

**Shiseido Pilots the Deployment of Humanoid Robots on Its Assembly Lines,
a Cosmetics Industry First
-Aiming to Establish a New Form of Manufacturing Through
“Collaboration of Humans and Robots”-**

Shiseido Company, Limited (Shiseido) has introduced a pilot program of deploying industrial humanoid robots on the assembly lines of makeup products at its Kakegawa factory starting from March 2017, for the first time in the world among cosmetics companies. In this factory, one human worker and two humanoid robots work together to assemble various parts of varied shapes and materials, delivering finished products. While humanoid robots cover the procedures that are hard to be automated with conventional machines and existing industrial robots, the human worker focuses on inspection of minor defects such as scratches, assuring the quality of products. Through “collaboration of humans and robots”, Shiseido safeguards its future by providing against changes in the social environment such as declining workforce, and aims to establish a new form of manufacturing that responds to the market changes more swiftly and flexibly.

Background of Humanoid Robot Deployment

In the cosmetics industry, companies are increasingly required to promote a new manufacturing system that effectively manages high-mix low-volume production to address the ever-diversifying needs of consumers. For makeup products in particular, their manufacturing process involves numerous materials and components, and complex procedures such as packaging and labeling. At the same time, companies are heavily counting on on-site workers for in-process inspection, which relies on human’s sensibilities and cannot be replaced with machines.

Furthermore, amid growing concerns over shrinking workforce, Japan needs to take an immediate action to introduce industrial robots and revise the conventional human-based manufacturing. Through these measures, companies can develop a new manufacturing style in which human capabilities are fully engaged on-site, including cases when one on-site worker is in charge of management, inspection and assessment across multiple production lines.

In order to respond to this situation, Shiseido has applied for a project led by the Ministry of Economy, Trade and Industry called “FY2016 Demonstration Project for the Introduction of Robots”, and has developed, demonstrated and introduced a new manufacturing system with “collaboration of humans and robots” in a partnership with GLORY Ltd., a leader in robot system development.

Shiseido will further develop and evolve this initiative to realize effective manufacturing and reduce the work load of on-site workers. Going forward, Shiseido aims to further advance innovation in technology, enabling robots to team up on more complex, high-dimensional operations by applying AI (Artificial Intelligence) technology.

