CAJOSUITE™ - POWERING YOUR INDUSTRIAL LASER MARKING PROCESS

CajoSuite™ is a comprehensive software for laser marking. Software offers a tools for implementing Cajo laser marking solutions in your production. It contains features for designing markings and easy-to-use user interface for operators. Software supports Cajo stand alone marking stations as well as Cajo inline marking stations in any production system. We provide a full integration to support your efficiency in your manufacturing process. Seamless integration of separate solutions into the whole manufacturing process is an absolute must.

Software has two modes, Design mode and Production mode. Design mode provides tools for designers and Production mode provides easy-to-use user interface for operators in production. Switching between modes is easier than ever, just mouse click from menu.
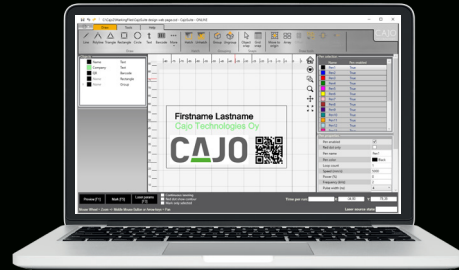
You can choose from 3 different software versions which are **CajoSuite Basic**, **CajoSuite Studio** and **CajoSuite StudioPlus**. Main differences between the versions are described in the chart.

CAJOSUITE LICENSES

CAJOSUITE FEATURES				DESCRIPTION
Design Mode	**Basic**	**Studio**	**StudioPlus**	
Laser marking (Cajo devices)	√	√	√	Markings made with Cajo laser system
Marking parameters	√	√	√	Setting up laser parameters (pencils)
System status monitoring	√	√	√	Indicators for laser marking system status (door open, laser source state etc.)
Marking head height control	√	√	√	Software controlled working distance
Geometric shapes	√	√	√	Basic shapes (rectangles, triangles, circles etc.)
Transformation tools	√	√	√	Rotation of object, mirroring etc.
Editing tools	√	√	√	Managing objects (array, offset, align, explode and auto connect)
Fonts	√	√	√	TrueType and SHX font support in markings
Hatch tools	√	√	√	Filling tools
Variable text	√	√	√	Variable content for each marking such as text, serial number and time stamp
Variable barcode	√	√	√	Variable barcode content for each marking (1D or 2D). Could be for instance serial number, time stamp or combination. Support for vast range of codes.
File import	√	√	√	Importing graphics from DWG- or DXF- files.
Multi-design support	√	√	√	Multiple designs can be open same time
Test Matrix Tool	-	√	√	Testmatrix tool for searching optimal laser parameters for the material
User permission control	-	√	√	Allows to limit user permissions in the software
Curved text	-	-	√	Text aligned with any line shape
Line weight	-	-	√	Adjusting the line width
Parameter storage tool	-	-	√	Parameter library structure for saving parameters
Tiling	-	-	√	Design which is too large to be marked at once can be split to smaller parts (tiles).
Line types	-	-	√	Different line types support such as dashed and custom lines.
File export	-	-	√	DXF file format exporting
Languages	en, fi, de	en, fi, de	en, fi, de	Supported languages. Kindly ask for other languages separately.
Production Mode	**Basic**	**Studio**	**StudioPlus**	
Laser marking (Cajo devices)	-	√	√	Markings made with Cajo marking system
Product management	-	√	√	Adding and managing products in product list
Device control	-	√	√	User interface to control the marking device actuators
System status monitoring	-	√	√	Indicators for laser marking system status (door open, laser source status etc.)
User permission control	-	√	√	Managing user permissions
TCP/IP remote control	-	√	√	Default Cajo TCP/IP interface
Simultaneous multi- controller support	-	-	√	Marking with multiple lasers simultaneously
Marking on the fly	-	-	√	Support for marking on the fly (MOTF)
Integrations, hourly rate	-	-	√	Database integrations/Device integrations
Workflow and user interface customization, hourly rate	-	-	√	User interface customization according to customer's needs
Languages	en, fi, de	en, fi, de	en, fi, de	Supported languages. Kindly ask for other languages separately.

CAJOSUITE BASIC™

CAJOSUITE STUDIO™

The software contains basic CAD features for designing marking templates to different purposes. In addition to basic shapes, marking can contain vector graphics, texts, barcodes and 2D-codes. Text, barcodes and 2D-codes can contain, for example, serial numbers, date & time and batch numbers which are automatically updated between each marking.

Markings can be done immediately in the same user interface. Designs created with the software version can be utilized in Studio and Studio+ versions Production mode.

√ To whom - Operator use, single markings and small limited batches (Logos, codes etc.)

√ What - Simple user interface and basic design features for creating marking templates with laser parameters. Markings can be done manually in the same user interface.

√ Use case - Operator opens or creates design (shapes, text, barcodes etc.). When the design is ready for marking, the operator adds workpiece to be marked under the laser and marks. Operator continues with a couple of similar markings and changes graphics to another design.

In addition to Basic version features Studio version includes Production mode and additional CAD tools.
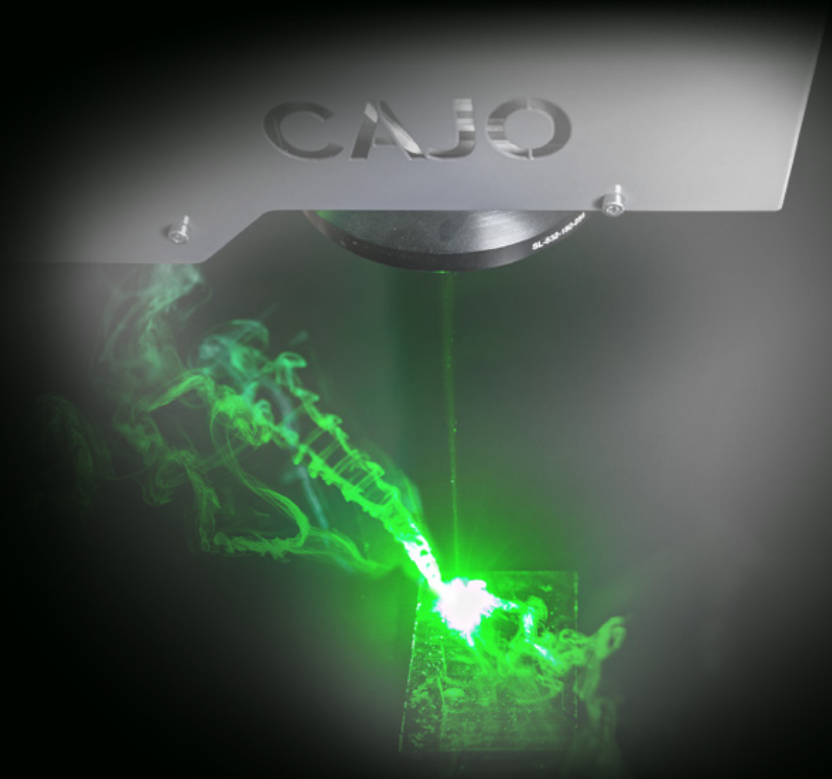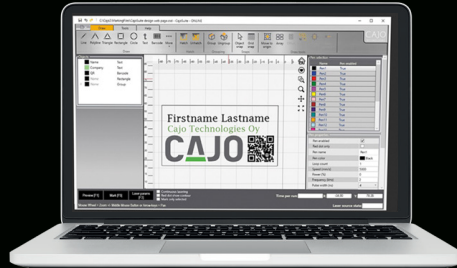
Design mode that is an easy-to-use CAD tool for easy design and markings. The software has wide variety of CAD features that makes it an advanced tool for designing marking for many purposes. CajoSuite Studio contains all CAD tools which are included to the Basic version. In addition, new parameters can be tested easily using test matrix tool and user permission can be controlled using user accounts. Designs created with Design mode can be utilized in Production mode.

Production mode is an easy-to-use software interface for operating Cajo lasers in daily production environment. Simple user interface and product specific marking content makes the controlling of marking process easy. Variable marking content and settings can be entered manually in Production mode or automatically using Design mode tools. Variable marking content can be, for example product IDs, serial numbers, batch numbers, and timestamps.

CajoSuite Studio offers also default Cajo TCP/IP interface for integrating Cajo laser marking systems with the other production and automation systems (e.g PLC or robot). This enables fully automatic laser marking.

√ To whom - Operator driven serial production.

√ What - Includes advanced design tools and Production mode features for operators. Default Cajo TCP/IP communication available for integrations.

√ Use case - Serial production where the volume consists of tens or hundreds of pieces per day. The production is done by utilizing the production mode features. The operator feeds the workpiece to be marked under the laser and starts the marking. Marking is done according to chosen product in production mode. If marking contain variable data (e.g. time stamps), the data will be automatically updated when marking starts

√ Use case - CajoSuite Studio can be used in automatic production through TCP/IP interface. Robot places workpiece under the laser, sends product selection and variable data via the interface and starts the marking process

CAJOSUITE STUDIOPLUS™

This version is the flagship software for laser marking! The Design mode contains all available design tools. The production mode user interface and workflow can be configured based on customers' needs for daily production. This version includes also advanced integration tools.

CajoSuite StudioPlus includes a Design mode that is an easy-to-use CAD with advanced tools for demanding marking needs. The software has all needed tools for designing markings for any purpose. In addition to tools in Studio license, this StudioPlus includes curved text, line type management tools and many others. Parameter database enables to load and save parameters for used materials. New parameters can be tested easily using test matrix tool. Designs created with Design mode can be utilized in Production mode.

Production mode is easy-to-use software interface for demanding marking needs. Workflow and user interface can be configured based on customer's needs.

Easy-to-use user interface and product specific workflow makes the controlling of marking process easy. User interface and workflows can be configured according to customers' needs. Variable marking content and settings can be entered manually or retrieved from other systems, such as database.

CajoSuite StudioPlus offers a full integration possibilities with the existing manufacturing environment. Interfaces (TCP/IP, serial port, IO etc.) can be used to control the marking system from other production systems (e.g PLC or robot). Interfaces can be configured based on customer's needs.

√ To whom - Full scale production environment with demanding marking needs. User interface and marking workflow needs to be fitted to customer's needs.

√ What - Includes all existing Design and Production mode features. Production mode user interface, workflows and integrations can be configured based to customer needs.

√ Use cases
    1. Advanced design features needed such as curved text or line type manager.
    2. Marking workflow configuration needed. For example, list of serial number fetched from customer's database or other system based on barcode on work order. Software guides user through the whole series of markings.
    3. Fully automatized marking workflow which is controlled by an external control system (PLC, robot, etc.). Marking content can be changed using software interfaces between each marking.
    4. Integration to existing production line by utilizing customer's existing software interfaces. For instance, drop-in replacement of inkjet printers, without any changes on production line control system.