PC-Based Cutting.
Machine Controller
VISION 51.

INTELLIGENT CONTROL SYSTEM.
SIMPLE OPERATION OF COMPLEX SYSTEMS.

VISION 51.

Complete control at your fingertips.

ESAB is the only manufacturer that offers a complete range of fully integrated CNC shape cutting machines.

Each of these machines features the intelligent interface of the VISION series of control systems, providing the highest possible level of control automation. By integrating all process controls into the VISION CNC, operation is simplified and manual errors are reduced, unlocking all of the productivity potential from your machine. Virtually every step of the production process can be controlled and automated to ensure fast, accurate and easy operation.

Common Technical Specifications.

CNC basics
- Customizable EIA or ESSI programming
- Colour-coded menu and dialog-driven operation
- Real-time graphical program displays
- Integrated software PLC for process control

Communications
- Ethernet (LAN)
- Serial (RS232/422)
- USB

Other functions
- 8-position joystick and electronic speed control knob - puts the controls you need at your fingertips
- True multi-tasking for increased productivity
- Built-in process database for quick and easy setups
- Context-sensitive online help
- Remote diagnostics for troubleshooting or training
- Sealed front panel with IP54 protection rating

- Automatic machine referencing
- Process database for plasma, oxy-fuel and marking processes
- Plate alignment
- Program parking
- True geometric kerf with kerf override
- Automatic gantry squaring
- Scale, mirror and rotate programs
- Power fail recovery
- Compatible with optical tracer system
- Compatible with remote hand pendant
- Built-in shape library
- Graphical program editor
- Joystick contouring for easy pickup of lost cuts
- Jog off contour with return or relocate
- Optional heater/cooler

The VISION 51 runs on the Windows® CE 5.0 operating system, which is designed for stability and security and optimised for use on industrial control systems.

Windows® is a registered trademark of Microsoft® Corporation in the United States and other countries.

The VISION 51.

Intelligence in a compact design.

The VISION 51 maximises durability and reliability in a simplified package ideal for controlling up to four process tools.

The compact package includes a robust front panel that is completely sealed, with solid state components and an industrial operating system for ultimate reliability. The built-in process database makes it easy and automatic to set up any process tool. The colour LCD display and graphical user interface make operating easier for any machine configuration.

VISION 51.

Specifics.

- Low-reflection 10.4" LCD
- Sealed membrane key panel
- Embossed keys with excellent tactile feedback
- Controls for up to 4 stations
- 6 dedicated process control keys

- Pentium III compatible processor
- Windows® CE 5.0 operating system
- 256 MB Flash memory, 512 MB RAM, expandable
- 3-axis gantry control (X1, X2, Y)

- 4 positioning axes for tool lifts
- Integrated Ethernet port
- CAN bus controller for unlimited I/O

VISION 51

VISION, COLUMBUS™ and DATA LEAP™.

Making productivity a priority.

High-performance machines, intelligent control systems and innovative software solutions complement each other perfectly at ESAB, your total system supplier.

The software specialists at ESAB work continuously to improve thermal cutting by making it more and more economical and precise.
Whether simply creating your cutting programs or completely integrating the cutting process into automated production, ESAB has the software package to ensure your success.
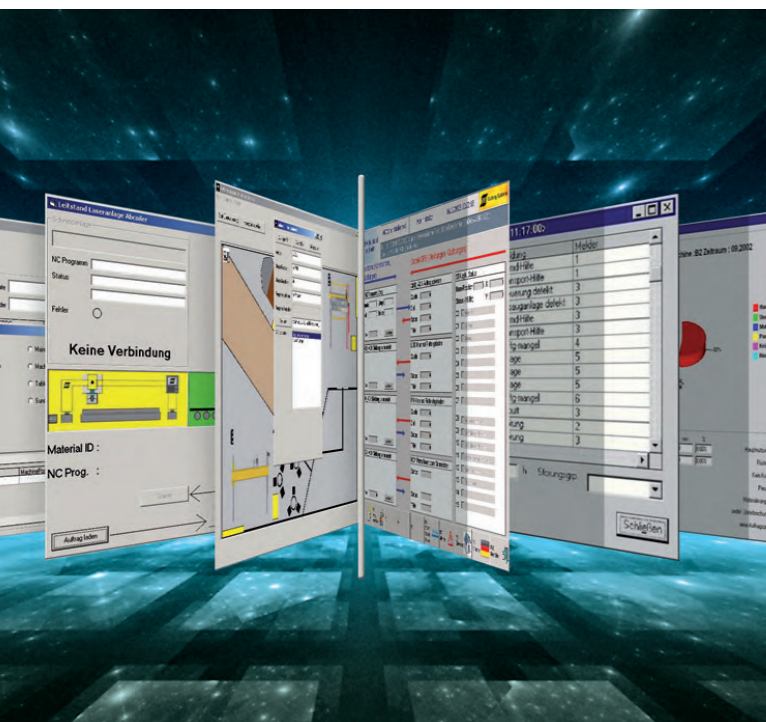
COLUMBUS™

The discovery of the perfect cut.

The COLUMBUS™ programming software is a full-featured and flexible tool for creating your cutting programs and nests with ease. All cutting and marking processes are programmed automatically and efficiently with COLUMBUS™. The modular design of the software allows ESAB to adapt a software package to your specific needs. Today and in the future, ESAB's software development also ensures continuous improvement and adaptability to your changing needs while remaining flexible.

DATA LEAP™

The data you need for continuous improvement.

Data Leap is the ideal system for monitoring, controlling, recording and reporting in real time. This customisable software package allows a seamless interface between your cutting machines and existing planning systems such as ERP or PPS. DATA LEAP™ helps you to achieve lower operating costs and reduced cycle times while making your production processes transparent. DATA LEAP™ is the key to maximum productivity and operating efficiency.
The DATA LEAP™ product range includes a number of individual software tools that can be combined to create a customised package to meet your exact needs.

Cutting machines, control systems and software from ESAB: Optimum solutions for integrated production processes.

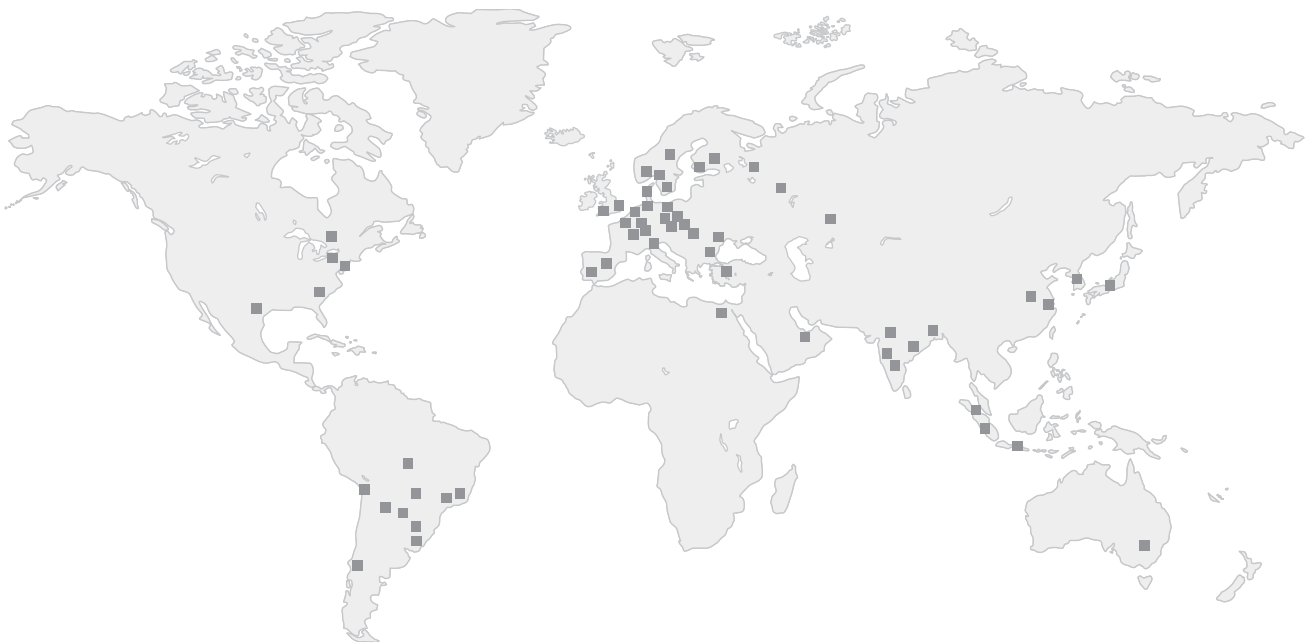# ESAB CUTTING SYSTEMS

Your partner in cutting.

Seven decades of experience and the consistent focus on the needs of our customers are the foundations for the successful and comprehensive product range of our cutting machines. As experts in many cutting processes - plasma cutting, oxy-fuel, laser and water jet cutting - ESAB has developed a range of machines that efficient-ly combine the highest cut quality with high cutting speeds, allowing intelligent integration into automated production processes.

With our machine control systems we also help customers from many industries increase their operating efficiency and productivity through process automation.

ESAB sales and service offices worldwide

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