



## NEWS RELEASE

### **MEDIA CONTACTS:**

Mazak Corporation  
Tasha Riddell  
Corporate Marketing & Comm. Manager  
859.342.1647 | triddell@mazakcorp.com  
or  
dgs Marketing Engineers®  
Chuck Bates  
Director of Public Relations  
317.813.2230 | bates@dgsmarketing.com

### **Mazak Makes its SmartBox Technology Even Smarter**

*Collaboration with software developer results in added intelligence and power to enrich data*

FLORENCE, Ky., April 18, 2016 – The Mazak SmartBox has been made even smarter with the power and intelligence to enrich data streams at their source – an area otherwise known as the “edge” in digital factory integration. Mazak worked with manufacturing software solutions leader System Insights Inc., and the two companies capitalized on the SmartBox’s complete open architecture to give it such advanced capability. With the power to enrich, or process, data, the SmartBox reduces the complexity of a source’s/machine tool’s data stream, or its “digital exhaust,” and simplifies it into a form that other applications can understand and utilize.

Developed in partnership with Cisco, Mazak’s SmartBox, at its base, is a launch platform for manufacturing operations monitoring and analytics as well as secure entrance into the Industrial Internet of Things (IIoT). With added enrichment capability, the SmartBox allows users to take full advantage of machine data regardless of complexity.

Enrichment classifies and identifies the data in terms of what is happening in a process and who is doing it. In the case of manufacturing, enrichment entails information such as when a machine was making a part, who was operating the machine, what was happening while the part was being made and reasons for any machine downtime.

As part of its work with Mazak, System Insights designed the VIMANA Enrich software to reside in the SmartBox. The highly sophisticated software system analyzes data and understands the behavior of machines within the context of manufacturing processes. It gives manufacturers extensive insight into exactly what their manufacturing equipment is doing in real time.

VIMANA Enrich provides continuous feedback to the SmartBox’s resident MTConnect® standard communications protocol agent using an extended set of data items and

vocabulary. The software combines its process knowledge with MTConnect data to provide the necessary contextual understanding of current processes. In doing so, it paves the way for better, more intuitive decision making where complex analytics and prognostics are used to compare patterns to historical norms and provide key performance indicators and send alerts when processes are operating incorrectly.

SmartBox is one of many innovative components within Mazak's dynamic iSMART Factory concept, which encompasses complete digital integration of advanced manufacturing cells and systems to achieve free-flow data sharing in terms of process control and analytics. The concept also incorporates the company's SMOOTH TECHNOLOGY, a complete process-performance technology platform that includes the various levels of the new Mazak MAZATROL Smooth CNC as well as advanced machine hardware and servo systems. For today's manufacturers, SMOOTH TECHNOLOGY represents a key first step towards digital factory integration.

For cybersecurity, Mazak SmartBox offers network isolation, which prevents unauthorized access from both directions – to and from the machines and equipment on a network. SmartBox also satisfies the critical security concerns of IT departments when connecting legacy equipment to a plant's main network for the purpose of gathering manufacturing data through the MTConnect protocol.

The Mazak SmartBox unit mounts to the side of a machine without the need for a direct connection to a machine's electrical cabinet. It provides several standard input ports and connection ports to quickly and easily connect any standard off-the-shelf sensors to the system for machine data gathering and condition monitoring. One SmartBox can serve several machine tools, along with other associated manufacturing equipment, depending on the application.

Download the complete white paper on the Mazak SmartBox enrichment project at <https://www.mazakusa.com/news-events/white-papers/digital-factory-integration/>

#### About Mazak Corporation

Mazak Corporation is a leader in the design and manufacture of productive machine tool solutions. Committed to being a partner to customers with innovative technology, its world-class facility in Florence, Kentucky, produces over 100 models of turning centers, Multi-Tasking machines and vertical machining centers, including 5-axis models. Continuously investing in manufacturing technology allows the Kentucky iSMART Factory to be the most advanced and efficient in the industry, providing high-quality and reliable products through its "Production-On-Demand" practice. Mazak maintains eight Technology Centers across North America to provide local hands-on applications, service and sales support to customers. For more information on Mazak's products and solutions, visit [www.mazakusa.com](http://www.mazakusa.com) or follow us on Twitter and Facebook.

#### About System Insights

System Insights (SI) based in California, with offices in Chennai, India, is a leading global supplier of manufacturing software in machining-based, discrete and process

industries. Through the innovative combination of a comprehensive real-time data solution and multidimensional, complex reasoning technology, the SI flagship product - VIMANA - delivers predictive analytics solutions to improve client's efficiency, productivity, and profitability. VIMANA's capabilities also enable customers to realize sustainable manufacturing objectives. The VIMANA software platform delivers a unique combination of Cloud Computing and Big Data capabilities that sets out to revolutionize the economics of manufacturing.

###