MITSUI-SOKO GROUP

Press Release

April 8, 2025

MITSUI-SOKO HOLDINGS Co., Ltd.

MITSUI-SOKO Group Introduces Advanced AI Visual Inspection System, Initiating Implementation

Enhancing quality assurance and inspection accuracy in cosmetics manufacturing operations

The MITSUI-SOKO Group (hereinafter, the "Group" or "we") is pleased to announce the introduction and implementation of an AI visual inspection system at our logistics centers, aimed at enhancing the quality of cosmetics manufacturing operations.

During the "label application" phase of the cosmetics manufacturing process, verifying accurate label placement presents challenges due to human errors stemming from variations in skill levels, experience, and simple lapses in concentration. The AI image inspection system utilizes advanced AI technology to analyze various attributes, including position, angle, shape, dimensions, and quantity of objects, based on image data captured by cameras. It then compares this information against pre-registered data to assess whether the objects pass or fail, ensuring consistent and high-precision inspection results in accordance with standardized inspection criteria.

MITSUI-SOKO Co., Ltd., a member of the Group, has successfully implemented an AI visual inspection system for label application inspection in the manufacturing processes of a company that outsources its operations to MITSUI-SOKO. This system ensures that labels are affixed correctly according to the procedure manual, effectively preventing any omissions. Furthermore, the capability to record inspection results and capture evidence images enables traceability investigations.

Overview of the Project

In the label application process for cosmetic products, specifically at two locations—on the product itself and its packaging—this mechanism employs an AI visual inspection system to perform mechanical inspections. It verifies that labels are applied correctly in accordance with standard operating procedures (SOPs) and captures images as evidence of compliance.

Effects of Introducing this System

1. Inspection accuracy can be enhanced by transitioning from conventional visual inspection to mechanical inspection powered by AI technology.
2. Traceability investigations can be performed by recording images of manufactured products (those with labels affixed) that have been inspected and classified as passed or failed by the AI visual inspection system.
3. Two operations can be performed simultaneously by transitioning from a cell system[1], where manufacturing (label affixing) and inspection (verifying label application) are conducted separately, to a line system[2] that incorporates an AI visual inspection system using a conveyor.

MITSUI-SOKO GROUP

Press Release

4. Multiple types of products with varying shapes can be effectively inspected using multiple AI visual inspection systems.

Since formulating the MITSUI-SOKO Group DX Strategy in 2021, the Group has been focused on creating societal value through digitization and visualization in supply chain management (SCM). We are committed to achieving optimal operations that enhance efficiency, reduce costs, and improve quality by leveraging the latest technologies, advanced robotics, material handling solutions, and other innovations.

In response to challenges such as labor shortages due to the declining birthrate and aging population, rising wages, and intensifying competition, we will continue to support the growth of our customers' businesses by promoting the automation and semi-automation of field operations, along with other measures to enhance productivity and quality through smart logistics.

[1]cell system: A system in which manufacturing and inspection processes are carried out individually by a single worker.
Manufacturing: Unpacking – Product removal – Inspection of outer packaging – Product label application at two locations: product and packaging – Packing.
Inspection: Unpacking – Product removal – Product label application check at two locations: product and packaging – Packing.

[2]line system: A system in which multiple workers collaborate to complete the manufacturing and inspection processes while moving products along a conveyor.

###

For inquiries regarding this matter:

MITSUI-SOKO HOLDINGS Co., Ltd.
Digital Strategy Division
Email: dx@mitsui-soko.co.jp

For inquiries regarding this press release:

MITSUI-SOKO HOLDINGS Co., Ltd.
Strategic Planning Division
Public Relations Team
Email: kouhou@mitsui-soko.co.jp