

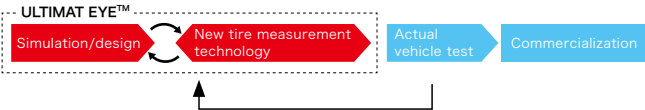
ULTIMAT EYE™

Bridgestone's proprietary tire development technology for measuring and visualizing tire contact surface behavior during actual riding conditions. Previously, tire development consisted of running simulations, building prototypes and using laboratory measurements as well as actual vehicle tests to verify performance. ULTIMAT EYE™ reproduces high-speed riding conditions in the laboratory that are equivalent to those of an actual vehicle, enabling tire contact surface behavior to be visualized. In addition to the previous actual vehicle tests, this allows high-precision analysis and performance verification with a solid scientific basis. Using technology born to develop tires for the world's most demanding car and motorcycle races, the measurement and analysis equipment can handle speeds of up to 400km/h and lean angles of up to 60 degrees.

■ Previous tire product development workflow



■ Tire product development workflow with ULTIMAT EYE™



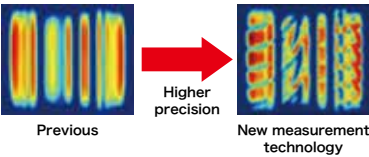
When developing tires, various computer simulations are run. The optimal calculated design is then used to create a prototype.



Bridgestone's proprietary technology allows the dynamic behavior of the tire in actual riding conditions to be reproduced and visualized in order to verify actual performance that cannot be understood through simulations alone.

■ Tire measurement technology for high rotational speed

By developing technology that enables the measurement and visualization of the distribution of tread pattern contact force, it becomes possible to measure the influence at high rotational speeds of small features of the tread pattern that were not previously understood.



GP-BELT



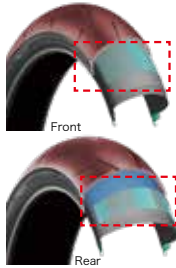
A new belt added to the conventional MS BELT. The pressure has been equalized to the ground surface. By enlarging the ground contact surface area, gripping performance during cornering has been improved. This also contributes to better gripping, reduction in ground contact surface area which causes slipping, and better wear control.



V-MS•BELT



Optimization of the spacing of the MS•BELT cords coiled around the tire's circumference contributes to ideal tire contact properties, as well as enhanced grip and performance.



MS•BELT Mono Spiral Belt



Patent acquired

Lightweight and durable cords are wrapped around the circumference of the tire to provide a smooth grip feeling. This contributes to a high performance tire with ① weight reduction, improvement in ② grip, ③ rotational stability, ④ high speed performance and ⑤ excellent damping effect.

HTSPC High Tensile Super Penetrated Cord



Steel cord material is comprised of individually rubber insulated inner filaments with high thermal conductivity to enhance heat transfer and reduce the risk of blowout. Moisture does not accumulate between filaments, reducing the chance of oxidation. The features promote high speed stability and durability of the tire as a whole. High case rigidity (grip performance) and superior shock absorption have also been achieved by these highly tensile filaments which have strong resistance to deformation.

3LC+CAP&BASE



The CAP&BASE construction divides the shoulder compound of the tire into upper and lower sections. By using a high grip compound for the upper section of the shoulder, and a high stability abrasion resistant compound for the lower and central sections, provides combination of both performance and mileage.



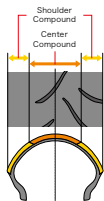
3LC 3 Layer Compound



3 Layer Compound

3LC (3 Layer Compound) technology. The shoulder compound provides excellent cornering grip. The center compound offers linear handling.

※ The name has been changed from "SPORT SACT"



RC POLYMER for motorcycle



RC POLYMER for motorcycle tire



Polymer improves wear resistance of tires, and silica is effective for wet performance. Although these two compounds are usually not compatible, the potential of both compounds is drastically increased by promoting affinity between them.

RC POLYMER for motorcycles, developed using Bridgestone's key technology NanoPro-Tech®, contributes to the improvement of wet performance and longer wear life.

※ NanoPro-Tech® is Bridgestone's key technology which controls the nanostructure of tire materials through molecular design, in order to emphasize the needed characteristics of the material.

5LC 5 Layer Compound

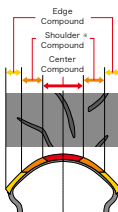


5 Layer Compound

Patent acquired

5LC (5 Layer Compound) technology. High grip performance has been achieved for every sports racing scene. The edge compound improves rotational stability during steep banking. The shoulder compound improves cornering power and grip performance in the forward direction. The center compound achieves a smooth feeling from straight runs to lean angles.

※ The compound with the highest "tensile rigidity in the circumferential direction" is used in the shoulder area, enabling rapid acceleration at a corner exit.



SPORT SACT



The center of the tire is equipped with a compound which provides excellent straight line stability, high speed durability and wear resistance. The shoulder area is equipped with a compound which realizes high grip performance. A smooth ride has been achieved by unifying these two compounds through intermolecular coupling at high temperature.

※ The name has been changed to "3LC (3 Layer Compound)"

CAP&BASE



The cap tread contains a compound with soft silica, and the base tread contains a compound with medium silica. These are carefully balanced. While ensuring shock absorption, strong grip performance in various temperature conditions is provided while supporting optimum rigidity.

SACT Straight And Cornering Technology



The center area utilizes a compound which specializes in wear resistance, and the shoulder with a compound which specializes in grip performance. By combining these compounds, two conflicting features, "long life durability" and "high grip performance" have been dimensionally fused. The two compounds are unified through intermolecular coupling at high temperature.

SILICA RICH



Silica Rich Compound ensures high grip performance in low temperature conditions at the early stage of riding and exhibits excellent wet performance.

Antenna rubber is Used

SILICA RICH EX



Performance in wet conditions is improved by greatly increasing the amount of silica compared to conventional SILICA RICH.

Antenna rubber is Used

●Antenna rubber (mainly used in SILICA RICH and SILICA RICH EX)

Electro-conductivity of the tire rubber containing larger amount of silica is, in general, low. Therefore, static electricity generated by a vehicle during driving is not easily discharged to a road surface. As a solution, rubber having high electro-conductivity (conductive slit) is exposed on a tread surface in a linear shape in order to easily discharge the accumulated static electricity. The rubber of the conductive slit has a different shade of color than the other tread rubbers so that it looks like a stripe on a tread surface. It does not affect the safety and wear life performance.

