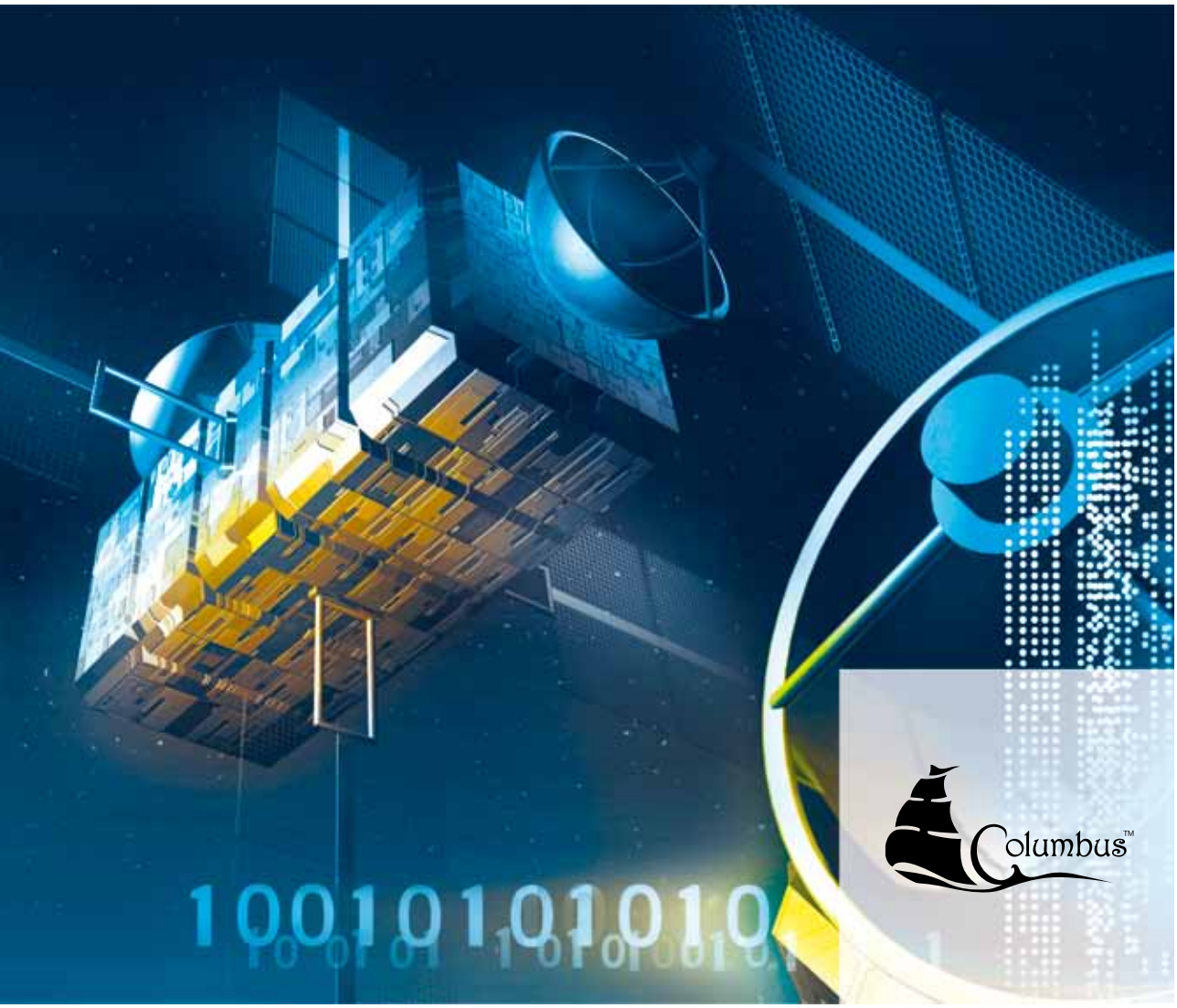
COLUMBUS III™

Programming Technology for the Future

CAD/CAM SOFTWARE SOLUTION FOR OPTIMAL
CUTTING MACHINE PRODUCTIVITY



COLUMBUS III™

Intelligent programming improves your cutting productivity.

Standardization, open interfaces, and an uncompromising focus on streamlined manufacturing processes: Venture into new dimensions of precision and productivity with COLUMBUS.

Technology Advantages:

- Explore new time saving functions for nesting and cutting optimization, such as common-line cutting, un-cut straps, bridge cutting, corner loops, pre-piercing, and Precision Hole Technology™.
- Work with a powerful new database function for secure data handling. In this database users can store data on machines, materials, sheet thickness, parts, rectangular plates, and layouts.
- Reduce waste through integrated error detection with the automated technology database.
- Use the included SQL server together with COLUMBUS as powerful solution for storing data. You can easily integrate the SQL server delivered with COLUMBUS into your current software architecture or add it to an existing resource.

Get productive with COLUMBUS

The new structured and process-oriented user interface streamlines your workflow. COLUMBUS optimizes the process that leads to generating CNC codes. Open interfaces and the use of an SQL database facilitate integration into your IT infrastructure.

Technological Progress

New software innovations support faster programming of cutting and marking codes. COLUMBUS is a completely new development based on the leading Microsoft .Net standards, so users, developers, and administrators will all benefit from standardized interfaces, intelligent processes, long-term investment protection, and a customizable user work space.

NEW!

Precision Hole Technology™

COLUMBUS 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 bolt-ready holes on mild steel up to 1 inch (25mm) thick.

The basic package: Layout Designer

The intuitive Layout Designer puts powerful tools at your finger tips

At the heart of COLUMBUS is a user-friendly interface that gives complete control over the entire programming process.

The Layout Designer manages all functions necessary for generating a CNC program or nest (straight cutting). Oxy-fuel, plasma, laser, and marking processes are supported. A wide array of data is securely stored in a SQL database for instant recall that helps streamline your workflow. Programming can begin by importing a DXF/DWG file through an import interface that features a graphical preview and automatic cutting tool assignments. To create geometry from scratch, a fully integrated CAD program is available for 2D part construction. Numerous standard features are included for part manipulation, including common-line cutting, cutting bridges, corner loops, pre-piercing, and optimizing small holes using ESAB's Precision Hole Technology™.

COLUMBUS III™

Adapt to Handle Any Challenge

The modular COLUMBUS package can be scaled to meet your exact needs for any cutting application. By combining the modules you need, the basic package can adapt and expand as required.

CNC part programming, even for the most unusual cuts, is now handled with a complete, systematic approach.

Economic Advantages:

- Rely on state-of-the-art software development with .Net standards for lasting protection of your investment.
- Modern software architecture and SQL server database allows advanced functionality with reduced IT implementation and support cost.
- Get productive quickly with the new intuitive user interface and our simple on-line training and support.

Advanced Options

Job Control

Easily set up tables for jobs and subassemblies. Jobs can contain parts together with their associated data, and they are available from the Layout Designer for further processing. Subassemblies which have been created from existing parts in the parts database, can be added into jobs. The table for job parts displays the processing status of each part.

Automatic Nesting

Fully automatic, true-shape nesting maximizes plate utilization while automatically creating nests for specific projects using any number of plates or remnants. Multi-torch nesting automatically reduces the number of torches when necessary. Nesting jobs can automatically use specific plates, or plates can be manually switched if desired. Maximum software flexibility makes nesting as easy as possible.

Bevel Cutting

The bevel cutting function in COLUMBUS enables simple programming of oxy-fuel, plasma, and laser bevel systems. Choose from a multitude of pre-defined bevel profiles (V upper bevel, V lower bevel, Y upper bevel, Y lower bevel, X bevel, K bevel) or create your own bevel profiles - up to five-pass cutting of a contour. Programmed bevel parts are saved in a parts database with object descriptions so they can easily be re-used 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 flexibility to create professional reports, customized data output, and use of custom formats and print templates. Easily adapt templates or start from the included sample reports to produce exactly the reports you need. Support for bar codes is also included.

COLUMBUS III™

Added Value Through Advanced Features

The user experience that went into the development of COLUMBUS and the new flexibility offered by the .Net standard form the foundation for innovation in software-supported mechanized cutting.

You want to create efficient nests, automatically set corner routines, or design customized bevel cuts. COLUMBUS, with its numerous functions, is the answer to your requirement - efficient work-flow and highest automation.

Process Advantages:

- Share work-flow among team members using networked systems and the network capabilities of COLUMBUS.
- Achieve new synergies by connecting to your company's IT using defined standards on the basis of .Net and SQL databases.
- Benefit from simple update management by accessing the COLUMBUS download server.

Advanced Features

Smart Assistants

COLUMBUS enhances your work-flow with the help of intelligent software assistants.

- Geometry Assistant
- Technology Assistant
- Nesting Assistant

Combine Marking and Cutting Tools

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

High-Performance SQL Database

Open database standards allow easier IT implementation, long term support, and scalability for your data storage compatible with modern hardware infrastructure.

Subassembly Management

Significantly speeds up processing of jobs containing subassemblies. Part geometry and quantity are predefined in the subassembly, making it easy to add the entire group of parts to a nesting job.

Navigation with the Explorer

COLUMBUS offers an intuitive Explorer screen to view all objects and data, such as parts, nests, jobs, and subassemblies. The Explorer window shows the hierarchy and the structure of the objects, making it easy to visualize relationships and dependencies, and the selected objects can be edited directly.

With a simple drag and drop function, elements can be taken from the list view and placed into a job or nest with the Explorer, composing a new layout with only a few clicks. The familiar Windows interface is intuitive and easy to learn, minimizing the need for training.

More Features. More Power. More Success.

A Superior Software Experience

Product Highlights:

- Powerful nesting and process control functions.
- Automatic nesting of assemblies and orders.
- Functional set up of lead sets and nesting parameters.
- Multi-pass beveling capabilities.
- Automatic import and separation of multiple parts in one CAD file.
- Manage full sheets, remnant plates, parts, materials, cutting tools, machines, and nests.
- Part detailing and saving in parts database.
- Graphical editing of the nesting.
- Editing of parts after nest has been completed.
- Integrated SQL databases.
- Software assistants speed work flow.
- Optional Solid Works interface.

Training and Service

- On-line training eliminates travel time and expense
- Regular training sessions at the ESAB Technology Center
- Free support hotline

Operating System

Microsoft Windows® XP 32Bit
Microsoft Windows® Vista 32Bit
Microsoft Windows® 7 - 64Bit

Windows® is a registered trademark of Microsoft Corporation.

ESAB Cutting Systems

U.S.A.
411 S. Ebenezer Rd.
Florence, SC 29501
Phone: 843-664-4394

Canada
6010 Tomken Road
Mississauga, Ontario L5T 1X9
Phone: 905-670-0220

Mexico
AVE. Diego Diaz de Berlanga No. 130
Col. Nogalar
San Nicolas de los Garza, N.L. 66480
Monterrey, Mexico
Phone: 81-8305-3700

Web: www.esab-cutting.com
E-Mail: us.mgr.cutting@esab.com

COLUMBUS III 2012-03-05. Specifications subject to change.

MCUT-3019