Color Becomes Function.
SHOWA Unveils Next-Generation Decorative Coating Technology, Motoiris™

- **Astemo's suspension brand SHOWA debuts Motoiris™, a new decorative coating technology that adds color to the front fork inner tube and rear shock unit inner rod.**
- **Rather than using pigments, "structural color" generated by controlling film thickness is used. The technology provides enhanced functions such as weather resistance, corrosion resistance, abrasion resistance and adhesiveness.**
- **The coating uses a multilayer structure with an amorphous film that achieves both hardness and flexibility. The relevant technology is currently the subject of a patent application.**
- **The technology has already been applied to suspension components for races such as the All Japan Road Race Championship and AMA SUPERCROSS. In actual vehicle evaluations, improvements in terms of control and overall evaluation were confirmed using comparisons with a conventional multi-layer titanium coating.**
- **At the 2026 EICMA, front fork inner tubes in 5 different colors will be exhibited.**



Motoiris™ gives vivid blue, green, yellow and pink colors to the inner tubes and rods of the suspension. At first glance, it looks like a technology that enhances design, but its essence is more than just coloring. It is a functional thin film for motorcycle suspension components with corrosion resistance, abrasion resistance, adhesiveness, compatibility with oil, combined with a feeling of operation and control for the rider. At

the 2026 EICMA, front fork inner tubes with Motoiris™ coating will be exhibited. You will be able to see its beauty firsthand.

Astemo's suspension brand, SHOWA, has always tried to differentiate itself by coloring its suspensions in a variety of ways.

The new decorative coating technology Motoiris™, being unveiled for the first time, adds color to the inner tube of the front fork and the inner rod of the rear shock units to promote color coordination of the entire motorcycle and increase added value for special edition and specially equipped vehicles. We have also improved the corrosion and abrasion resistance of the coating, while at the same time improving its adhesion and sliding properties. It can be used in a wide range of suspension types such as upright and inverted front forks, rear mono shocks and twin shocks.

At the Astemo stand at EICMA 2026, we will be exhibiting front fork inner tubes in five colors produced using Motoiris™. By making subtle adjustments to the film thickness, it will be possible to reproduce the colors that lie between these five different shades. It can also express modest colors such as a dark navy blue, a deep green, and a red with understated elegance. These colors are not created by adding pigments, but are attained from the structural color generated by the thickness of the film. As long as the film is properly maintained, the color does not fade even after prolonged use.

In actual vehicle tests, we obtained results showing improvement in the feeling of control and overall evaluation as compared with the multi-layer titanium coating used in racing. The sense of control is the feeling that the vehicle moves in accordance with the rider's intention in response to ruts and road surface changes, and is related to multiple factors such as the effectiveness of damping, attitude changes during braking, and the followability to the road surface when the suspension stroke is short.

Whether we are developing products for racing or mass-produced products, we believe that the evaluation of the rider is ultimately important. We believe that the key technical skill of a suspension manufacturer is to conduct numerical evaluations and durability tests using test equipment, and then to adjust performance to include the rider's feeling, which cannot be captured by measurements alone.

In addition, the new Motoiris™ has already been applied to racing suspensions with multi-layer titanium coating in some races such as the AMA SUPERCROSS held in North America and the All Japan Road Race Championship. In the future, we will replace other racing suspensions

with these Motoiris™ parts through repeated testing.

It has already been proven that it is durable in races, and has also passed the durability tests assuming mass production. In particular, structural color changes with slight differences in film thickness, so color reproducibility is important. At EICMA 2026, we will listen to market reactions and requests and accelerate development.

In the future, we would like to create a situation where people can choose the coating color of the inner tube of the front fork and the inner rod of the rear shock unit just as they choose the body color when choosing a new vehicle. We are also considering the use of decorative coating technology to color-coordinate the entire undercarriage, such as the brake calipers. There is potential for application to metal parts, and we believe that a stronger visual expression can be expected in combination with milled parts and nickel-plated substrates.

*Information contained in this Technical Information is current as of November 3, 2026, but may be subject to change without prior notice.