

WHITE PAPER

IMPROVED PROCESSES FOR INTERCONTEC CONNECTORS

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INDUSTRIAL



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TE Connectivity (TE) shortens lead times and improves delivery performance for its market leading INTERCONTEC connectors.

INTERCONTEC connectors help reduce downtime and increase productivity for servo motors and their application. To faster provide the market with their time-tested connectors, TE is currently enhancing its service processes. By concentrating production and implementing a modern ERP (Enterprise Resource Planning) software, TE has been able to significantly reduce lead times and improve reliability in the supply chain.



Our INTERCONTEC connectors have led the way in servo motor connectivity solutions in the EMEA (Europe, Middle East, and Africa) region for two decades. INTERCONTEC connectors are used whenever power, signal and data connections or combinations are required. These connectors owe their outstanding position to ongoing technical advancements and a high-quality service offering. A wide range of form factors are available for the design process of motor and drive manufacturers – from M12, one of the world's smallest singlecable circular connector for motors, to M58.

The INTERCONTEC connectors' advanced technical design features include e.g. the with CROWN CLAMP connection for attaching braided shields and the SpeedTec quick-locking system, which helps enable much quicker locking compared to conventional connector systems. Coding on the connector housing helps prevent incorrect insertion. The SpeedTec connector locking system is available for power, signal and hybrid connectors and in various sizes. It is backwards compatible with standard screw locking systems and has time-tested itself in environments with high vibration loads.

Making good things even better

We have been driving several initiatives to further improve the customer experience for INTERCONTEC products. Previously, we produced these connectors at four different locations, three in Europe (Germany and Poland) and one in Asia Pacific region (China). This presented us with several challenges that needed to be addressed to provide customers with an improved service level: The primary aim was to consolidate the competitiveness of the INTERCONTEC portfolio in the market environment. This requires flexibility to react on market dynamics, including the availability of skilled labor force. The internal supply chain between the three plants in Europe also offered potential for optimization in order to react optimally in times of high demand. Finally, the European plants were not operating with the same ERP system and there was also potential here to improve customer order processing.

Strategies for optimization

As the coordination in the supply chain between the plants and several subcontractors was complex, we decided to centralize the entire production of the INTERCONTEC portfolio at the plant in Bydgoszcz, Poland and maintain the manufacturing location in China. The Bydgoszcz site has a long and successful history within the TE group and has been working with an SAP-based ERP environment for decades. The move to Bydgoszcz supports the transition of INTERCONTEC towards SAP. Scheduled to be completed in 2024, the smooth integration into the TE ERP landscape is expected to bring many benefits to customers.

Focus on customer satisfaction

Our first step was to fine-tune the digital frontend for enhanced customer experience. This improvement became immediately apparent to all customers when placing an order, as orders can now be processed through a central channel, ensuring everything comes from a single source. The second step was to overhaul the operating processes to ensure proper execution from order receipt to dispatch of the finished product. This included creating complete transparency of the available stock of component up to finished products.

We created safety stocks in advance for high-demand products (high-runner parts), helping ensure that the relocation had minimal impact on their availability. The transfer of equipment to the plant in Poland was exemplary, with production resuming earlier than originally planned. This smooth transition enabled the high quality of the INTERCONTEC products to be maintained throughout the moving process. The Polish facility manages production efficiently and adheres to TE's strict quality controls, helping ensure that only high-quality products are delivered to customers.

Shorten lead times and delivery periods

We are renowned as a market leader in circular metric connectors. The high degree of automation in connector assembly and automated controls provide for maximum process reliability and nearly 100% quality. Complementing this is a high level of customer service, which plays a crucial role in the decision-making process for customers. Delivery times, in particular, are a key indicator of good service. Consequently, we have made significant efforts and improvements to help reduce lead times for INTERCONTEC products.

The need for this improvement became apparent in 2021, when an unexpected surge in demand led us to initiate an allocation phase, increasing lead times to 25 weeks for all parts of the INTERCONTEC portfolio. The recent transfer, now nearly complete, has helped TE to reduce lead times for key parts of the INTERCONTEC portfolio significantly.

We continue to strive for even shorter lead times. A new INTERCONTEC service offering is being developed to reduce lead times to a range of 2 weeks to 4 weeks for the high-runner portfolio and 6 weeks to 8 weeks for the mid runners with no changes to low runners — a standard market service for customers. With the planning processes for INTERCONTEC products now fully integrated into SAP, data reliability has significantly improved. All processes are monitored daily using performance indicators in the operating environment.

With this improved service level, customers benefit from significantly shorter throughput times, increasing flexibility and reducing stock level pressures. Overall, the customer's supply chain organization is relieved, helping allow teams to focus on strategic initiatives.

Exclusive customer projects at the start

TE and INTERCONTEC products are characterized by their ability to meet customer needs, develop optimal applications, and bring application-related solutions to market quickly. Shortening lead times and enhancing service levels for customers are just the beginning of many initiatives undertaken. We have several exclusive customer projects with market leaders in servo motors and is driving market trends in single-cable technology.

We will continue to provide design-in support to help ensure customers select the right products for their systems. The number of parts available through the TE sample store has significantly increased, enabling rapid delivery of samples to customers within 48 hours for initial testing.

We are also investing in the strategic expansion of its portfolio for harsh environment applications, such as outdoor settings and demanding food and beverage applications. The ongoing miniaturization and increasing demand for board connections in motor connectors are trends that we will address with its latest INTERCONTEC connector products.

Conclusion

The comprehensive product portfolio of INTERCONTEC connectors is built on a solid foundation, characterized by technological leadership and high service levels. We continuously adapts its highly reliable products to new technological developments and market trends. As a result, INTERCONTEC connectors are well-positioned to maintain a leading role in the industry, making them a reliable choice for industrial customers worldwide.



About TE

TE Connectivity is a global industrial technology leader creating a safer, sustainable, productive, and connected future. Our broad range of connectivity and sensor solutions, proven in the harshest environments, enable advancements in transportation, industrial applications, medical technology, energy, data communications, and the home. With more than 85,000 employees, including over 8,000 engineers, working alongside customers in approximately 140 countries, TE ensures that EVERY CONNECTION COUNTS.

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We make it easy to connect with our experts and are ready to provide all the support you need. Visit **te.com/support** to chat with a Product Information Specialist.

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