



Engineered for the Fast Lane

"You either do it properly or you quit."

Vladimiros Tziortzis

NASCAR Euro Series race winner, seven-time Cyprus Karting Champion, and the first Cypriot driver in EuroNASCAR



In motorsport, performance comes from precision, control, and getting every move right. **ENCY 3.0** brings the same mindset to manufacturing — with new CAM technology, smarter robot motion, advanced laser and additive workflows, and AI that works directly with the CAM project.

From Tool Assemblies and Combo Finish to Smart Motion and CAM Agent, ENCY 3.0 takes CNC and robot programming to the next level.

Discover what's driving ENCY 3.0 forward.

CNC & CAM TECHNOLOGY

ENCY 3.0

Precision in Every Move.

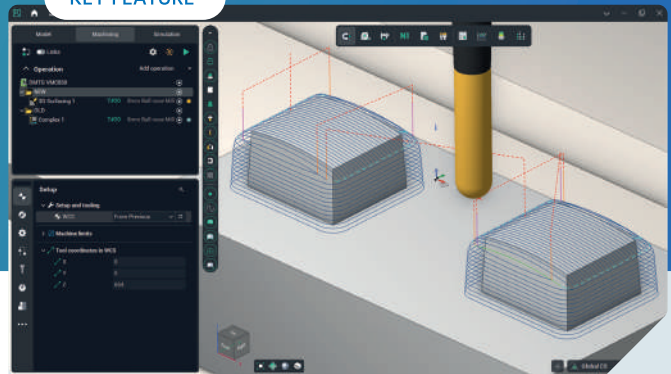
KEY FEATURE



Tool Assemblies

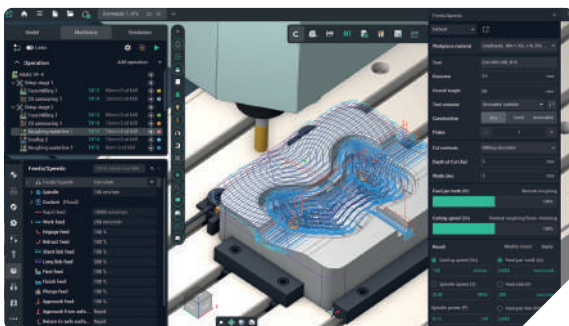
Build complete tool assemblies from the spindle or turret to the cutting edge. Combine parametric and 3D components, change holders and adapters directly in the machining context, and use true tool geometry for more accurate simulation and collision checking.

KEY FEATURE



Combo Finish

Plane, Waterline, and Scallop strategies now come together in one universal finishing operation, including combined modes for steep and shallow areas. Smoother zone merging, continuous passes, and parallel calculation deliver cleaner toolpaths with fewer unnecessary transitions.

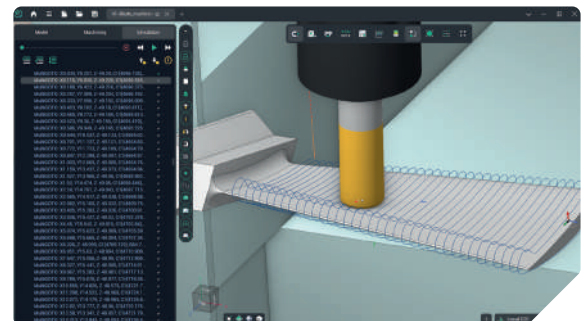


Feeds & Speeds

The rebuilt Feeds & Speeds calculator automatically determines cutting conditions from the selected tool, workpiece material, and machining method. Built-in Walter, Kennametal, and Sandvik data provides ready-to-use cutting parameters that can be adjusted and sent directly to the operation.

Adaptive Tilting

Avoid holder collisions automatically. ENCY adjusts tool tilt in two directions and converts 3-axis motion into 5-axis movement only where extra clearance is required, while protecting both cutting passes and links.



Blade Machining

New dedicated 5-axis strategies bring advanced finishing to turbine, compressor, and impeller blades. Control the tool axis and machine blades, roots, hubs, and edges with specialized Spiral, Circular, and Linear passes.

Swarf

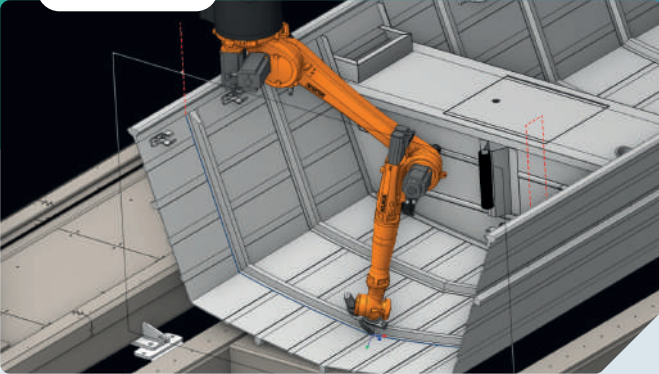
The Swarf operation has been substantially reworked for 5-axis side-surface machining. Improved tool-axis control, simpler handling of closed contours, and more flexible axial passes make complex Swarf toolpaths easier to create and control.

ROBOTICS & ADVANCED MANUFACTURING

ENCY 3.0

Complex Motion. Under Control.

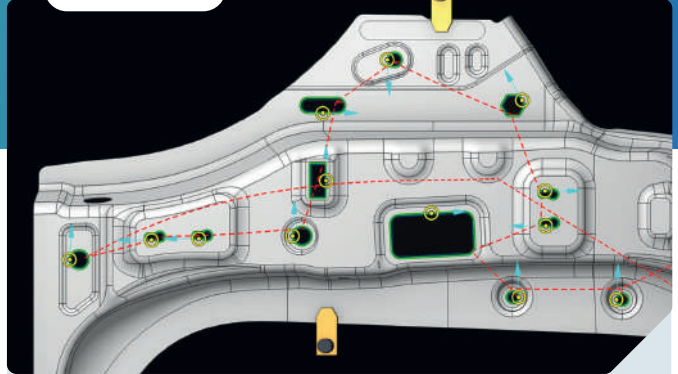
KEY FEATURE



Smart Motion

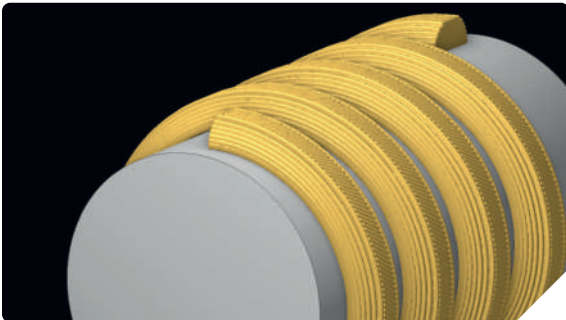
Generate 5D and 6D robot trajectories without manually creating an axes map. Smart Motion automatically coordinates redundant robot and external axes, stays within axis limits, and avoids singularities and collisions — with the axes map still available for fine-tuning.

KEY FEATURE



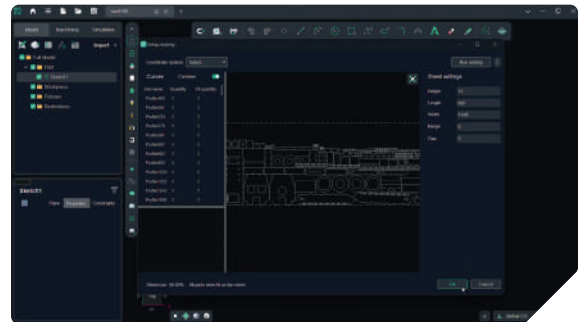
Laser Cutting

ENCY 3.0 takes laser cutting further from model to machine. Feature Recognition identifies circles, rectangles, slots, keyholes, and other cuts automatically; Support Generator creates the required fixtures; and NC output with cycles produces shorter, cleaner machine programs.



Additive Manufacturing

Additive workflows now cover planar, non-planar, and radial slicing. New radial strategies support closed, partial, and helical deposition around a rotary axis, with added control over infill angles, seam gaps, power, and layer time.



Nesting

Automatic Nesting combines AI with conventional placement algorithms to arrange parts efficiently on sheet material. Define spacing and rotation rules, then let ENCY find a compact layout for laser, plasma, waterjet, and other cutting processes.

AI & CONNECTED WORKFLOWS

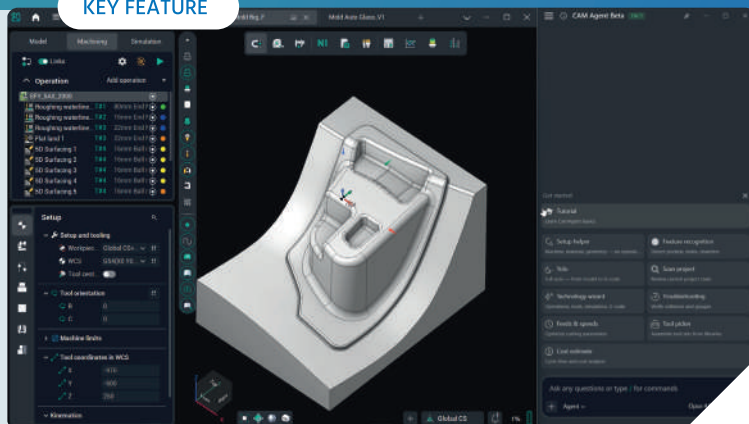
ENCY 3.0

Intelligence in the Driver's Seat.

CAM Agent

CAM Agent works with the active ENCY project. Use plain language to recognize machining features, choose strategies, tools, and cutting data, create and simulate toolpaths, troubleshoot problems, estimate time and cost, and inspect NC code — while staying in control of every step.

KEY FEATURE



Macros

Record a workflow once and replay it on similar jobs. Macros capture operations, geometry selections, machine setup, stock, and project parameters, turning repetitive sequences into reusable automation that can also be edited and shared.

Extensions Store

Extend ENCY with additional tools and capabilities when you need them. Find, install, update, and manage add-ons such as CAM Agent and custom workflow extensions directly from ENCY.

ENCY Clouds

Keep projects, files, messages, and production context connected across ENCY, the web, and mobile. Share projects with colleagues or technical support, keep local and cloud versions in sync, and review tools and toolpaths from virtually anywhere.

Digital Machine Center

Find postprocessors, machine schemas, interpreters, and complete Machine Kits in one catalog. Search by machine, controller, brand, or asset type, review technical details and licensing options, and request trials before adding an asset to your workflow.

About ENCY Software

We leverage over 30 years of experience in developing CAD/CAM solutions, combining deep industry knowledge with an innovative approach. ENCY represents a breakthrough in technology and a fresh perspective on traditional processes, merging time-tested methods with modern tools for CNC and robotic programming. The ENCY X ecosystem embodies this approach, delivering cutting-edge design and manufacturing capabilities supported by cloud technology and AI for fast and efficient operations.

