

FOR IMMEDIATE RELEASE

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Utilizing Floating Linear Technology*¹
Construction of a Resilient New Production System to Respond to Diverse Needs
A Unique New Value Proposal and Contribution to a Resource-circulating Society: Accelerating
“*Yoki-Monozukuri*”^{*2} with ESG Integration”

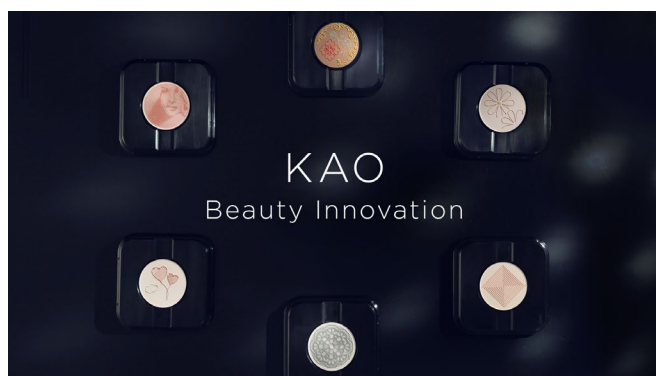
Kao Corporation have developed a decoration processing technology that can design products according to the consumers’ needs and a dynamic cell production technology that enables efficient high-mix low-volume manufacturing by optimization of floating linear technology*¹ in collaboration with B&R K.K. and Kyoto Seisakusho Co., Ltd. The new never-before-seen production system will begin operation in 2023.

Kao promotes ESG-driven *Yoki-Monozukuri**² that contributes to a resource-circulating society by delivering only what is needed through providing personalized products that can offer new value and realizing high-mix manufacturing with a high degree of freedom.

*1 Floating linear technology: A linear transport system that allows objects with built-in permanent magnets to float and move freely by controlling the repulsive or attractive magnetic force. With this system, high-speed, high-precision and complex transfers are possible. Floating linear technology facilitates both flexibility and efficiency in production.

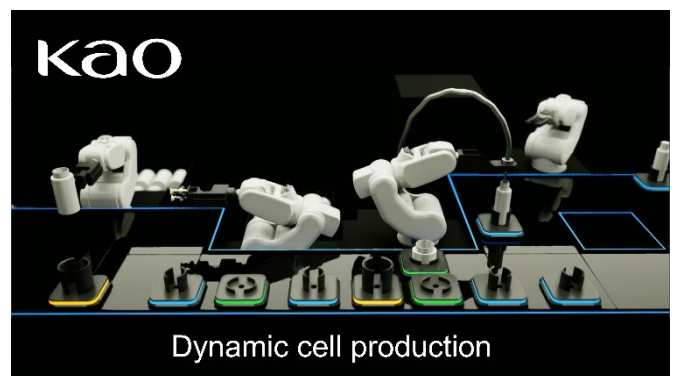
*2 Kao defines *Yoki-Monozukuri* as a strong commitment by all members to provide products and brands of excellent value for consumer satisfaction.

- Offering personalized products with new decoration processing technology



URL: https://youtube.com/watch?v=BsX_26nv3Bg

- New manufacturing that can contribute to a resource-circulating society created with dynamic cell production technology



URL: <https://youtube.com/watch?v=KOTgi5PutS4>

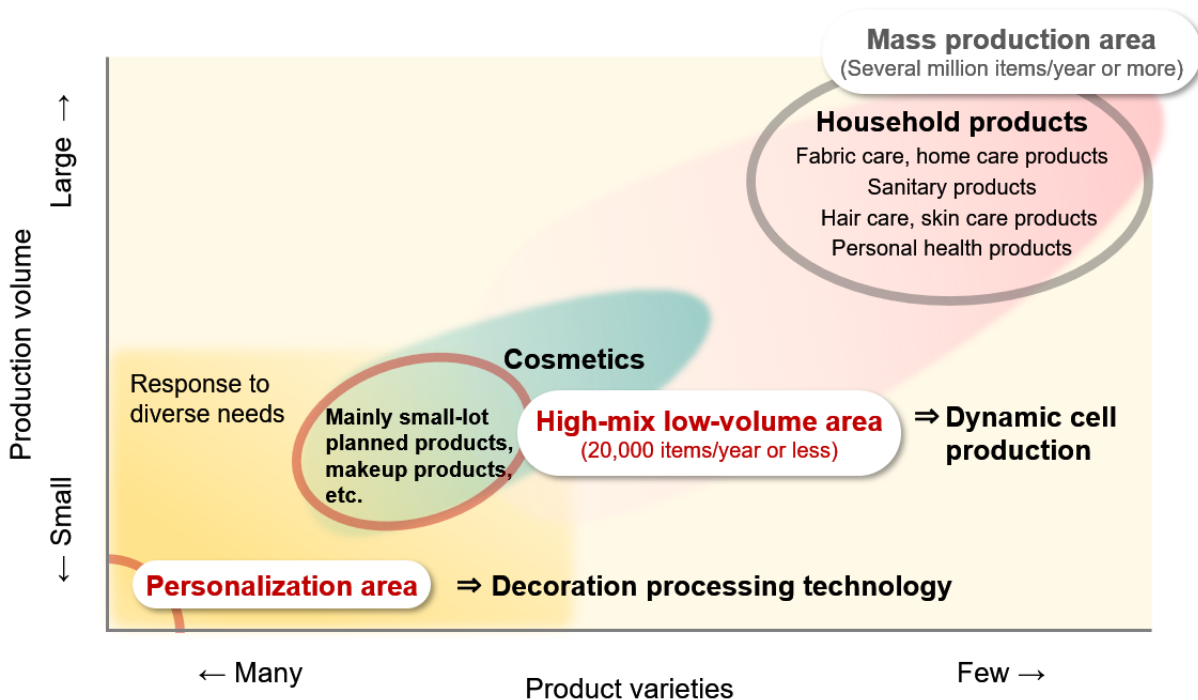
In the past, Kao has used its distinctive technologies as a base and has received support for many products created through mass production. However, now it is necessary to reform the speed and quality of manufacturing in response to consumers' diversifying needs.

The newly constructed decoration processing technology system utilizes movement of components that move, rotate and tilt freely and with high precision in six directions by floating linear technology. Because of this system, starting with cosmetics, we will be able to provide unprecedentedly valuable products and services that meet the needs of each individual consumer, and accelerate the shift to personalized marketing.

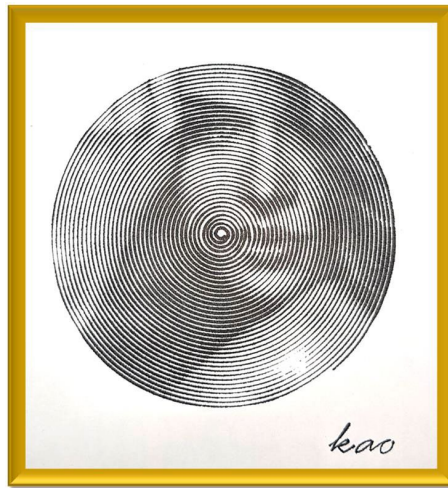
In addition, the highly adaptable transfer technology of the floating linear system enables flexible and rapid product changeovers. Complex simultaneous high-mix manufacturing can be achieved such as putting products with different filling methods and processing speeds into one production line at the same time and changing the processing order depending on manufacturing speed. In the future, we can expect significant functional expansion by promoting the integration of smart features, such as introducing AI, digitally connecting and linking pre- and post-processes.

Kao aims to build a sustainable supply chain through the realization of flexible and efficient production by actively utilizing cutting-edge technology and promoting DX.

■ Speed and quality reform in manufacturing



- Offering personalized products to meet various needs



With the corporate purpose “To realize a Kirei World in which all life lives in harmony,” Kao Group established its ESG strategy, the Kirei Lifestyle Plan in April 2019, and since 2021, has been employing the Kao Group Mid-term Plan 2025 (K25) with its vision of “protecting future lives” and “sustainability as the only path.”

Kao is promoting *Yoki-Monozukuri*^{*2} with ESG integration which preserves resources and reduces the burden on the environment, and is working to help people live richer lives and create a caring and resource-circulating society that develops sustainably.

By utilizing rapidly evolving digital technology and collaborating with various partners, Kao aims to develop innovative technology and build a sustainable supply chain that meets the expectations of society and is kind to people, society and the Earth.

About Kao

Kao creates high-value-added products and services that provide care and enrichment for the life of all people and the planet. Through its portfolio of over 20 leading brands such as *Attack*, *Bioré*, *Goldwell*, *Jergens*, *John Frieda*, *Kanebo*, *Laurier*, *Merries*, and *Molton Brown*, Kao is part of the everyday lives of people in Asia, Oceania, North America, and Europe. Combined with its chemical business, which contributes to a wide range of industries, Kao generates about 1,420 billion yen in annual sales. Kao employs about 33,500 people worldwide and has 135 years of history in innovation. Please visit the Kao Group website for updated information.

<https://www.kao.com/global/en/>

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