PRESS RELEASE

GIFU TADASEIKI, MEG-MARUKA KAKOUKI, and Sumitomo Heavy Industries Jointly Develop In-Mold Coating and Molding System

-Realizes eco-friendly coating with high appearance quality-

GIFU TADASEIKI Co., Ltd. (GIFU TADASEIKI), MEG-MARUKA KAKOUKI Co., Ltd. (MEG-MARUKA KAKOUKI), and Sumitomo Heavy Industries, Ltd. (Sumitomo Heavy Industries)
has jointly developed an in-mold coating and molding system for injection molding machines, called "IMP^{e} (In-Mold-Plus eco)."

In-mold coating is a technique that involves the unified molding of low-viscosity paint in the injection molding process. By making the cleaning and drying stages of the coating process shorter than those in the previous coating process, this technique makes it possible to reduce operating costs. It also reduces Volatile Organic Compounds (VOCs) and CO_2 emissions and helps mitigate negative environmental impact.
Furthermore, this unified development of precision equipment for molding machines, metallic molds, and implantation machines by three domestic Japanese companies has resulted in the realization of a high level of appearance quality that only Japanese manufacturers can produce.

Going forward, the companies will aim to realize the practical application and mass production of this system.

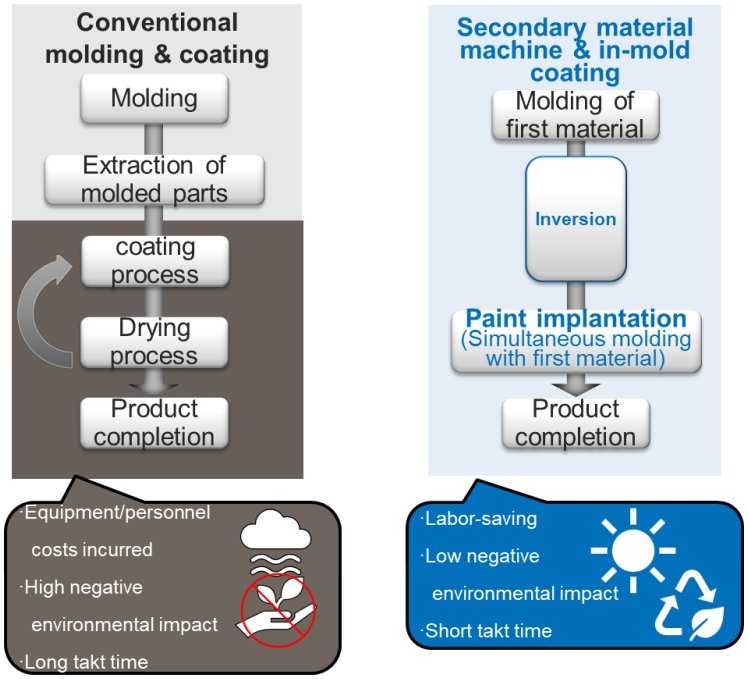
Features of Product

■Cost reductions

Reduces costs incurred in operation by shortening cleaning and drying processes

■Mitigation of negative environmental impact

Realizes coating that is gentle on the environment through the reduction of VOCs and CO_2 emissions



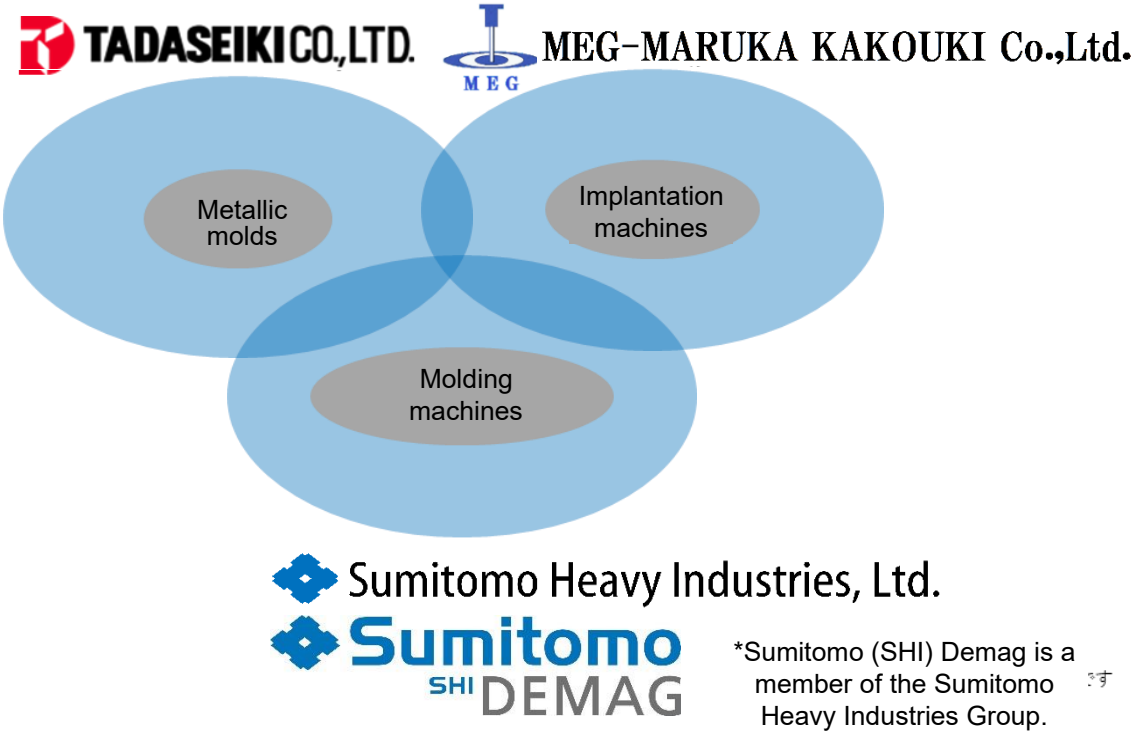
[Comparison of processes]

■ High appearance quality

Provides highly functional, attractive appearance quality through unified development using metallic molds, implantation machines, and molding machines

[Injection molding machines]

[In-mold coating products]



[Role of each company in "IMP^{e} (In-Mold-Plus eco)" in-mold coating and molding system]

<<Reference>> Overview of Each Company

[GIFU TADASEIKI Co., Ltd.]
Location: Gifu-shi, Gifu
Representative: Norio Tada, President
URL：http://www.tada.co.jp/

GIFU TADASEIKI designs and produces molds in a wide range of fields that include water-washing, medical devices, and stationary, with a particular focus on plastic molds for internal and external components and mechanical components for automobiles. A "development proposal-based enterprise" that also actively pursues the development of molds that realize higher functionalization in molded products and improved productivity on the customer side, the company largely specializes in molds for highly-difficult molded products that require complex shapes and considerable designability. One of the defining characteristics of mold creation at GIFU TADASEIKI is that the process is almost completely internalized, from the design and mechanical processing of the molds to their surface shaving and heat and surface treatment.

[MEG-MARUKA KAKOUKI Co., Ltd.]
Location: Miyoshi-shi, Aichi
Representative: Masayuki Nishikimi, President
URL： https://www.meg-maruka.co.jp/

MEG-MARUKA KAKOUKI delivers high-pressure polyurethane implantation machines as well as low voltage implantation and elastomer machines to customers in fields that include the automobile industry, thermal insulation materials industry, and furniture and other household goods industry in its capacity as a manufacturer that specializes in polyurethane foam injection molding machines. The company's polyurethane foam offers superior designability in addition to weight saving properties and thermal insulation performance, and will continue to be a material that plays a role in improving comfort in people's lives in a number of business categories and industries in the future as well. MEG-MARUKA KAKOUKI will keep on endeavoring to develop products for high-quality, high-precision equipment in order to facilitate that role.

[Sumitomo Heavy Industries, Ltd.]
Location: Shinagawa-ku, Tokyo
Representative: Shinji Shimomura, Representative Director, President and CEO
URL：https://www.shi.co.jp/

Sumitomo Heavy Industries entered the injection molding machine business in 1965. Since then, it has been developing technologies that have been leading the industry, such as all-electric machines equipped with the industry's first direct drive system and the revolutionary integration application “Zero-molding.” Its strength includes its robust lineup and precision/high-cycle molding, which contribute to the production of a wide variety of plastic products. Going forward, Sumitomo Heavy Industries will further push forward the sustainability of the global environment and the overall industry with involvement in molding that the company belongs to in its capacity as a leading company that promotes "the realization of a sustainable society."