



Photos: Loxone

Zollner Elektronik AG achievement in the areas of: Industrial Engineering, Automation, Serial Production and Digital Supply Chain.

Success Story: Loxone

„Zollner Takes Over Production of the Loxone Touch Pure Flex Product Innovation“

Customer and Product:

The Loxone Group, from Kollerschlag, Austria, is the leader in the area of intelligent automation solutions. As a specialist, Loxone makes simple control and intelligent automation possible for all types of products. Whether a private home, hotel, office or commercial property – Loxone makes life and work easier in every situation. The Loxone Group has over 550 employees at more than 20 locations worldwide. Here the epicenter of European building automation currently exists with the Loxone Campus – a one-of-a-kind, intelligent ensemble of buildings made up of a hotel, office, logistics and training center.

Over the past years, Zollner Elektronik AG has further built up strategic cooperation with Loxone. In March of this year it received an order from Loxone to produce a completely individualized user interface using state-of-the-art laser technology as well as to simultaneously define and validate the applicable processes and systems for a step-by-step segue into serial maturity.

With the “Touch Pure Flex”, an intuitive and diverse Smart Home Panel was developed. The new button standard has more than 14 touch points, twelve of which are freely placeable icons – which can be populated with individual symbols and markings – plus two optional selection buttons, an LED matrix display with optional status LEDs for precise adjustment of functions as well as integrated temperature and humidity sensors. The exceptionally flexible “Touch Pure Flex” can be individually, quickly and simply created, “customer created”, from an online configurator regarding layout, functions, markings and individualized with a selection from over 200 icons.

Its unique product properties make the “Touch Pure Flex” the most flexible control element in the world for building automation such that it can be used in the most widely varied application options – whether that be in a hotel, restaurant, company, medical practice, housing complex or at one’s own home.

What was the big challenge of the project?

The "Touch Pure Flex" is available in two models: the "Touch Pure Flex Air" (wire-less with a battery) and the "Touch Pure Flex Tree" (with a cable) in white or charcoal gray. The complex manufacture of these completely individualized products within the shortest amount of time presented Zollner Elektronik AG with its first challenge, for example, how to affect the highly precise laser marking of the glass or develop the sensitive process of gluing glass to plastic. The user interface must be engraved with high precision, adapted to individual customer specifications and then assembled to be weather resistant. The real glass needs to be glued to the plastic housing and the circuit board here such that resistance against environmental influences continues to be guaranteed.

Another complex part of this project was to make so-called "one-piece orders" possible in spite of the industrial sequences of a serial production process with EDI connection because every individual end customer can create their own "Touch Pure Flex" tailored to their needs. These should be produced at Zollner in one-off production and also delivered individually by Zollner.

A fascinating task was also to realize the sophisticated logistics process regarding execution of deliveries to Loxone's worldwide distribution locations for direct shipment to the end customer.

What solution did Zollner find?

The goal of Zollner Elektronik AG was to implement industrial engineering, automation and serial production of the completely individualized "Touch Pure Flex" with expert

know-how, while at the same time define the applicable processes and systems for validation and subsequent step-by-step segue into serial maturity. To do this, multiple processes needed to be introduced at Zollner for the first time.

The luxurious feel of the control is created by genuine glass, the satin-finished optics by ceramic refinement. In order to guarantee weather resistance, Zollner Elektronik AG precisely engraves the glass plate (the user interface) of the "Touch Pure Flex" with state-of-the-art laser technology. The PCBA was produced at the Zollner plant in Satu Mare, laser marking of the glass plate and assembly took place at Altenmarkt. For future production, final serial production is planned for Satu Mare so the time span between order placement and delivery can be shortened.

In order to optimally adapt the background logistics process, Zollner Elektronik AG implemented a digital supply chain. That means, after a "Touch Pure Flex" has been "customer created" in the online configurator, the order is transmitted by one of the worldwide Loxone locations via a digital end-to-end supply chain connection to the Zollner ERP system, and the respective order is produced internally at Zollner within 48 hours with an individual device.

With this digital connection, "one-piece" production can be realized in spite of the industrially engineered sequences of serial production. Here Zollner takes over packaging work so the "Touch Pure Flex" can be quickly shipped to the end customer by the Loxon distributor, assembled and with the applicable paperwork. Upon delivery, the individual devices are brought together according to the end customer's order. With the development of a digital supply chain, Zollner Elektronik AG could expand its competence and smooth new ways into a smart future.

This is what our customer says about our collaboration:

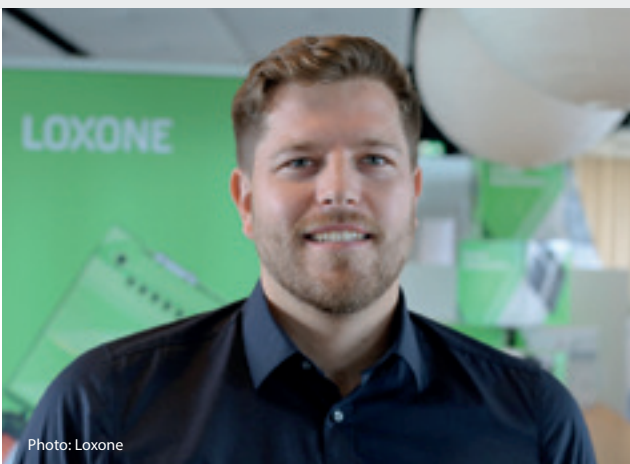


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„Through digitalization of the complete supply chain, from the incoming customer order at Loxone to creation of the production order at Zollner, the Touch Pure Flex can already be efficiently produced as a high volume product starting with a lot size of 1.“

Philipp Gujon, Loxon Product Manager