



Delta's Industrial Automation Solutions for Digitalized, Visualized and Integrated Smart Manufacturing Unveiled at Hannover Messe 2019

Delta, a global provider of smart and energy-efficient industrial automation solutions, will demonstrate its enhanced spectrum of solutions for the digitalization, visualization and integration of smart manufacturing at Hannover Messe 2019. An impressive 220-inch video wall at Delta's booth will feature the newly-launched Digital Factory Monitoring Solution, which integrates a series of software platforms developed by Delta to determine in real-time the status of manufacturing processes, equipment and energy consumption. The new DIASstudio integrated engineering software enables an all-in-one platform to select models, program and set up PLCs, HMIs, drives and more, allowing for effective and time-efficient machinery systems development. Delta's new CODESYS-based Motion Control Solution, matched with a Delta SCARA robot, will also be a highlight of our showcase.



Andy Liu, general manager of Delta's Industrial Automation Business Group, indicated, "The development of smart manufacturing is a major pillar of Delta's long-term strategy. By leveraging its commitment to innovation, automation hardware-software integration capabilities, and energy-efficient manufacturing expertise, Delta develops comprehensive platforms that help our customers' production facilities reach the smart manufacturing standard. By utilizing Delta's smart manufacturing solutions in our own PLC production lines, we are targeting an improvement in production capacity by approximately 70%, a reduction in production area by 35%, and at least a threefold increase in direct labor per-worker average productivity."

To foster the smart manufacturing megatrend, Delta is launching its new **Digital Factory Monitoring Solution**, an IIoT-based platform in which various Delta software systems converge to facilitate a 360-degree monitoring view of manufacturing and factory operations, such as production equipment data collection (DIAMMP Manufacturing Management Platform), factory facility operation (DIAView SCADA system) and overall factory energy consumption (DIAEnergie). Visitors at Delta's exhibition booth will witness the cutting-edge automation, digitalization and visualization qualities of the Digital Factory Monitoring Solution in a 220-inch video wall.

The **DIASstudio integrated engineering software** is an all-in-one system designed to simplify and reduce the time required for the setup process in machinery systems. Tasks such as product (Delta's HMIs, PLCs, servo drives and motors, AC motor drives) selection, PLC programming, quantitative parameter setting, machine tuning and HMI integration can all be executed smoothly with DIASstudio's key tools:

- **DIASelector:** A PC and APP-based (Android) mechanism to select the specific elements in the machine system.
- **DIADesigner:** After users have exported the model selection information out from the DIASelector, they can use the globally-adopted CAD software EPLAN for project planning and configuration, and then import the configured data to the DIADesigner to execute the programming, parameter settings, tuning and management.
- **DIAScreen:** A tool to achieve tag sharing between PLCs and HMIs/text panels.

Following Delta's cooperation with CODESYS, announced last November at SPS-IPC Drives Nuremberg, Delta will showcase its brand new **CODESYS-based Motion Control Solution** and the upcoming

PLC-based Extended Motion Controller DXMC series at Hannover Messe 2019. The former solution boasts compliance with IEC62231-3 standards to enable user-friendly integration of PLCs, HMIs and motion controllers into one single platform while also supporting EtherCAT protocol to simultaneously control field devices. The latter solution enables synchronous multi-axis motion control with an optional CODESYS SoftPLC in either standard type or panel type (7 inches / 10inches). In addition to the earlier released PC-based Motion Controller AX864E series () which can handle up to 64-axis control, the newly announced **PLC-Based Extended Motion Controller DXMC** can control up to 32 axes (standard type) / 8 axes (panel type). Visitors at our booth will also experience Delta's industrial robots working on a CODESYS environment to provide user-friendly and highly productive operations.

Other total solutions exhibited this year will offer substantial benefits to applications such as woodworking, packaging, elevators, water treatment and more. Welcome to Delta's showcase at Hall11, stand A57 at Hannover Messe 2019 from April 1st to 5th, Germany.

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Other highlights from Delta's Industrial Automation Solutions presented at Hannover Messe 2019 will include:

- The **Vector Control Drive C2000 Plus series** is a heavy-duty drive based on the architecture of the highly successful drive C2000 series. With 460V models reaching up to 560kW rated power overload capacity, it offers the best possible stability and performance of speed and position control for both sensor and sensorless types of synchronous and asynchronous motors, which are commonly used in heavy-duty and constant torque applications in the fields of food and beverage, metals, chemicals, plastics, and rubber. The C2000 Plus supports a wide range of protocols and built-in PLC functions for up to 10k steps.
- Delta's new **Multi-Loop Temperature Controller DTM series** is designed to provide highly accurate temperature-based control in advanced and complex applications. Its modular and scalable design includes the host, up to 7 temperature modules, and up to 8 I/O extensions, thus, capable of supporting up to 64 points of temperature control. By functioning with widely used protocols such as RS-485 and Ethernet, it can offer temperature control for more than 1,000 points. The DTM series also boasts complete isolation between channels to facilitate fast and stable information transmission, which are critical requirements in glass bending, plastic molding and ceramic plating machines.

About Delta

Delta, founded in 1971, is a global provider of power and thermal management solutions and a major player in several product segments such as industrial automation, displays, and networking. Its mission statement, "To provide innovative, clean and energy-efficient solutions for a better tomorrow," focuses on addressing key environmental issues such as global climate change. As an energy-saving solutions provider with core competencies in power electronics and innovative research and development, Delta's business domains include Power Electronics, Automation, and Infrastructure. Delta has 169 sales offices, 70 R&D centers and 38 manufacturing facilities worldwide.

Throughout its history, Delta has received many global awards and recognition for its business achievements, innovative technologies and dedication to corporate social responsibility. Since 2011, Delta has been listed on the DJSI World Index of Dow Jones Sustainability™ Indices for 7 consecutive years. In 2017, Delta was selected by CDP (formerly the Carbon Disclosure Project) for its Climate Change Leadership Level for the 2nd consecutive year.

For detailed information about Delta, please visit: www.deltaww.com

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