



ASYS Automation Systems GmbH | Case Study Semiconductors, SMT

## CNC Control and Machine Software for Depaneling Systems

The entire CNC control technology and machine software for the high-end depaneling system DIVISIO from ASYS Automation Systems GmbH is provided by REX AT. The commissioning can be done virtually thanks to a digital twin — perfect for the carbon footprint of both companies.

**“The use of the digital twin proved to be extremely effective in this doubly challenging task: We supplied the CNC, I/O control technology, IPC, camera technology and the entire machine software for the ASYS DIVISIO depaneling product range and actively reduced time and costs. The constantly growing range of functions of our products helps ASYS and REX AT to further strengthen their market position.”**

Lars Agricola | Managing Director  
REX Automatisierungs GmbH



### Objective

For the current DIVISIO product line, a high-end depaneling system, ASYS Automation Systems GmbH relied on the long-standing cooperation with REX Automation Technology that has been successful since 1999. REX AT provides the CNC control technology for DIVISIO and also developed the entire machine software.

### The Customer

For over 30 years, ASYS Automation Systems GmbH has been developing and delivering automated production machines in the fields of electronics, life science, and energy as a key planner and global company. “Transforming Ideas” is ASYS’s vision. The goal is to proactively embrace future-oriented trends for intelligent automation, key technologies, and robotics, to provide creative impulses, and to (re)invent forward-looking solutions.



› The depaneling system of the DIVISIO series combines milling with a pick and place application to load the separated circuit boards into a magazine or pass them on to a downstream machine. The REX Automation Technology team supplies the hardware for the CNC control technology and develops the complete machine software from a single source.

### Performance by Eckelmann

REX AT not only provides the hardware for the CNC control technology but also takes responsibility for developing the complete machine software:

- › PLC development including CNC functionality
- › HMI: Development of an intuitive user interface
- › Digitalization: Implementation of the digital twin into the user interface
- › Supply of hardware from the Eckelmann Group: CNC control E°EXC 89 including I/O-system, safety control E°SLC 89, industrial box-PC
- › Additionally, REX AT provides the camera system including image processing software. The image processing performs:
  - › Setting the zero points of tools and products
  - › Recognition of reference marks on the circuit board and correction of the position offset
  - › Reading the product ID (DMC)
  - › AOI (Automatic Optical Inspection), quality control of the cut edges