



COLUMBUS™ III **Technology for the Future.**

CAD/CAM SOFTWARE SOLUTION FOR OPTIMAL
MACHINE CUTTING PROCESSES



COLUMBUS™ III

Intelligent programming improves your cutting productivity.



Standardisation, open interfaces and an uncompromising focus on smooth manufacturing processes: Venture into new dimensions of precision and productivity with COLUMBUS™ III.



Your technology advantages:

- ➔ Open up new worlds by saving time with nesting and technology functions such as common-line cutting, uncut straps, bridge cutting, corner loops, pre-piercing and Precision Hole Technology™.
- ➔ Gain safety through integrated error detection with the automated technology database.
- ➔ Work with the SQL database for secure data handling. In this database users store data on e.g. machines, materials, sheet thickness, parts, rectangular plates and layouts.
- ➔ Use an SQL server together with COLUMBUS™ III as a powerful standard solution for storing data. You can easily integrate the SQL server included in the delivery into your current software architecture or add it to an existing resource.

Take off with COLUMBUS™ III

The new structured and process-oriented user interface streamlines your workflow. COLUMBUS™ III optimises the processes that lead to generating NC codes. Open interfaces and the use of an SQL database facilitate cross-system integration in your IT structure.

Technological progress

Your innovation in software-supported cutting and marking processes. As a consistent new development users, administrators and developers benefit from standardised interfaces, intelligent processes, long-term investment protection and user-friendly interfaces.

Precision Hole Technology™

NEW!

COLUMBUS™ III supports the most advanced plasma hole cutting technology with a built-in database that automatically assigns the optimum lead-in, lead-out and process codes required to achieve bold-ready holes on construction steel up to 25 mm thick.

The basic package: Layout Designer

The intuitive Layout Designer opens unlimited perspectives

The graphical user interface for user-friendly management of complete processes represents the control centre of COLUMBUS™ III.

The Layout Designer maps all functions necessary for generating a nesting and/or NC program (straight line). Oxy-fuel, plasma, laser and marking processes are supported. Secure data handling is ensured with an SQL database where data on machines,

materials, sheet thickness, parts, rectangular plates and layouts are stored. A special and fully integrated CAD program is available for 2D part construction. Numerous standard features are included for part manipulation, e.g. common-line cutting, cutting bridges, corner loops, pre-piercing and optimising small holes using ESAB's Precision Hole Technology™.



COLUMBUS™ III

More options for future challenges.

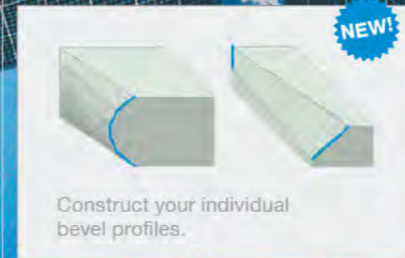
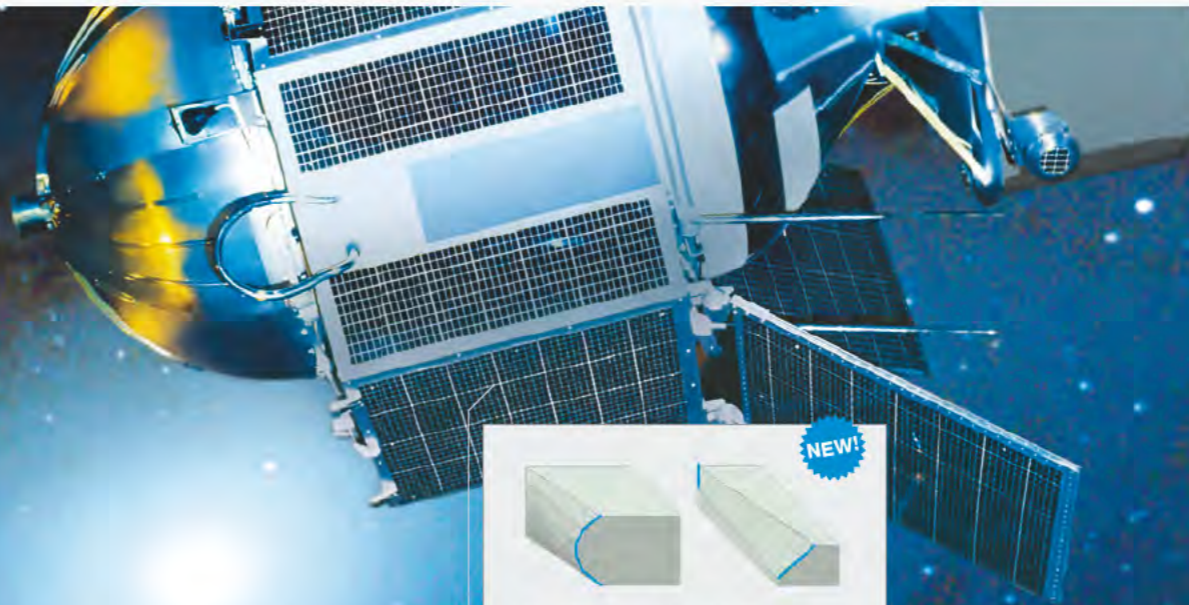


The scope of the program can easily be adapted to your application conditions using the perfectly matched options of the COLUMBUS™ III basic package.

NC program generation, even for the most unusual cuts is now integrated and supported by the system.

Your economic advantages:

- ➔ Rely on future-oriented system development for lasting protection of your investment.
- ➔ Create new development perspectives for your IT structures by consistently reducing implementation efforts.
- ➔ Inspire your technical staff with the new intuitive user interfaces and our user-oriented staff training.



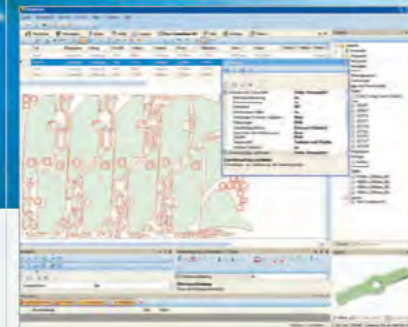
Construct your individual bevel profiles.

Your options



Job control

Contains tables for jobs and subassemblies. Jobs can contain parts together with their data and they are made available to the Layout Designer for further processing. Subassemblies which have been created from existing parts in the parts database can be integrated into the jobs. The table for job parts gives an update overview of the processing status.



Automatic nesting

Resource-saving, fully automated nesting of project-specific geometries is available for any number of blanks and remnants. The number of torches is automatically reduced if it cannot be divided by the number of parts. Thanks to automation, nesting jobs can be executed across several reserved plates. Switching is possible if desired. Process obstacles are reduced to a minimum.



Bevel cutting

The bevel cutting function in COLUMBUS™ III enables straight line programming of oxy-fuel, plasma and laser bevel aggregates. Choose from a multitude of defined bevel profiles (V upper bevel, V lower bevel, Y upper bevel, Y lower bevel, X bevel, K bevel) or assemble individual bevel profiles - up to fivefold cutting of a contour. Saving the individualised bevel parts in a parts database with object description allows reuse in other projects.

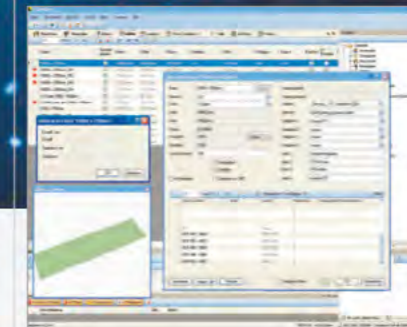
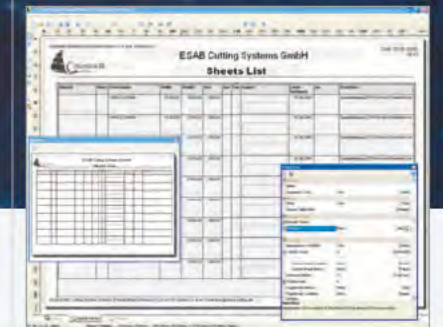


Plate management

Rectangular as well as remnant plates are managed and defined here. Accordingly, many data fields ensure unique identification of each individual plate (and also plate copy). Comprehensive traceability of the material from the last remnant plate through to the original plate is ensured. Areas of a plate which have not been nested can be divided into any number of remnant plates.



Print Designer

The Print Designer offers maximum space for professional concepts, creation and adaptation of user-specific formats and print templates. Adapt templates and samples to your corporate specifications. Support for bar codes is also included.

COLUMBUS™ III

Added value through future-oriented functions.



The user experience that entered into the development of COLUMBUS™ III and the new flexibility constitute the basis for innovation in software-supported machine cutting.

You want to use nested geometries, set corner routines automatically or design infinite bevels? With its numerous functions, COLUMBUS™ III is the answer to your requirement - highest precision.



Your process advantages:

- ➔ Support team-based working processes in your company using networked systems and the network capabilities of COLUMBUS™ III.
- ➔ Achieve new synergies by connecting to your company's IT using defined standards based on SQL databases.
- ➔ Benefit from simple update management by accessing the COLUMBUS™ III download server.

Your functions

Smart assistants

COLUMBUS™ III supports smooth operation with the help of intelligent assistants.

- Technology Assistant
- Nesting Assistant
- Geometry Assistant

A combination of different marking and cutting tools

Arrange your tools individually and according to your cutting requirements in COLUMBUS™ III and combine marking and cutting processes as required.

High-performance SQL database

Open database standards offer more security in planning your future IT and hardware infrastructures and new potential for scaling your data storage processes.

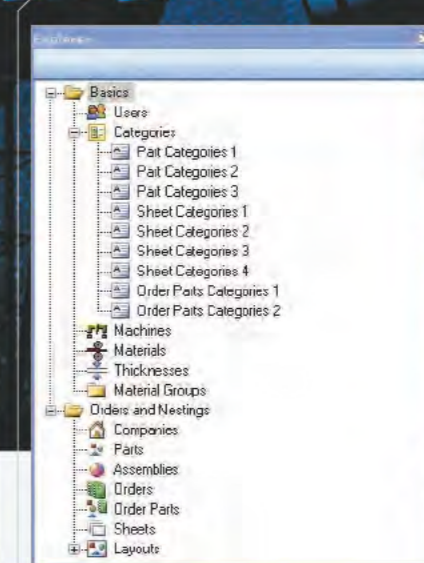
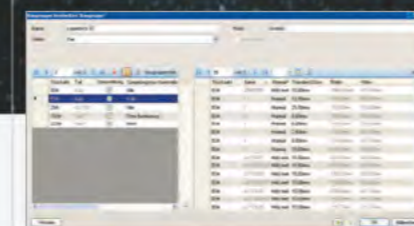
Subassembly management

Significantly facilitates the processing of jobs relating to subassemblies. The geometry and the required number are already predefined here, which facilitates the search for geometries and determination of the required number of pieces.

Navigation with the Explorer

COLUMBUS™ III offers a structured view of the objects and data using tried and tested methods that can be used intuitively, such as the Explorer screen. The Explorer window maps the hierarchy and structure of the objects used. Relations and dependencies are visualised and the selected objects can be edited directly.

With the help of the "drag and drop" function, elements can be taken from the list presentation and placed into a context with the Explorer. Compose new layouts easily with just a few clicks. Using the principles of successful application user interfaces, intuitive introduction is facilitated and the need for training minimised.



More functions. More energy. More success.

A wider range of services.

All the highlights at a glance:

- All conventional nesting and technology functions
- Ideal adjustment to all ESAB cutting machines
- Adjustment to third-party machines
- Individual bevel profiles possible
- Management of raw/remnant plates, parts, materials, technologies, machines and nesting
- Job and part tracking
- Integrated CAD system
- Subassembly handling
- Licence management
- Investment protection
- Integrated SQL databases
- Many useful assistants
- Clearly structured Explorer view

Training and service

- Customer-specific training on site by appointment
- Regular training sessions at the ESAB Technology Centre
- Support hotline

Delivery format

Hard-shell case with USB stick

Operating system

Microsoft® Windows® XP / 32 Bit

Microsoft® Windows® Vista / 32 Bit / 64 Bit

Microsoft® Windows® 7 / 32 Bit / 64 Bit



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Reg.-Nr. COLUMBUS_III_EN_2012_05 · Technical modifications and errors excepted.



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