

## Japan's Shimadzu automates coating processes of medical systems components

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### Opens new building at medical system manufacturing subsidiary in Japan

An opening ceremony was recently held for a new building at Shimane Shimadzu Corporation, a manufacturing subsidiary of Japan-based Shimadzu Corporation located in Shimane Prefecture.

The new building features various manufacturing digital transformation (DX) measures, including automated coating processes for medical systems components. Coating process automation will increase coating production capacity by 50% at Shimane Shimadzu.

Shimane Shimadzu is a manufacturing subsidiary that manufactures X-ray systems developed by the Medical Systems Division of Shimadzu Corporation. With the new building, Shimane Shimadzu will now be able to coat a large number of parts for general radiography systems, fluoroscopy systems, mobile X-ray systems, and other X-ray products on a single production line.

In addition to fully automating the processes of transferring parts between coating process steps and loading them into automatic coating equipment, wireless radio-frequency identification (RFID) tags will be used to assign different manufacturing instructions for each part and artificial intelligence (AI) will be used to automatically detect errors.

Furthermore, a reuse system of over-sprayed powder coating material was introduced to eliminate the disposal of waste powder. For welding processes, robots were introduced to ensure consistent quality, increase productivity, and reduce the burden on workers.

In the future, AI-based quality inspection capabilities will be introduced for coating processes and robotics will be used for the remaining manual coating steps in an effort to fully automate the manufacturing of parts.