

**E°CUT Release 2023.1.0: Fully integrated partner solution for automated oxyfuel cutting with IHT APC**

## **E°CUT solution package optimizes oxyfuel cutting machines with automated oxyfuel cutting process**

**Wiesbaden, June 2023.** “This release is an important signal for the mechanical engineering industry: In the future, our customers will be able to automate and commission their CNC cutting machines plug-and-play in the shortest possible time thanks to E°CUT”, explains Boris Spangenberg, Product Manager CAD/CAM, Digitization and Cutting in Eckelmann AG’s Machine Automation Division. “Seamless integration allows the system to be operated from a single location”, adds Thomas Franzmann, Head of PLC Software Development at Eckelmann.

As a pioneer in machine automation, the company Eckelmann offers the E°CUT solution package to machine builders of cutting machines. It seamlessly integrates IHT Automation’s solution with the E°CUT HMI, PLC and E°EXC89 controller. The APC system itself contains an integrated technology database for oxyfuel cutting, oxyfuel cutting torch, gas controller, ignition and a distance control. Benefit: The E°CUT solution package is pre-configured for use with IHT Automation’s APC system. Once installed, it allows the customer to start cutting directly. In addition to this easy integration, the support effort has also been reduced. “In practice, it only has to be mounted on the machine and connected”, praises Kurt Nachbargauer, Managing Director of IHT Automation, who accompanied the integration with his team. In the Baden-Baden showroom for oxyfuel cutting technology, IHT Automation is also presenting a cutting machine including the innovative APC system for the automated oxyfuel process via E°CUT for training purposes.

With APC, IHT Automation introduces an automated technology for cutting mild-carbon steel sheets, tubes or profiles used on cutting tables or by robots. It ensures maximum productivity and a safe cutting environment. Eckelmann maps the processes with the E°CUT solution package, one of the leading systems on the market. It combines the software components firmware, E°CUT HMI, E°CUT PLC, CAD/CAM as well as hardware components from Eckelmann, for example control and drive technology, camera systems, industrial PCs and more.

For almost five years, Eckelmann engineers have been equipping cutting machines from leading manufacturers with automation technology together with their partner IHT Automation:

- Through the interaction between E°CUT and IHT APC, the partners Eckelmann and IHT Automation enable fully automatic control of the oxyfuel process.
- Integration of the I/O signals and assignment of the APC control component for the Eckelmann E°EXC89 control in the PLC
- Optimizing cut quality – smart sensors enable more precise cuts.
- Fully integrated and browser-based user interface of the APC-system in the E°CUT HMI Premium Edition of the E°CUT HMI within release 2023.1.0.

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- Seamless technology data exchange via MQTT between the E° CUT solution and the APC Oxfuel Process Control. Machine-to-machine communication and previous processes have been fundamentally simplified.
- Control and optimization: Optimal process data and machine data can be matched and evaluated.

The greatest benefit of the solution is that the machine builder no longer has to assemble his machine control system from individual components.

Preconfigured I/O configurations reduces the amount of cabling required and it reduces errors significantly.

The savings in time and costs pay off particularly well for machine series.

A variety of hardware and software components work together with E° CUT to ensure optimal operation. The integrated cutting database ensures consistently high cutting quality with less waste. The parameters in the database have been developed on the basis of numerous cutting tests under a wide range of conditions and can be customized.

User-friendliness has been specifically increased: the integration makes it much easier to control the entire machine. The operating personnel act on just one panel; it replaces the previous two and can be operated intuitively.

Kurt Nachbargauer knows the advantages from practical experience: One of them is safety, thanks to the integration of intelligent cutting torches. Whereas flames were previously ignited manually and thus dangerously by hand, self-ignition now takes place in the cutting torch.

Another advantage of the Eckelmann package: "In the past, we were inhibited by partner controls at the latest when new implementations were due. Today, the Eckelmann team does not have to readjust customer updates, or only marginally. Updates take effect more quickly, downtimes are avoided, and thus costs are actively saved."

In view of the omnipresent shortage of skilled workers, Boris Spangenberg is hoping for a high response to the E° CUT solution package worldwide, especially from the American market, due to the significant simplification of processes and the enormous reduction in workload. And he also makes a promise for the future: "Every system remains updateable, and we will continue to be at our customers' side for the future with clear added value for the life of the machine."



Image line:

In the show room of IHT Automation in Baden-Baden, Managing Directors Kurt Nachbargauer (right) and Martin Roubicek (Sales and Marketing Manager) present a cutting machine with E° CUT HMI and integrated APC browser tile. The APC-system is mounted on the machine.

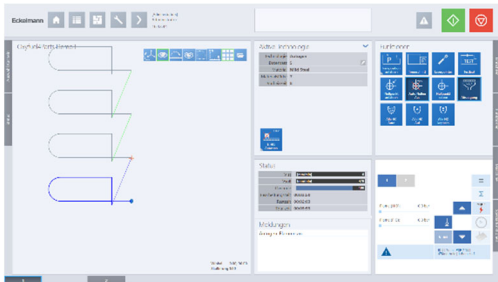


Image line:

Fully integrated browser-based tile of the APC system in the E°CUT HMI Premium Edition of the E°CUT HMI within release 2023.1.0.