ZCC Pick&Place Interface Option

Zünd Cut Center – ZCC offers the ability to control a robot via the Pick&Place Interface Option, which enables fully automatic picking, sorting, and placing.

The Pick&Place Interface Option enables direct communication with a robot via the Zünd Cut Center – ZCC operating software. A Modbus TCP protocol is used for this purpose, while the robot's PLC interface serves as the master. The robot solution is available from third-party suppliers. When purchasing a robot, make sure it comes with a master PLC

and Modbus interface and has sufficient reach. The configuration of the PLC memory range is based on Zünd interface specifications. All safety concerns must be addressed, incl. implementing general operating safety measures, fences, light curtains, connecting the robot to the emergency-stop circuits of the cutter, obtaining CE and other certifications, etc. The Pick&Place Interface Option makes picking, sorting, and placing a fully automated process. The system allows for individually defining locations (e.g. containers) for parts placement. The necessary parameters are derived from the metadata of the order/job file.





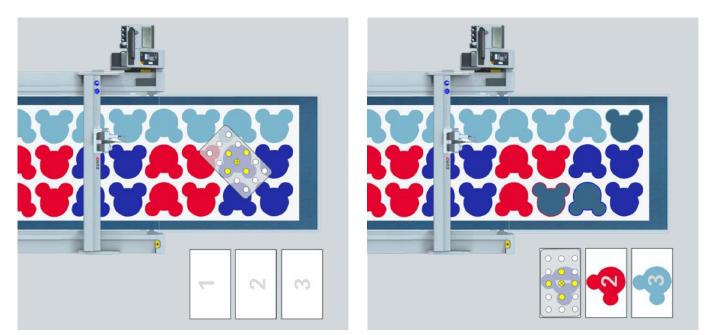


Parts removal

The size and shape of the cut pieces are taken into account during removal. To ensure a reliable process, Zünd Cut Center – ZCC calculates the ideal arrangement of the suction cups and activates only those that are needed.

Parts placement

The cut pieces can be placed at predefined locations. Based on the default settings in ZCC, the robot can create stacks or deposit parts in containers. Based on the metadata transmitted to ZCC, each part is put in the correct spot and sorting becomes a fully automated process.



In this example, five suction cups are activated to remove the part. The end effector automatically positions itself correctly for easy removal of the cut part.

Details

Modbus TCP protocol

Hardware connection set (emergency-stop connection)

Requires front cutter extension

Patent pending

Compatible with S3, G3, D3

Benefits at a glance
Fully automated Pick&Place
Intelligent sorting of cut parts
Optimized alignment of the end effector
Selective activation of the suction cups

Definable parts placement in stacks or containers

