

## The “Mazak iSMART Factory” Starts Operation At Yamazaki Mazak Headquarters in Japan

Yamazaki Mazak Corporation has announced that the “Mazak iSMART Factory™”, based on a new smart factory concept, has started operation at the Yamazaki Mazak Corporation Headquarters located in Oguchi, Japan. This new concept utilizes state-of the art IIoT equipment and advanced automation technology to realize improved productivity.

Mazak has been a pioneer in the development of automation and factory network systems. This started in the early 1980’s with the first Flexible Manufacturing Factory followed by the first Cyber Factory which started operation in 1998.

The “MAZAK iSMART Factory™” utilizes this extensive accumulated expertise together with the implementation of advanced digital manufacturing. By utilizing IIoT technology, all production equipment is integrated in a factory-wide computer network. This provides the ability to perform comprehensive monitoring of all production equipment and analysis of production results to give the ability to change aspects of manufacturing to realize improved productivity. By combining this with the company ERP system and AI technology, production will be continuously optimized.

By the use of the MTConnect® standard open communication protocol, all production equipment including Mazak machine tools and those of other manufacturers, are integrated in a network in the “Mazak iSMART Factory™”. The MAZAK SMARTBOX™ is used in the factory network for convenient and highly secure network operation. This allows the comprehensive monitoring of all facets of production – from the actual status of the production schedule, tool usage, cycle times to the occurrence of machine alarms. These data are thoroughly analyzed which is used to develop suggestions to be used on the shop floor to improve productivity. Data are input into portable electronic devices, such as tablets, on the shop floor for procedures such as machine final inspection to become part of each machine tool’s digital record. This digital approach to manufacturing will make it possible for the Mazak iSMART Factory™ to realize substantial improvements to overall productivity as well as the management of the entire production facility.

In the future, all Mazak manufacturing facilities, in Japan and other countries, will be upgraded to Mazak iSMART Factories in their continuing evolution incorporating the state-of-the-art and best technologies as they become available.

In addition to developing advanced digital manufacturing utilized by the Mazak iSmart Factory concept, Mazak has recently developed the “MAZAK SMARTBOX™” to ensure cyber security in factory networks, the Smooth Monitor – software for convenient monitoring of production equipment and visualization of the results, and the “MAZATECH SMS” - a flexible manufacturing system integrating machining centers and multi-tasking machine tools with a large capacity automated storage and retrieval system. All of these are designed to effectively meet the requirements of manufacturers worldwide today as well as tomorrow.

Contact: Public Relations, Corporate Planning & Strategy Office, YAMAZAKI MAZAK CORPORATION.

TEL : 0587-95-6849 <http://english.mazak.jp/>

Information in this press release is current at the time of publication.

This information is subject to change without notice.