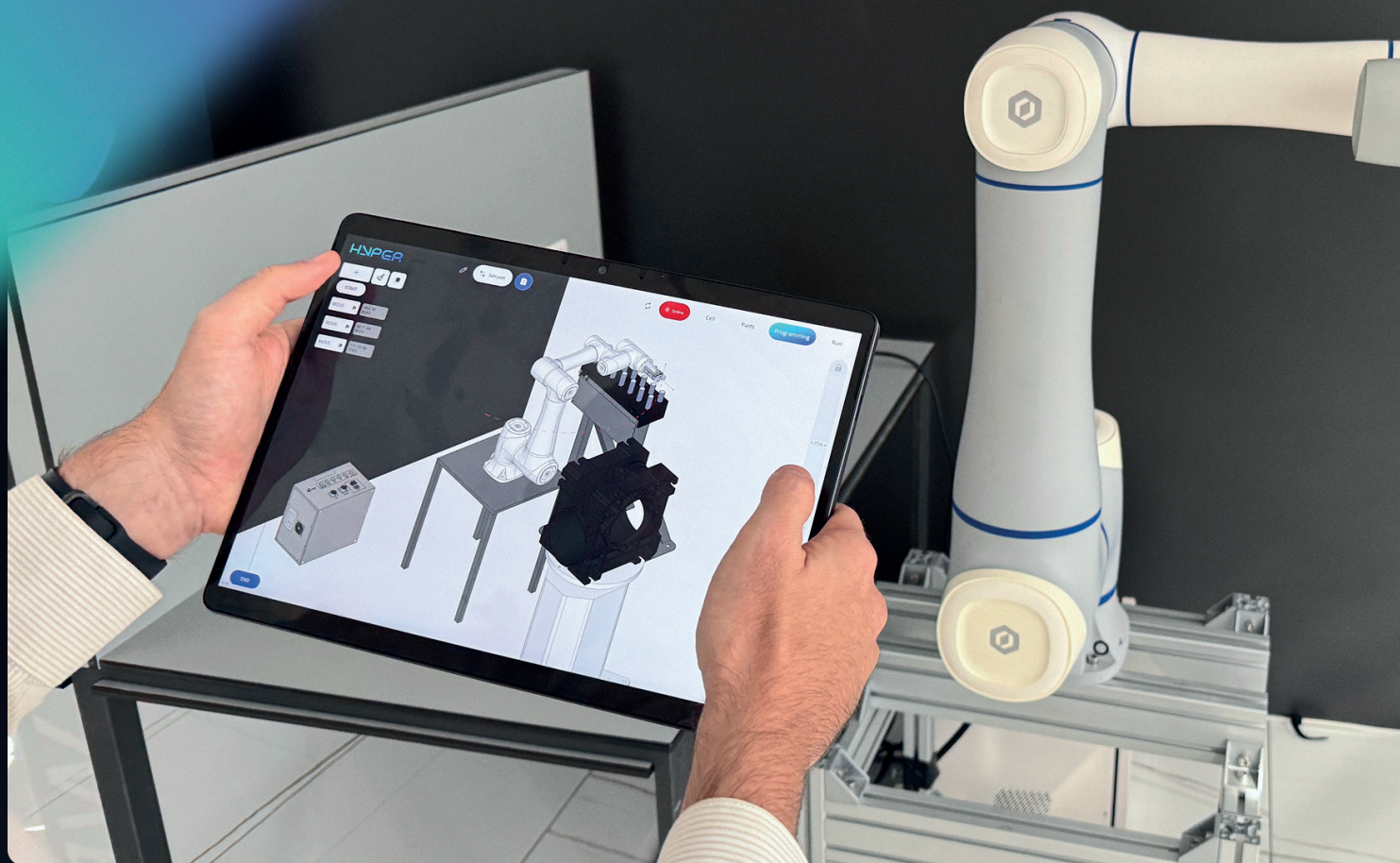


HYPER



# ENCY Hyper: hybrid programming of industrial robots

Empowers every shop-floor operator with the capabilities of a professional robot platform.



Touchscreen interface



Block-based programming



Cross-platform solution



Multi-brand support



Collision avoidance



Real-time control



Trajectory calculation

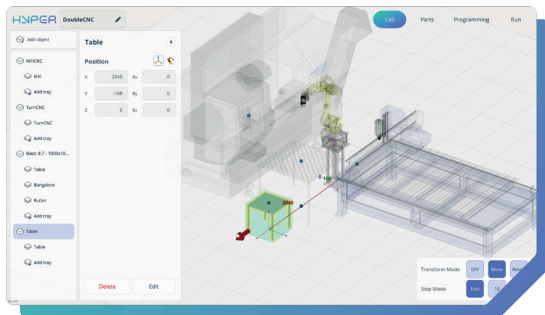
Command blocks define the sequence of operations

Provides control over operation parameters and kinematics

The interface is optimized for touch-screen devices



## An incredibly simple workflow

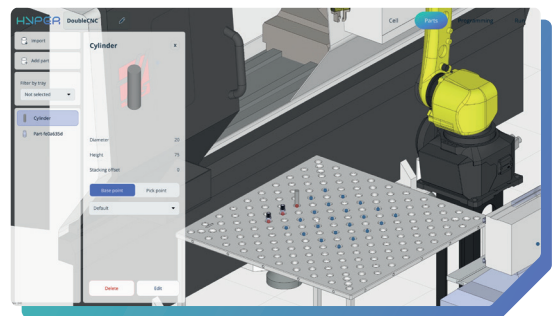


### Cell Mode

The robot cell can be created in ENCY MachineMaker, our digital twin builder, and then loaded into ENCY Hyper. Here, you can edit the robot cell — add or modify components and adjust layout parameters.

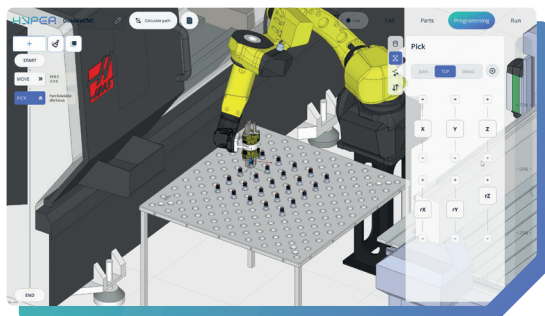
### Parts Mode

In this mode, you define the parts. You can import a CAD model or build a parametric one directly. Then you set the gripping points and arrange the parts in the workspace — for example, on pallets or tables.



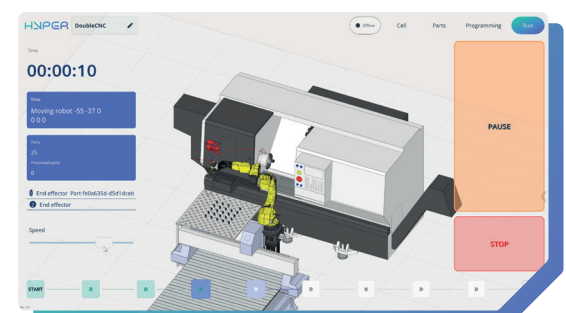
### Programming Mode

You create your robot program visually by placing command blocks and connecting them in sequence. Once your sequence is ready, you can test it either in a virtual simulation or directly on the real robot — just press Live.



### Run Mode

When the program is ready, switch to Run Mode to execute it on the real robot. Here, you can control the speed, monitor the current task, and track the tool status — all in real time. All robot movements in the real cell are simultaneously reflected in the digital twin and displayed in the software interface.



# Advantages of hybrid programming compared to

## Traditional online methods

- ✓ Zero downtime
- ✓ Real-time digital twin feedback
- ✓ Multi-brand compatibility
- ✓ Smart auto-calibration
- ✓ Fast changeovers

## Pure offline systems

- ✓ Real-world synchronization
- ✓ Minimal post-calibration
- ✓ Bi-directional workflow
- ✓ Lightweight deployment
- ✓ Adaptive learning

## AI-only tools

- ✓ Human-supervised intelligence
- ✓ Deterministic results
- ✓ Full process context
- ✓ Industrial reliability
- ✓ Collaborative hybrid mode

ENCY Hyper keeps the user in the loop with the real robot — allowing the program to be executed and refined simultaneously. In simple terms, the platform connects to the robot controller online, enabling the engineer to test and adjust robot motions directly on the real robot while observing the results both in the virtual model and in the physical cell.

## Configurations and applications

### ENCY Hyper

ENCY Hyper can run completely independently — and this makes it perfect for everyday automation.

- pick-and-place
- machine tending
- palletizing
- packaging
- assembly
- nailing



### ENCY Hyper Max

ENCY Hyper acts as the operator interface, while ENCY Robot works in the background, handling heavy calculations and trajectory generation.

- milling
- welding
- polishing
- coating
- additive

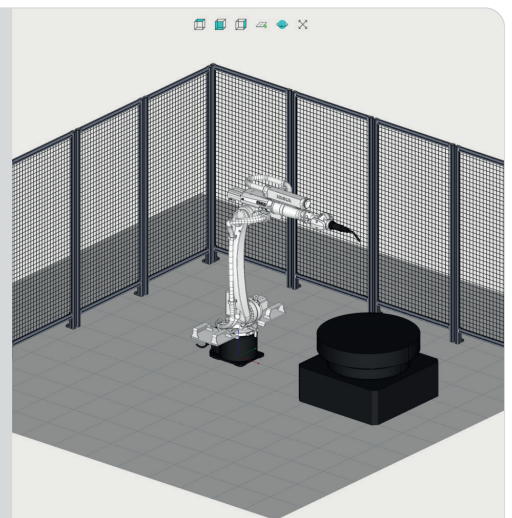


### MachineMaker: zero code digital twin builder

Create accurate digital twins of your production equipment:

- Design full robotic cells with all components
- Simulate robot functions in detail
- Generate error-free code with certified post processors
- Access the Robot Components library with major brands
- Build custom kinematic models quickly

MachineMaker helps manufacturers and integrators replicate real-world setups virtually. While extensive Robot Components library includes a wide selection of industrial robot brands and various components to build virtual robotic cells. The high-quality simulations and detailed digital twins ensure precise planning and testing before implementation.



# Who benefits from ENCY Hyper

## For robot integrators

- A ready-to-use solution compatible with multiple robot brands
- No need to develop or maintain custom software anymore
- The integrator can prepare a project for the customer, and the customer can later adapt it easily without returning to the integrator
- The customer doesn't need to learn complex CAM software
- Complete robot cells can be designed using components from a large online library, with process simulation and demonstration capabilities



## For robot manufacturers

- Can be bundled with robots to provide customers a modern, flexible, and user-friendly programming solution — a strong value add
- There's no need to develop or maintain custom software anymore
- A cross-platform application that can be installed on most industrial PCs, tablets, or even hand-held computers

## For robot operators

- Offers a visual programming approach appreciated by operators and automation engineers
- Eliminates complex teach pendant routines — complete workflows can be designed with simple drag-and-drop logic
- Ensures safety through full cell simulation and automatic collision avoidance



## For ENCY Robot users

- Serves as the perfect companion for users of ENCY Robot software
- Enables fine-tuning, testing, and execution of projects directly next to the real robot — without loss of data or time
- Supports integration with computer vision and real-time feedback from sensors and external devices

## About us

ENCY SOFTWARE LTD, the developer and supplier of these products, is headquartered in the EU, in Cyprus.

For over three years, our team has been dedicated to transforming the CAD/CAM workflow. We aim to create a natural environment for the next generation of CAD/CAM engineers, breaking the boundaries of traditional solutions with advanced communication tools and AI. Our goal is to ensure the industry's fastest transition from design to finished part, making your processes more efficient and innovative.

Experience the future of CAD/CAM with ENCY. Explore our solutions, request a demo, or contact us to learn how we can help you revolutionize your workflow.