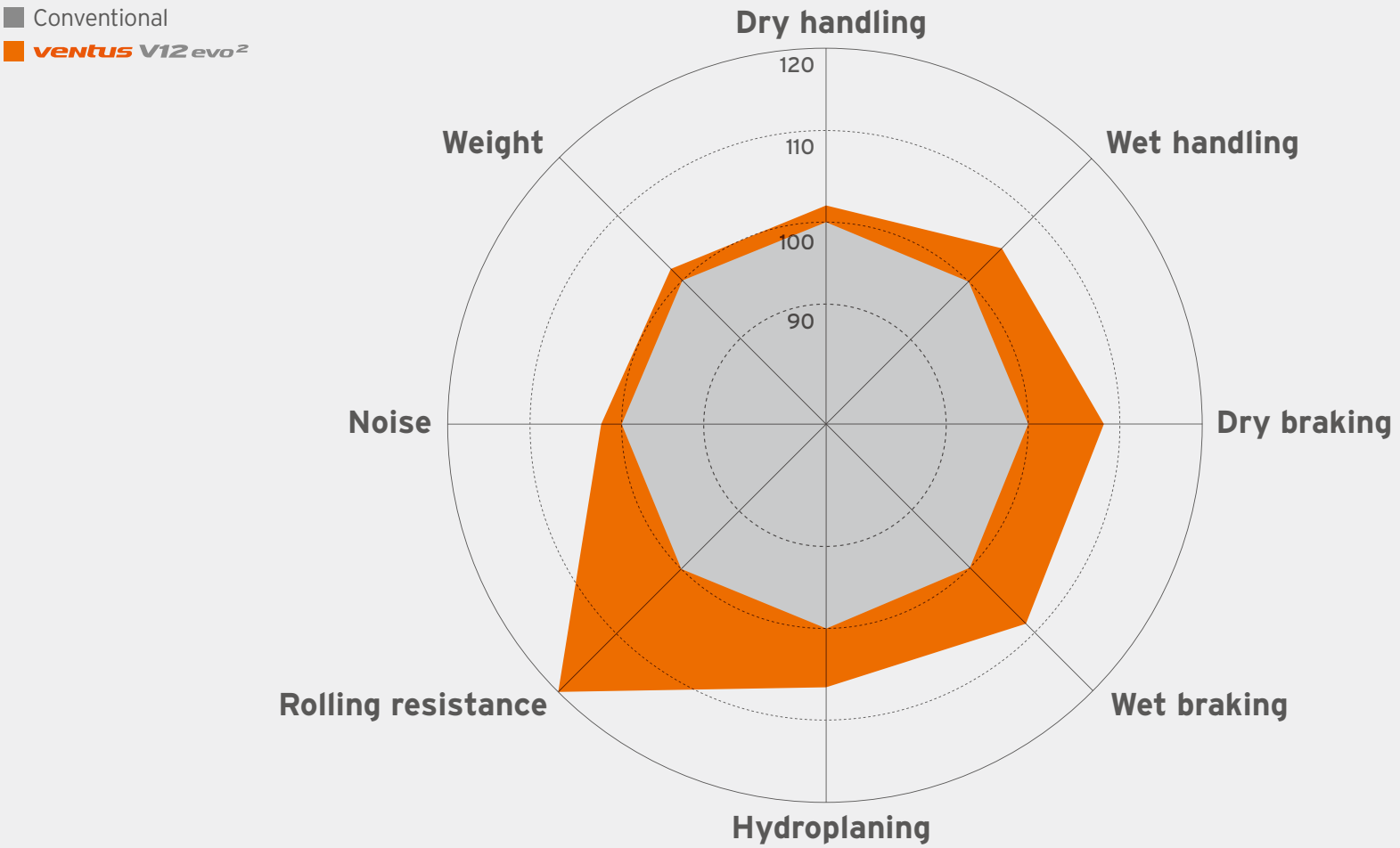
Performance icon

Technical profile

Speed symbol : V, W, Y
Tread width : 195~305
Series : 30~55
Rim diameter : 15~20

Key performance

Improvement in performance compared to predecessor.



Extreme performance through advanced technology

Alignment indicator

Driver can check the status of the vehicle alignment themselves through in / out wear check.

Aqua jet

Catalyst to channel water out of the centre to the main groove wall effectively.

Favorable dry handling performance

Cooling system

Speeds up water drainage and improves heat radiation at high speed.

Stealth technology

Unique wing tip design reduces noise using ‘Stealth technology’.

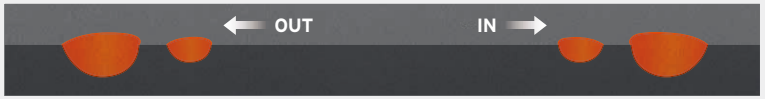
- 3D blocks.
- Maintaining block stiffness.
- Even wear noise.

VAI siping system

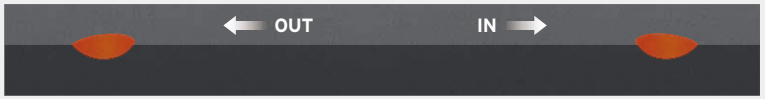
A VAI siping system

The visual alignment indicator siping system provides an easy way to check tIre alignment. Compares the wear on the sipes located on both of the tire's shoulders and then realign as necessary.

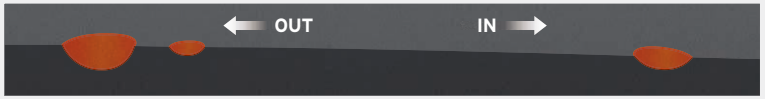
Before use



After use (regular wear)

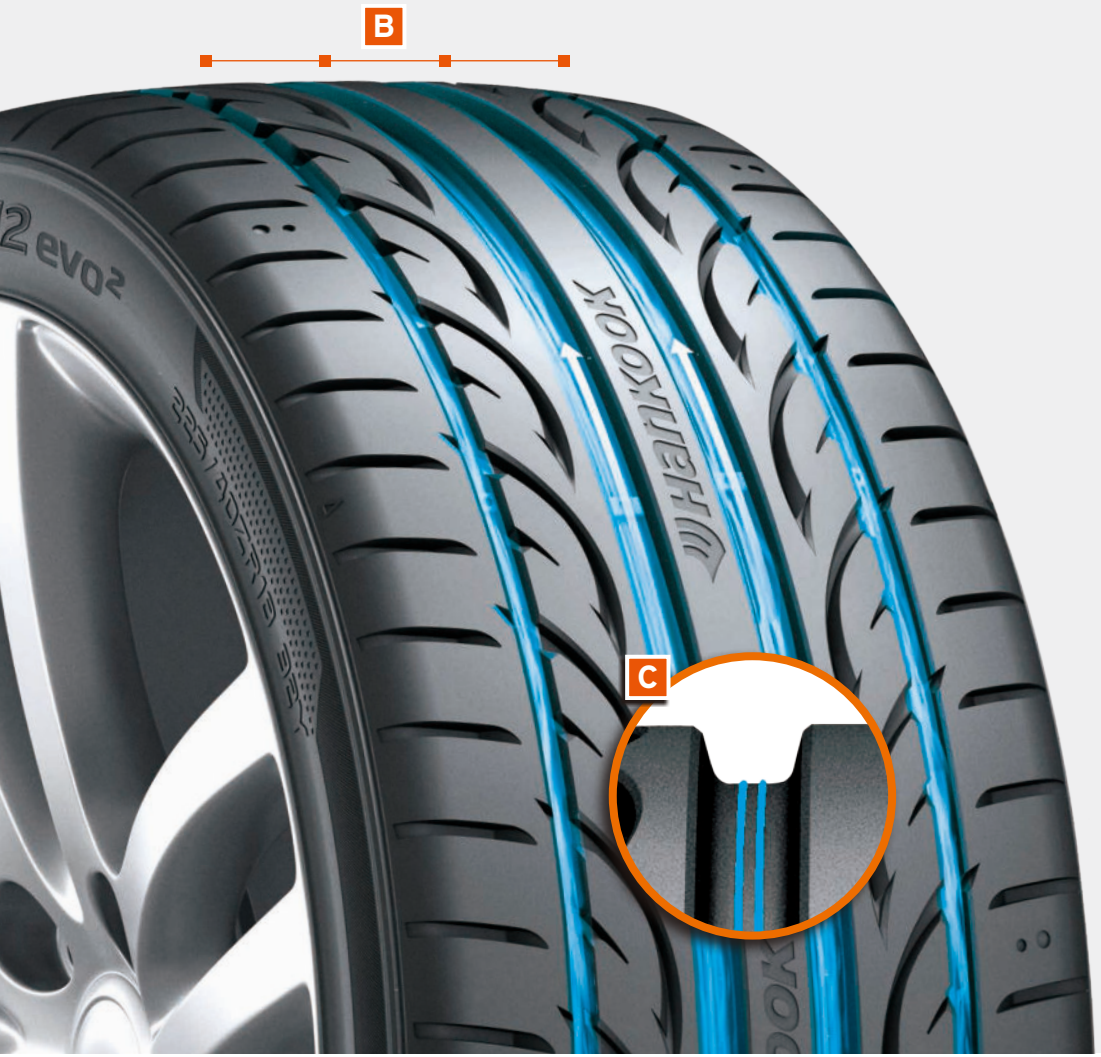


After use (irregular wear)



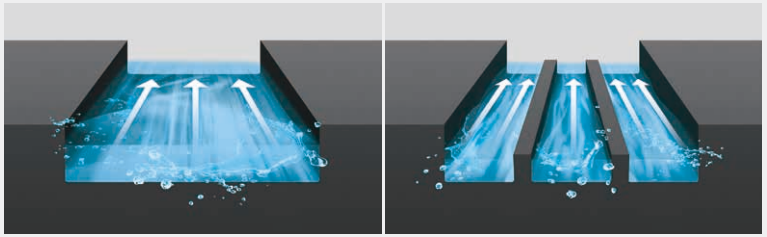
Indicator marks that have different depths can help easily identify the degree of tire wear.

Cooling system and water-slide



B Water-slide

Faster drainage water channel.



Conventional

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C Cooling system

Increased contact area induces the rapid release of heat and ensures excellent performance in wet conditions.

Conventional

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Aqua jet

D Aqua jet

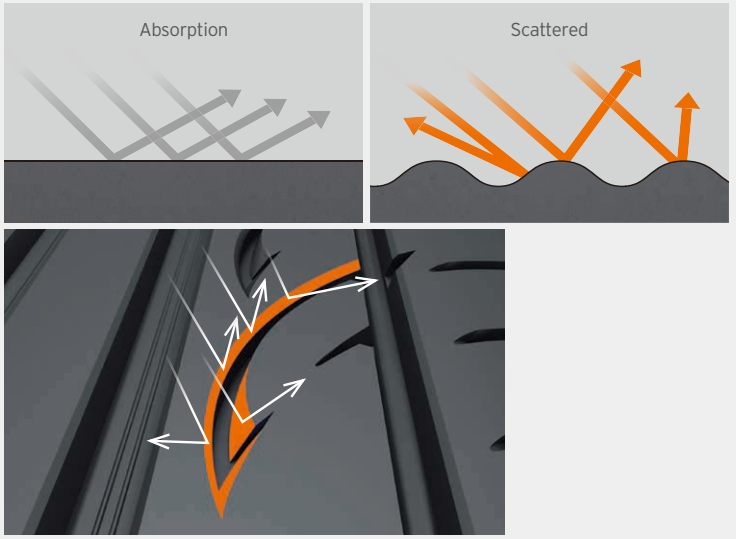
Aqua jet is the catalyst to channel water effectively out of the centre to the main groove wall.

Catalyst action in aqua jet groove.

Stealth technology

E Stealth technology

Unique wing tip design reduces noise using ‘Stealth technology’. Slanted edges support the blocks during handling where sounds or trembling hits. This slanted surface reduces impact.



Slanted edge scatters incoming noise.

Aero dynamic sidewall

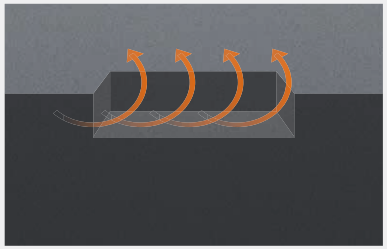
F Aero dynamic sidewall

The aero sidewall design through rectangular dimples minimises noise and vibration levels by reducing the air turbulence when driving.

Aero-sidewall dimple

- Sportiness is stressed with dynamic graphics.
- Rectangular dimples suggest a textile pattern similar to those found in car interiors.
- The carved letters prevent crack of sidewall.
- Minimises the noise and vibration levels by reducing air turbulence when driving.

Air turbulence



Tire structure

High grip silica compound

Improved dry / wet traction and lower rolling resistance.

Jointless full cover

Ideal tread strength.

Wide steel belt layer

Better dry / wet handling.

High density polyester carcass

Enchanced sidewall stiffness and durability.

High stiffness bead filler

Better steering and handling response.

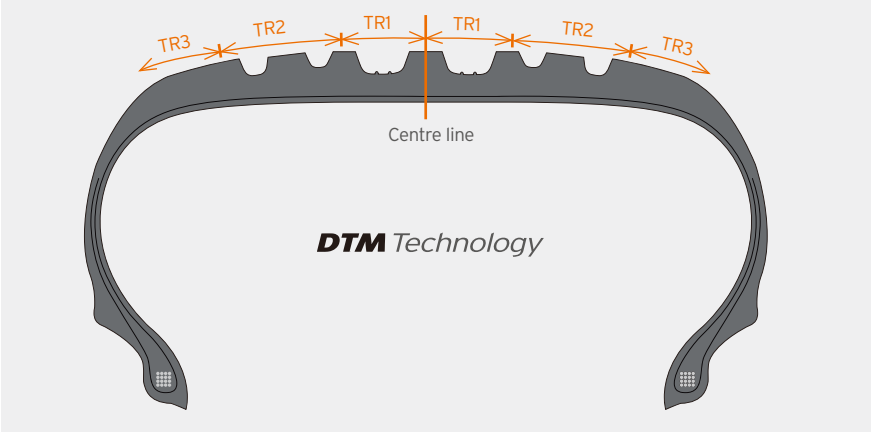
Strong single strand bead wire

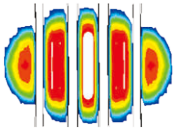
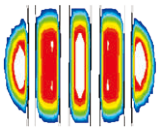
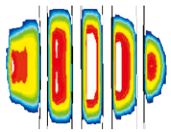
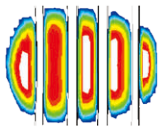
Improved uniformity and tire fitting.

New profile for hydroplaning resistance

DTM Technology

Optimised triple tread radius system based on the DTM racing profile technology ensures the best tire performance in high-speed driving conditions.

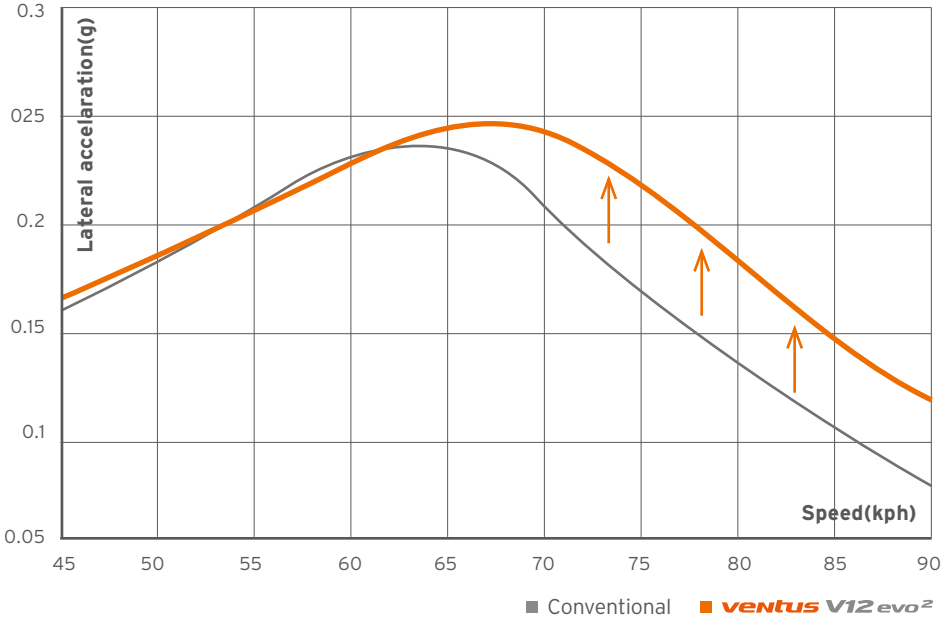


	Conventional	ventus V12 evo²
Vertical load		
Lateral load		

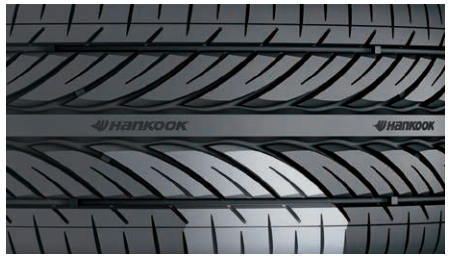
Increased contact area · Excellent handling performance.

Improved shoulder roundness · Improved hydroplaning performance air turbulence when driving.

Hydroplaning lateral G (G=gravity)



Noise



Conventional

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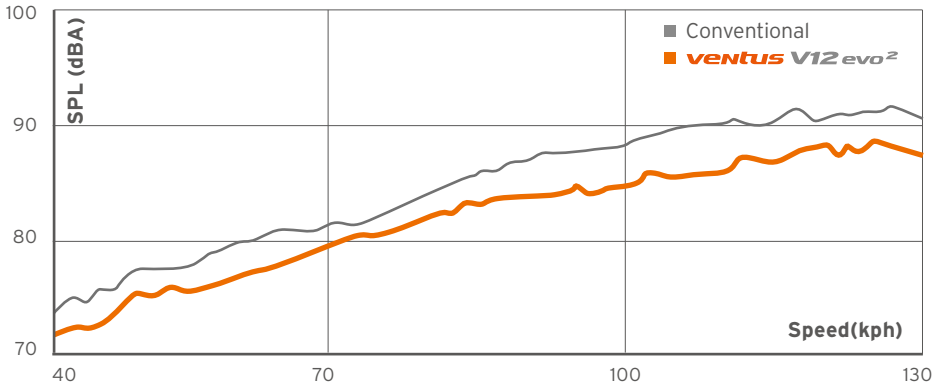
· Reduced noise by applying increased pitch numbers. (application of 5-pitch)
· Optimised middle block pitch array. (M pitch optimisation)

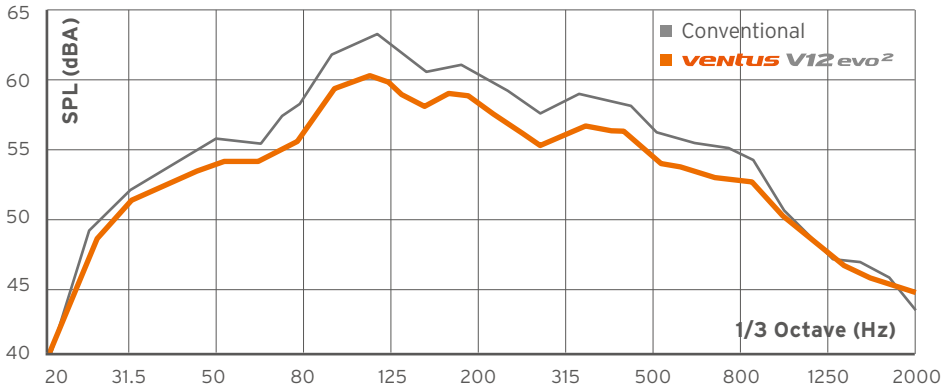
Result of single unit indoor noise assessment



Front wheel condition

· single tire unit assessment. The K120 displays outstnading noise performance.

Result of single field unit noise assessment



On field condition

· worn tire unit assessment. The K120 displays outstanding noice performance.

Compound technology

By applying of new stirene polymer featuring a functional group, rolling resistance performance is improved.

Polymer
Funcationalisation

↓

Polymer & Filler
Chemical combination

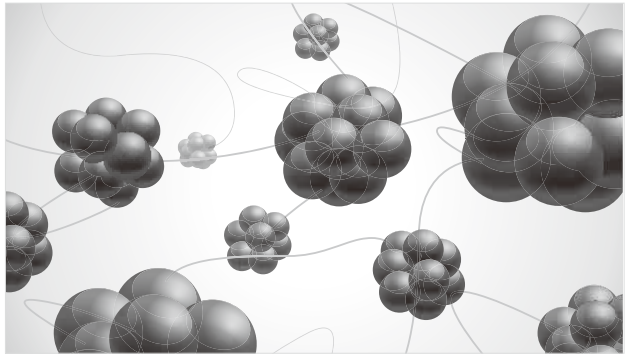
↓

Filler
Improved dispersibility

↓

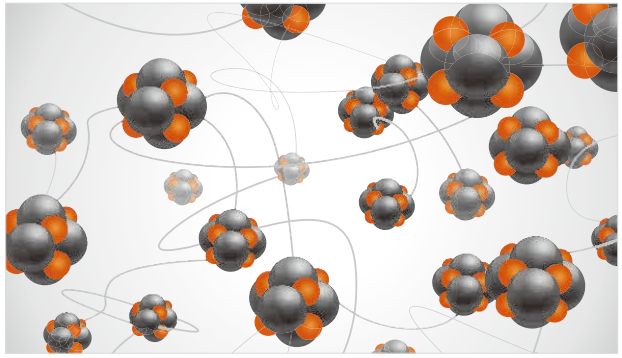
Improved tire performance

Non-functionalised stirene polymer



Conventional

Functionalised stirene polymer



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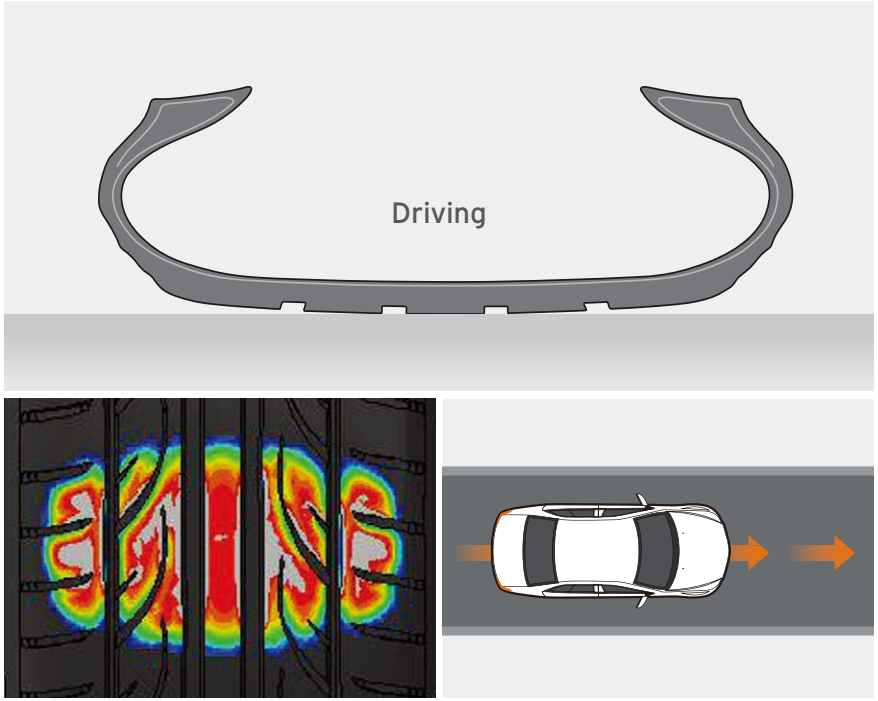
- Improved interaction between polymer and filler.
- Optimised dispersion of filler.
- Minimised hysteresis loss.

Filler : Hydrophilic Functional group Polymer : Hydrophobic

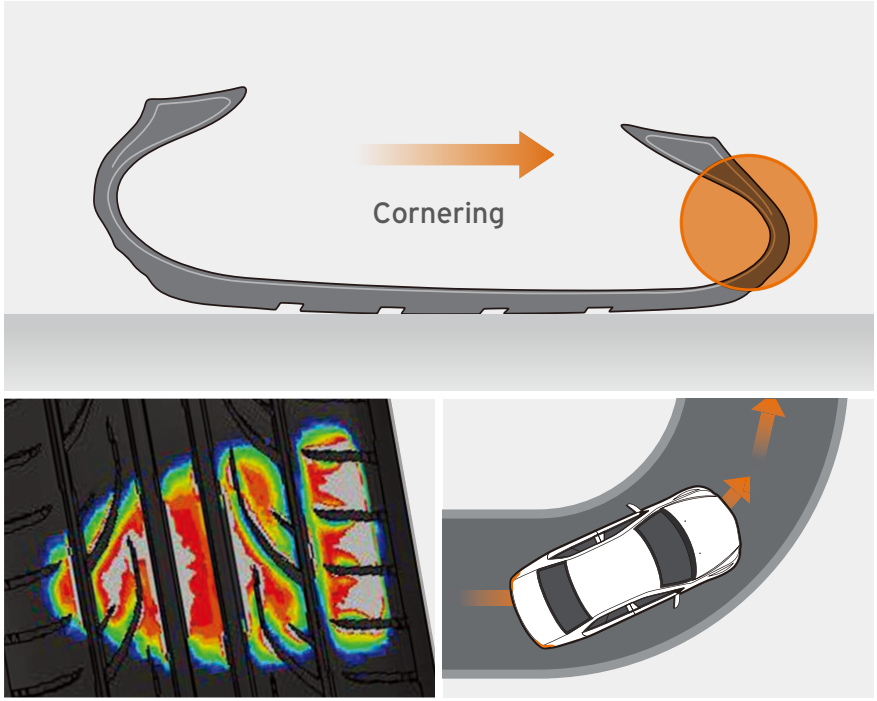
Dry and wet performance (handling)

Even loads transfer vertically and laterally, they maintain a stable foot shape through an optimal design based on a multiple tread radius profile and equilibrium carcass line. This provides the best handling performance.

Traction force at driving



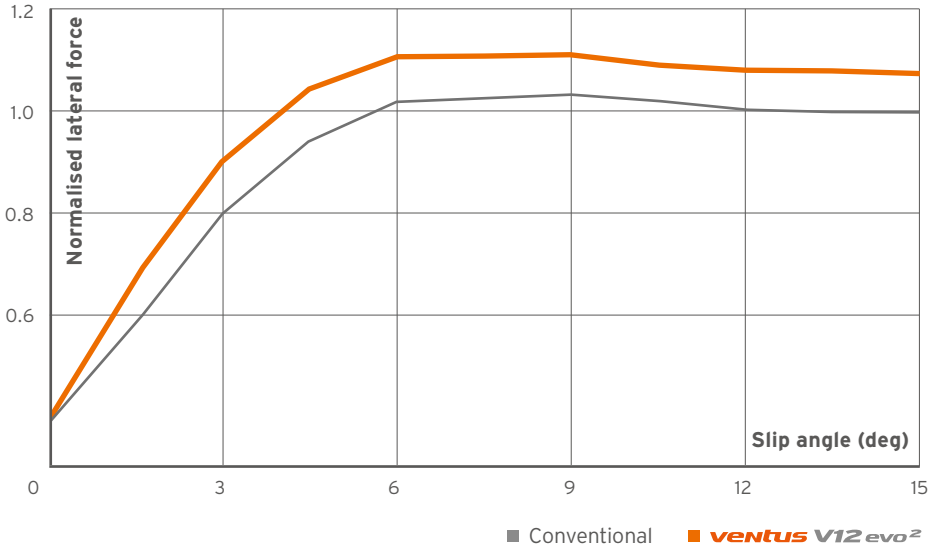
Traction force at cornering



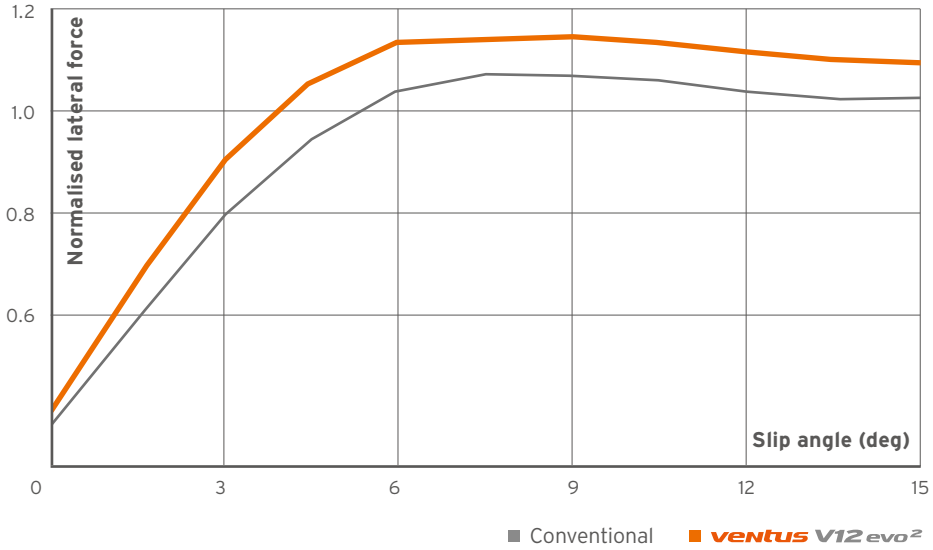
Dry and wet performance (handling)

Apply a high grip compound and optimal structure to maxmise the front and rear wheel grip. Despite the grip balance of front and rear combination, a faster response is obtained compared to existing products. The maximum grip is improved.

Front lateral friction



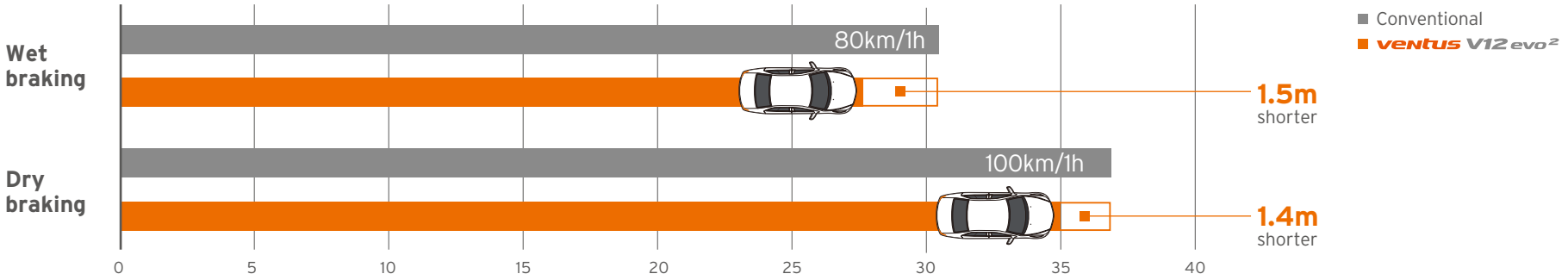
Rear lateral friction



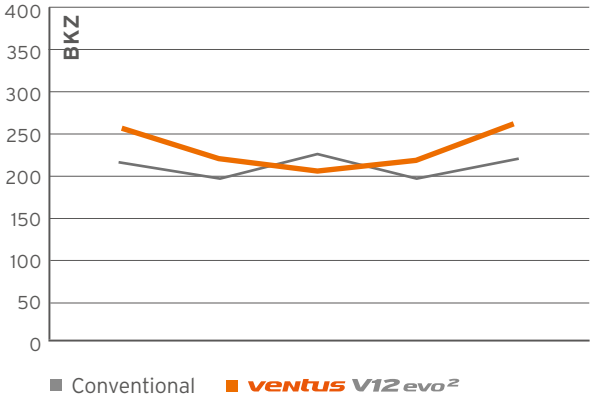
Dry and wet performance (braking)

Extremely short braking distances are achieved on wet and dry surfaces by optimising the balance of the tread block stiffness.

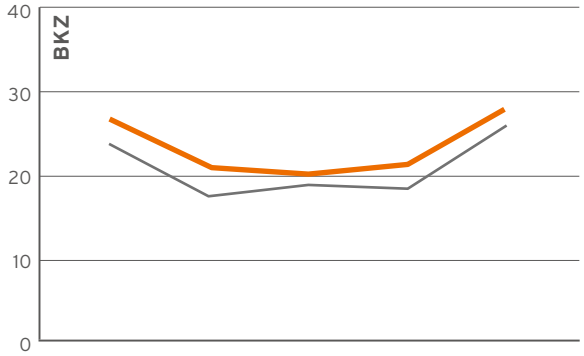
Stopping distance



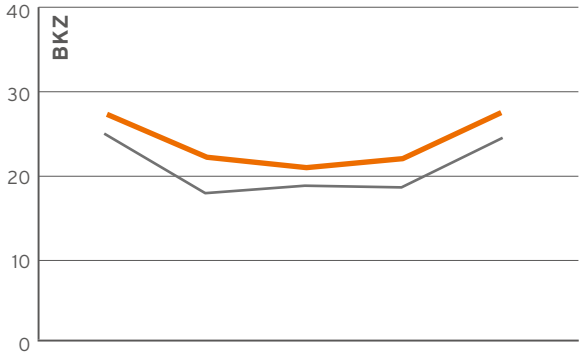
Vertical



Longitudinal



Lateral



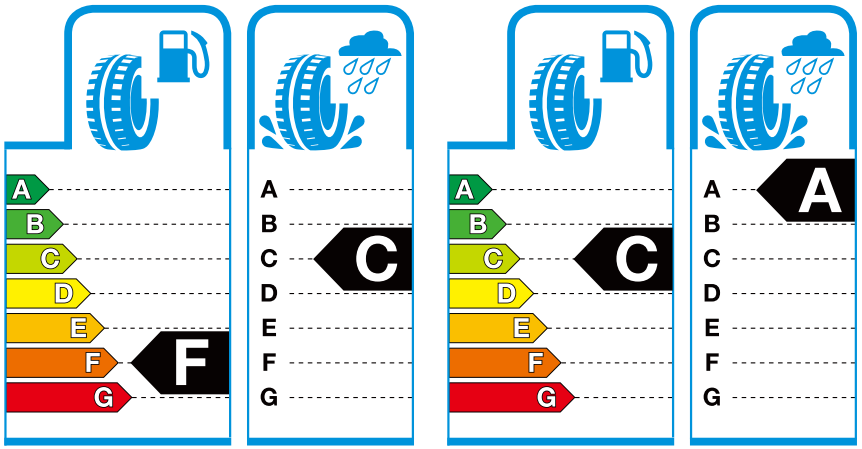
Rolling resistance

Free rolling distance

* Test size : 225/40ZR18Y XL standard

Implemented the technology to enhance eco performance while maintaining wear-resistance. (mileage)

· Application of low rolling resistance compound.
· Application of lightweight belt.
· Optimised rubber volume.




HANKOOK
driving emotion