



 GOOD DESIGN  
AWARD 2013

## Dynapro HP2

The new Dynapro HP2 high-performance tire for luxury and power SUVs

Hankook Tire & Technology



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Features and performance information

The new Dynapro HP2 high-performance tire for luxury and power SUVs

# Dynapro HP2



## Technology icon



Low noise

## Performance icon



Wet handling



Wet braking



Low noise

## Technical profile

Speed symbol : H, V, T

Tread width : 215~285

Series : 50~70

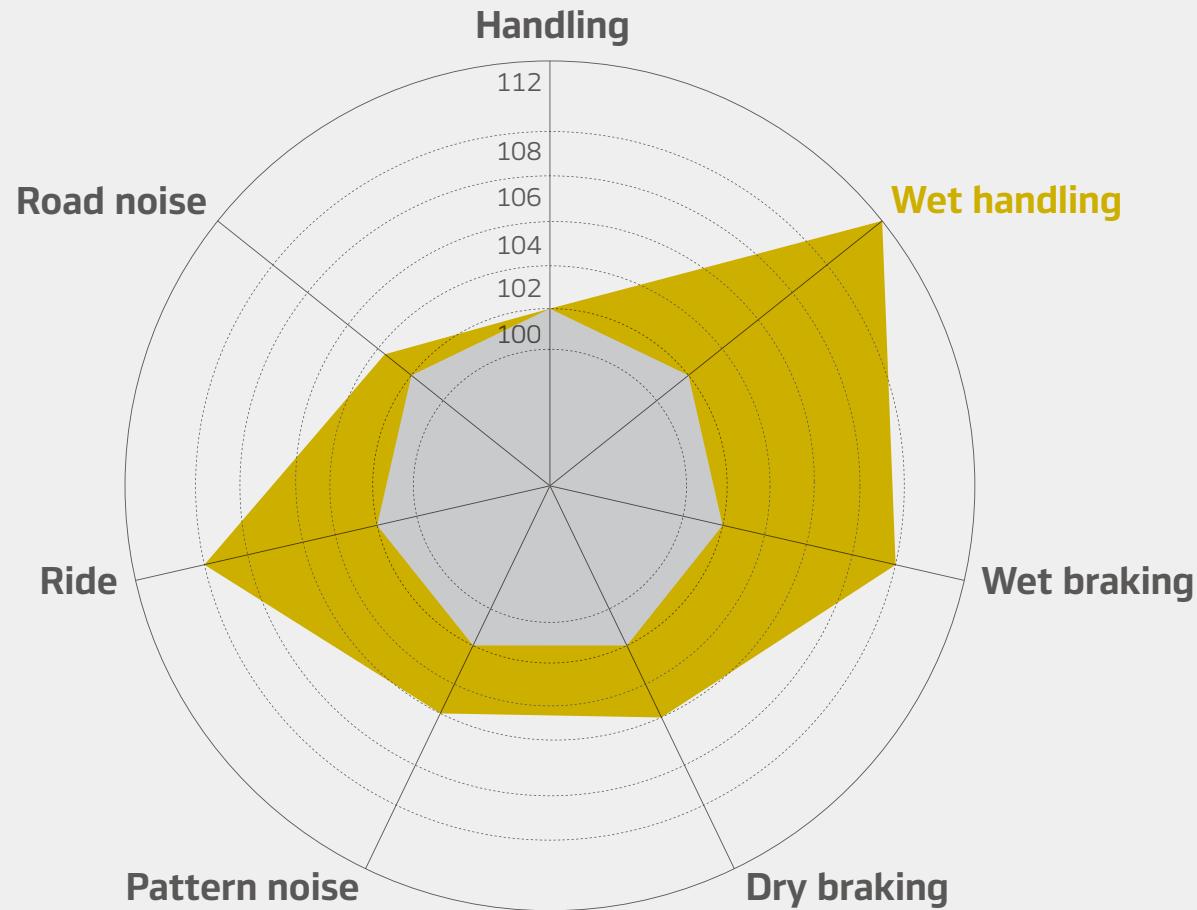
Rim diameter : 16~19

## Key performance

Improvement in performance compared to predecessor.

The new Dynapro HP2 high-performance tire for luxury and power SUVs

■ Conventional  
■ **Dynapro HP2**





# High-performance tire for luxury and power SUVs

By applying aqua technology

## Dynapro HP2

- Non-direction, 4 straight groove
- Wet, steering and braking, low noise, low RR, long mileage
- On-road high-performance SUV vehicle for OE/RE

# Provides excellent ice and snow performance

## Straight 4-channel waterway



Resists hydroplaning and aquaplaning performance up.



## Silencer sipes

Prevents harmonic tread pattern sound.



## High stiffness center rib

Stiff center tread blocks provide precise steering.



## Aqua slant sipes and groove

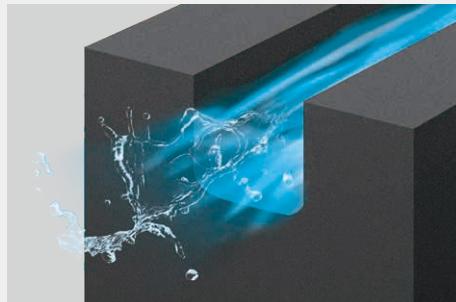
Radial direction sipes provide improved handling in wet and dry conditions by locking together for greater rigidity. lateral grooves provide resistance to hydroplaning.



# Wet performance

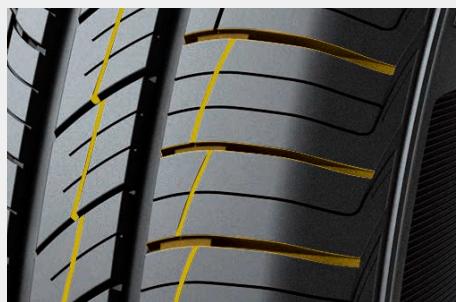
## A Straight 4-channel waterway

Resists hydroplaning and aquaplaning performance up.



## B Aqua slant sipes and groove

Radial direction sipes provide improved handling in wet and dry conditions by locking together for greater rigidity. lateral grooves provide resistance to hydroplaning.



## Dry performance

### C High stiffness center rib

Stiff center tread blocks provide precise steering.



### D Silencer sipes

Prevents harmonic tread pattern sound.



# Tire structure

## Base tread compound

Absorbs shock from the road and offers better comfort.

## Jointless full cover reinforced belt

Ideal tread strength.

## Wide 2 steel belt layer

Better dry / wet handling.

## High density polyester carcass

Better steering and handling response.



# Handing performance

## Wide and square tread

Wide tread (increased%) enables longer mileage and better grip.



Conventional



Dynapro HP2

## High stiffness centre rib

Stiff centre tread blocks provide precise steering.



The Dynapro HP2 provides improved handling performance for your driving by applying an optimised high stiffness centre block. By applying an optimised profile and tread block stiffness, the foot print pressure is dispersed equally across various load conditions. Even lots which transfer vertically and laterally maintain a stable foot shape through an optimal design. This is based on 3D sipe and 3D shoulder block technologies providing the best handling performance.

# Braking performance

## Wide TW (Tread Width)



## Optimised foot print

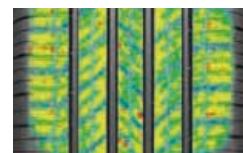


The Dynapro HP2 provides improved braking performance by applying wide TW (tread width) and an optimised foot shape. The wide tread delivers loads equally to the ground ensuring foot print pressure is dispersed equally in various braking conditions.

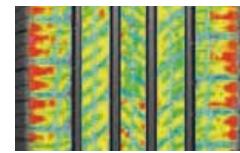
# Ride and noise performance

Optimised tread block stiffness and profile.

## Foot print



Conventional



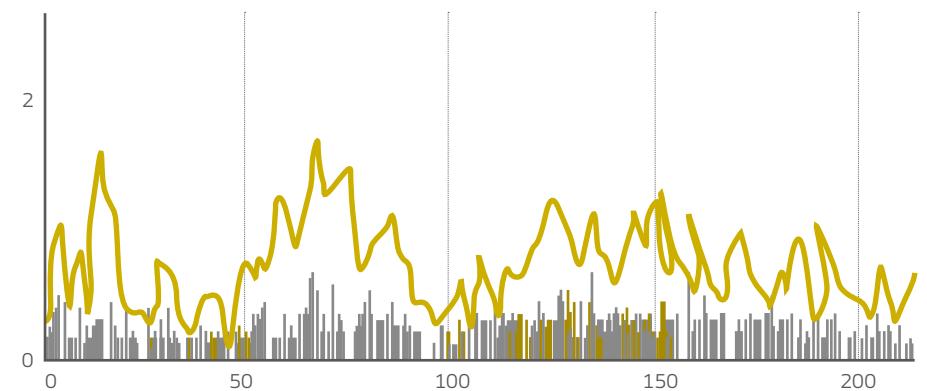
Dynapro HP2

· Test Condition (Rim : 7.0J x 17, Air Pressure : 2.0kg/cm<sup>2</sup>)

## Silencer sipes



Prevents harmonic tread pattern sound.



# Hydroplaning performance

By applying wide main grooves and an optimized profile.

## Wide groove area



Center line

11.1% ↑ 24.7% ↑ 42.0%

11.2% 11.0%

**Dynapro HP2** Block : Groove → 77.9% : 22.1%

Conventional

80.0% : 20.0%

## Straight 4-channel waterway



Straight 4-channel waterway

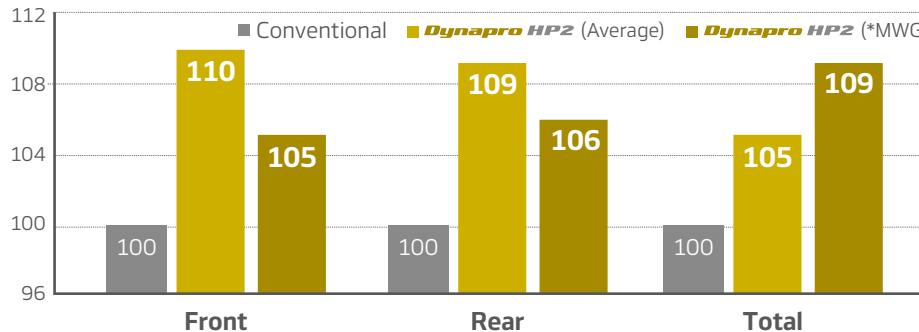
Resists hydroplaning and aquaplaning performance up.

# Noise performance

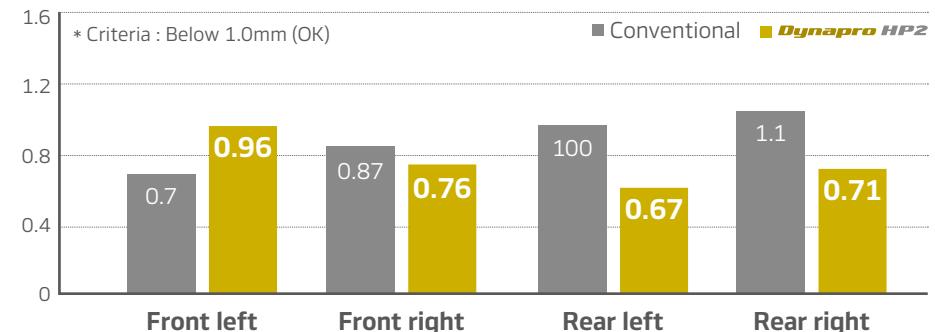
## Wear

By applying optimized shoulder lateral groove and optimized block stiffness prevent block movement and irregular wear.

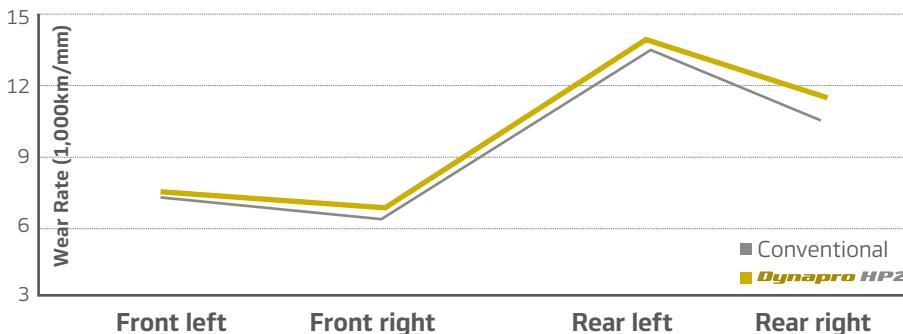
**Total number of middle block studs**



**Heel and toe (index)**



**Wear rate**



**Center wear (index)**

