October XX, 2026

Nippon Paint Automotive Coatings Co., Ltd.

Nippon Paint Automotive Coatings Jointly Develops New Film Decoration Technique for Automotive Parts
—Establishes a Process that Cuts Material and Processing Costs

Nippon Paint Automotive Coatings Co., Ltd. (Head Office: Hirakata City, Osaka; President and Representative Director: Satoshi Nishimura; "NPAC") announces that its subsidiary, Nippon Paint Automotive Americas, Inc., and Taikisha USA, Inc. jointly presented a new film decoration technique for automotive parts at the 2026 SPE TPO Global Automotive Conference in Michigan, USA, on September 29, 2026. Taikisha USA, Inc. is a group company of Taikisha Ltd. (Head Office: Shinjuku-ku, Tokyo; Representative Director and President: Masashi Okada; "Taikisha").

NPAC, which develops and manufactures automotive coatings, and Taikisha, which has extensive experience in paint application systems and production line design, have been jointly developing film decoration technology by combining their respective technologies and expertise. The new technique addresses key challenges identified during mass-production feasibility testing on a demonstration line, using an automotive bumper as an example of a large automotive part.

■ Key Features of the New Technique

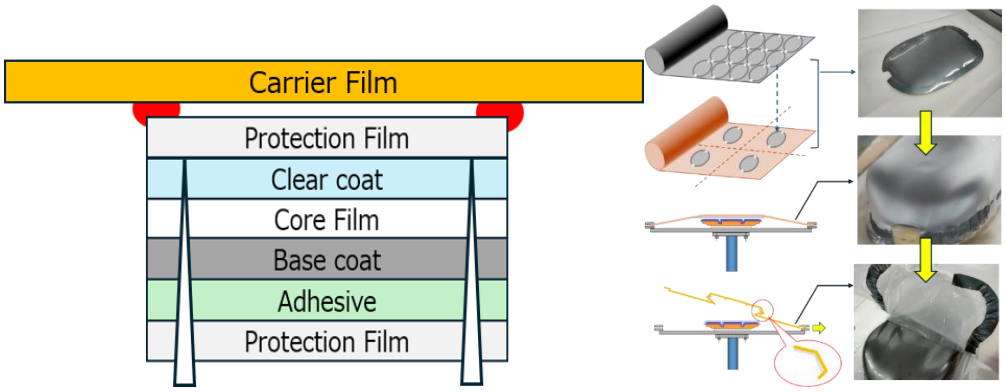
The new technique addresses material costs and trimming quality—the main challenges identified during mass-production feasibility testing—while shortening cycle times to improve productivity and reducing processing energy consumption.

The conventional process required a decorative film slightly larger than the part, with approximately 70% of the film discarded after vacuum-pressure forming, resulting in high material costs. Laser trimming also posed quality challenges. Addressing these issues was essential to making the process viable for mass production.

The new technique increases decorative film utilization to 90% or more by placing decorative film cut to the required size onto a low-cost carrier film before forming. The decorative film is pre-cut so that peeling off the carrier film after forming removes all unwanted sections in a single step. This eliminates the need for laser trimming, which had posed quality challenges. The carrier film is also recyclable, helping to reduce environmental impact. Together, these features are expected to reduce costs to a level comparable to or lower than those of conventional painting systems.



Comparison of Decorative Film Usage:
Left: Conventional Process　Right: New Process



Film Structure and Processing Steps for the New Process

■Looking Ahead

Film decoration offers a high degree of design flexibility and environmental benefits, with the potential to reduce energy consumption and labor requirements. However, production capacity and cost constraints have so far limited its application.

Through the new technique, NPAC and Taikisha aim to address these challenges and expand the applications of film decoration. Starting with small plastic parts, the companies will accelerate testing and development toward commercialization, with a view to extending the technology to larger plastic parts and, ultimately, entire vehicle bodies.

(Reference) Overview of Film Decoration Technology

Film decoration technology can reproduce conventional paint colors while enabling a wide range of design effects unique to decorative films and incorporating functions tailored to specific applications. Compared with conventional painting lines, film decoration lines can reduce the required building volume by 70% or more, substantially reducing space requirements. They also offer environmental and operational benefits, including unmanned operation, reduced labor and maintenance requirements, and substantial reductions in

CO_2 emissions.

By applying the automotive coatings technologies developed over many years, NPAC will deliver these benefits while meeting the high-performance standards required for automotive parts.



Illustration of the Film Decoration Process

Paint-coated films are heated, stretched, and applied to the part.

■ Presentation Overview

Conference: 2026 SPE TPO Global Automotive Conference

Conference Dates: September 28-30, 2026

Presentation Date: September 29, 2026

Location: Troy, Michigan, USA

Joint Presenters: Nippon Paint Automotive Coatings America and Taikisha USA, Inc.

Presentation Title: Establishment of a Film Decoration Technique Applicable to Large PP Parts

Official Website: https://auto-tpo.com/

For inquiries:
Nippon Paint Automotive Coatings Co., Ltd.
2-14-1 Shodai-Ohtani, Hirakata, Osaka, Japan
Tel: +81-72-857-5530
E-mail：info.npau@nipponpaint.jp
Corporate Planning Department
Attn: Nakane / Tanaka