



Our customer portrait

Digital Electronics, Austria

It is hardly possible to describe *Digital Elektronik*, headquartered in the province of Salzburg, in one sentence. Today, the company sums up its forty-year history with the slogan 'Performing Excellence'. A little less polished, *Digital Elektronik* could also be called a real problem solver in the field of mechatronics. "You can say, many of our clients have all failed somewhere else before coming to us," Johannes Hainzl, one of the two managing directors, sums it up.

Johannes Auer, who shares the management with Johannes Hainzl, adds: "We are not a classic SMD contract manufacturer, although we do occasionally work in this field. Our core competence is taking on challenging tasks in mechatronics that only a few companies dare to tackle. We make them our business. We combine all the key competences required to solve the task in the best possible way. This begins with a thorough understanding of the challenge. First and foremost, this includes asking the right questions. Then, in the creative process, we work out the best possible and most economical solution. Since we unite all production steps under one roof, we can already draw on the relevant know-how for later feasibility during the design process. In this way, economic efficiency is already kept in view during prototype development."

The experience in the development department plays the biggest role at this point. Across various industries, *Digital Elektronik* develops and manufactures a wide variety of mechatronic products. This can involve medical equipment or designer lamps. Drive technology or products for communication technology. The team of explorers is particularly enthusiastic about unprecedentedly complex product ideas. A layman cannot even imagine the complexity and the high demands on some products. As in the example of casino equipment. According to its own statements, *Digital Elektronik* is the market leader in the development and production of card shuffling and dispensing devices, for example.

The company building at the headquarters near Salzburg, which had been in use for over 40 years, was bursting at the seams in 2020. A new building was planned and the existing buildings were integrated into it. "With the new company building, we were naturally able to think in a completely new way when expanding our production lines. A unique opportunity to plan from scratch, so to speak," enthuses Hainzl.

Digital Elektronik has relied on the reliability of JUKI placement machines since 1987. Did JUKI have, so to speak "Home advantage"? "When investing in six pick-and-place machines and a comprehensive automated storage solution, you inevitably have to be tough as nails. We took a close look at all the well-known manufacturers and analysed them neutrally. We chose JUKI again for a number of reasons: the price-performance ratio /We know that we have a reliable partner in JUKI, which pays off when it comes to integration, for example," explains Johannes Auer. "Not to forget that with JUKI we get everything from a single source. Warehouse - assembly, software and in addition a competent and motivated team that supports us as partners," adds Johannes Hainzl.

With the flexible and fast all-round placement machine JUKI RS-I, *Digital Elektronik* has opted for JUKI's bestseller. A big plus of the "pick-and-place machine for all cases" is its flexibility combined with high speed and a unique, low-maintenance head system.

The JUKI head system - an original Takumi head design - has a fully automated, height-adjustable centring system. The head system can process components up to 25 mm high - no head change is required. As far as the component spectrum is concerned, the JUKI RS-I placer processes components from 0201 (metric), up to 74 x 74 mm and 50 x 150 mm. Here too: no head exchange is necessary! The head system adjusts itself individually to the components fully automatically, which further optimises throughput. The placement head, which operates with eight suction cups, achieves an optimum speed of up to 42,000 parts per hour. JUKI's own optimisation software reduces travel distances to a minimum and thus maximises throughput.

In addition to the placement machines, JUKI also designed and integrated the automated storage solution for the electronic parts. For the storage and provision of the electronic parts, *Digital Elektronik* uses the JUKI storage system ISM

UltraFlex 3600 and the extension(s) ISM UltraFlex 3900, plus an ISM 500. The storage system serves as a master for the storage and retrieval of all electronic components. Several factors were convincing. For example, the material handling times are massively reduced, while at the same time errors are minimised. The set-up times can be significantly minimised with the JUKI ISM UltraFlex storage solutions in combination with the JUKI feeder intelligence. An important factor for *Digital electronics*, because smaller batch sizes are also produced.

Traceability is indispensable in some customer industries and is therefore a basic requirement for *Digital Elektronik*.

Other factors that contribute to economic efficiency played an important role - for example, in addition to the high speed, the small footprint compared to conventional bearings. Or also the MSD capability. But also details such as a specially designed output tray, which allows the JUKI ISM UltraFlex storage solutions to access higher-priority items during the automated storage and retrieval process.

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The JUKI logo consists of the letters 'JUKI' in a bold, blue, sans-serif font. The 'J' and 'U' are connected, and the 'K' and 'I' are also connected. The letters are all the same height and are set against a white background.

It is obvious that the storage systems are tailored to the needs of SMD production to the highest degree.

In addition, for *Digital Elektronik* the integration of an external automated vertical large-part warehouse was particularly important. This is where Digital Elektronik opted for EffiMat. The integration and support from JUKI in the start-up process was a very important part of JUKI's service and once again underlined the partnership cooperation.

"Our business model requires innovation to the highest degree. We cannot afford to stand still. We are not a manufacturer that generates its profits through high production volumes. We have to develop intelligently and manufacture leanly, constantly questioning ourselves. Where can we become even better and more efficient? We certainly pass on this pressure to innovate to our partners," explains Auer. "As a rule, we don't get along with suppliers who deliver off the shelf. Flexibility and the will to cooperate beyond the much-vaunted horizon are indispensable for us," adds Johannes Hainzl.

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The JUKI logo is displayed in a bold, blue, sans-serif font. The letters are thick and closely spaced, with a slight shadow effect on the right side of each letter, giving it a three-dimensional appearance.