WACOAL HOLDINGS CORP.

Wacoal to Exhibit Melooop Technology at IPF Japan 2026

～Exploring Applications in Automotive, Sports, and Other Fields through Joint Development with KINGSTEEL～

Nov 27,2026
Wacoal Holdings Corp.
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Wacoal Corp. (head office: Kyoto-shi; Keisuke Kawanishi, Representative Director, President and CEO; hereafter, "Wacoal"), a subsidiary of Wacoal Holdings Corp., will exhibit samples utilizing its proprietary Melooop technology at IPF Japan 2026 (International Plastic Fair), to be held at Makuhari Messe from December 1 to 5, 2026.

The samples will be exhibited at the booth of KINGSTEEL Machinery Co., Ltd. (hereinafter “KINGSTEEL”). They combine Wacoal’s Melooop technology, KINGSTEEL’s NexCell physical foam injection molding technology, and BASF’s Elastollan® thermoplastic polyurethane (TPU). By bringing together the technologies and expertise of the three companies, the collaboration aims to explore applications beyond innerwear and apparel, including the automotive, sports, and lifestyle sectors.

■Background of the Exhibition

Melooop is a proprietary technology developed by Wacoal. Its key features include mono-material molding, reduced material waste, and mold-free manufacturing. To date, it has been used in the innerwear and fashion sectors. In May 2026, Wacoal opened Melooop Lab, a research and development base where the company is advancing applications in a broad range of fields, including automotive, through co-creation with partners in Japan and overseas. This joint development began when BASF brought the three companies together. At IPF Japan 2026, the companies will showcase samples that integrate their respective technologies, demonstrating new manufacturing possibilities through the integrated examination of materials, product structures, and manufacturing processes.

■Main Exhibition Content

The exhibition will feature jointly developed samples for potential use in automobiles, bicycles, and other applications. The samples combine Melooop, NexCell, and BASF’s Elastollan® TPU.

・Plate / TPU Leather Samples
Samples for verifying texture, tactile feel, and material compatibility.

・Automotive Armrests

Designed as a potential automotive interior component, the sample will be used to explore opportunities to simplify product structures and manufacturing processes.

・Bicycle Saddles
Designed for applications requiring comfort, the sample will be used to explore the potential of different material properties and product designs.



Application image for automotive armrests combining Melooop and NexCell



Application image for bicycle saddles combining Melooop and NexCell

■Statements from the two companies

Keisuke Kawanishi, Director, Corporate Officer of Wacoal Holdings Corp.
Representative Director, President and CEO of Wacoal Corp.

Wacoal will exhibit a prototype combining a skin material made with its proprietary Melooop technology and a foam material utilizing KINGSTEEL's NexCell physical foaming injection molding technology at the KINGSTEEL booth at IPF Japan 2026 (International Plastic Fair). This joint development has enabled the creation of a new texture using a mono-material structure that could not be achieved with Melooop alone.

In addition to automotive interior components, which Wacoal has identified as a key focus area, the company aims to expand its applications to a wide range of industrial materials. Wacoal will continue to develop a new manufacturing process that combines materials made with Melooop and foam materials produced using NexCell.

Jim Chen, CEO, KINGSTEEL Machinery Co., Ltd.

Through this collaboration, we are exploring how NexCell, our physical foam injection molding technology, can simplify component designs and manufacturing processes while preserving the texture and feel of Wacoal's Melooop. For applications in automotive interiors and lifestyle products such as bicycle saddles, we plan to evaluate performance and moldability to inform product design for volume production.
At IPF Japan 2026, alongside the jointly developed samples, we will showcase additional NexCell samples at the KINGSTEEL booth to demonstrate the technology across a wider range of applications. We look forward to continuing our discussions with Wacoal's Melooop team to identify

new opportunities for joint development.

■**Future Outlook**

Through Melooop Lab, Wacoal will continue to advance application development across a wide range of fields, including automotive, sports, and lifestyle, through co-creation with partners in Japan and overseas. By combining the expertise cultivated in the innerwear and fashion sectors with the technical characteristics of Melooop and other materials and technologies, Wacoal aims to create new applications and business opportunities.

[Reference information]

＜INTERNATIONAL PLASTIC FAIR JAPAN＞

Exhibition name : INTERNATIONAL PLASTIC FAIR JAPAN

Period : Tuesday, December 1, 2026 to Saturday, December 5, 2026

Venue : Makuhari Messe (Hall 5 / Booth Nos. 52013, 52014)

URL : https://www.ipfjapan.jp/

Outline of Melooop

The new Melooop technology developed by Wacoal's Human Science Research & Development Center is used to create three-dimensional objects using the melt-blown method of manufacturing non-woven fabric. In the melt-blown method, a raw material resin is heated and extruded from a spinning nozzle, stretched using high-speed heated air, and made into microfibers. At the same time, the fibers are fused together using heat, making it possible to form a non-woven fabric without using adhesives.

Features of Melooop

① It makes products easily recyclable, including polyurethane, polylactate, and other monomaterial products

② It reduces wasted materials because it makes it possible to create three-dimensional objects by spraying fibers

③ Products can be colored by adding colorants or pigments to raw materials, which eliminates the need for a dyeing process.

④ Fibers are sprayed onto an object created using a 3D printer, which makes the use of molds unnecessary, making this technology ideal for small-lot production.

About the Wacoal Human Science Research & Development Center

The Wacoal Human Science Research & Development Center is a Wacoal research institution that was established in 1964. Scientists at this facility are scientifically exploring the human body from the perspectives of beauty, comfort and health. Since its foundation more than 60 years ago, data has been accumulated at the center. This data is applied in the development of new products, and it is Wacoal's infrastructure for improving quality and expanding its business domains. In recent years, the facility has been exploring the relationship between the body and the mind, proposing products and services based on insights and the needs of

consumers and studying and developing new materials and technologies.

<KINGSTEEL>
KINGSTEEL is a Taiwan-based machinery manufacturer. Since its establishment in 1978, the company has advanced the development of injection molding technologies and currently offers injection molding machines for foamed elastomers and industrial elastomers utilizing its proprietary core technologies. Through initiatives such as the development of its new foaming technology, “NexCell,” KINGSTEEL is working to advance manufacturing technologies and promote more sustainable manufacturing.

<NexCell>
NexCell is a physical foam injection molding technology developed by KINGSTEEL that utilizes supercritical fluids (SCFs). The technology enables foam molding using nitrogen (N_2) or carbon dioxide (CO_2) without the use of chemical blowing agents. It is being developed as a manufacturing technology that contributes to more efficient use of materials and reduced environmental impact.

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