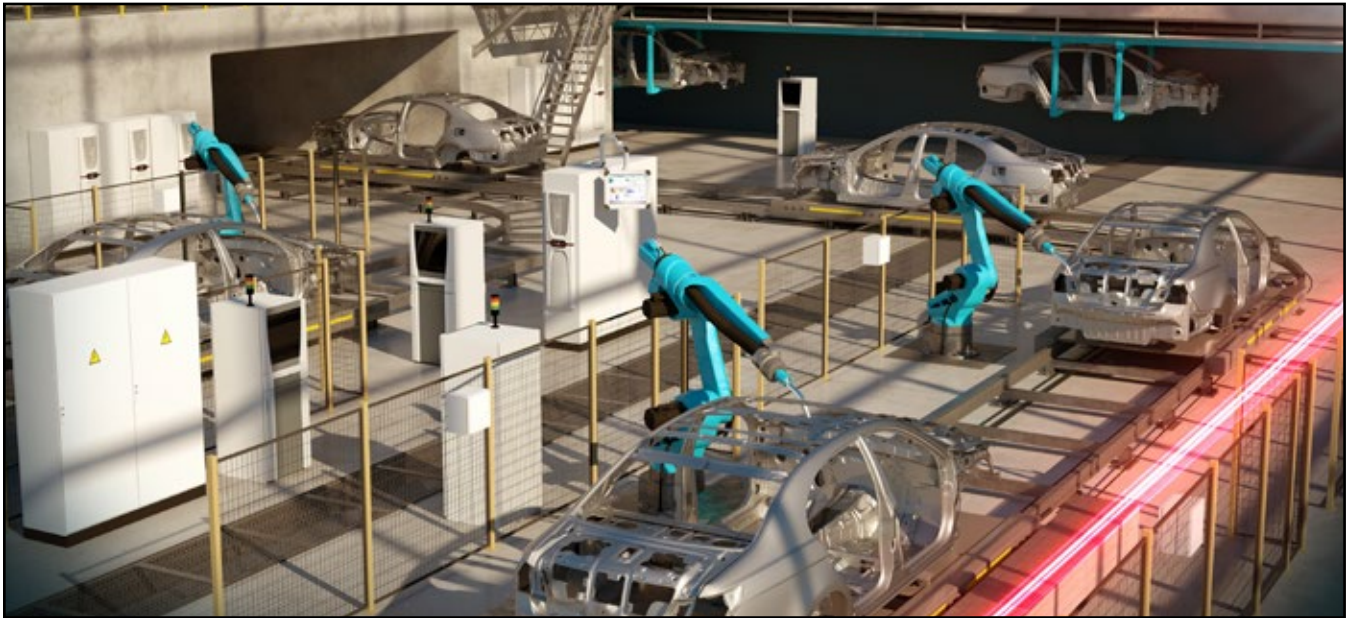


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RITTAL SOLUTIONS

Automation Systems and Digitalization Enable Electro-Matic to Provide Streamlined Solutions



ELECTRO-MATIC DEVELOPS GLOBAL PDP SOLUTION FOR A MAJOR NORTH AMERICAN AUTOMOTIVE MANUFACTURER

Big industrial automation challenges often require strategy, creativity, and collaboration across organizations. That was certainly the case when Rittal North America, EPLAN USA, and Electro-Matic worked together on a global standardization of power distribution panels for a major North

American automotive manufacturer. Now, using Rittal enclosures, Rittal Perforex machines, and EPLAN Pro Panel software, Electro-Matic is able to provide this automotive giant a standard product at all 52 of its manufacturing facilities around the world.

ENCLOSURES // POWER DISTRIBUTION // CLIMATE CONTROL // IT INFRASTRUCTURE // SOFTWARE & SERVICES

FRIEDHELM LOH GROUP



THE CHALLENGE

This major North American automotive manufacturer works with original equipment manufacturers and system integrators around the world to keep its assembly lines running efficiently. In the past, this led to inconsistencies due to OEMs following disparate standards. It also led to headaches, with the customer forced to deal with a long list of suppliers, parts, and pieces.

A GLOBAL SOLUTION

Leveraging its long relationships with Rittal and EPLAN, Electro-Matic developed a single-part solution: a fully-assembled power distribution panel (PDP) that can be ordered worldwide using a single part number configuration of the customer's specification. This package encompasses what used to be 40 unique part numbers and simplifies them into one custom product, representing significant time savings and increased ease of use for the customer. Programs and projects that the customer outsources to local OEMs around the world are now easily repeatable and scalable.

The PDP has been tailored to the customer's needs using a custom modification of Rittal's flange mount disconnect TS 8 modular enclosure. All documentation is housed in EPLAN, which means that if the design of the solution needs to be adjusted over time, making changes to products that use that design downstream is simple.

"One of the beautiful things about EPLAN," says Sarah Groden, Electro-Matic's Rittal Product Manager, "is the database of base component parts. Instead of having to look for all the CAD data of widgets that go into assembly, you just upload a bill of material and all the data will get populated automatically."

In order to provide ongoing support, the companies worked together to set up transparent monthly reporting between Electro-Matic, Rittal, and the customer. These reports include forecast numbers so that Rittal can ensure that Electro-Matic is always well stocked with the exact enclosures and accessories needed for every PDP build, which in turn guarantees the customer that their plants operate without interruption or unnecessary downtime.



ELECTRO-MATIC AND RITTAL AUTOMATION SYSTEMS

Electro-Matic was one of the first Rittal partners in North America to offer on-site modification capabilities using the Rittal Perforex BC, a fully automated machining center that significantly accelerates individual production stages.

“With the utilization of Rittal Automated Systems, Electro-Matic has the technology and expertise to modify, assemble, and customize enclosures to meet our customer needs,” says Mario Barraco, President of Electro-Matic. “We depend on our engineering team and the Rittal Perforex machine to automate this process. These tools give us the ability to machine custom enclosures with precision and accuracy — and much faster than traditional hand-cutting methods.”

Today, Electro-Matic has three Perforex machines, two in its Metro Detroit facility and one in its Cleveland facility, which allows their engineering team to complete customer orders with faster turnarounds than ever before.

“Across the board, customers love that we can offer this value-add service,” says Groden. “It saves them time and money while preventing errors, and it allows us to be more flexible to meet our customers’ needs.”

ELECTRO-MATIC AND EPLAN

Along with Electro-Matic’s investment in Rittal Automation Systems machining equipment, using EPLAN software has dramatically reduced the company’s engineering time and costs.

Errors in PDP builds lead to change orders, which are costly in both time and money, so it’s key to get it right the first time. EPLAN has helped Electro-Matic achieve faster design time cycles with increased quality and less risk for error.

“But it’s not just about the upfront engineering time or the documentation that is needed for manufacturing,” explains Ken Hady, Strategic Account Manager at EPLAN. “EPLAN software brings in sourcing, how the documentation is

being managed, and how you are storing the bill of material.” In panel manufacturing, one of the most manual and time-consuming tasks is wiring. But with EPLAN Pro Panel and Rittal Automation Systems working together, this formerly manual task is automated. For Electro-Matic, this means major savings in upfront engineering time.

Plus, EPLAN Pro Panel takes care of not only the 3D model of the PDP design but also important considerations like collision checking and thermal requirements so that engineers know exactly where to place the power supply so that it doesn’t overheat, making the design process even simpler.

A SERVICE LEVEL OF EXCELLENCE

Together, Rittal Automation Systems and EPLAN have enabled Electro-Matic and Rittal to provide a service level of excellence to this North American automotive manufacturer.

In one instance when the customer had an urgent need for a modification, their Rittal account manager picked up a pair of enclosure doors, drove them to Electro-Matic so they could be modified, and hand-delivered the modified doors so that the customer's critical system could go live as planned. "This is not a normal process," says Groden, "but in an emergency-down situation, we accommodate urgent requests because we have local CNC capabilities."

In another unusual instance, a completed PDP that was shipped to one of the customer's facilities in China was damaged during shipping. Instead of shipping a whole new PDP, which would have set the customer's project timelines back, Electro-Matic was able to contact Rittal partners in China who provided a local modification solution for the customer.

"Because EPLAN is so organized and documents everything precisely, the customer was able to tell us exactly which component was damaged and what needed replacing," says Groden. "We pulled up the schematic, looked at the bill of material, and were able to pinpoint exactly what they needed."

"We know there are going to be problems that arise," says Nicole Brecht, Global Key Account Manager at Rittal. "That is a matter of fact with life, but it's how you resolve those problems that people will remember. We could have said, 'That's not our problem, file a shipping claim.' But Rittal's mission is to provide a total package solution for our customers. In this case, because Rittal is a global company, we were able to do that seamlessly."



END-TO-END AUTOMATION

The automotive industry is pushing toward increased automation and digitalization, which means a streamlined manufacturing ecosystem is more important than ever before. From design and engineering to sourcing, manufacturing, and operations, Rittal and EPLAN work with their partners across the U.S. and worldwide to provide an integrated solution that unites products, processes, and the data they generate. The result: end-to-end automated production, with service customers rely on.

ABOUT ELECTRO-MATIC



Since 1969, Electro-Matic has helped transform American industry by supplying automation components and solutions to leading U. S. manufacturers. Today, Electro-Matic continues to leverage the value of emerging technologies by developing practical applications for industrial, commercial and retail markets. As a technology company, Electro-Matic helps their customer base turn innovation into value. As a one-hundred percent employee-owned business, customers enjoy the benefit of a supplier partner intently focused on delivering strong value-for-value relationships. **Learn more at electro-matic.com.**

ABOUT EPLAN

EPLAN provides software and service solutions in the fields of electrical, automation, and mechatronic engineering, including one of the world's leading design software solutions for machine and panel builders. These solutions enable panel and machine builders, system integrators, and their partners and clients, to achieve an increase in productivity, reduced time to market, and predictable profitability, with a minimum 40% time savings from pre-sales through project delivery. **Learn more at eplanusa.com.**



ABOUT RITTAL NORTH AMERICA

Rittal North America, LLC is a global manufacturer of industrial and IT enclosures, racks, and accessories, including cooling solutions and power management systems for industrial, data center, outdoor, and hybrid applications. Rittal provides innovative, high-quality solutions for practically any industrial or IT infrastructure application, from single enclosures to comprehensive, mission critical systems. Products are tested and certified to the appropriate standards that apply, including UL, CSA, ATEX, NEMA, and more. **Learn more at rittal.us.**

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