



CATALOGUE
2025

MASTER SERIES

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HEADQUARTER / GENEL MERKEZ

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MAKİNA**
SAN. TİC. LTD. ŞTİ.
Ağaç İşleme Makinaları



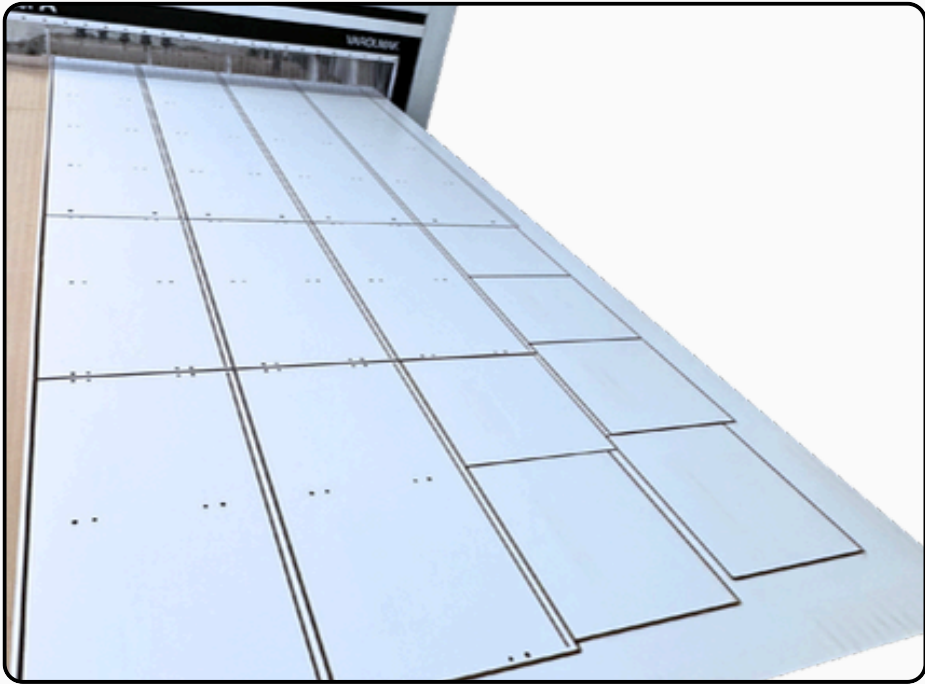
MASTER SERİSİ

Varolmak CNC processing center, high-level solutions for your nesting and hole applications with its powerful body structure and advanced configuration. It enables flexible production with its structure which can perform different applications from one machine.

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YouTube

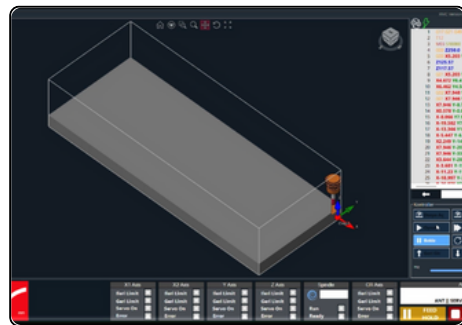




Reinforced **aluminum worktable** for enhanced stability and strength



Gain production speed with **vacuum zones** controllable directly from the control panel.

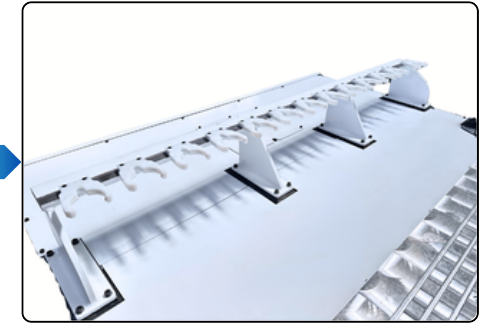


Software Features:

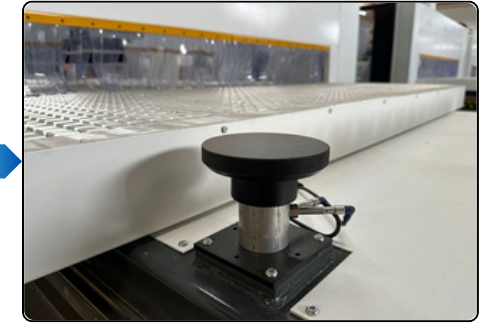
- Simulation program
- Complete data tracking with IBR file format
- VRL-2D CAM software
- Create and manage your own library with the Control Center

Highlighted Features;

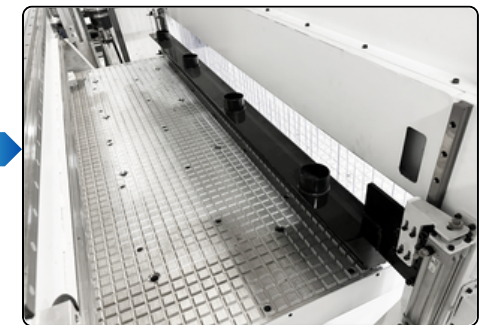
- 1 Working area with SafeScan
- 2 Expandable **vacuum zone** options
- 3 Easy operation through IPC with a **touch screen** interface
- 4 **Handwheel** can also be controlled via your mobile device or tablet



With the **Automatic Tool Changer Unit**, the machine automatically selects the required tools in the programmed design the need without manual operations.



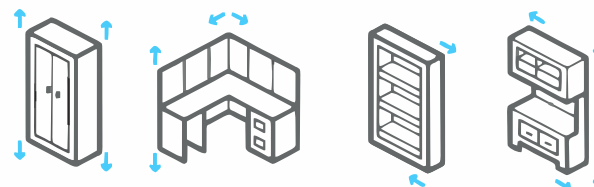
With the **Tool Length Measurement Unit**, the machine automatically measures and records the length of your tools.



Unloading and Cleaning Unit

- Operator-free operation
- Time-saving performance
- Increased efficiency
- Clean and safe working environment
- Full automation compatibility

Turning your designs into reality with high precision is now easier than ever.



➡ Safety Solutions

SafeScan with Laser

Operator safety is our top priority. For this reason, our machines can optionally be equipped with a laser scanning safety system.

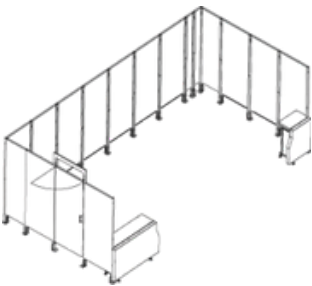
The system instantly detects any operator, forklift, or obstacle entering the designated scanning zone.

When an intrusion is detected within the hazardous area, the machine automatically switches to slow-down mode or performs a complete stop, ensuring maximum operational safety in compliance with industrial safety standards.

Fences

The machine is surrounded by durable metal panels.

Physical access of the operator to hazardous areas is prevented.

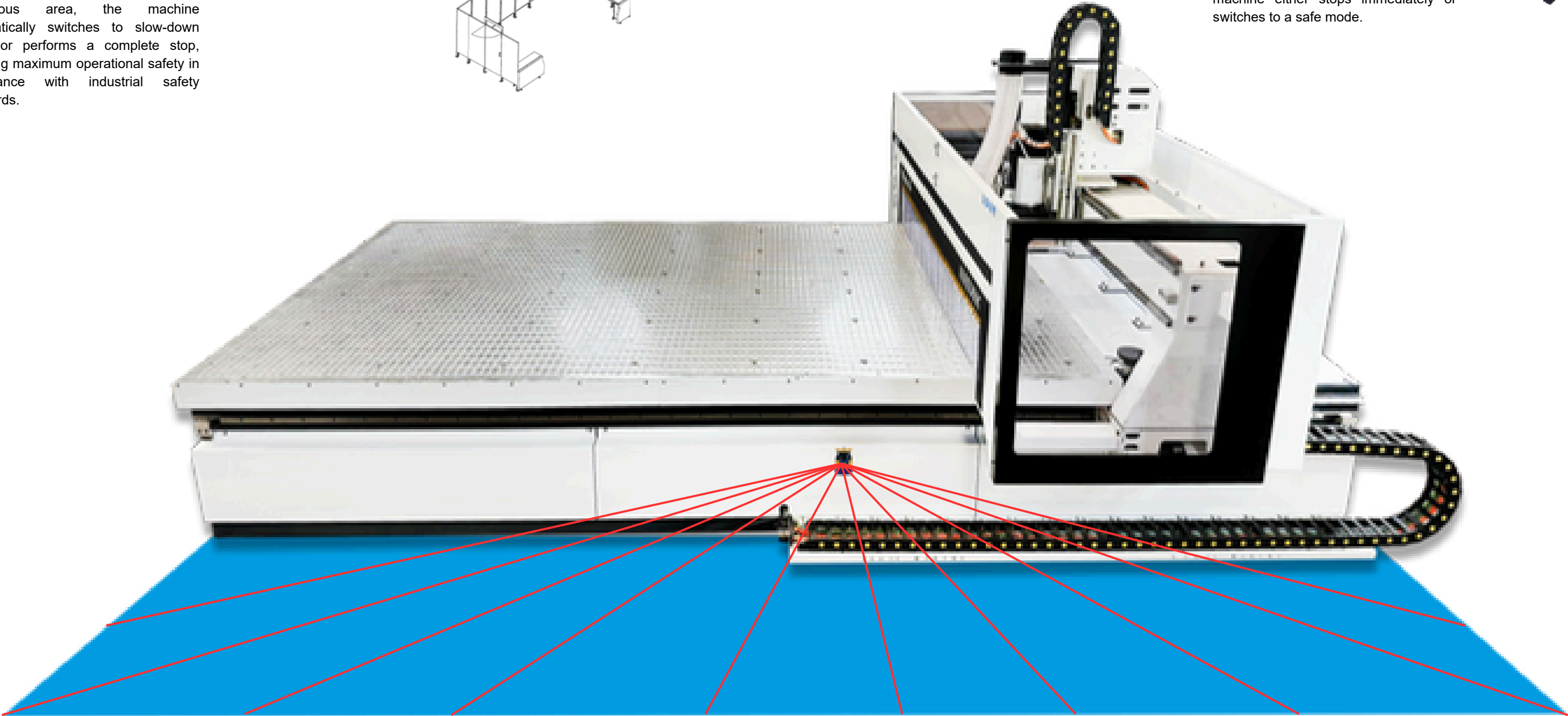


Light Barrier

The light barrier consists of infrared light curtains placed in front of the machine or within hazardous motion zones.

When the operator or any object interrupts one of the light beams, the system detects it instantly.

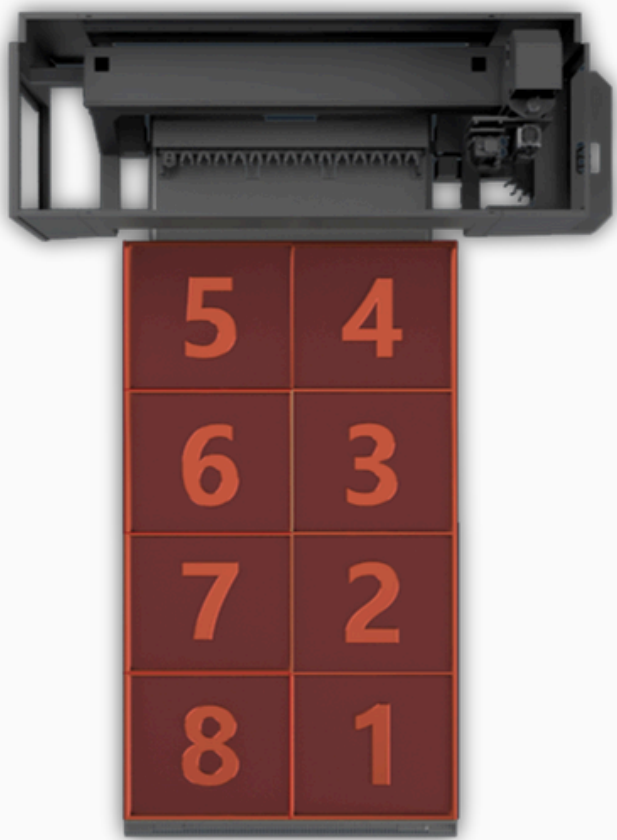
Depending on the risk level, the machine either stops immediately or switches to a safe mode.



➡ **Strong Grip on Every Piece, Perfect Results in Every Production.**

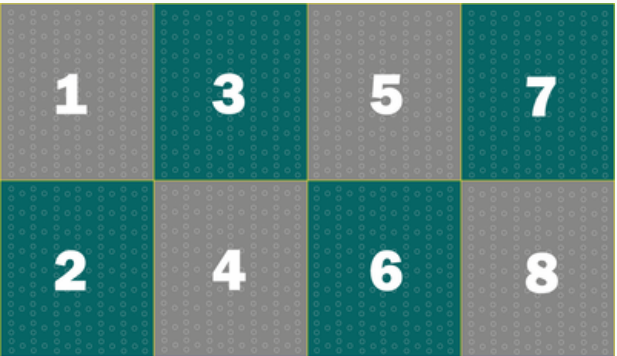
The meeting point of safety, speed, and precision in production:

The Master Series holds workpieces securely with 6 independent vacuum zones, ensuring safe clamping even for small parts. This guarantees every operation is executed flawlessly, down to the finest detail. The zonal control feature uses vacuum only where needed, providing a strong grip, while two additional optional vacuum zones can be added for a total of 8 controllable areas. This way, flexibility, efficiency, and high performance come together in a single machine for your production line.

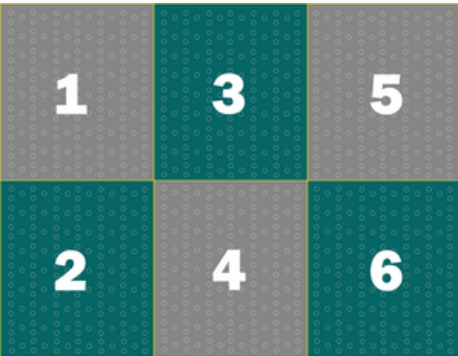


All vacuum zones are controlled directly from the control panel.

Segmentation into 8 fields



Segmentation into 6 fields



➡ **With the IPC Touch Screen: "One-Touch Control, Flawless Production at Every Stage."**

Everything at Your Fingertips!

The IPC touch screen makes production smarter, faster, and safer. With simple menus, intuitive operation, and live visualizations, every operator can use the machine at maximum efficiency. Real-time monitoring, error logging, and quick intervention ensure continuous production. The result: fewer stoppages and higher productivity.

- One-Touch Total Control
- Smart Screen, Smart Production
- Speed, Safety, and Convenience at Your Fingertips



Precise and Fast Control from Anywhere

Instead of a physical MPG (manual handwheel), operators can control machine movements more flexibly, safely, and conveniently via mobile devices.

- One-Touch Total Control
- Speed, Safety, and Convenience at Your Fingertips



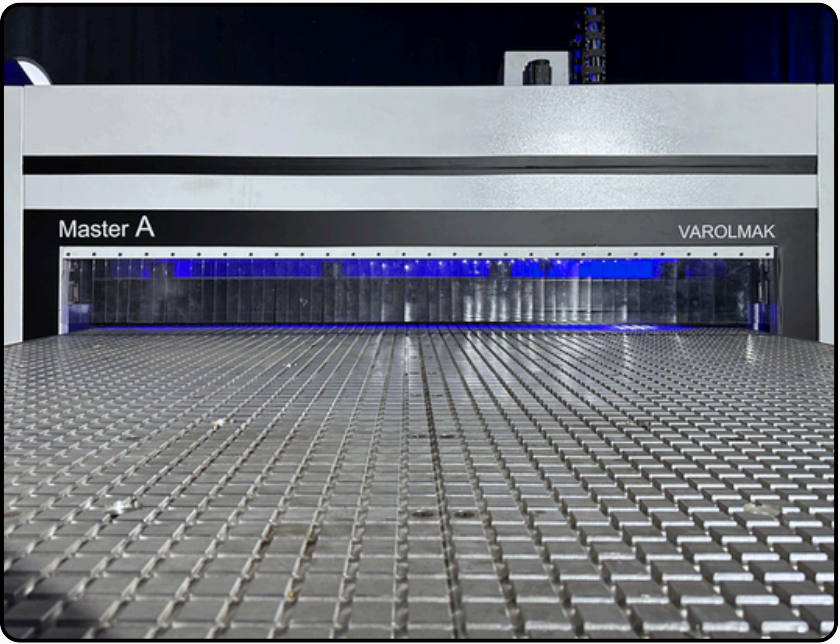
Hand-Wheel

The physical handwheel located on the side of the machine allows the operator to control movements manually. When used together with the emergency stop button and motion control buttons, the operator can perform safe and precise operations.



Aluminum Worktable

The aluminum matrix table used in our machine is designed to securely hold workpieces with high precision. Thanks to its matrix surface structure, parts can be clamped or vacuum-secured safely. The aluminum material offers durability and strength for long-lasting use while ensuring high consistency during production. This design delivers maximum performance in applications requiring precise machining.



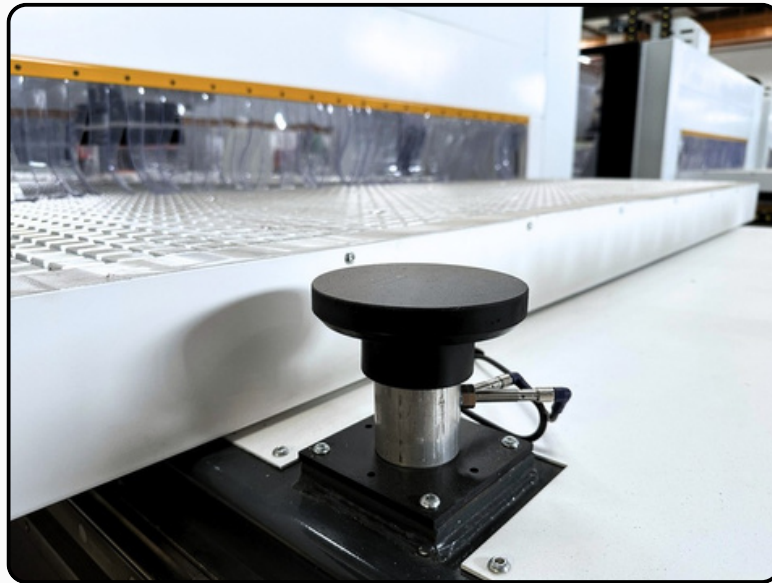
Alignment System and Stop Cylinder

Pneumatically lowerable aluminum stop cylinder as number 4.
It is possible to place additional stops in the table.



▶ Tool Length Measurement with **Consistent Precision for Every Tool**

With the Automatic Tool Length Measurement Unit, the length of each tool is precisely checked before every operation. It works on a zero-error principle, saving time by eliminating the need for manual measurements.



▶ Uninterrupted Production with Smart **Tool Change**

The Automatic Linear Tool Changer Unit accelerates tool change processes, maximizing production efficiency. It automatically swaps tools according to the programmed sequence without manual intervention, eliminating downtime and enhancing operational safety. Its fixed magazine design provides a durable, long-lasting, and low-maintenance solution. In mass production environments, it ensures uninterrupted workflow, high precision, and consistent quality, delivering maximum performance to the operation.



13-Position Linear Tool Changer
for Master.A model

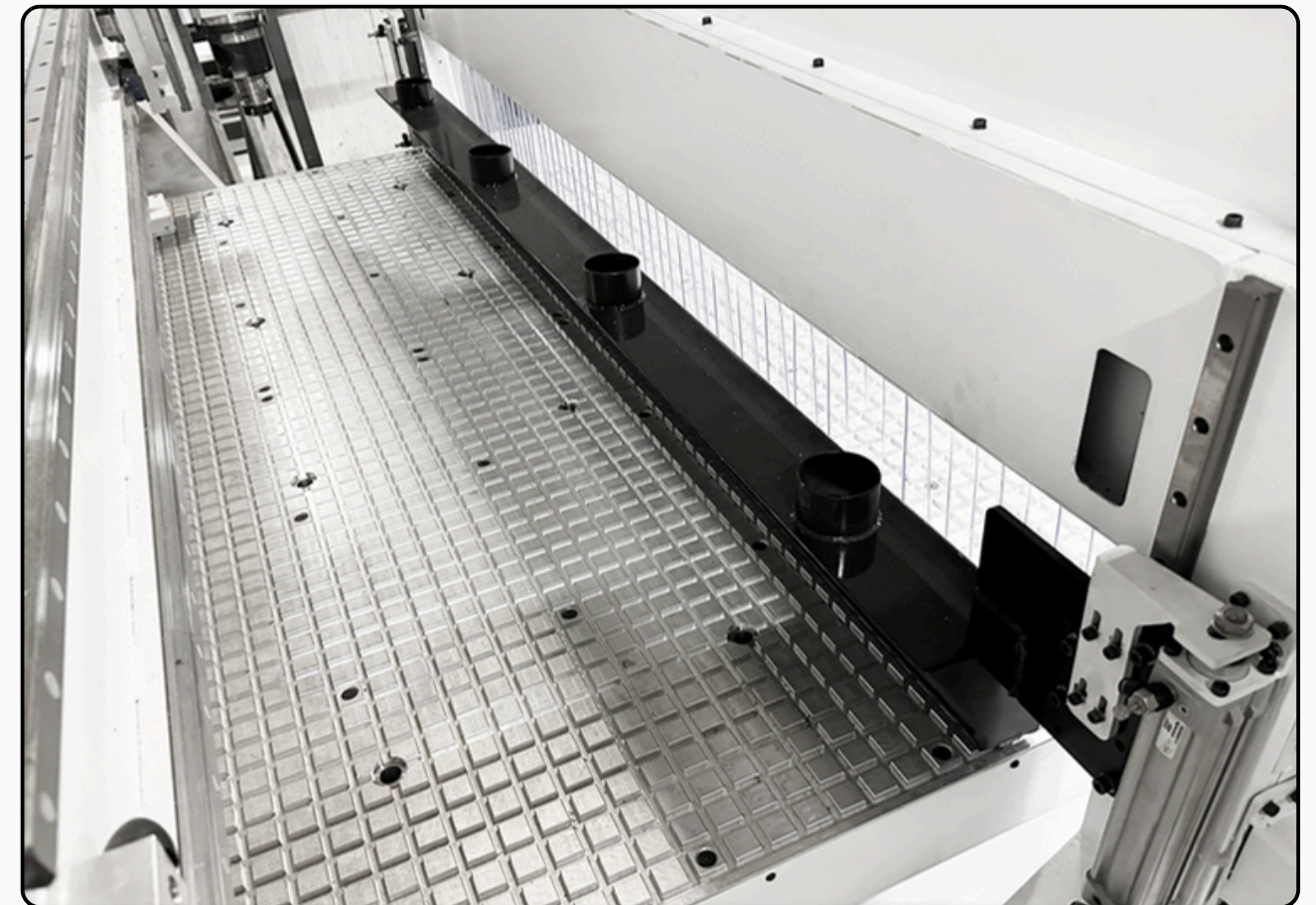


16-Position Rotary Tool Changer
for Master.B | Master.C models

▶ Clean Table, Flawless Machining with the **Unloading and Cleaning Unit**

The Unloading and Cleaning Unit ensures that parts are quickly and safely removed after machining while simultaneously cleaning the table surface, making it ready for the next operation. It minimizes manual operator intervention, enabling uninterrupted workflow and high productivity. By preventing dust and chips from accumulating on the table, it helps maintain vacuum power and consistent machining quality. This results in time and labor savings, delivering maximum performance to the operation.

- Width: 2100 mm



➡ Conveyor Unit — The Solution That Accelerates Your Production Flow

The Conveyor Unit ensures that processed parts are safely, quickly, and efficiently transferred from the machine. By minimizing manual handling, it reduces operator workload and enables a continuous production flow. The conveyor system organizes material movement, making it easier to stack and transfer parts to the next operation. With its durable structure and low maintenance requirements, it provides long-lasting and reliable performance.

Dimensions:

- 2100×2800 mm
- 2100×3700 mm



Increase your production efficiency with the **Semi-Automatic Line System.**

Spindle Unit

With spindle options starting from 12 kW, flexible solutions that perfectly adapt to your production needs.



Drilling Head

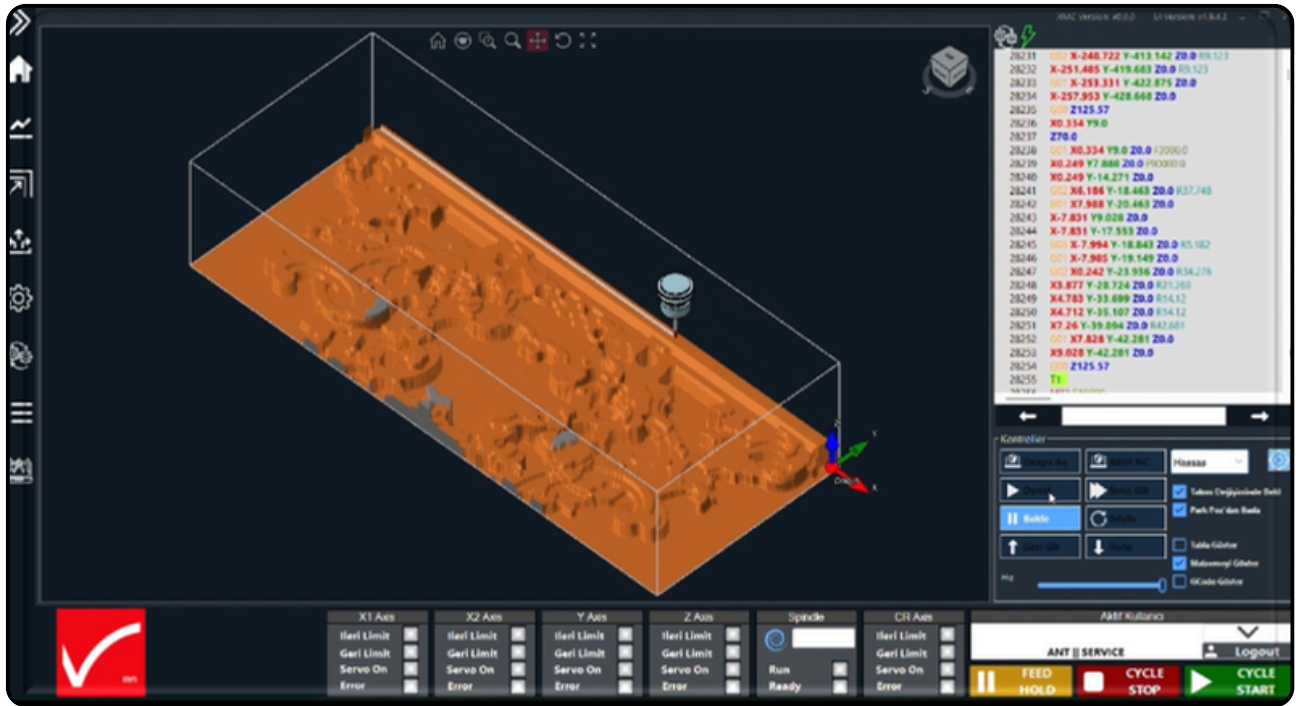
9 Spindle Vertical Drilling Unit with HSD and FAM options. Applicable for Master B and C Series.



Software Features

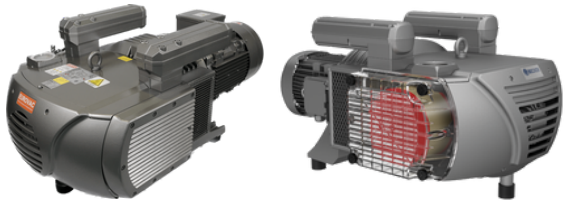
Simulation – Safety and Precision Before Production

The integrated Simulation Program allows all machining operations to be digitally previewed before production begins. Operation sequences, tool paths, and processing times are displayed on-screen with realistic visualization, enabling early detection of potential errors. This eliminates risks before production starts, preventing time and material loss. With its user-friendly interface, it provides operators with easy control while enhancing both efficiency and safety standards.



Vacuum Pump

Strong hold with a 250 m³/h dry-type vacuum pump. Preparation for a second vacuum pump is standard across all series.



Lubrication

Central automatic lubrication unit with 13 lubrication points.

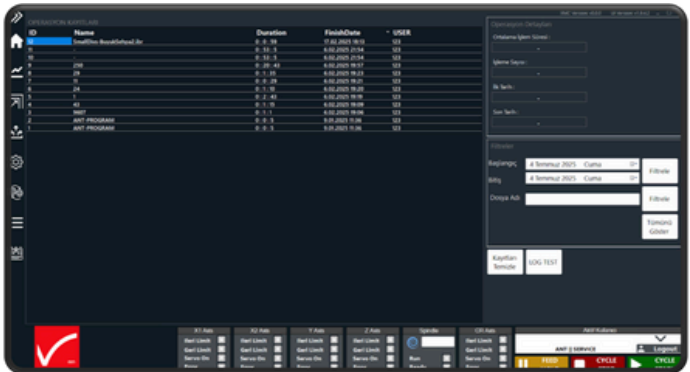
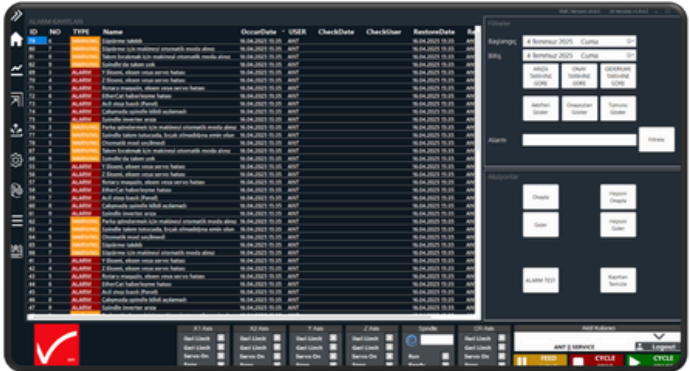


Record System

The advanced recording system used in the machine makes all operational processes transparent and fully controllable.

- Operation Records
- Machine Operating Data
- Filtering Features

The machine's recording system tracks operation durations, user information, and the IBR files used. The IBR file serves as a reference, containing all process data and program information related to a work order. This allows viewing of average processing times, date ranges, and repetition counts. Operating data—including energizing time, axis movements, and spindle runtime—is recorded in detail. Separate reset options are available for users and administrators. Advanced filtering enables easy access to operations and alarms.

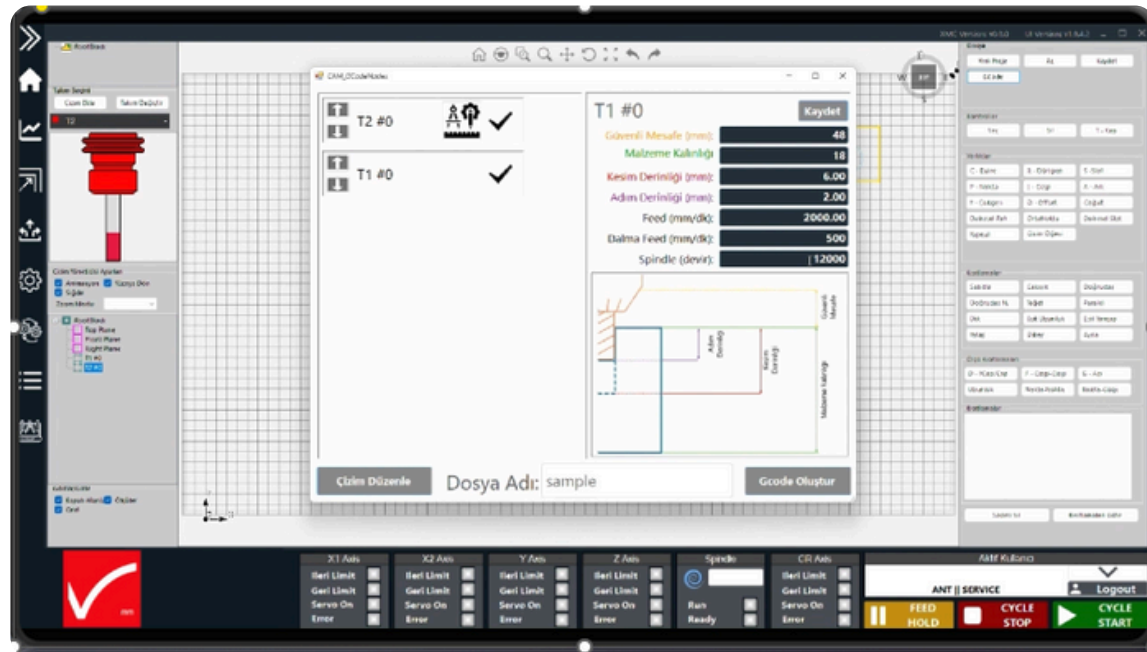
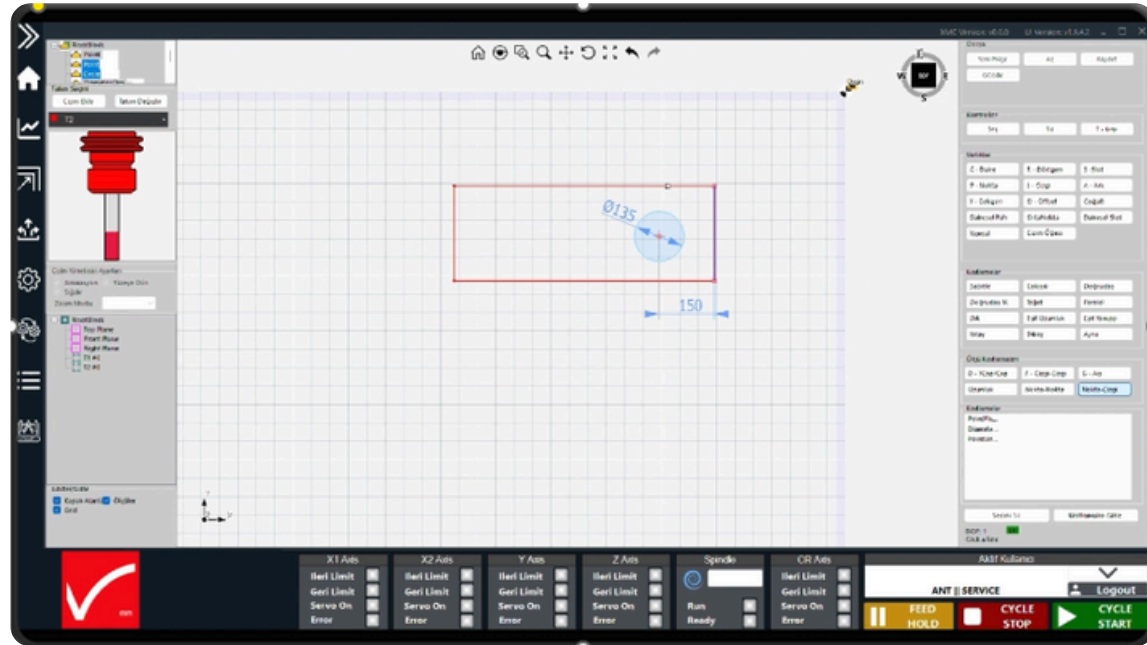


CAM - VRL 2D

The advanced G-Code generation system transforms your drawings into production with maximum efficiency.

- Cutting order can be easily defined, ensuring that priority elements are processed first.
- Parameters such as depth, material thickness, safety distance, and spindle speed offer flexible adjustment options for the user.
- With the multi-pass feature, high precision and reliability are achieved in deep cutting operations.
- Elements can be mirrored, duplicated, and geometric constraints such as parallelism, perpendicularity, and equality can be applied.

Cutting paths are automatically adjusted for inner, outer, or center cutting based on tool diameter, and different tools can be assigned for different operations.

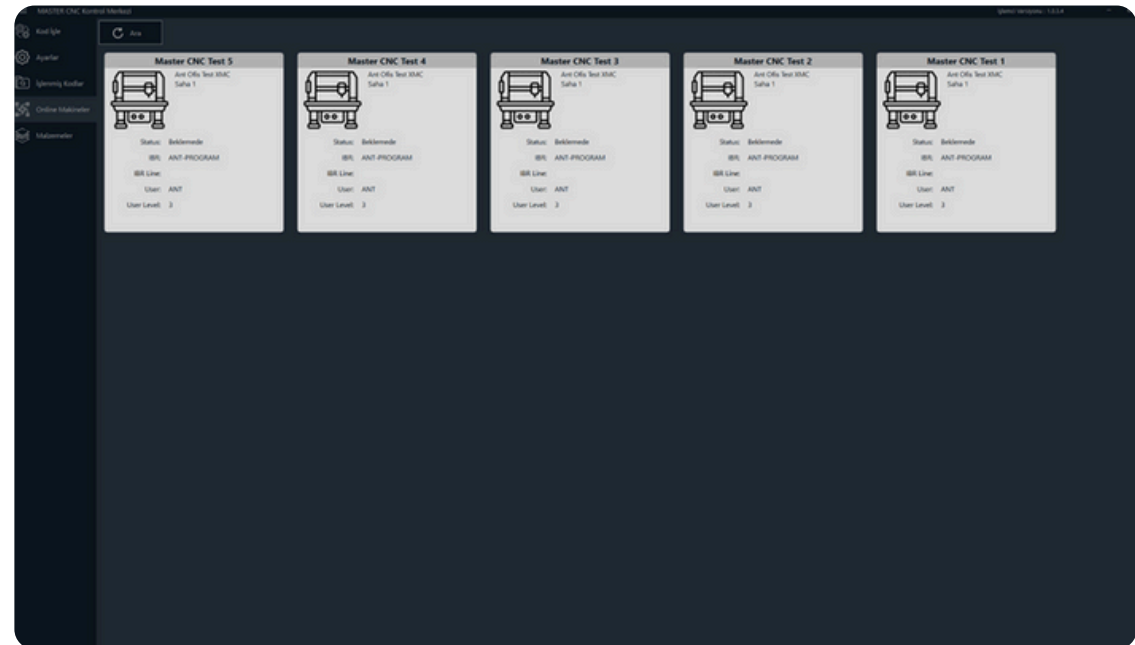
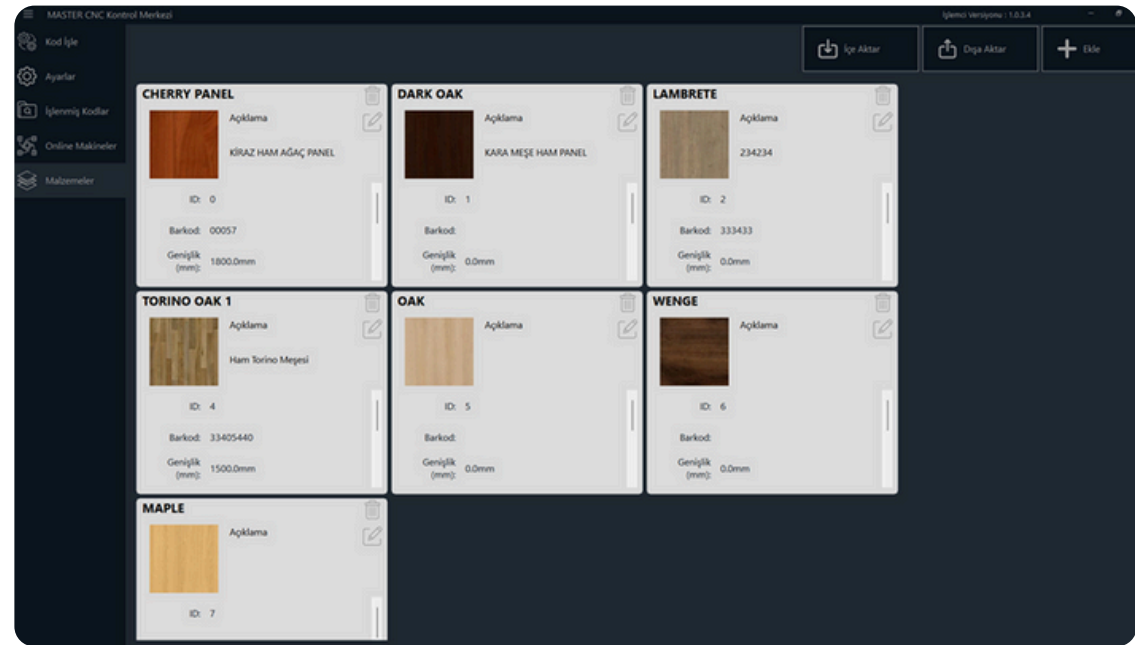


MASTER CONTROL CENTER

The Master Control Center is an intelligent software solution that allows you to manage all your CNC machines from a single point.

- **Advanced Code Management:** G-Code files are converted into IBR format for fast and precise machining. Users can prioritize speed or precision, save settings, and archive processed codes with custom names.
- **Parameter Control:** Achieve maximum efficiency for each operation with control over machining precision, speed limits, corner rounding, hardness settings, and advanced G-Code processing options.
- **Central Monitoring:** The status of all Master CNC machines on the network, active user information, currently processed files, and real-time operations can be monitored from a single screen.
- **Material Database:** Information such as name, barcode, dimensions, weight, density, and images of materials is stored. This data is matched with IBR files to ensure the right material reaches the correct machine.
- **File Management:** Processed codes can be exported, sent to networked CNC machines with operation notes, or deleted when necessary.

With the Master Control Center, your entire production process is managed in a fast, reliable, and centralized manner.



CAD / CAM

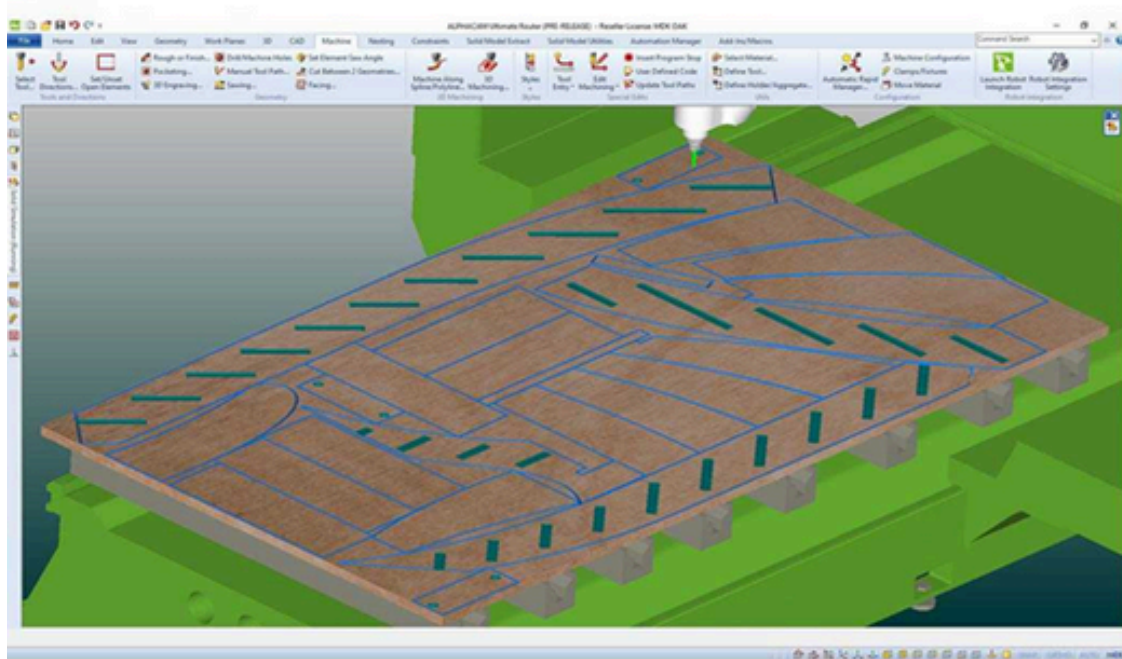
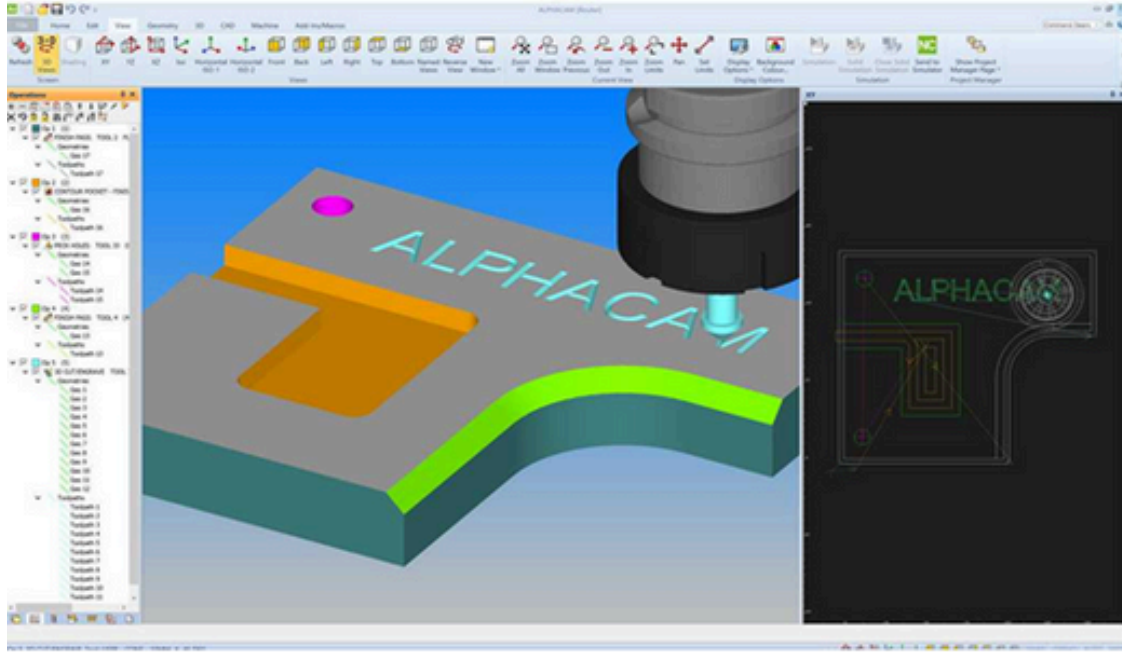
Alphacam Core Modul

Flexible yet powerful CAM software

ALPHACAM Core is the foundation for your manufacturing needs, offering a wide range of essential functionality for part programming. Core includes the ability for CAD importing, toolpath generation, simulation, report generation, and more.

Alphacam xNesting Modul

Nested manufacturing is made easy using ALPHACAM's xNesting multiplier. Parts can be selected directly from the screen or as a kit; their orientation fixed, if grain direction needs to be maintained or rotated to any angle. Nesting supports tool lead in/out, support tags for small parts, avoiding loss of table vacuum and multiple depth cuts, if an onion skin is required.



Layout Plan

Model Master.A 2136

2100x3660 mm

