

CAMLINK 2

Reference Guide

Contents

Introduction	6
About This Manual	7
Notation in the manual	7
Symbols	7
How to Obtain This Guide and Related Manuals	7

Chapter 1 About CAMLINK2

1.1 Features of CAMLINK2	10
1.2 System Requirements	11
1.3 DXF Versions	12

Chapter 2 Before Use

2.1 Installation	14
2.2 License Activation	17
Activation from the [License activation] menu	18
When using a proxy server	19
Activation from the license webpage	20
Creating the activation file	20
Issuing a license key	22
Loading a license key file	23
When the CAMLINK2 computer has no internet access	26
2.3 Screen Structure	27
2.4 Coordinate Panel	28
Base point panel	30
[Set the Point] panel > [Point] tab	30
[Set the Point] panel > [Base Point] tab	31
2.5 Origin	32
2.6 Environment setup defaults	33
Configuring the environment	33
[Environment Setup] > [Plotter] tab	33
[Environment Setup] > [Communication] tab	34
[Environment Setup] > [Other] tab	36
2.7 Starting CAMLINK2	37
Opening saved figures	37
Opening files	37
Importing additional files	37
2.8 Quitting CAMLINK2	38
Saving figures	38
Saving as new	38
Overwriting files	38
Closing figures	39
2.9 Checking or Changing the Current Model	40
Checking the current plotter	40
Changing the current plotter	41

Chapter 3 Cutting

3.1 Process of Cutting	44
3.2 Importing Cut Data (DXF Files)	46
[Read DXF] > [Option] tab	47
3.3 Registering Blades.....	48
[Blade] tab.....	49
Compensating for overcutting	51
3.4 Registering Cut Condition Names	52
3.5 Setting Cut Conditions	53
Cut Condition > [Base Setting] tab.....	56
List of available tools.....	57
Repeated cutting ([Z Position] setting).....	58
Cut Condition > [Detail Setting] tab.....	59
Cut Condition > [Milling] tab.....	60
Cut thickness with [Joint Setting] configured.....	63
Cut Condition > [V Cut] tab	65
3.6 Setting Up Layers	67
Layer Setting.....	68
If registration marks have not been placed on the intended layer.....	70
3.7 Checking a Preview	71
Preview	72
3.8 Sending to a Plotter	74
Plotter Out.....	74
Edge Detect	76
Register Mark Setting.....	77

Chapter 4 Basic Operations

4.1 Selecting Shapes/Canceling Selection	80
4.2 Editing Functions	81
Moving shapes.....	81
Creating linked copies of shapes/canceling linkage	82
Rotating shapes.....	85
Horizontally or vertically flipping (mirroring) shapes	86
Resizing shapes	86
Creating multiple copies of shapes	88
Grouping/ungrouping shapes	89
Disassembling shapes.....	90
Entering comments.....	90
Moving shapes to other layers.....	92
Grouping by layers.....	92
4.3 Showing/canceling the grid.....	93
4.4 Setting Up work space.....	94

Chapter 5 Applied Functions

5.1 Checking/Changing the Output Order	96
Changing/resetting grouped shape output order	96
Changing line segment output order	97
5.2 Line functions.....	98
Changing line cutting direction.....	98
Dividing line segments.....	99
Changing the cutting start position	100
5.3 Shape/size of registration marks	101
5.4 Cutting printed works (data with registration marks).....	102
Process of cutting data with registration marks	102
Detecting registration marks	104
If registration marks cannot be detected	105
5.5 Using freely placeable marks to cut.....	106
5.6 Reverse cutting of printed works (data with registration marks)	108
5.7 Edge detection.....	113
Scenarios where edge detection is used	113
Edge detection and surface cutting using data without registration marks	113
5.8 V-Cutting.....	115
5.9 Milling.....	119
5.10 Toggle Cutting	122

Chapter 6 Function Explanation

6.1 File(&F) Menu	128
6.2 Edit(&E) Menu	129
6.3 View(&V) Menu.....	131
6.4 Output(&O) Menu	132
6.5 Setup(&S) Menu	133
6.6 Window(&W) Menu.....	134
Changing how windows are displayed.....	134
6.7 Help(&H) Menu	136

Chapter 7 Troubleshooting

7.1 Troubleshooting by case example	138
Files cannot be imported, or the database cannot be opened.....	138
CAMLINK2 does not start	138
Cannot send data to a plotter	138
Forgot to deactivate the license	138
Lost the serial key	138
7.2 How to deactivate the license if the computer fails.....	139

7.3 Uninstallation	140
Deactivating the license	140
Deactivation from the [License activation] menu.....	140
When the CAMLINK2 computer has no internet access.....	141
Uninstallation	144

Introduction

Thank you for purchasing CAMLINK2.

Read this reference guide (hereinafter, "this guide" or "this manual") thoroughly and make sure you understand it to ensure correct use of your Mimaki product.

- Any unauthorized use or reproduction, in part or whole, of this guide is strictly prohibited.
- The information in this guide may be subject to change without notice in the future.
- Details pertaining to specifications in this guide may differ due to improvements made to this software.
- Copying the Mimaki Engineering Co. Ltd. software described in this guide to other disks (except for backup purposes) or loading it to memory except for the purpose of running it, is strictly prohibited.
- With the exception of what is provided in the warranty provisions, Mimaki Engineering Co. Ltd. does not assume any liability for any damage (including, but not limited to, the loss of profit, indirect damage, special damage, or other monetary damages) resulting from the use or inability to use this product. The same shall apply in cases where Mimaki Engineering Co. Ltd. has been notified of the possibility of damages. As an example, we shall not be liable for the loss of any work made by using this product or for any indirect loss caused by a product made with such work.

CAMLINK2 is a trademark or a registered trademark of Mimaki Engineering Co. Ltd. in Japan and other countries.

Microsoft, Windows, Windows 10, and Windows 11 are trademarks or registered trademarks of Microsoft Corporation in the United States and other countries.

AutoCAD and DXF are trademarks or registered trademarks of Autodesk, Inc.

Adobe and Illustrator are trademarks or registered trademarks of Adobe Incorporated in the United States and other countries.

CorelDRAW is a trademark or registered trademark of Corel Corporation in Canada, the United States, and other countries.

DraftBoard and DesignFreeQ are trademarks or registered trademarks of Shark Designer Ltd. in Japan.

Other company names and product names described in this guide are trademarks or registered trademarks of their respective owners.

About This Manual






This manual describes the following:

- Installation and settings for using CAMLINK2
- Instructions for using CAMLINK2

Notation in the manual

- On-screen buttons and menu items are enclosed in brackets, as in [OK] or [Open].

Symbols

Description		
	Important	The "Important" symbol represents information you must be familiar with when using CAMLINK2.
	Tip	The "Tip" symbol represents useful information to know.
	Reference information	Indicates a reference page with related information. Click on the reference to display the corresponding page.
	General compulsory instructions	Indicates actions that must be performed.
	General prohibitions	Indicates actions that must not be performed. The specific details of the prohibited action are indicated in the pictogram.

How to Obtain This Guide and Related Manuals

The latest versions of this guide and related manuals are available at the following URL:

<https://mimaki.com/download/software.html>

Chapter 1 About CAMLINK2




This chapter

This chapter summarizes CAMLINK2 and provides introductory information.

Features of CAMLINK2 10 DXF Versions12
System Requirements 11

1.1 Features of CAMLINK2

CAMLINK2 software is designed specifically for the cutting of thick material.

See  ["System Requirements"\(P. 11\)](#) for details on compatible OSES and recommended computer environments.

● Database storage of cutting conditions

Configured cutting conditions are stored in a database and can be used with other works.

● Optimal processing for small shapes

Can automatically switch to another tool for output of shapes that are too small to cut.

● Layouts to fit the work


Shapes can be laid out to fit the work, enabling effective use of works.  ["Setting Up work space"\(P. 94\)](#)

● Customizable shape cutting order



Cutting order can be specified.  ["Changing/resetting grouped shape output order"\(P. 96\)](#)

The cutting order can also be checked on the screen. --- リンクがありません ---


● Automatic database backup

With database backup enabled, the database is automatically backed up when you quit CAMLINK2.  ["\[Environment Setup\] > \[Other\] tab"\(P. 36\)](#)


● Detection of registration marks

Registration marks can be detected, which enables continuous cutting of multi-copied shapes, or shapes arranged in the same position on multiple works.  ["Cutting printed works \(data with registration marks\)"\(P. 102\)](#)  ["Using freely placeable marks to cut"\(P. 106\)](#)

● V-cutting

Folding lines can be created on cardboard or other thick works. Crisp edges can also be created, using a V-cutting tool.  ["V-Cutting"\(P. 115\)](#)

● Cutting of works not compatible with cutters

This enables machining of acrylic, aluminum composite panels, channel boards, and other material.  ["Milling"\(P. 119\)](#)

1.2 System Requirements

The following OSes can be used.

- Microsoft® Windows 10® Pro (64-bit)
- Microsoft® Windows 10® Enterprise (64-bit)
- Microsoft® Windows 11® Home
- Microsoft® Windows 11® Pro

● Recommended computer environment

The following system environment is recommended.

OS	Windows® 10 Pro 64-bit
CPU	Intel® Core™ i5 or higher recommended
Chipset	Intel chipset
Memory	At least 8 GB
Hard disk	At least 10 GB of free disk space
Interface	RS-232C, Ethernet port* ¹

*1. Always connect via Ethernet when using a tool's automatic detection or CMOS camera functionality.

1.3 DXF Versions

Cutting by CAMLINK2 is based on DXF data. Note that some DXF files cannot be used, depending on the version in which they were saved.

● DXF file versions

DXF version	Application used to save DXF files				
	AutoCAD 2024	Adobe Illustrator	CorelDRAW	DraftBoard	DesignFreeQ
2018	O	O	X	X	X
2013	O	O	X	X	X
2010	O	O	X	X	X
2007	O	O	O	X	X
2004	O	O	O	X	X
2000	O	O	O	O	O

*1. O: supported, X: not supported



- The DXF file format data prepared in Adobe Illustrator does not read arc data, ellipse data, and spline data correctly.

Chapter 2 Before Use



This chapter

This chapter describes CAMLINK2 installation, screen layouts, and database registration before you begin using the software.

Installation	14	Environment setup defaults	33
License Activation	17	Configuring the environment	33
Activation from the [License activation] menu	18	[Environment Setup] > [Plotter] tab	33
When using a proxy server	19	[Environment Setup] > [Communication] tab	34
Activation from the license webpage	20	[Environment Setup] > [Other] tab	36
Creating the activation file	20	Starting CAMLINK2	37
Issuing a license key	22	Opening saved figures	37
Loading a license key file	23	Opening files	37
When the CAMLINK2 computer has no internet access	26	Importing additional files	37
Screen Structure	27	Quitting CAMLINK2	38
Coordinate Panel	28	Saving figures	38
Base point panel	30	Saving as new	38
[Set the Point] panel > [Point] tab	30	Overwriting files	38
[Set the Point] panel > [Base Point] tab	31	Closing figures	39
Origin	32	Checking or Changing the Current Model	40
		Checking the current plotter	40
		Changing the current plotter	41

2.1 Installation

Download the installer and install CAMLINK2 as follows.



- Install the software as a user with administrator privileges.
- An internet connection is required in order to install CAMLINK2. Contact your local distributor, our sales office, or service center.

1 Download the CAMLINK2 installer from the Mimaki website.

- <https://mimaki.com/download/software.html>



- If the computer on which to install CAMLINK2 is not connected to the internet, use a computer with an internet connection to download the installer. After this, copy the installer to the computer on which to install the software.

2 Double-click the downloaded exe file, which is a self-extracting file.

- The installation screen will be displayed automatically after the CAMLINK2 installer is extracted to the desktop.



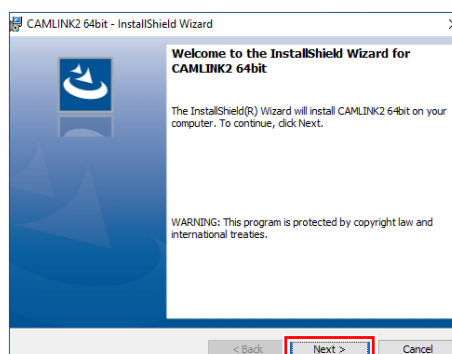
- If the installation screen does not appear automatically, double-click [CDMenu.exe] in the extracted folder.

3 Click [Install].

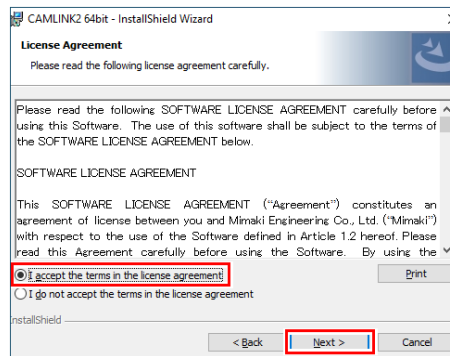


- The Microsoft .NET Framework installer will launch if .NET Framework has not been installed. Install .NET Framework first.

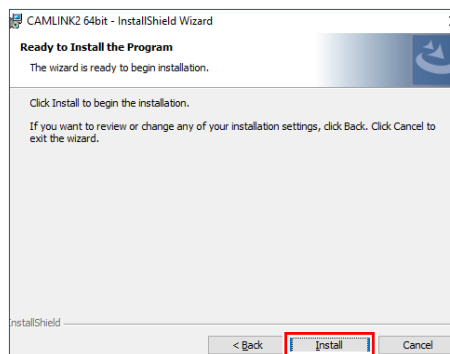
4 Click [Next].



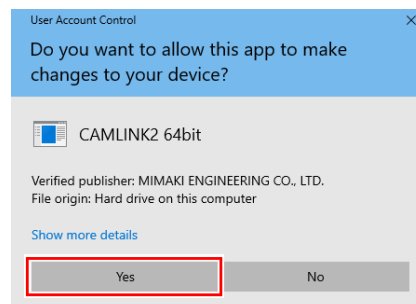
5 Select [I accept the terms of the license agreement] and click [Next].



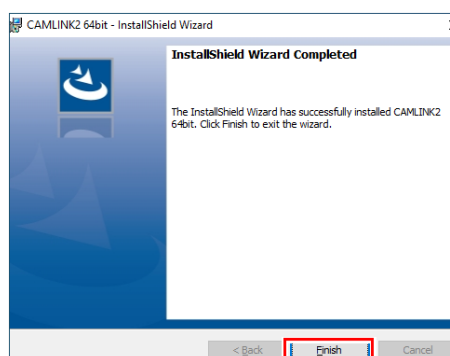
6 Click [Install] to start the installation process.



- Click [Yes] if the User Account Control dialog box appears.



7 Click [Complete] to complete installation.



8 Click [X] or [Exit] in the upper right to close the installation screen.



- After installation, do not change, delete or rename the installation folder or files that were installed.

2.2 License Activation

To continue using CAMLINK2, the license needs activating. Activation requires the computer on which CAMLINK2 is installed to be connected to the internet.



- (If the computer has no internet access, another one with access can be used for activation.)

The license activation process uses the information from Ethernet equipment as hardware configuration information of the PC.

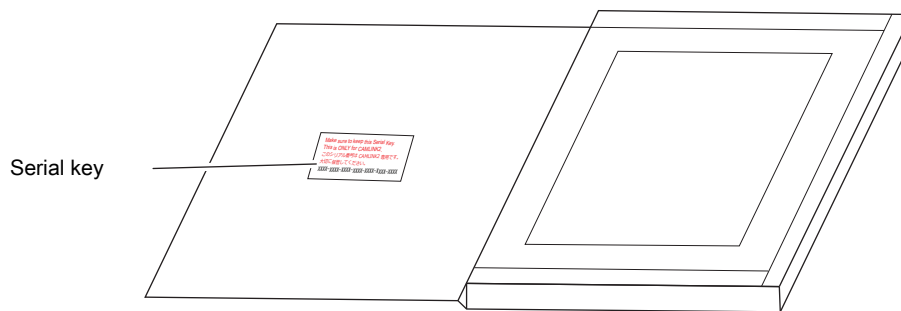
- Do not disable the Ethernet equipment that is enabled upon license activation. Even if you switch between a wired and wireless connection, keep the equipment previously used active.
- If you use a PPP-connected or USB-connected network device, enable Ethernet equipment.



- In license activation, the serial key and the information to identify the CAMLINK2 computer (generated automatically from computer hardware configuration information) are sent to Mimaki Engineering.
- The software can be used for 30 days from the first startup, which is the trial period, without activating the license. Activate the license during the trial period to continue using CAMLINK2 after the trial period ends.

● Where you can find the serial key

The serial key is found on the inside of the package lid.



● Activating the license

The license can be activated as follows. The activation method varies depending on the computer environment.

- On a computer connected to the internet
 - "Activation from the [License activation] menu"(P. 18)
 - "Activation from the license webpage"(P. 20)
- On a computer not connected to the internet
 - "When the CAMLINK2 computer has no internet access"(P. 26)

Activation from the [License activation] menu

1 From the Windows [Start] menu, select [All apps] > CAMLINK2 > [License Activation].



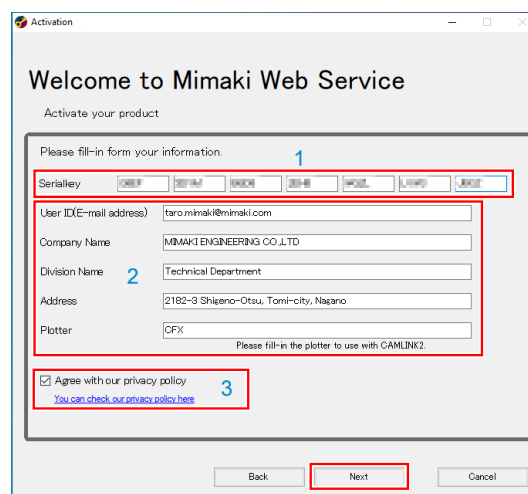
- The license can also be activated from the [Activation] screen that appears on initial startup of CAMLINK2.

2 Select [Activate] and click [Next].

- If using a proxy server, this will need configuring. ["When using a proxy server"\(P. 19\)](#)



3 Configure the settings and click [Next].



(1) Enter the serial key, which you can find on the inside of the package lid. ["License Activation"\(P. 17\)](#)

(2) Fill in any of the fields as required.

(3) Read the privacy policy at the following URL, then select the [Agree with our privacy policy] check box.

- <https://mimaki.com/privacy.html>
- You need to agree with the privacy policy before [Next] is enabled. Click [Next] to start the activation process.



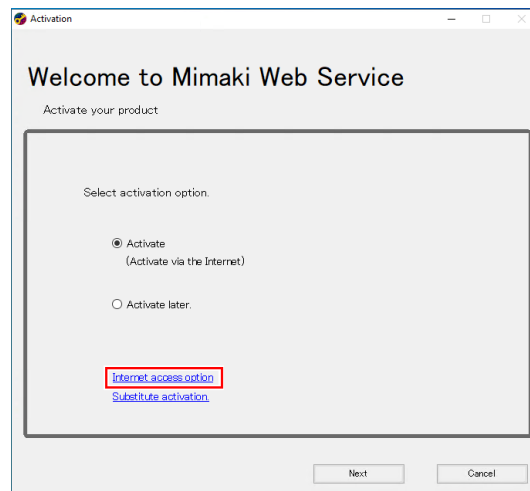
- If using a personal firewall, a connection confirmation screen may appear. If the connection confirmation screen appears, allow the connection.

4 Click [Complete] to complete license activation.

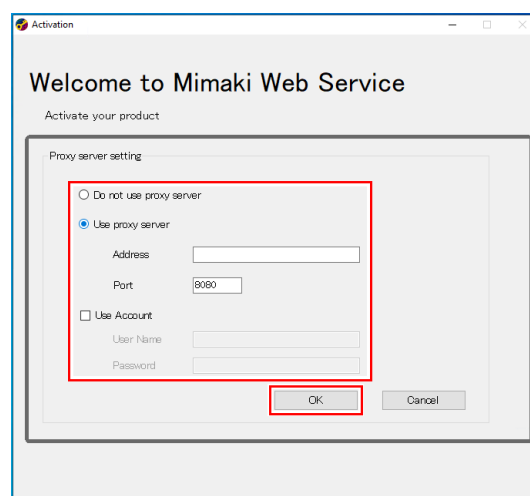


When using a proxy server




1 Click [Internet Option].



2 Configure the settings and click [OK].



Activation from the license webpage

- 1** Create an activation file.
 -  "Creating the activation file"(P. 20)
- 2** Activate the license.
 -  "Issuing a license key"(P. 22)
- 3** Load the license key file.
 -  "Loading a license key file"(P. 23)

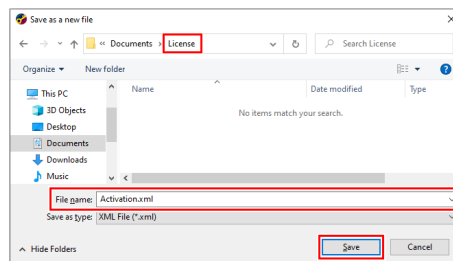
Creating the activation file

- 1** From the Windows [Start] menu, select [All apps] > CAMLINK2 > [License Activation].
- 2** Click [Substitute activation].



- 3** Select [Create an activation file for substitute activation].



4 Click [Browse].**5** Specify a storage location and enter a name for the file to save.**6** Click [Save].**7** Click [Next].

8 Configure the settings and click [Next].

- (1) Enter the serial key, which you can find on the inside of the package lid. "License Activation"(P. 17)
- (2) Fill in any of the fields as required.
- (3) Read the privacy policy at the following URL, then select the [Agree with our privacy policy] check box.
 - <https://mimaki.com/privacy.html>
 - You need to agree with the privacy policy before [Next] is enabled. Click [Next] to start the activation process.

9 Click [Complete].

Issuing a license key

1 Access the following URL to display the activation page.

- <http://miws.mimaki.jp/license/agencytop.aspx>

Important! • Clicking the URL may display a PDF security warning. If this happens, click [Allow].

2 Click [Activation].

Activation
If you have the activation file by Substitute License Activation.

Activation

Deactivation
If you have the deactivation file by Substitute License Deactivation.

Deactivation

Deactivation (When the PC broken)
Can not deactivation because the PC running RasterLink/MPM/Simple POP is broken.

Deactivation
(When the PC broken)

3 Click [Select File].

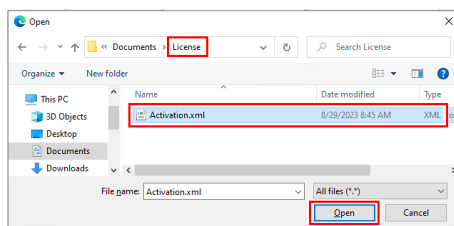
Please select the activation file created on RasterLink/MPM/Simple POP.

Choose File No file chosen

Get license key

4 Select the license activation file created and click [Open].

- 👉 "Creating the activation file"(P. 20)

**5** Click [Get license key].

- The license key file is saved to the downloads folder.

Please select the activation file created on RasterLink/MPM/Simple POP.

Choose File Activation.xml

Get license key

6 Copy the saved license key file to any location on the CAMLINK2 computer.**Loading a license key file****1** From the Windows [Start] menu, select [All apps] > CAMLINK2 > [License Activation].

2 Click [Substitute activation].



3 Select [Input file name of the substitute activated license key file].

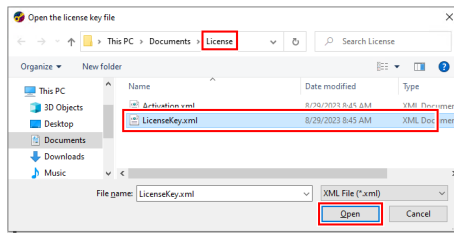


4 Click [Browse].



5 Select the issued license key file and click [Open].

-  "Issuing a license key"(P. 22)



6 Click [Next].



7 Click [Complete].

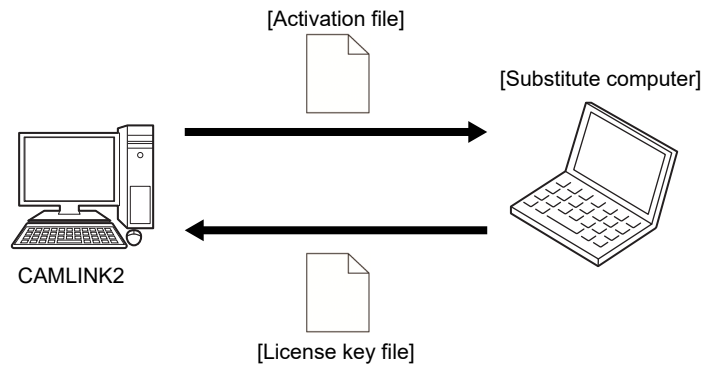


When the CAMLINK2 computer has no internet access

1 Use the CAMLINK2 computer to create an activation file.

-  ["Creating the activation file"\(P. 20\)](#)

2 Copy the activation file to a computer with internet access.



3 Activate the license.

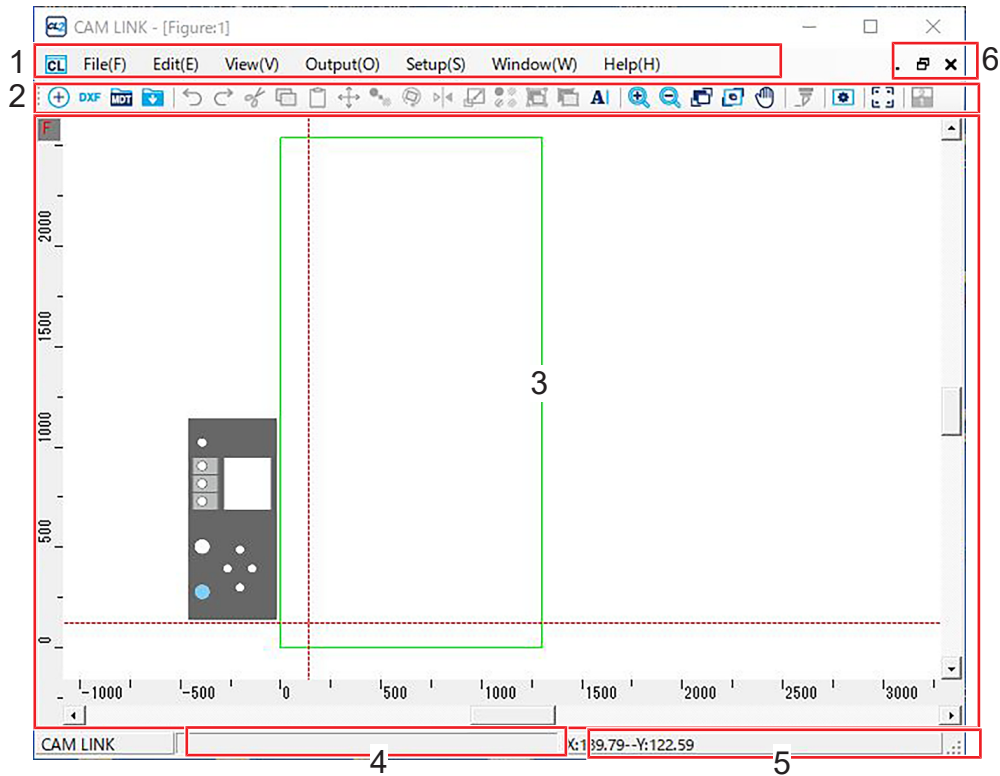
-  ["Issuing a license key"\(P. 22\)](#)

4 Copy the license key file to the CAMLINK2 computer.

5 Load the license key file.

-  ["Loading a license key file"\(P. 23\)](#)

2.3 Screen Structure



No	Item	Description
1	Menu bar	Shows menu commands. "File(&F) Menu"(P. 128)
2	Toolbar	Shows frequently used functions as icons. "File(&F) Menu"(P. 128)
3	Editing screen	Screen for importing and editing DXF files. The origin varies depending on the plotter. The active working space (maximum plotting size of the current model) is outlined in green. <ul style="list-style-type: none"> • Grid mark (upper left): G is shown when the grid is set and F when it is not. "Showing/canceling the grid"(P. 93) • Rulers (top and left): Used as a layout guide. Labeled in millimeters. • Scroll bars: The vertical scroll bar is used to scroll (move) the screen up or down, and the horizontal one, left and right.
4	Message area	Shows a brief description and instructions for the selected command.
5	Coordinate display	Indicates the current mouse pointer coordinates. When importing cut data (in a DXF file), to specify base point and placement position coordinates for the imported shape, click before confirming the placement position to display a coordinate dialog box, then enter the coordinates. It is also possible to access this dialog box by selecting the function enabling setting of coordinates, then pressing [Alt]+[A]. "Coordinate Panel"(P. 28)
6	Window buttons on the figure	<ul style="list-style-type: none"> • Minimize button: Minimizes the window. • Maximize button: Maximizes the window. • Close button: Closes the window.

2.4 Coordinate Panel

Enables entry of placement coordinates when specifying shape origins or duplicating shapes.

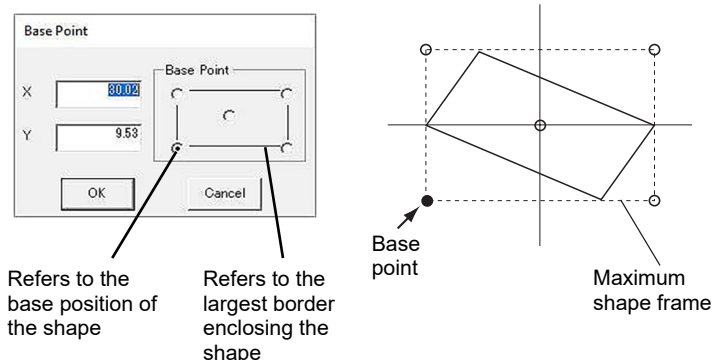
- Coordinates can be entered for the following operations.
 - When importing DXF files or additional files ["Importing Cut Data \(DXF Files\)"\(P. 46\)](#)
 - When moving shapes, creating linked copies, or rotating shapes ["Moving shapes"\(P. 81\)](#) ["Creating linked copies of shapes/canceling linkage"\(P. 82\)](#) ["Rotating shapes"\(P. 85\)](#)
 - When resizing shapes ["Resizing shapes"\(P. 86\)](#)
 - When entering comments ["Entering comments"\(P. 90\)](#)
 - When specifying work shapes/sizes ["Setting Up work space"\(P. 94\)](#)
 - When specifying points to move the screen

● Figure base point and maximum frame

The base point of a selected figure is based on its maximum frame.

In the following figure, the maximum frame is indicated by a dotted line.

The arrow below indicates the base point when it is set as the lower left point in the coordinate panel.



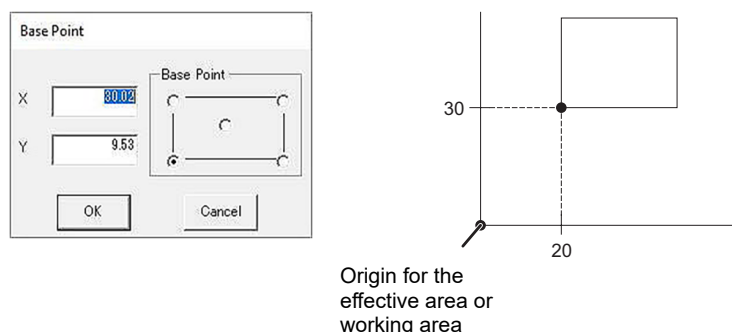
● Entering coordinates

For reference when entering coordinates in the coordinate panel, see below for the directions of X and Y coordinates. ["Origin"\(P. 32\)](#)

● Specifying base point positions

Specify where to set the base points of shapes you are arranging, and then enter the coordinates.

First, select a position on the shape as the base point in [Base Point]. After this, enter the base point's X and Y coordinates.

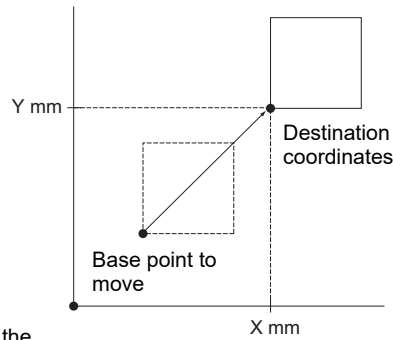
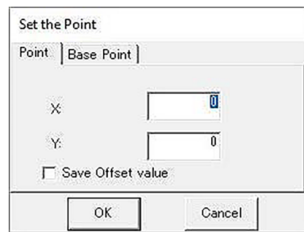


- X and Y coordinates are automatically shown for the selected [Base Point], whether clicking one of the four corners or the center point.

● Specifying placement positions

To enter coordinates for moving or copying figures, use the [Point] tab in the following dialog box.

To specify the base point position for this placement, click the [Base Point] tab.



Origin for the effective area or working area

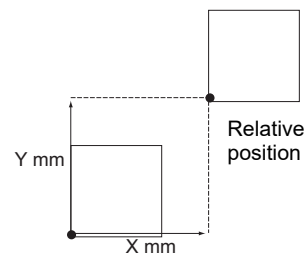
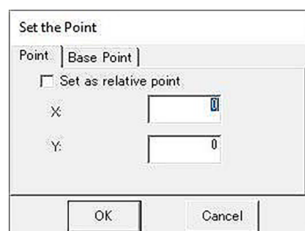


- Specify the placement position after specifying the base point of the shape to move or copy.

● Specifying relative positions

To arrange shapes by entering relative coordinates, select [Set as relative point] in the coordinate dialog box. Enter relative values in X and Y directions.

The shape is moved or copied by a distance from the original base point position corresponding to the entered relative value.



Base point to move

● Accessing the base point panel

Before copying, moving, or resizing shapes, set their original base points.

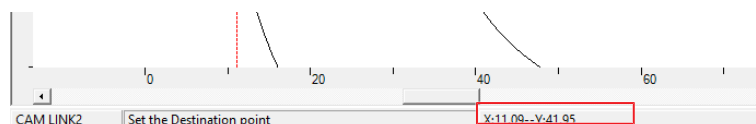
1 Select a shape.

- "Selecting Shapes/Canceling Selection"(P. 80)

2 Select an editing function (move, link copy, etc.).

3 Click the coordinate values near the middle of bottom of the screen.

- The base point panel is displayed.



- You can also access the base point panel by pressing [Alt]+[A].

● Accessing the point input panel

Enter the X and Y coordinates according to the values entered for the base point.

1 Set the base point in the base point panel.

- "Base point panel"(P. 30)

2 Click the coordinate values near the middle of bottom of the screen.

- The point input ([Set the Point]) panel will appear.
 - "[Set the Point] panel > [Point] tab"(P. 30)
 - "[Set the Point] panel > [Base Point] tab"(P. 31)

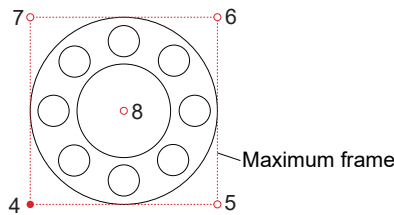
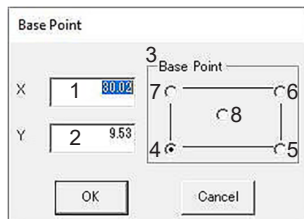


- You can also access the point input panel by pressing [Alt]+[A].

Base point panel

Used to set a base point for editing functions (move, copy, etc.).

Either set the base point coordinates or select a base point in [Base Point].



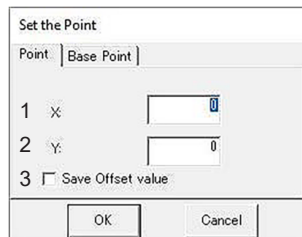
No.	Item	Description
1	X (mm)	Enter the X-coordinate of the base point.
2	Y (mm)	Enter the Y-coordinate of the base point.
3	Base Point	Select the base point, based on the maximum shape frame. *1

*1. Numbers 4–8 in the figure correspond to shape base point positions.

[Set the Point] panel > [Point] tab

Set the coordinates, based on the origin. The base point set on the [Base Point] tab is arranged accordingly.

The coordinate origin (0, 0) is the lower-right or lower-left corner (depending on the plotter, "Origin"(P. 32)) of the green frame indicating the active working space.

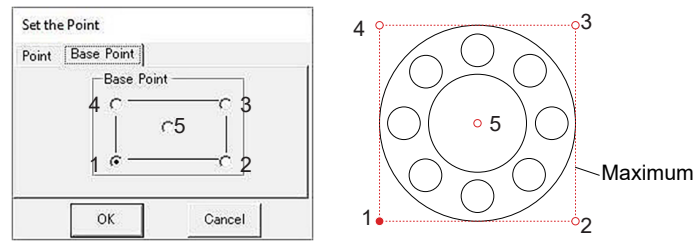


Example: When a DXF file is imported

No.	Item	Description
1	X (mm)	Enter the X-coordinate for shape placement.
2	Y (mm)	Enter the Y-coordinate for shape placement.
3	Save Offset value	[X] and [Y] coordinates are saved and shown as the initial panel coordinate values the next time a DXF file is imported.

[Set the Point] panel > [Base Point] tab

Specify the reference (base point) position used for shape placement. Can be set at any corner or in the center of the shape. ^{*1}

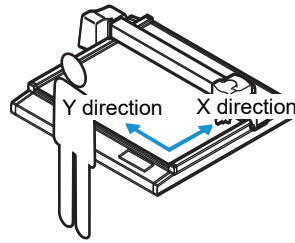
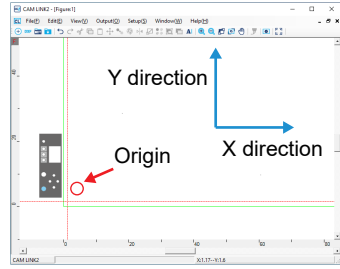


*1. Numbers 1–5 in the figure correspond to shape base point positions.

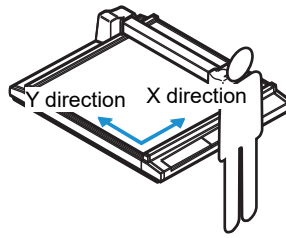
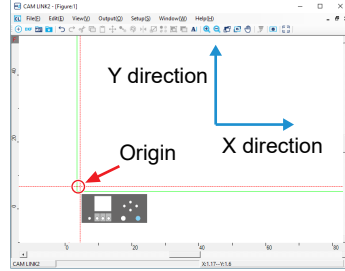
2.5 Origin

Origin X and Y directions vary depending on the plotter.




For plotters with an origin in the lower right



For plotters with an origin in the lower left




2.6 Environment setup defaults

- 1** From the Windows [Start] menu, select [All apps] > CAMLINK2] > [CAMLINK2].
 - [Set the configuration] is displayed.
- 2** Click [OK].
 - CAMLINK2 starts up and the [Environment Setup] dialog box is displayed.
- 3** Configure the settings and click [OK].
 -  "[Environment Setup] > [Plotter] tab"(P. 33)
 -  "[Environment Setup] > [Communication] tab"(P. 34)
 -  "[Environment Setup] > [Other] tab"(P. 36)


Configuring the environment

Configure environment settings when creating a new figure.

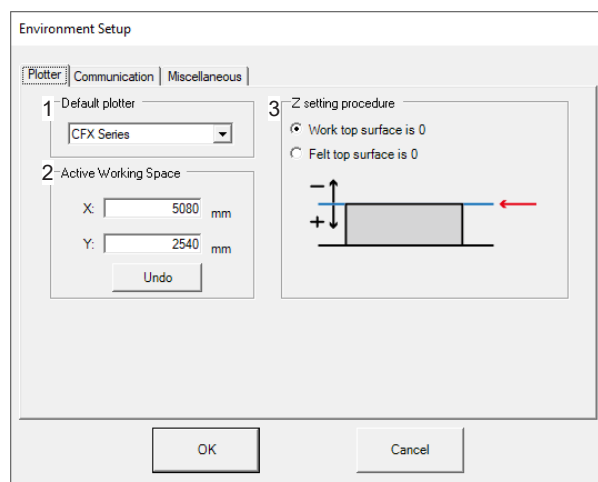
- 1** Close all open figures.
 -  "Closing figures"(P. 39)



- Immediately after CAMLINK2 start up, a new figure will open. Click the Close button in the top right to close the current figure.

- 2** From the CAMLINK2 menu bar, select [Setup(&S)] > [Environment(&V)].
 - The [Environment Setup] dialog box is displayed.
- 3** Configure the setting items.
 -  "[Environment Setup] > [Plotter] tab"(P. 33)
 -  "[Environment Setup] > [Communication] tab"(P. 34)
 -  "[Environment Setup] > [Other] tab"(P. 36)

[Environment Setup] > [Plotter] tab



No.	Item	Description
1	Default plotter	Select the plotter to use.

No.	Item	Description
2	Active Working Space	<p>After selecting a plotter, its maximum active working space is indicated here. Your specified active working space is outlined in green when you open a figure.</p> <ul style="list-style-type: none"> • Values in [Active Working Space] do not set the actual cutting area. Change this area if a work jig or the like is used that reduces the effective cutting area. • Click [Undo] to restore default values.
3	Z setting procedure	<ul style="list-style-type: none"> • Work top surface is 0: The top surface of the work is the basis. <div data-bbox="837 425 1364 660" data-label="Diagram"> <p>The diagram shows a cross-section of a workpiece on a felt base. A tool is positioned above the workpiece. A dashed horizontal line indicates the Z-axis origin (0) at the top surface of the workpiece. Below this line, the Z-axis is labeled 'Positive values'. Above the line, it is labeled 'Negative values'. The Z-axis is labeled 'Z Position'.</p> </div> • Felt top surface is 0: The bottom surface of the work is the basis. <div data-bbox="837 728 1364 963" data-label="Diagram"> <p>The diagram shows a cross-section of a workpiece on a felt base. A tool is positioned above the workpiece. A dashed horizontal line indicates the Z-axis origin (0) at the bottom surface of the workpiece. Above this line, the Z-axis is labeled 'Positive values'. Below the line, it is labeled 'Negative values'. The Z-axis is labeled 'Z Position'.</p> </div> <p>☞ "Cut Condition > [Base Setting] tab"(P. 56) ☞ "Repeated cutting ([Z Position] setting)"(P. 58)</p>
4	Origin	<p>Select an origin that matches the plotter settings.</p> <ul style="list-style-type: none"> • Select [Bottom Right] or [Bottom Left] when using mark detection. • Origin is not displayed on models which do not have [Center]. Only [Bottom Right] and [Bottom Left] are available. <ul style="list-style-type: none"> – [Bottom Right] and [Bottom Left] setting items vary depending on the plotter origin. ☞ "Origin"(P. 32)

[Environment Setup] > [Communication] tab

● Using a LAN cable

Environment Setup

Plotter Communication Miscellaneous

1 Plotter communication port LAN

2 Connection Plotter Not found port.

IP Address

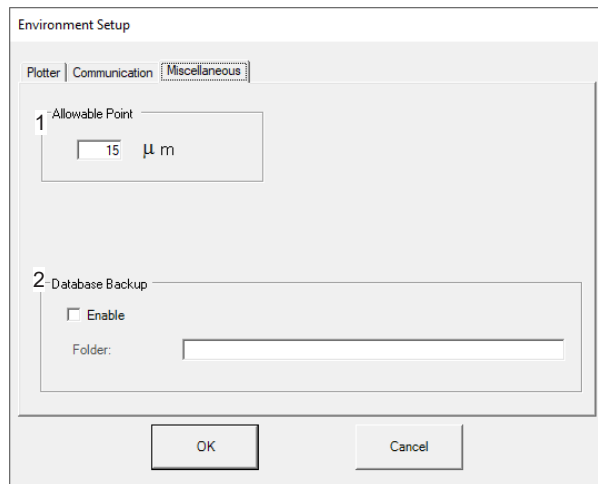
OK Cancel

No.	Item	Description
1	Plotter communication port	Select [LAN].
2	Connection Plotter	Select the port connected to the plotter. If the plotter connection is not displayed, manually enter the plotter IP address. Select [IP Address] and enter the address. <ul style="list-style-type: none"> To find the plotter IP address, refer to the plotter operation manual.

● Using a serial cable

No.	Item	Description
1	Plotter communication port	Select [Serial].
2	Port	Select the port connected to the plotter.
3	Baud rate Stop bit Data bits Parity Use XON/XOFF parameters	Select each required setting item. <ul style="list-style-type: none"> For communication details, refer to the plotter operation manual. ---

Important! With the CFX Series, be sure to always select the [Use XON/XOFF parameters] check box.

[Environment Setup] > [Other] tab

No.	Item	Description
1	Allowable Point	If the distance between line segment endpoints is less than or equal to the specified value, it is treated as a connected line segment. <ul style="list-style-type: none"> • Default: 15 (μm)
2	Database Backup	Automatically backs up the database (which is overwritten when you quit CAMLINK2). To back up the database manually, see "Setup(&S) Menu"(P. 133). <ul style="list-style-type: none"> • Folder: Specify the destination folder for backup files.


Important!

- The database contains essential data. Back it up regularly.
- We also recommend regular backup to removable media.

2.7 Starting CAMLINK2

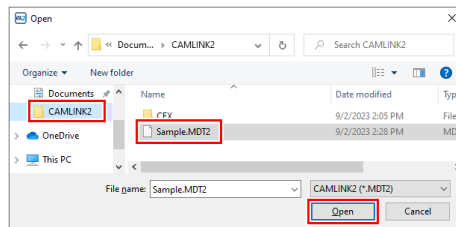
- 1 From the Windows [Start] menu, select [All apps] > CAMLINK2] > [CAMLINK2].
 - CAMLINK2 is started.

Opening saved figures

Open saved figures as follows (MDT2: proprietary CAMLINK2 format;  "Saving figures"(P. 38)).

Opening files

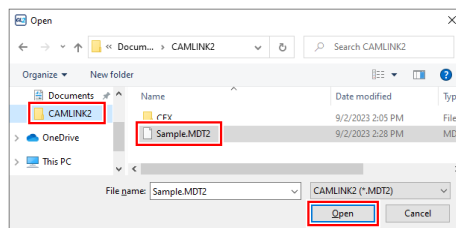
- 1 From the CAMLINK2 menu bar, select [File(&F)] > [Open(&O)].
 - The [Open] dialog box is displayed.
- 2 Select a file and click [Open].




Importing additional files

Add figure data from other files to an open figure as follows.

- 1 From the CAMLINK2 menu bar, select [File(&F)] > [Load(&L)].
 - The [Open] dialog box is displayed.
- 2 Select a file and click [Open].



- 3 Click a position to place the figure there, or use the coordinate panel ( "Coordinate Panel"(P. 28)) to set the coordinates.
 - The position where you click is used as the base point for placement of the shape.

2.8 Quitting CAMLINK2

- 1 From the CAMLINK2 menu bar, select [File(&F)] > [Quit(&X)], or click the Close button in the upper right.
 - CAMLINK2 is closed.

Saving figures

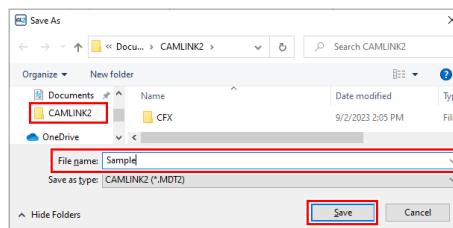
Save figures as follows. Figures are saved in an original CAMLINK2 format, MDT2.



- All editing data is saved, including your specified cut conditions and screen display colors.

Saving as new

- 1 From the CAMLINK2 menu bar, select [File(&F)] > [Save As...(&A)].
 - The [Save As] dialog box is displayed.
- 2 Specify a destination folder and enter a file name.



- 3 Click [Save].
 - The data is saved as a new file.

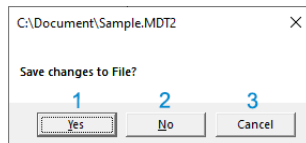
Overwriting files

- 1 From the CAMLINK2 menu bar, select [File(&F)] > [Save(&S)].
 - The existing file is overwritten.

Closing figures

From the CAMLINK2 menu bar, select [File(&F)] > [Close(&C)], or click the Close button in the upper right above the figure.

A dialog box is displayed to confirm saving if you attempt to close an unsaved file.



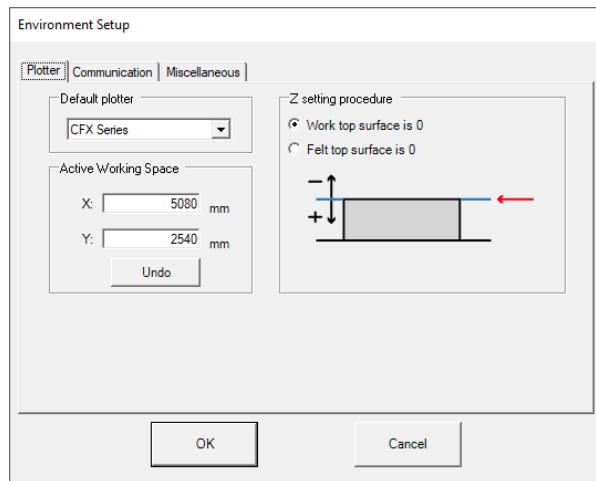
1	Yes	<ul style="list-style-type: none"> • When saving as new: The [Save As] dialog box is displayed. Select a destination folder and enter a file name. Click [Save] to save the file and close the figure. • When overwriting: The file is overwritten and the figure is closed.
2	No	The figure is closed without saving changes.
3	Cancel	Cancel closing the figure.

2.9 Checking or Changing the Current Model

You can check whether your plotter is selected and change the current plotter.

Checking the current plotter

- 1 From the CAMLINK2 menu bar, select [Setup(&S)] > [Environment(&V)].
 - The [Environment Setup] dialog box is displayed.



- 2 Click the [Plotter] tab.
- 3 Check the model below [Default plotter].
- 4 Click the [Cancel] button to close the [Environment Setup] dialog box.

Changing the current plotter

1 Close all open figures.

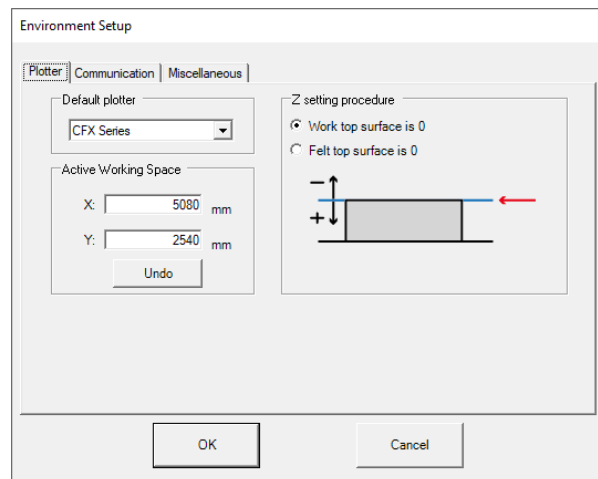
-  "Closing figures"(P. 39)



- Immediately after CAMLINK2 start up, a new figure will open. Click the Close button in the top right to close the current figure.

2 From the CAMLINK2 menu bar, select [Setup(&S)] > [Environment(&V)].

- The [Environment Setup] dialog box is displayed.



3 Click the [Plotter] tab.

4 Select the plotter to use in the [Default plotter] list box.

5 Click [OK] to close the [Environment Setup] dialog box.

Chapter 3 Cutting



This chapter


This chapter describes the basic process of cutting and related tasks.

Process of Cutting	44	Cut thickness with [Joint Setting] configured	63
Importing Cut Data (DXF Files)	46	Cut Condition > [V Cut] tab	65
[Read DXF] > [Option] tab.....	47	Setting Up Layers	67
Registering Blades	48	Layer Setting	68
[Blade] tab	49	If registration marks have not been placed on the intended layer	70
Compensating for overcutting	51	Checking a Preview	71
Registering Cut Condition Names	52	Preview	72
Setting Cut Conditions	53	Sending to a Plotter	74
Cut Condition > [Base Setting] tab	56	Plotter Out	74
List of available tools	57	Edge Detect	76
Repeated cutting ([Z Position] setting)	58	Register Mark Setting	77
Cut Condition > [Detail Setting] tab	59		
Cut Condition > [Milling] tab	60		

3.1 Process of Cutting

In the following example, DXF data with separate layers is prepared.

1. Create cut (DXF) data

-  ["DXF Versions"\(P. 12\)](#)
- If you will modify individual cut conditions, prepare cut data with different layers or in different colors.



- For details on the available area for placing cut data, refer to the plotter operation manual.

2. Load work on plotter



- For details on how to load the work and using the plotter, refer to the plotter operation manual.

3. Work origin setting

- Switch to [Remote] mode after setting the origin.




- For details, refer to the plotter operation manual.


4. Launching CAMLINK2

-  ["Starting CAMLINK2"\(P. 37\)](#)



- Upon first using the application, configure the environment settings.  ["Environment setup defaults"\(P. 33\)](#)

5. Plotter selection (confirmation)

-  ["Checking the current plotter"\(P. 40\)](#)



- If not selected, select your plotter.  ["Changing the current plotter"\(P. 41\)](#)


6. Blade registration (confirmation)

- Check the blade. Register a blade if no blade has been registered.  ["Registering Blades"\(P. 48\)](#)

7. Work Size

-  ["Setting Up work space"\(P. 94\)](#)

8. Importing cut (DXF) data

- Arrange the imported cut (DXF) data on to the work set.  ["Importing Cut Data \(DXF Files\)"\(P. 46\)](#)

9. Cut condition settings

-  ["Setting Cut Conditions"\(P. 53\)](#)

10. Output condition settings

-  ["Setting Up Layers"\(P. 67\)](#)



- Be sure to configure [Cut Condition] settings for layers you will output (cut).

11. Output

-  ["Sending to a Plotter"\(P. 74\)](#)

3.2 Importing Cut Data (DXF Files)

Import cut data (a DXF file) as follows.  ["DXF Versions"\(P. 12\)](#)



- Multi-text data cannot be imported.


1 From the CAMLINK2 menu bar, select [File(&F)] > [New(&N)].

- A new figure is created.
- If a new figure is already open, go to the next step.


2 Select [File(&F)] > [Read DXF] from menu bar.

- The [Read DXF] dialog box is displayed.

3 Select a DXF file and click [Open].

- (1) Select the folder where the DXF file is stored.
- (2) Select the DXF file.
 - The shape is displayed on the preview screen.
- (3) Configure the [Loading Criteria] settings.
 - Layer: The application imports layer information saved in the DXF file.
 - Color: The application creates a layer for each color of the shape saved in the DXF file.
- (4) Click the [Option] tab.
 - Configure the setting items.  ["\[Read DXF\] > \[Option \] tab"\(P. 47\)](#)




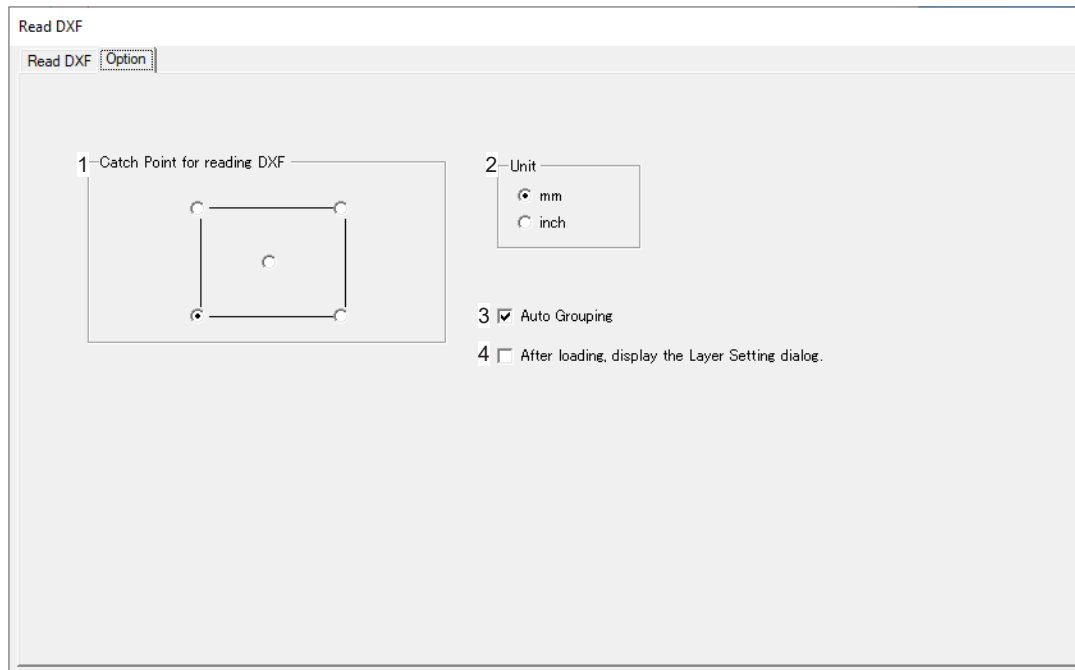
- To automatically display the [Layer Setting] dialog box after placing DXF data on the editing screen, select the [After loading, display the Layer Setting dialog] check box on the [Option] tab. Configure layers as needed.  ["Setting Up Layers"\(P. 67\)](#)

4 On the editing screen, arrange the DXF data.

- Place the work within the area outlined in green (active working space) or blue (work area for works already configured).





- You can also use the coordinate panel to set base points.  ["Coordinate Panel"\(P. 28\)](#)

[Read DXF] > [Option] tab

No.	Item	Description
1	Catch Point for reading DXF	Select a base point for data placement.
2	Unit	Select the unit of measure for imported data.
3	Auto Grouping	<ul style="list-style-type: none"> • Selected: Groups shapes by DXF file when data is imported. • Cleared: Imports without grouping.
4	After loading, display the Layer Setting dialog.	Sets whether the [Layer Setting] dialog box is displayed after DXF files are imported.

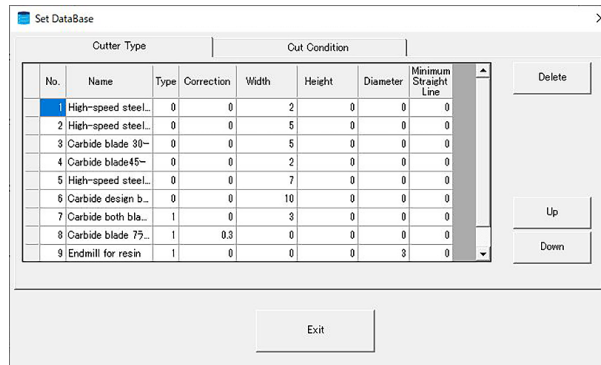
3.3 Registering Blades

Register blades in advance.

Blades registered here are used for [Cut Condition] and [Layer Setting] in the [Setup(&S)] menu.  "[Setting Cut Conditions](#)"(P. 53)  "[Setting Up Layers](#)"(P. 67)

1 From the CAMLINK2 menu bar, select [Setup(&S)] > [Set Database(&A)].

- The [Set Database] dialog box is displayed.



2 Select the [Blade] tab and register the blade used.

-  "[\[Blade\] tab](#)"(P. 49)

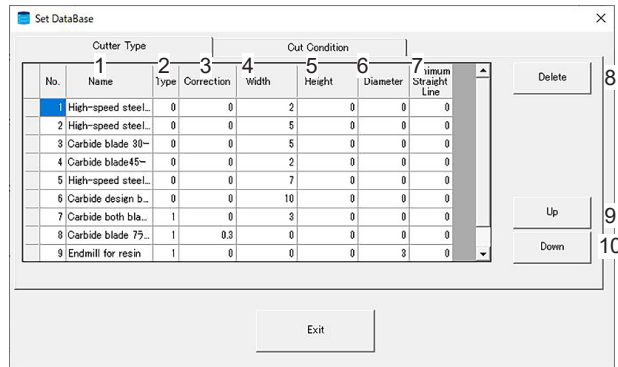
3 Click [Exit].



- Closing by clicking [x] cancels the settings.
- Closing by clicking [Exit] saves the settings.
- A blade cannot be deleted unless the number and blade name are correctly entered.
- Do not change the number. The output conditions already registered may be altered if the number is changed.

[Blade] tab

Register blades you will use as follows.



1	Name	Enter the blade name.
2	Type	Select whether the blade is single- or double-edged. 0: Single edged 1: Double edged
3	Correction	To compensate for overcutting, set the amount to be left uncut. Can be set to one decimal place (fixed value).
4	Width	(See figure above.) Can be set to one decimal place.
5	Height	(See figure above.) Can be set to one decimal place.
6	Diameter	This function is available when a milling tool is selected in the [Cut Condition] dialog box. Entering the end mill tool diameter automatically creates cutting lines that take the diameter into account. Can be set to one decimal place.
7	Minimum Straight Line (V)	This function is available when a V-cut tool is selected in the [Cut Condition] dialog box. Sets the minimum line segment length to be cut to prevent overcutting due to the blade width of the V-cut cutter. Can be set to one decimal place.
8	Up	Moves the current blade up one position in the list. <ul style="list-style-type: none"> For convenience, cut condition names you use often can be moved up or rearranged.
9	Down	Moves the current blade down one position in the list.



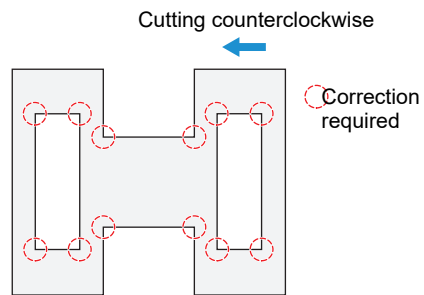
Correction

- Setting only the amount left uncut to compensate for overcutting will stop cutting before this length is reached, regardless of work thickness.
- The amount of compensation is reduced to zero when [Correction], [Width], and [Height] are all set to 0.
- The amount of compensation is calculated from [Width], [Height], and work thickness only when [Correction] is set to 0.
- Because the amount of compensation varies depending on blade shape and mounting position, we recommend making test cuts and measuring the portion overcut to decide the [Correction] setting.
- When a milling tool is selected, values other than the diameter are ignored for cutting.
- When a V-cut tool is selected, values other than the minimum straight line are ignored for cutting.

Compensating for overcutting

Products may be damaged if a blade cuts too far into the material.

To prevent product damage, this correction stops the blade before excessive cutting occurs.



Overcut correction applies in the following situations.

- When [Line Direction] is set: ["Changing line cutting direction"\(P. 98\)](#)
- When [Line Division] is set: ["Dividing line segments"\(P. 99\)](#)
- When [Auto Division] is set: See [Auto Division] for ["Plotter Out"\(P. 74\)](#).

3.4 Registering Cut Condition Names



- These instructions are optional.

You can enter cut condition names in the database.

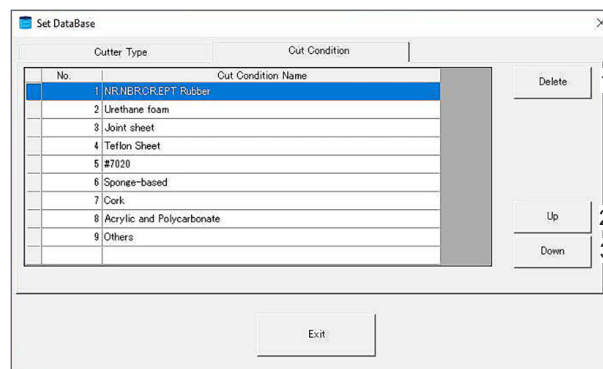
Configure the settings for the cut condition names registered in the database in [Cut Condition] in the [Setup(&S)] menu. These cut condition names are used in [Layer Setting]. ["Setting Cut Conditions"\(P. 53\)](#) ["Setting Up Layers"\(P. 67\)](#)

1 From the CAMLINK2 menu bar, select [Setup(&S)] > [Set Database(&A)].

- The [Set Database] dialog box is displayed.

2 Select the [Cut Condition] tab and register the cut conditions.

- Click an item to enter, and then enter the value.



1	Delete	Deletes the current cut condition name. <ul style="list-style-type: none"> • Clicking the Delete button will delete all registered cut conditions along with the cut condition name.
2	Up	Moves the current cut condition name up one position in the list. <ul style="list-style-type: none"> • For convenience, cut condition names you use often can be moved up or rearranged.
3	Down	Moves the current cut condition name down one position in the list.



- To rename cut conditions, enter the new name directly in the [Cut Condition Name] field.
- Cut conditions cannot be registered with the same name or number.
- Cut conditions cannot be registered with the name "Register mark".
- Do not change the number. The output conditions already registered may disappear if the number is changed.

3.5 Setting Cut Conditions

Set cut conditions to suit the work material and other details.



- Some setting items may not be available, depending on the equipment model used.

1 From the CAMLINK2 menu bar, select [Setup(&S)] > [Cut Condition(&D)].

- The [Cut Condition] dialog box is displayed.

Cut Condition

General Conditions

Cut Condition: PP Add Condition Copy

[Base Setting] Detail Setting | Milling V Cut

Station: D Station

Tool: V-Cut 45 deg

	Output Order	Type	Press Level	Z Position	Speed	Times	Cutting Direction	Rpm	Z-Speed
▶	1	High-spe...	100	0	10	1	Upcut	0	1

Add Line Delete Line Up Down

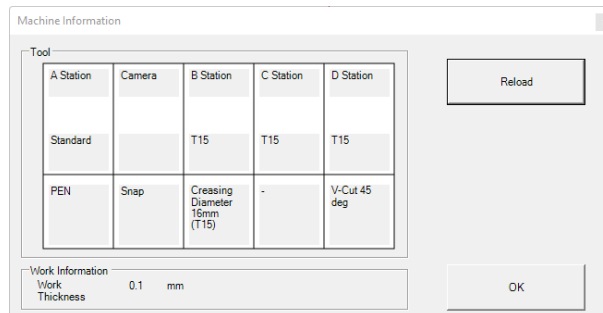
Work Thickness: 10 mm

Machine Information

OK Test Cut Cancel

2 Check the tool mounted in the plotter.

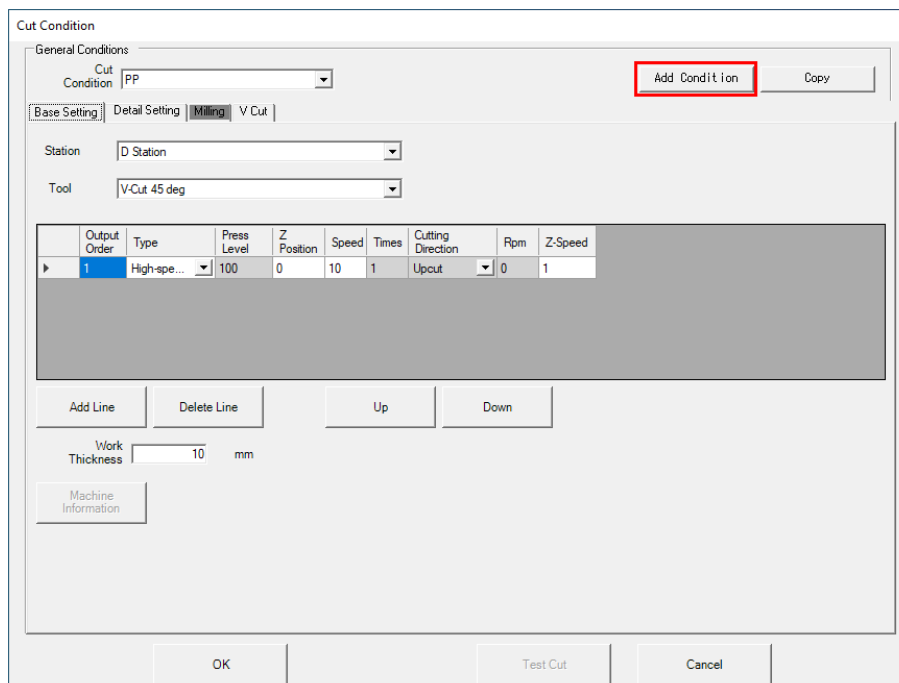
- Models for which machine information can be acquired
- Click [Machine Information] on the [Base Setting] tab.
 - The [Machine Information] dialog box is displayed.



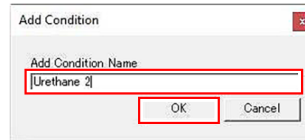
- Click [Reload].
 - Information on tools mounted in each station, camera connections, and work thickness is acquired from the plotter.
 - Click [OK].
 - The acquired information is applied.
 - Other models
- Click [Tool Setting] on the [Base Setting] tab.
 - The [Tool Setting] dialog box is displayed.
 - Review and edit the types of tools for each tool number as needed.

3 Click [Add Condition].

- The [Add Condition] dialog box is displayed.



4 Enter a cut condition name and click [OK].



- To use cut conditions registered in "3.4 Cut Condition Name Registration", select from the [Cut Condition] list box.
- To alter existing cut conditions, select from the [Cut Condition] list box.
- You can also prepare cut conditions by copying existing conditions.
 - (1) Click [Copy Condition].
 - The [Copy Condition] dialog box is displayed.
 - (2) Select [Original Condition].
 - (3) Enter a cut condition name in [Add Condition Name], and then click [OK].

5 Enter, review, and edit the cut conditions as needed.

- "Cut Condition > [Base Setting] tab"(P. 56)

6 Configure the setting items on the [Detail Setting] tab.

- "Cut Condition > [Detail Setting] tab"(P. 59)




- When the tool is set to milling, configure the setting items on the [Milling] tab. "Cut Condition > [Milling] tab"(P. 60)
- When the tool is set to V Cut, configure the setting items on the [V Cut] tab. "Cut Condition > [V Cut] tab"(P. 65)

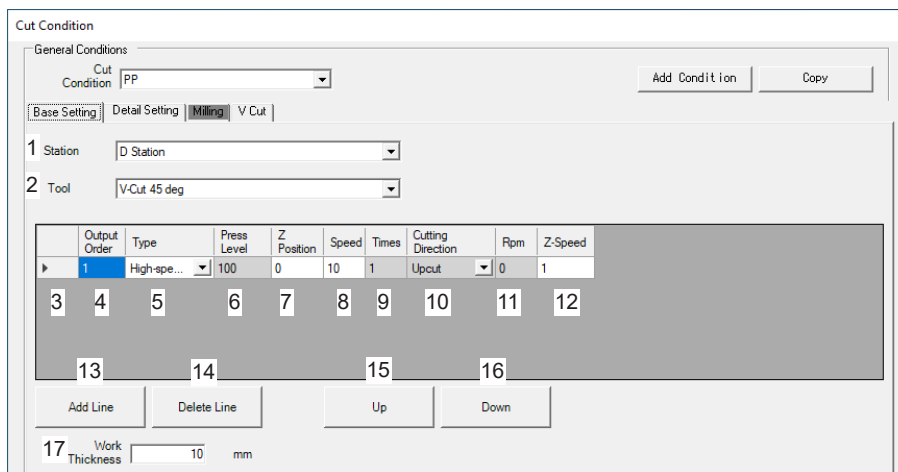
7 Click [OK] to exit Cut Condition setup.



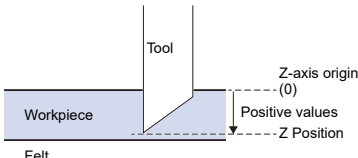
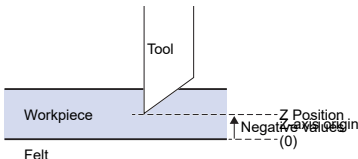
Cut Condition > [Base Setting] tab


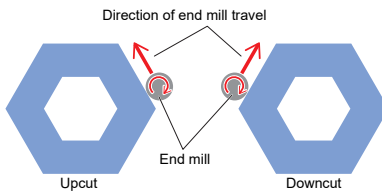
Configure tool settings as follows. Click each setting item to configure it. You can also navigate between cells with the [Tab] key or the left and right arrow keys.



- To delete a row, click the leftmost cell to select it. Press the [Delete] key to delete the row.
- Items in gray cannot be configured.



No.	Item	Value	Description
1	Tool attachment	*1	From the list, select the tool attachment used.
2	Tool	 "List of available tools"(P. 57)*1	Clicking the cell will display the [Tool Select] dialog box. Select the tool used and click [OK].
3	Cell for selecting the row	-	Click to select the row.
4	Output Order	1–100	Conditions are issued in order, starting from the top.
5	Blade	*2	From the list, select the type of blade used.
6	Pressure (Press Level)	*1	Set the cutting pressure. (The name varies depending on the model.)
7	Z Position	*1	<p>Set the z-position of the tool tip when down. Note that the method of configuration varies depending on the [Z setting procedure] setting in [Environment Setup] (in  "[Environment Setup] > [Plotter] tab"(P. 33)).</p> <ul style="list-style-type: none"> Work top surface is 0: Enter a value based on the top surface of the work. <div style="text-align: right; margin-top: 10px;">  </div> Felt top surface is 0: Enter a value based on the bottom surface of the work. <div style="text-align: right; margin-top: 10px;">  </div>

No.	Item	Value	Description
			When using thick works, for example, you can also cut and trim the same shape repeatedly (repeated cutting).  "Repeated cutting ([Z Position] setting)"(P. 58)
8	Speed	*1	Set the cutting speed.
9	Times	*1	Cutting is repeated the specified number of times using the output order conditions (same conditions) entered.
10	Direction*3	Upcut, Downcut	Select the cutting direction. You may be able to improve the cut finish by changing the direction. We recommend making test cuts in advance to check the results. <ul style="list-style-type: none"> • Upcut: Cut on the left side in the direction of end mill travel. • Downcut: Cut on the right side in the direction of end mill travel. 
11	Rpm*3	5,000–60,000 rpm	Set the end mill rotation speed.
12	Z-Speed*3	1 to 500 mm/s	Set the speed at which the tool is lowered to the work.
13	Add Line		Adds a setting row at the very bottom.
14	Delete Line		Deletes the selected setting row.
15	Up		Moves the selected row up so that it is output earlier.
16	Down		Moves the selected row down so that it is output later.
17	Work Thickness	*1	Enter the work thickness.

*1. Varies by plotter.

*2. Limited to those in the database.  "Registering Blades"(P. 48)

*3. Available when a milling tool is selected.

List of available tools

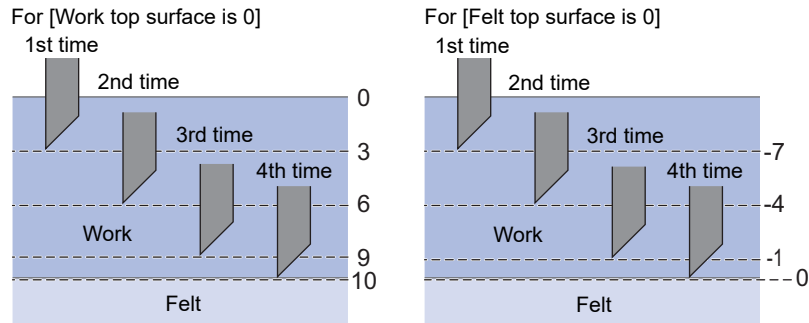
Model	Tool name
CFX Series	Tools you can set differ according to the station. <ul style="list-style-type: none"> • A Station: Pen, eccentric cutter, marker • B Station, C Station: Flat blade, reciprocating cutter, roller, V-cut • D Station: Flat blade, roller, V-cut, milling

Repeated cutting ([Z Position] setting)

Repeated cutting refers to cutting and trimming the same shape repeatedly when using thick works, for example. Add conditions and set the tool tip position (Z).

● When set to 4 times

- Example when set for a work 10 mm thickness.



Times	Z position (mm)	
	Work top surface is 0*1	Felt top surface is 0*1
1st time	3 mm	-7 mm
2nd time	6 mm	-4 mm
3rd time	9 mm	-1 mm
4th time	10 mm	0 mm

- *1. Note that the method of configuration varies depending on the [Z setting procedure] setting in [Environment Setup] (in "[Environment Setup] > [Plotter] tab"(P. 33)).

Cut Condition > [Detail Setting] tab

1. [Cut Angle for circle] setting (optional)

Select [390 deg] if there are uncut portions at the beginning or end of circle cuts. Cutting for an extra 30 degrees will help prevent uncut material.

2. [Starting Pressure] setting (optional)

Adds your specified pressure at the beginning of cuts. Useful if there are uncut portions near the beginning of cuts.

3. [Minimum Diameter Setting] setting (optional)

Your specified tool will be used with shapes that cannot be cut, such as small circles or arcs.

Item	Value	Description
Min Diameter	0 to 1,000 mm	Special handling applies to shapes smaller than this size.
Min Arc Radius	0 to 1,000 mm	Special handling applies to shapes smaller than this size.
Cut Condition	-	Configure the setting items.
Station	*1	From the list, select the station used for the minimum diameter setting.
Tool	*1	From the list, select the tool used for the minimum diameter setting.
Blade	*2	From the list, select the blade for the minimum diameter setting.
Pressure	*1	Set the pressure that applies to the minimum diameter setting.
Speed	*1	Set the speed that applies to the minimum diameter setting.

*1. Varies by plotter.

*2. Limited to those in the database. ["Registering Blades"\(P. 48\)](#)

4. [Circle Theta correct] setting (optional)

Thicker or harder works may cause misalignment of the beginning and ending points of circles. This setting can correct this difference before cutting.



Item	Value	Description
R < 5 5 <= R < 10	-20 to 20°	Enter a value in 0.5° increments.
10 <= R < 15 15 <= R < 20 20 <= R < 50 50 <= R < 100 100 <= R	-9.8 to 9.8°	Enter a value in 0.2° increments.

*1. R: Radius

5. [Number of cut for small circle] setting (optional)

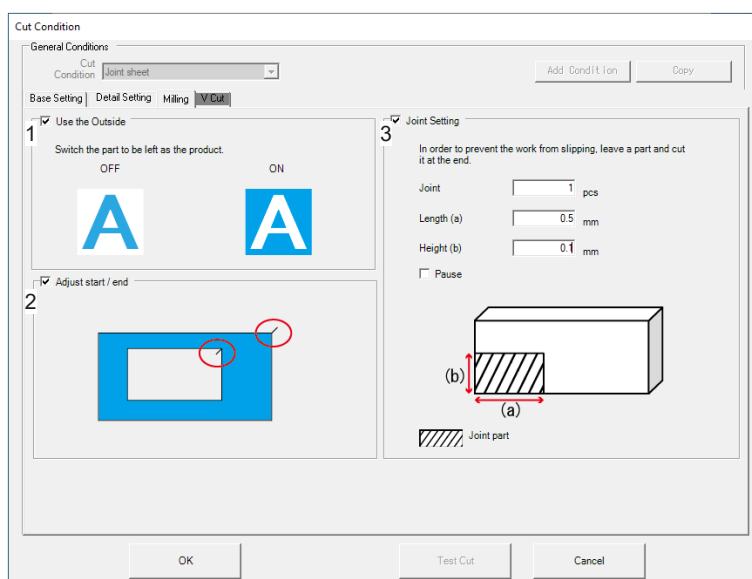
Circles of your specified diameter or smaller will be cut additional times (the number of times set in [Additional cutting]).

Set for thick works that cannot be cut in a single pass.

Item	Value	Description
Diameter	0 to 1,000 mm	Set the diameter.
Additional cutting	1–99 times	Set the number of additional cuts.

Cut Condition > [Milling] tab

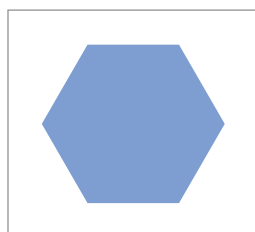
Milling cut conditions



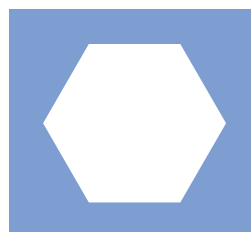
1. [Use the Outside] setting

Specify the portion after cutting that will be used as a product.

- OFF: The outer portion will be removed to use the inner portion as a product.
- ON: The inner portion will be removed to use the outer portion as a product.



Cleared

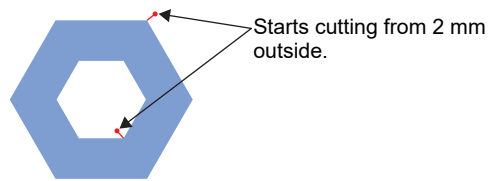


Selected

2. [Adjust start / end] setting


Set for a neater finish at the beginning and end of cuts.

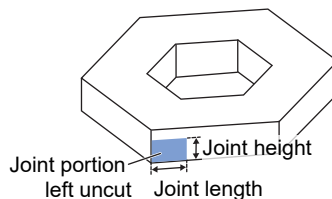
- ON: Starts cutting from 2 mm outside.

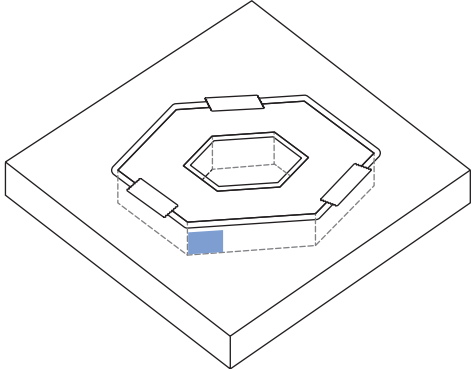



- If the cut line crosses into adjacent objects, adjust by spacing the objects farther apart.

3. [Joint Setting] setting

Leaves a portion of the cut line uncut, and cuts at the end. Helps prevent work misalignment and ensure a neat finish.  "Cut thickness with [Joint Setting] configured"(P. 63)



Joint	Set the number of portions left uncut. Your specified number of uncut portions are evenly spaced along cut lines. Positions of uncut portions vary depending on joint length. Be sure to check the preview. Specifying multiple portions can help prevent works from shifting if they are warped or have large shapes.
Length (a)	Set the length of work portions left uncut.
Height (b)	Set the width/thickness of work portions left uncut. Warping or other factors may prevent works from being flat in some areas. We recommend setting joint height somewhat high.
Pause	<p>Select to temporarily retract the plotter head to leave joint parts uncut.</p> <ul style="list-style-type: none"> It may not be possible to cleanly cut end points of small or heavy works, which tend to shift more easily during cutting. After cutting pauses and the head is retracted, secure the work with tape or the like. 

 • When [Joint Setting] is set, we recommend actually cutting and checking.

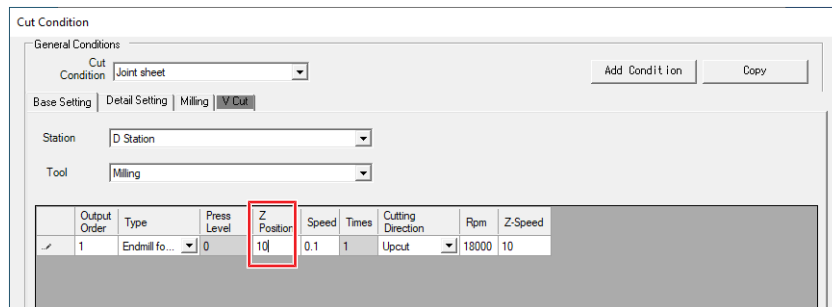
Cut thickness with [Joint Setting] configured

Examples for the following conditions.

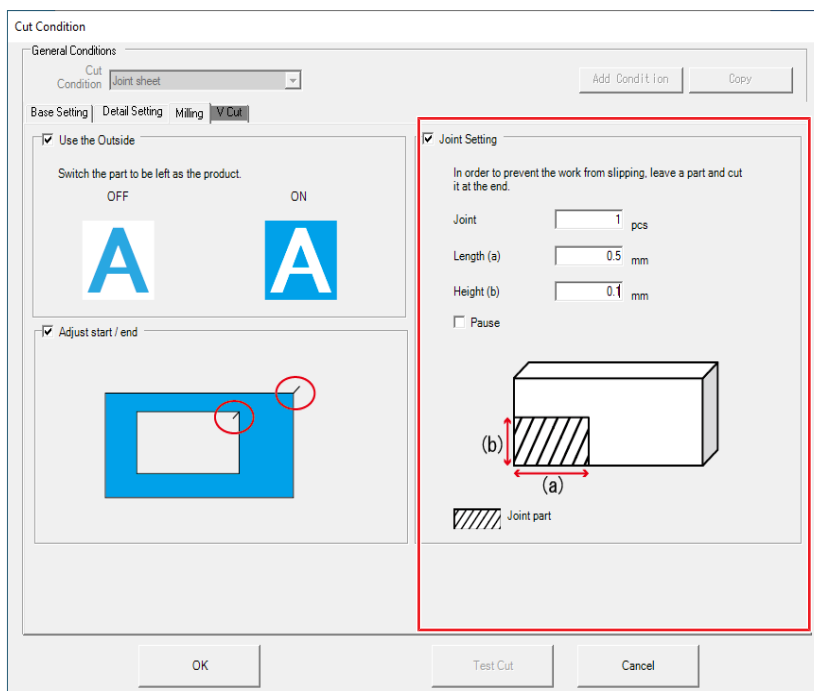
- Work Thickness: 10 mm
- Z setting procedure: Set to [Work top surface is 0] ([Setup(&S)] > [Environment(&V)] "[Environment Setup] > [Plotter] tab"(P. 33))

● Example 1

- [Base Setting] tab settings "Cut Condition > [Base Setting] tab"(P. 56)
 - Cutting one time: [Z Position] 10 (mm)

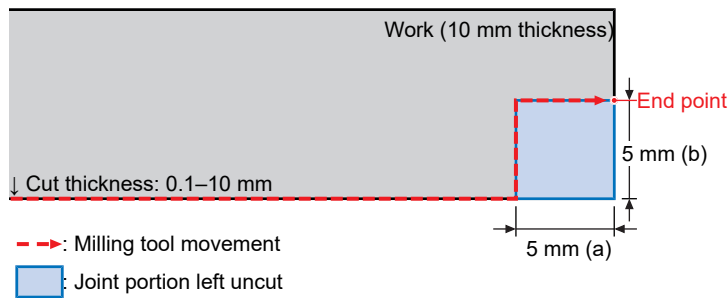


- [Milling] tab settings "Cut Condition > [Milling] tab"(P. 60)
 - Joint: 1 (one segment)
 - Length (a): 5 (mm)
 - Height (b): 5 (mm)



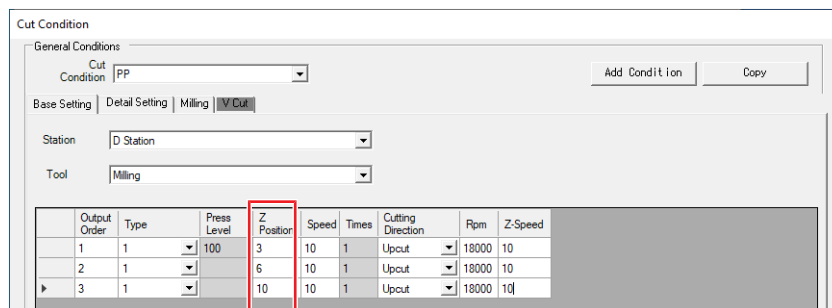
• **Plotter operation**

Cutting is performed along the red lines before cutting the joint sections.



● **Example 2**

- [Base Setting] tab settings "Cut Condition > [Base Setting] tab"(P. 56)
 - 1st cut: [Z Position] 3 (mm)
 - 2nd cut: [Z Position] 6 (mm)
 - 3rd cut: [Z Position] 10 (mm)

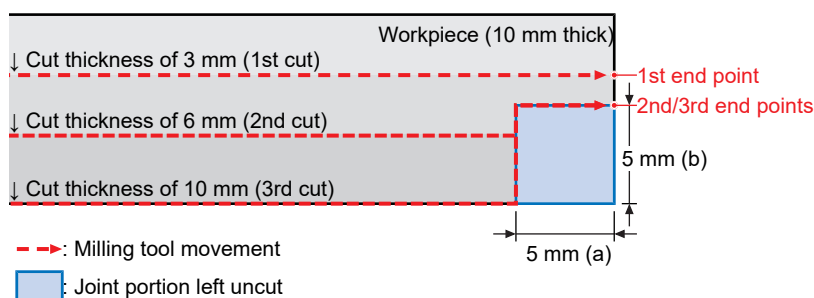


- [Milling] tab settings "Cut Condition > [Milling] tab"(P. 60)
 - Joint: 1 (one segment)
 - Length (a): 5 (mm)
 - Height (b): 5 (mm)

• **Plotter operation**

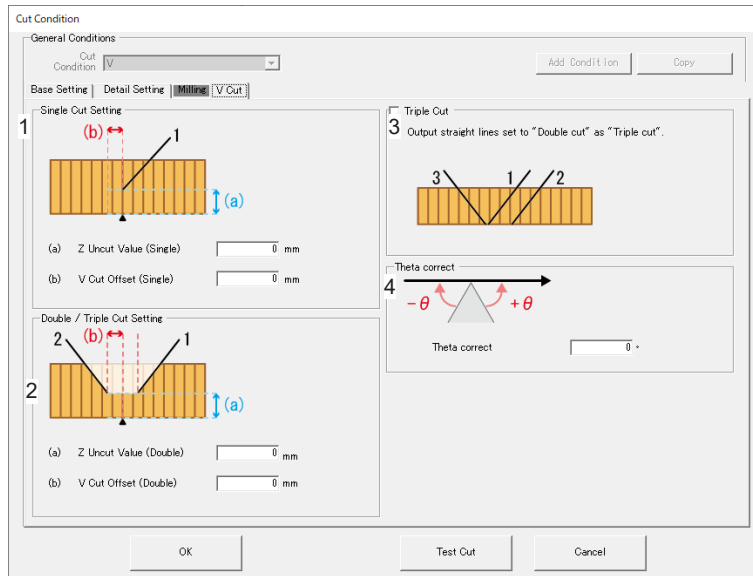
Cutting is performed along the red lines before cutting the joint sections twice.

- First joint cut (fourth time overall): Cut thickness 6 mm
- Second joint cut (fifth time overall): Cut thickness 10 mm



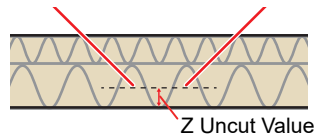
Cut Condition > [V Cut] tab

 "V-Cutting"(P. 115)



● [Z Uncut Value] setting

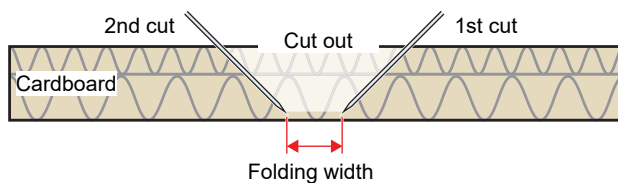
Specify the uncut amount of work as distance from the bottom of the work. When set to 0 mm, the work is cut.



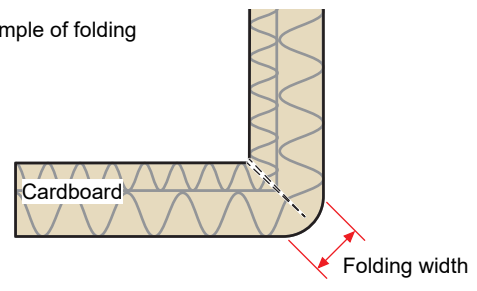
● [V Cut Offset] setting

Set the folding width for double or triple cutting.

Example with V-cutting set to double
Example of cutting



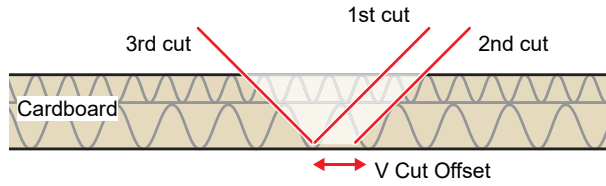
Example of folding



- [Z Uncut Value] and [V Cut Offset] must be set respectively for single cutting and double cutting.

● [Triple Cut] setting

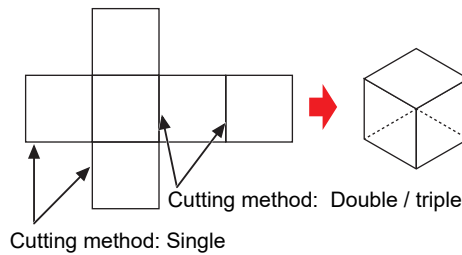
Set double cutting to triple cutting.



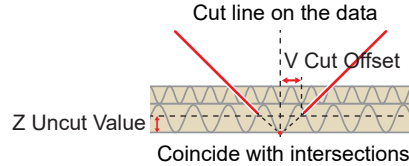
• Lines set up for single cutting cannot be triple cut.

● [Z Uncut Value and V Cut Offset] setting

Using the V-cut tool to create boxes with materials such as thick cardboard enables sharp edges. In this case, the outer edge is cut out with the cut method set to single. Set the cut method to double or triple the inner part, and leave the bottom surface without cutting.



• When setting the double or triple above, [Z Uncut Value] and [V Cut Offset] must be set so that the extension line of blade tip and the cut line in the data are aligned. Note that if these settings are different, the box shape will become corrupted.

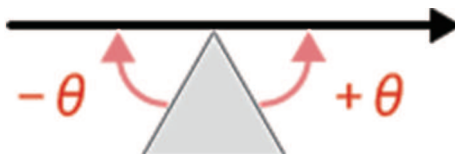


Furthermore, the [Z Uncut Value] and [V Cut Offset] values must also be changed depending on the mounting angle of the V-cut tool. Set the following calculation formula as the starting points.

V-cut tool angle	Z Uncut Value(mm)	V Cut Offset(mm)
15°	V Cut Offset/ 0.268	Z Uncut Value x 0.268
22.5°	V Cut Offset/ 0.414	Z Uncut Value x 0.414
30°	V Cut Offset/ 0.577	Z Uncut Value x 0.577
45°	V Cut Offset	Z Uncut Value

● [Circle Theta correct] setting (optional)

When using V-cut, it sets the theta correction angle.




3.6 Setting Up Layers

Configure layer settings, such as changing the working layer or naming/renaming layers, as follows.




- Be sure to configure [Cut Condition] settings for layers you will output (cut). Output/cutting is not possible if they are not set.

● Layers in DXF files

Information imported when you import DXF files varies depending on the [Loading Criteria] setting.  ["Importing Cut Data \(DXF Files\)"\(P. 46\)](#)

- Layer: The application imports layer information saved in the DXF file.
- Color: The application creates a layer for each color saved in the DXF file.



● When additional MDT2 data is imported

Previously saved layer information remains intact after importing. If additional information is imported, this will be combined with the existing layer with the same name.  ["Opening saved figures"\(P. 37\)](#)

● Order of layers

Layers are cut sequentially starting with shapes on the upper layer (excluding registration marks).

● Working layer

New data added with copy/paste or comment functions on the editing screen is added to this layer.  icons identify this layer. You can change the working layer from the [Layer Setting] dialog box.  ["Layer Setting"\(P. 68\)](#)





- Layer settings are not available unless shape data has been arranged.

1 From the CAMLINK2 menu bar, select [Setup(&S)] > [Layer Setting].

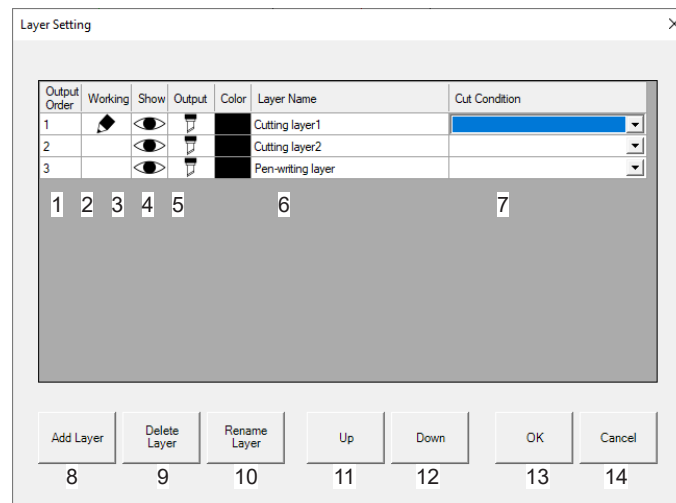
- The [Layer Setting] dialog box is displayed.

2 Configure the setting items.






-  ["Layer Setting"\(P. 68\)](#)
- If registration marks are not placed on the layer they are intended for, **close the [Layer Setting] screen** and follow the steps in  ["If registration marks have not been placed on the intended layer"\(P. 70\)](#).

3 Click [OK] to exit Layer Setting setup.

Layer Setting




1	Output Order	Layers are output in order starting with the first layer.
2	Working	<p>You can change the order of the layer with the icon, rename it, or delete it.</p> <p>Text entered in [Comment Parameters], as well as pasted shapes, are placed on the working layer, identified by a icon.</p>
3	Show	<p>To show a layer on the editing screen, click the [Show] cell. Visibility is indicated by this icon: .</p> <ul style="list-style-type: none"> Click the [Show] cell again to clear the icon and hide the layer on the editing screen. (As long as the icon is displayed, the layer will be output, even if it is hidden.)
4	Output	<p>To mark a layer for output, click the [Output] cell. Output is indicated by this icon: .</p> <ul style="list-style-type: none"> Click the [Output] cell again to clear the icon. The layer will not be output.
5	Color	<p>Used to change the color of the layer's shape.</p> <ol style="list-style-type: none"> Click the layer's [Color] cell. <ul style="list-style-type: none"> The [Color] dialog box is displayed. Select a color and click [OK]. <ul style="list-style-type: none"> The color is updated accordingly. <ul style="list-style-type: none"> To set colors other than the standard colors <ol style="list-style-type: none"> Double-click the color in the lower right of the [Color] dialog box. <div data-bbox="584 1630 890 1879" data-label="Image"> </div> <ul style="list-style-type: none"> A separate [Color] dialog box is displayed. Select a color and click [OK]. <ul style="list-style-type: none"> The color in the lower right is updated accordingly. Select the color in the lower right and click [OK].

6	Layer Name	Lists the names of all figure layers.
7	Cut Condition	Used to select registered cut conditions. <ul style="list-style-type: none"> • This list is not displayed unless cut conditions have been registered in the database.  "Registering Blades"(P. 48) • Be sure to configure [Cut Condition] settings for layers to be output. • Be sure to set registration marks in [Cut Condition] for the layer to be used for these marks. Registration marks can only be set on one layer. • There is no need to add registration marks to the database in order for them to be listed in the cut conditions.
8	New	Creates a new layer.
9	Delete	Deletes the layer. <ol style="list-style-type: none"> 1. Click the [Working] cell for the layer to be deleted. <ul style="list-style-type: none"> –  icons identify this layer. 2. Click [Delete]. <ul style="list-style-type: none"> – The layer is deleted. A warning message is displayed for layers with shape data.
10	Rename Layer	Used to rename the layer. <ol style="list-style-type: none"> 1. Click the [Working] cell for the layer to be renamed. <ul style="list-style-type: none"> –  icons identify this layer. 2. Click [Rename Layer]. <ul style="list-style-type: none"> – The [Rename Layer] dialog box is displayed. 3. Edit [Layer Name] as needed and click [OK]. <ul style="list-style-type: none"> – The layer is renamed.
11	Up	Moves the layer up one position in the output order. <ol style="list-style-type: none"> 1. Click the [Working] cell for the layer to be reordered. <ul style="list-style-type: none"> –  icons identify this layer. 2. Click [Up]. <ul style="list-style-type: none"> – The layer is moved up one position.
12	Down	Moves the layer down one position in the output order. <ol style="list-style-type: none"> 1. Click the [Working] cell for the layer to be reordered. <ul style="list-style-type: none"> –  icons identify this layer. 2. Click [Down]. <ul style="list-style-type: none"> – The layer is moved down one position.
13	OK	Saves the current changes and closes the Layer Setting dialog box. The [Undo] function is then disabled here.
14	Cancel	Closes the Layer Setting dialog box without saving the current changes.

If registration marks have not been placed on the intended layer

Follow these steps if registration marks have not been placed on the layer they are intended for.

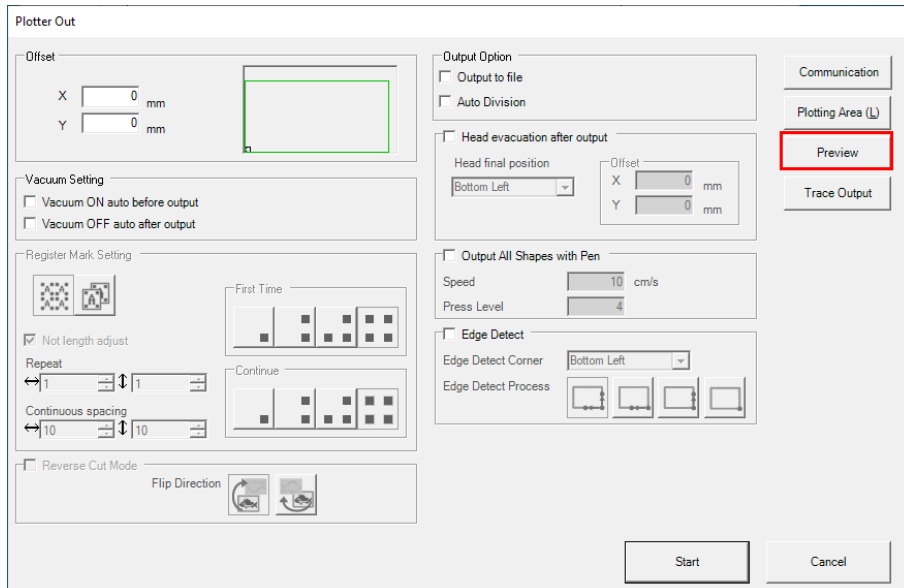
- 1 Ungroup registration marks and other shapes if they are currently grouped.**
 - From the CAMLINK2 menu bar, select [Edit(&E)] > [Ungroup(&N)].
- 2 The [Layer Setting] dialog box opens.**
 - CAMLINK2 menu bar: [Setup(&S)] > [Layer Setting]
- 3 Set registration marks in [Cut Condition] for the intended layer, and then click [OK].**
 - If there is no layer for registration marks in [Cut Condition], create a layer with your preferred name for this purpose.
- 4 Select a registration mark in the figure and select [Edit(&E)] > [Move Layer] from the CAMLINK2 menu bar.**
 - The [Move Layer] dialog box is displayed.  ["Moving shapes to other layers"\(P. 92\)](#)
- 5 Select a layer for the registration marks and click [OK].**
 - The registration marks are moved to the layer for this purpose.

3.7 Checking a Preview

Before outputting the data to cut, you can preview cut lines and details such as the direction and order of cutting as specified in your cut conditions.

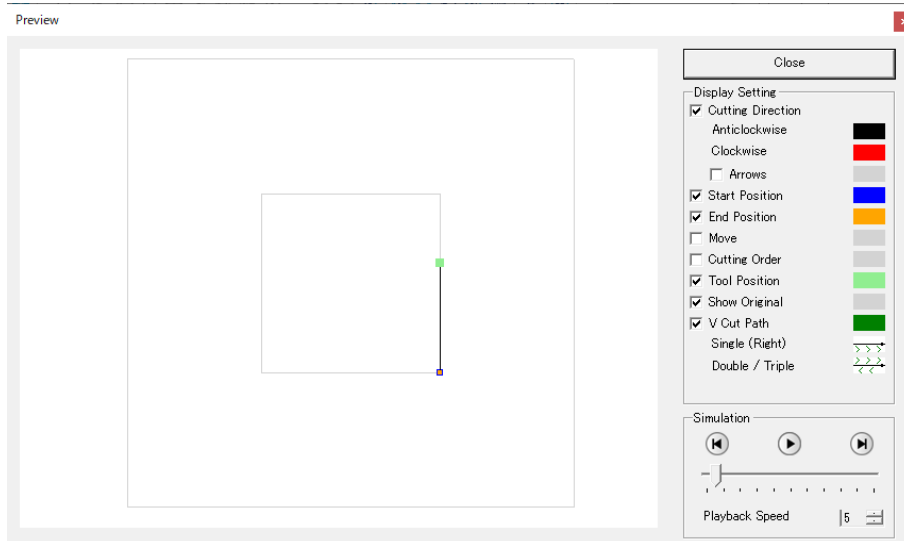
1 From the CAMLINK2 menu bar, select [Output(&O)] > [Plotter Out].

- The [Plotter Out] dialog box is displayed.



2 Configure the output conditions and click [Preview].

- The [Preview] dialog box is displayed.



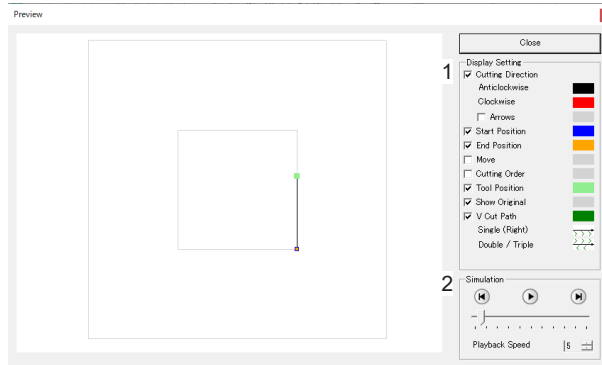
3 Configure the setting items.

- "Preview"(P. 72)

4 Click to check the cutting motion.

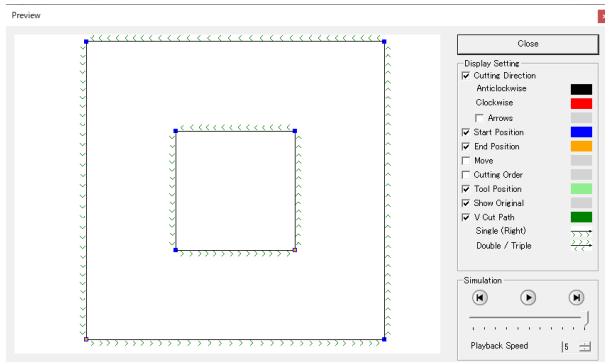
5 Click [Close] to close the screen.


Preview



● Display Setting




Cutting Direction	Red cut lines run clockwise, and black cut lines run counterclockwise. Select [Arrows] to indicate the cutting direction with arrows. <ul style="list-style-type: none"> For open paths, both cutting directions are shown in black.
Start Position	The cutting start point is shown in blue.
End Position	The cutting end point is shown in orange.
Move	Lines where the tool is raised and moved are shown in yellow.
Cutting Order	The order of output (cutting) is indicated by numbers.
Tool Position	The position of the tool (head) is shown in green.
Show Original	Displays the original DXF file.
V Cut Path	Lines are displayed where you have specified V-cutting. Display varies as follows depending on your specified V-cut method. <ul style="list-style-type: none"> Single: V-shapes point to the right in the cutting direction. Double / Triple: V-shapes point on both sides in the cutting direction. The following figure shows an example of Single cutting.



 • [Display Setting] colors can be changed by clicking color boxes to the right of each setting.

● Simulation

Simulations enable you to check tool motion.

- : Starts the cutting simulation.
- : Shows the state before cutting.
- : Shows the state after cutting.

- Playback Speed: Sets the simulation speed.

3.8 Sending to a Plotter

Send figure data with your specified cutting conditions to a plotter as follows.



- Data protruding to the bottom left of the work will not be cut.

1 From the CAMLINK2 menu bar, select [Output(&O)] > [Plotter Out].

- The [Plotter Out] dialog box is displayed.

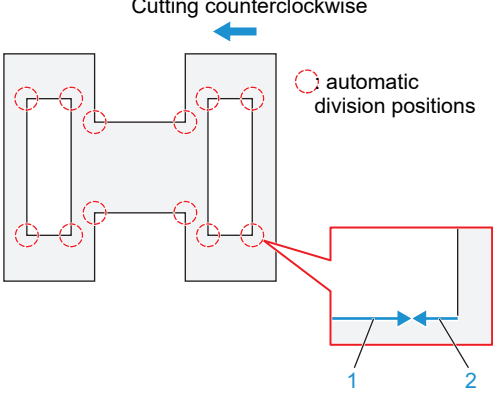
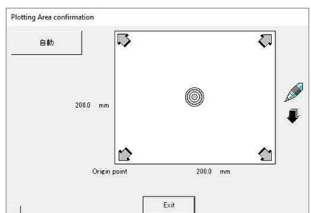
2 Configure the setting items.

- "Plotter Out"(P. 74)

3 Click [Start] to start cutting.

Plotter Out


1	Offset	By specifying an amount of offset, you can move the shape for output within the active working space (outlined in green). Offsets can also be negative. You can preview the results on the right.
2	Vacuum setting	Set vacuum operation. <ul style="list-style-type: none"> • Vacuum ON before output: Activates the vacuum before cutting. • Vacuum OFF after output: Deactivates the vacuum after cutting.
3	Register Mark Setting	Available when registration marks are detected. "Register Mark Setting"(P. 77)
4	Reverse Cut Mode	Available for models of equipment that support reverse cutting and detect registration marks. <ul style="list-style-type: none"> • For reverse cutting, specify the work flip direction. <ul style="list-style-type: none"> – Vertical: Set when works are flipped vertically. – Horizontal: Set when works are flipped horizontally.

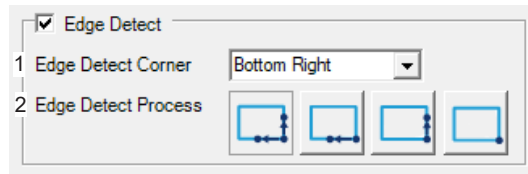
5	Output to file	<p>Saves data and commands for output in Plot Command File Format (*.PLT). Saved files can be sent to the plotter via [Output(&O)] > [Send a Spool File(&F)].</p> <ul style="list-style-type: none"> • Operation <ul style="list-style-type: none"> – Select the check box and click [Start] to display the [Output to file] dialog box. Enter a file name of your choice and click [Save].
6	Auto Division	<p>Automatically divides lines to prevent overcutting. Automatic line cutting is only available for straight lines. The length of divisions varies depending on the blade used.</p>  <ol style="list-style-type: none"> 1. Normal cutting direction 2. Cut in the opposite direction, corresponding to the length of [Correction] for the blade (☞ "Registering Blades"(P. 48) [Blade] tab)
7	Head evacuation after output	<p>Specify the final head position after output.</p> <ul style="list-style-type: none"> • Eccentric: Bottom Left, Bottom Right, Top Left, Top Right Retracts the head respectively to the Bottom Left, Bottom Right, Top Left, Top Right positions within the Active Working Space. • An offset position can be specified if [Offset] is selected. The offset position is the position at that distance from the point diagonal to the origin along the maximum frame around shapes.
8	Output All Shapes with Pen	<p>Pen output applies to all shapes. Enter the pen speed and pressure.</p>
9	Edge Detect	<p>Detects the work origin and tilting. The cutting angle is adjusted to suit work tilt. ☞ "Edge Detect"(P. 76)</p>
10	Communication	<p>For checking communication with the plotter. ☞ "[Environment Setup] > [Communication] tab"(P. 34)</p>
11	Plotting area	<p>Check the shape plotting area.</p> <ul style="list-style-type: none"> • [Plotting Area confirmation] dialog box instructions <ul style="list-style-type: none"> – Click the pen icon to specify raising or lowering of the pen after the head is moved. – Click the arrows in the corners or the circle in the center to move the plotter head to the output position. – Automatic: Click to move between the four corners, one after another. 
12	Preview	<p>Before cutting, you can preview cut lines and details such as the direction and order of cutting as specified in your cut conditions. ☞ "Checking a Preview"(P. 71)</p>
13	Trace Output	<p>Outputs a cut line using the plotter red pointer before cutting.</p>





Edge Detect

Edge detection is available under the following conditions.

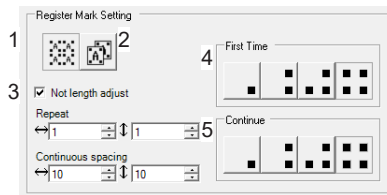
- Surface cutting for data without registration marks
- Reverse cutting for data with registration marks

For reverse cutting instructions, see  ["Reverse cutting of printed works \(data with registration marks\)"\(P. 108\)](#).



1	Edge Detect Corner	Shows the position of the reference corner. <ul style="list-style-type: none"> • For models with an origin in the lower right: Lower right
2	Edge Detect Process	Select the work tilt detection method. <ul style="list-style-type: none">  (default): Detect the reference corner position and the work's horizontal/vertical edge. : Detect the reference corner position and the work's horizontal edge. : Detect the reference corner position and the work's vertical edge. : Detect only the reference corner position.

Register Mark Setting



1	Continuous mode	<p>Select this option when printing a series of shapes with registration marks.</p> <ul style="list-style-type: none"> Repeat: Enter the number of shapes vertically and horizontally. Continuous spacing (mm): Set the distance in mm between vertical/horizontal registration marks.
2	Mill end mode	<p>Select this option when printing multiple copies with only one shape with registration marks placed.</p> <ul style="list-style-type: none"> Repeat: Set the number of works for output.
3	Length adjust	<p>Works that have been stored where the temperature fluctuates, and so on may expand or contract. In this case, when this option is selected, the output data is corrected for cutting to suit the work.</p>
4	1st time	<p>Specify where to detect the first registration mark.</p> <ul style="list-style-type: none"> More detections take longer but enable more accurate cutting.
5	Continue	<p>Specify where to detect the second and subsequent registration marks.</p>



- The setting ranges for Repeat and Space vary depending on the model being used.

Chapter 4 Basic Operations



This chapter

This chapter describes basic ways of using the software.

Selecting Shapes/Canceling Selection.....	80	Creating multiple copies of shapes	88
Editing Functions	81	Grouping/ungrouping shapes.....	89
Moving shapes	81	Disassembling shapes	90
Creating linked copies of shapes/canceling linkage.....	82	Entering comments	90
Rotating shapes	85	Moving shapes to other layers	92
Horizontally or vertically flipping (mirroring) shapes.....	86	Grouping by layers.....	92
Resizing shapes.....	86	Showing/canceling the grid	93
		Setting Up work space	94

4.1 Selecting Shapes/Canceling Selection

● Selecting a shape

Select a shape in one of the following ways. Selected shapes are outlined by a dotted line.

- Click the shape. To select multiple shapes, hold down the [Shift] or [Ctrl] key while clicking.
- Drag around the shape. You can select multiple shapes this way.
- To select all shapes in the figure, press [Ctrl]+[A]. (Note that hidden shapes are not selected.)

● Canceling selection

Cancel selection in one of the following ways. No dotted line is displayed around shapes after you cancel selection.

- Press the [Esc] key.
- Click an empty area in the figure.


4.2 Editing Functions

Moving shapes

1 Select a shape to move.  ["Selecting Shapes/Canceling Selection"\(P. 80\)](#)


2 Select [Move].

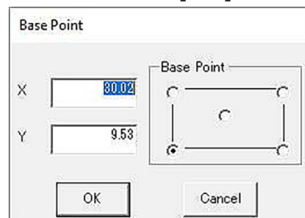
- **Move a shape in one of the following ways.**

- From the CAMLINK2 menu bar, select [Edit(&E)] > [Move(& M)].
- Click the  icon in the toolbar.
- Right-click. From the pop-up menu displayed, select [Move(&M)].

3 Specify a base point to move.


- **Specify shape base points in one of the following ways.**

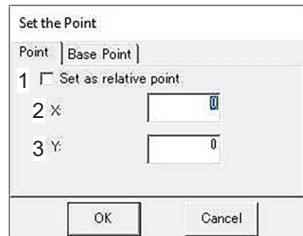
- Click anywhere in the figure.
- (To use the coordinate panel:  ["Coordinate Panel"\(P. 28\)](#)) Click the coordinate values near the middle of the bottom of the screen. Set the base point coordinates or select a base point, and then click [OK].



4 Specify a destination point.

- **Specify shape base points in one of the following ways.**

- Click anywhere in the figure. To move a shape horizontally or vertically, hold down the [Shift] key while moving the mouse.
- (To use the coordinate panel:  "Coordinate Panel"(P. 28)) Click the coordinate values near the middle of the bottom of the screen. Set the base point coordinates or select a base point, and then click [OK].



(1) [Set the relative point]: Select this check box when specifying relative coordinates.

- [Set the relative point] ON
X: Enter the amount of movement in the X direction.
Y: Enter the amount of movement in the Y direction.
- [Set the relative point] OFF
X: Enter the X-coordinate for shape placement.
Y: Enter the Y-coordinate for shape placement.

(2) X-coordinate for shape placement or amount of movement in the X direction

(3) Y-coordinate for shape placement or amount of movement in the Y direction










- Shapes can also be moved by dragging them.

Creating linked copies of shapes/canceling linkage

Create a linked copy of a shape, with information in the original and the copy linked, as follows. Editing one shape also changes the linked copy at that time.




- To copy shapes to another figure, see the following section.
Copy and paste shapes
- To copy multiple shapes, see the following section.
 "Creating multiple copies of shapes"(P. 88)

- The following editing is not available for shapes that are linked copies (both the original shape and the copy). You can edit the shapes in these ways by canceling the linkage.
 -  "Rotating shapes"(P. 85)
 -  "Horizontally or vertically flipping (mirroring) shapes"(P. 86)
 -  "Resizing shapes"(P. 86)
 -  "Creating multiple copies of shapes"(P. 88)
 -  "Grouping/ungrouping shapes"(P. 89)
 -  "Disassembling shapes"(P. 90)


- **Creating a linked copy**

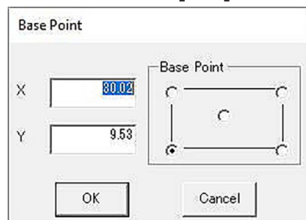
1 Select a shape to create a linked copy.  "Selecting Shapes/Canceling Selection"(P. 80)

2 Select [Link Copy].


- **Create a linked copy in one of the following ways.**
 - From the CAMLINK2 menu bar, select [Edit(&E)] > [Link Copy(&Y)].
 - Click the  icon in the toolbar.
 - Right-click. From the pop-up menu displayed, select [Link Copy(&Y)].

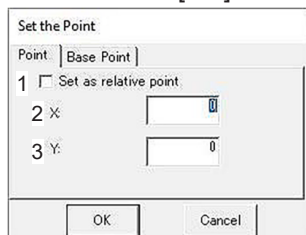
3 Specify a source base point to copy.

- **Specify shape base points in one of the following ways.**
 - Click anywhere in the figure.
 - (To use the coordinate panel:  "Coordinate Panel"(P. 28)) Click the coordinate values near the middle of the bottom of the screen. Set the base point coordinates or select a base point, and then click [OK].



4 Specify a destination base point.

- **Specify shape base points in one of the following ways.**
 - Click anywhere in the figure. To move a shape horizontally or vertically, hold down the [Shift] key while moving the mouse.
 - (To use the coordinate panel:  "Coordinate Panel"(P. 28)) Click the coordinate values near the middle of the bottom of the screen. Set the base point coordinates or select a base point, and then click [OK].



(1) [Set the relative point]: Select this check box when specifying relative coordinates.

- [Set the relative point] ON
 - X: Enter the amount of movement in the X direction.
 - Y: Enter the amount of movement in the Y direction.
- [Set the relative point] OFF
 - X: Enter the X-coordinate for shape placement.
 - Y: Enter the Y-coordinate for shape placement.

(2) X-coordinate for shape placement or amount of movement in the X direction

(3) Y-coordinate for shape placement or amount of movement in the Y direction



- You can also create link-copies by holding down the [Ctrl] key and then selecting and dragging a shape.
- In this case, note that selecting the shape first will prevent you from copying it.

● Canceling linkage

1 Select a shape to cancel linkage. "Selecting Shapes/Canceling Selection"(P. 80)

2 Select [Cancel Link Copy].

- **Cancel linkage in one of the following ways.**
 - From the CAMLINK2 menu bar, select [Edit(&E)] > [Cancel Link Copy].
 - Right-click. From the pop-up menu displayed, select [Cancel Link Copy].
- A dialog box is displayed for canceling linked copies.


3 Click [Yes] to cancel the linkage.

- The original shape and copy are no longer linked, and you can edit their cutting conditions and other information separately.


Rotating shapes

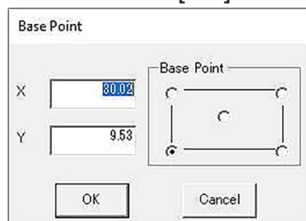
1 Select a shape to rotate.  ["Selecting Shapes/Canceling Selection"\(P. 80\)](#)

2 Select [Rotate].


- Rotate the shape in one of the following ways.
 - From the CAMLINK2 menu bar, select [Edit(&E)] > [Rotate(&O)].
 - Click the  icon in the toolbar.
 - Right-click. From the pop-up menu displayed, select [Rotate(&O)].
 - Press [Ctrl]+[R].

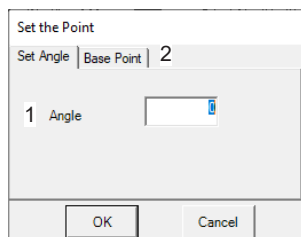
3 Specify a center to rotate the shape around.

- Specify the center for rotation in one of the following ways.
 - Click anywhere in the figure.
 - (To use the coordinate panel:  ["Coordinate Panel"\(P. 28\)](#)) Click the coordinate values near the middle of the bottom of the screen. Set the base point coordinates or select a base point, and then click [OK].



4 Specify a rotation angle.

- Specify the angle for rotation in one of the following ways.
 - Click anywhere in the figure. To rotate the shape in 45-degree increments, hold down the [Shift] key while moving the mouse.
 - (To use the coordinate panel:  ["Coordinate Panel"\(P. 28\)](#)) Click the coordinate values near the middle of the bottom of the screen. Specify the angle and click [OK].



- (1) Angle: Enter a rotation angle.
- (2) [Base Point] tab: You can change the center for rotation. Note that coordinates cannot be specified.


Horizontally or vertically flipping (mirroring) shapes

1 Select a shape to flip (mirror). "Selecting Shapes/Canceling Selection"(P. 80)

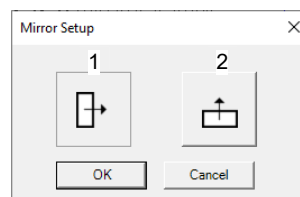


- Text data cannot be mirrored.

2 Select [Mirror].

- Flip the shape in one of the following ways.
 - From the CAMLINK2 menu bar, select [Edit(&E)] > [Mirror].
 - Click the  icon in the toolbar.
 - Right-click. From the pop-up menu displayed, select [Mirror].

3 Select a direction for flipping and click [OK].




1	Horizontal	Flips the shape horizontally.
2	Vertical	Flips the shape vertically.


Resizing shapes

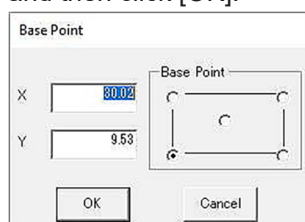
1 Select a shape to resize. "Selecting Shapes/Canceling Selection"(P. 80)

2 Select [Resize].


- Resize the shape in one of the following ways.
 - From the CAMLINK2 menu bar, select [Edit(&E)] > [Resize(&E)].
 - Click the  icon in the toolbar.
 - Right-click. From the pop-up menu displayed, select [Resize(&E)].

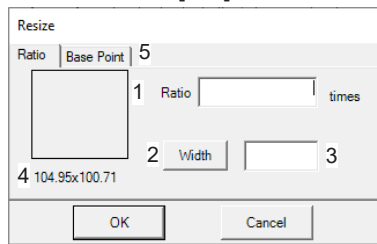
3 Specify the base point to resize the shape from.

- Specify shape base points in one of the following ways.
 - Click anywhere in the figure.
 - (To use the coordinate panel:  "Coordinate Panel"(P. 28)) Click the coordinate values near the middle of the bottom of the screen. Set the base point coordinates or select a base point, and then click [OK].



4 Specify the position as the basis for resizing, or use the coordinate panel to specify resizing.

- (To use the coordinate panel:  "Coordinate Panel"(P. 28)) Click the coordinate values near the middle of the bottom of the screen. Set the base point coordinates or select a base point, and then click [OK].



- (1) Ratio: Specify the resizing ratio.
- (2) Width/Height: Set whether resizing applies to the width or height.
- (3) Enter the size after resizing. Enter the size in mm.
 - The resizing ratio is automatically calculated and shown in [Ratio].
- (4) Width x Height: Shows the original width and height.
- (5) [Base Point] tab: You can change the base point used for resizing. Note that coordinates cannot be specified.


Creating multiple copies of shapes

Create multiple copies of a shape to fit the working area as follows. First, group all shapes.

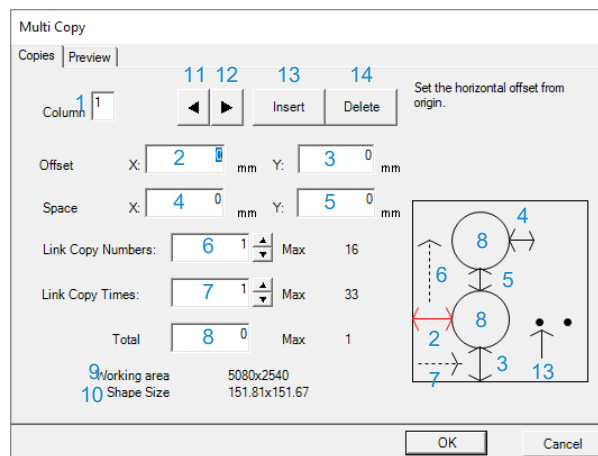


- The [Group by layer] in the [Edit] menu can be used to group together all of the shapes within the same layer.

1 Select [Multi Copy].

- Create multiple copies in one of the following ways.**
 - From the CAMLINK2 menu bar, select [Edit(&E)] > [Multi Copy(&I)].
 - Click the  icon in the toolbar.
 - Right-click. From the pop-up menu displayed, select [Multi Copy(&I)].

2 Configure the first column.



1	Column	Indicates which column you are configuring.
2	Offset X	Offset from the origin in the X direction.
3	Offset Y	Offset from the origin in the Y direction.
4	Space X	Link copy spacing in the X direction.
5	Space Y	Space between shapes in the Y direction.
6	Link Copy Numbers:	The number of link copies in the Y direction.
7	Link Copy Times:	The number of link copies in the X direction.
8	Total	The total number of shapes specified for link copying.
9	Working area	Indicates the working area.
10	Shape Size	Indicates the size of the maximum shape frame.
11	◀	Switches to showing information for the preceding column.
12	▶	Switches to showing information for the next column.
13	Add	Adds a column.
14	Delete	Deletes the column indicated in [Column].

- Information for the item in focus among items 2–8 and 13 is highlighted in red in the small window.
- To ensure that all shapes fit in the working area, the maximum link copy numbers/times and total quantity vary depending on offset/space values.

3 Click the [Preview] tab for a preview of multi-copying.

4 Click [OK].

- Multiple copies are created.



- Data with multiple copies created becomes link copies. ["Creating linked copies of shapes/canceling linkage"\(P. 82\)](#)

Grouping/ungrouping shapes

● Grouping shapes


Group selected shapes into a single shape as follows. Once shapes are grouped, you can edit them as if they were a single shape by rotating, flipping (mirroring), moving them, and so on.



- The shapes you will group should be placed on the same layer. Shapes on separate layers cannot be grouped. To move shapes to the same layer, use [Move Layer] in the [Edit] menu. ["Moving shapes to other layers"\(P. 92\)](#)
- Grouping when importing DXF files can be set in [Auto Grouping]. ["Configuring the environment"\(P. 33\)](#)

1 Select shapes to group. ["Selecting Shapes/Canceling Selection"\(P. 80\)](#)

2 Select [Group].

- **Group shapes in one of the following ways.**
 - From the CAMLINK2 menu bar, select [Edit(&E)] > [Group(&G)].
 - Click the  icon in the toolbar.
 - Right-click. From the pop-up menu displayed, select [Group(&G)].
 - Press [Ctrl]+[G].

3 Click [Yes(&Y)] after the confirmation dialog box is displayed.

- Your selected shapes are now grouped.


● Ungrouping shapes

Ungroup grouped shapes as follows. Once shapes are ungrouped, you can edit them separately by rotating, flipping (mirroring), moving them, and so on.

1 Select a shape to ungroup. ["Selecting Shapes/Canceling Selection"\(P. 80\)](#)

- You can select multiple groups.

2 Select [Ungroup].

- **Ungroup shapes in one of the following ways.**
 - From the CAMLINK2 menu bar, select [Edit(&E)] > [Ungroup(&N)].
 - Click the  icon in the toolbar.
 - Right-click. From the pop-up menu displayed, select [Ungroup(&N)].

3 Click [Yes(&Y)] after the confirmation dialog box is displayed.

- Your selected shape is now ungrouped.

Disassembling shapes

Disassemble selected shapes into line segments as follows.



- When disassembling a grouped shape, you will need to ungroup the shape before you can disassemble it.

1 Select a shape to disassemble. ["Selecting Shapes/Canceling Selection"\(P. 80\)](#)

2 Select [Disassemble the Shape].

- **Group shapes in one of the following ways.**
 - From the CAMLINK2 menu bar, select [Edit(&E)] > [Disassemble the Shape(&V)].
 - Right-click. From the pop-up menu displayed, select [Disassemble the Shape(&V)].

3 Click [Yes(&Y)] after the confirmation dialog box is displayed.

- Your selected shape is now disassembled into line segments.

Entering comments

Enter text on figures as follows. Your entered text is output by pen in a linear font (consisting of characters' center lines).



Text data with comments entered cannot be output for reverse cutting.

Similarly, text data with comments entered cannot be edited using the following functions:

- Mirror
- Output order changed
- Cutting direction changed
- Line Division
- Cutting Start Position

- Entered text can be edited as follows. Selecting a string changes the text display color to gray. Edit text displayed in gray.
 - Cutting/copying/pasting shapes ["Edit\(&E\) Menu"\(P. 129\)](#)
 - ["Moving shapes"\(P. 81\)](#)
 - ["Creating linked copies of shapes/canceling linkage"\(P. 82\)](#)
 - ["Rotating shapes"\(P. 85\)](#)
 - ["Resizing shapes"\(P. 86\)](#)
 - ["Creating multiple copies of shapes"\(P. 88\)](#)
 - ["Grouping/ungrouping shapes"\(P. 89\)](#)




- Even if you have entered multiple lines of text, editing is performed on one line at a time. To edit multiple lines at a time, group them first.

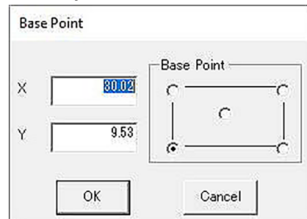
● Entering comments

1 Select [Comment Parameters].

- **Enter comments in one of the following ways.**
 - From the CAMLINK2 menu bar, select [Edit(&E)] > [Comment(&K)].
 - Click the icon in the toolbar.
 - Right-click the figure. From the pop-up menu displayed, select [Comment(&K)].
 - Press [Ctrl]+[T].

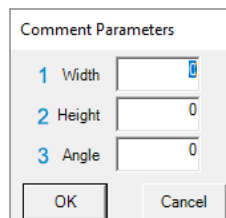
2 Specify a comment base point.

- The [Comment Parameters] dialog box is displayed.
- **Specify comment base points in one of the following ways.**
 - Click anywhere in the figure.
 - (To use the coordinate panel:  "Coordinate Panel"(P. 28)) Click the coordinate values near the middle of the bottom of the screen. Set the base point coordinates and click [OK]. Comment base points cannot be set.



3 Fill in any of the fields as required.

- Width (mm): Specify the width of one character. Enter "0" to make the width 1/2 of the height.
- Height: Enter the height of one character.
- Angle: Enter an angle to tilt the text.



4 Click [OK].


- The base point where text will be entered is indicated by a flashing cursor (|).

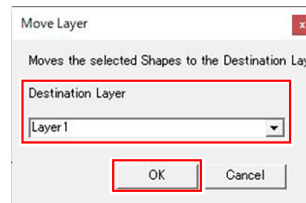
5 Enter the text.

- Press the [Enter] key to insert a line break.
- After the second line, pressing the [Enter] key without entering text will exit comment input.

Moving shapes to other layers

Move selected shapes to other layers as follows.

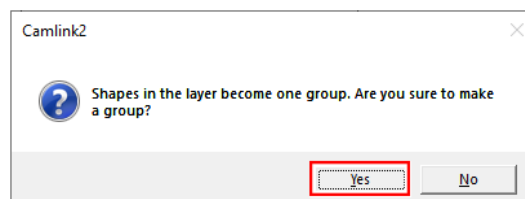
- 1 Select a shape to move to another layer.  "[Selecting Shapes/Canceling Selection](#)"(P. 80)
- 2 Select [Move Layer].
 - **Move shapes to another layer in one of the following ways.**
 - From the CAMLINK2 menu bar, select [Edit(&E)] > [Move Layer].
 - Right-click. From the pop-up menu displayed, select [Move Layer].
 - The [Move Layer] dialog box is displayed.
- 3 Select [Destination Layer] and click [OK].



Grouping by layers

Shapes can be grouped together by layer.

- 1 Select [Group by layer].
 - **Group shapes by layer in one of the following ways.**
 - From the CAMLINK2 menu bar, select [Edit(&E)] > [Group by layer].
 - Right-click. From the pop-up menu displayed, select [Group by layer].
 - A confirmation dialog box is displayed.
- 2 Click [Yes(&Y)] after the confirmation dialog box is displayed.
 - All data is grouped together by layer.



- Data on hidden layers will also be grouped.
- Existing grouping information will be lost.
- All linkage of link copied data will be cancelled.

4.3 Showing/canceling the grid

Display a grid with your specified pitch as follows.

● Showing the grid

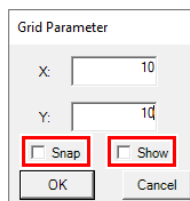
When a grid is set, pointer movement is aligned with the grid.

1 From the CAMLINK2 menu bar, select [View(&V)] > [Grid(&G)].

- The [Grid Parameter] dialog box is displayed.

2 Configure the setting items.

- X (mm): Enter the horizontal grid pitch.
- Y (mm): Enter the vertical grid pitch.
- Snap: When this option is selected, objects snap to the grid.
- Show: When this option is selected, the grid is displayed.



- Selecting Show will automatically select [Snap], and objects will be snapped.
- A "G" (for "grid") in the upper left of the figure indicates that the grid is enabled.



3 Click [OK].

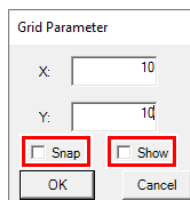
● Canceling the grid

1 From the CAMLINK2 menu bar, select [View(&V)] > [Grid(&G)].

- The [Grid Parameter] dialog box is displayed.

2 Configure the setting items.

- Show: Clear this option.



3 Click [OK].



- An "F" in the upper left of the figure indicates that the grid is disabled.

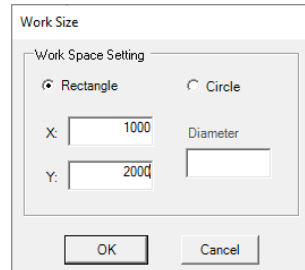
4.4 Setting Up work space

Configure the shape and size of the space for your work as follows. Keep this space in mind when arranging cut data.

● Setting Up work space

1 From the CAMLINK2 menu bar, select [Setup(&S)] > [Work Size(&W)].

- The [Work Size] dialog box is displayed.



2 Specify the workspace shape and size and click [OK].

- [Rectangle]: Enter the length in the X and Y directions.
- [Circle]: Enter the diameter.




- Enter rectangle or circle sizes within the active working space.

3 Click a position in the figure that will be the origin for works.

- The work is placed, and the work area (in blue) is updated.



- You can also use the coordinate panel to set the origin.  ["Coordinate Panel"\(P. 28\)](#)
- The base point setting cannot be changed.
- Data protruding to the bottom left of the work will not be cut.

● Removing work spaces

1 From the CAMLINK2 menu bar, select [Setup(&S)] > [Remove Work Space(&W)].

- The work size settings are cleared and restored to the active working space (in green) set in the environment settings.

Chapter 5 Applied Functions



This chapter

This chapter describes more advanced ways of using the software.

Checking/Changing the Output Order	96	Detecting registration marks	104
Changing/resetting grouped shape output order.....	96	If registration marks cannot be detected ..	105
Changing line segment output order	97	Using freely placeable marks to cut	106
Line functions	98	Reverse cutting of printed works (data with registration marks).....	108
Changing line cutting direction	98	Edge detection	113
Dividing line segments	99	Scenarios where edge detection is used ..	113
Changing the cutting start position.....	100	Edge detection and surface cutting using data without registration marks	113
Shape/size of registration marks	101	V-Cutting	115
Cutting printed works (data with registration marks).....	102	Milling	119
Process of cutting data with registration marks	102	Toggle Cutting	122

5.1 Checking/Changing the Output Order

Changing/resetting grouped shape output order

Check the output order for grouped shapes as follows. Changes to the output order also apply to grouped shapes that are link copies.



- Changes are also applied to all groups that are link copies, regardless of whether they are link copy sources or destinations.

● Changing shape output order

- 1** Select one of the grouped shapes.
- 2** From the CAMLINK2 menu bar, select [Output(&O)] > [Shapes Order(&O)].



- The [Shapes Order(&O)] menu is not available when multiple groups are selected.

- 3** Click shapes in your preferred output order.
 - Selected shapes are displayed with solid lines.
 - A confirmation dialog box is displayed after all shapes have been selected.
- 4** Click [Yes] to apply your changes to the output order.
 - To cancel changes, click [No].

● Resetting shape output order

Restore grouped shapes to the state after importing as follows.

- 1** Select one of the grouped shapes.



- Multiple groups cannot be selected. The [Initially Order(&I)] menu is not available when multiple groups are selected.

- 2** From the CAMLINK2 menu bar, select [Output(&O)] > [Initially Order(&I)].
 - A dialog box is displayed for confirming initialization of the output order.
- 3** Click [Yes] to reset the output order.
 - To cancel initialization, click [No].

Changing line segment output order

Change the output order for shape line segments as follows.



- The following data cannot be processed:
Data for output off layers, ellipse data, spline data, text data

1 Select a shape.



- If it is grouped, ungroup it.  ["Grouping/ungrouping shapes"\(P. 89\)](#)

2 From the CAMLINK2 menu bar, select [Output(&O)] > [Line Order(&L)].



- The [Line Order(&L)] menu is not available when multiple shapes are selected.

3 Click lines in your preferred output order.

- Selected segments are displayed with solid lines.
- A confirmation dialog box is displayed after all line segments have been selected.

4 Click [Yes] to apply your changes to the output order.

- To cancel changes, click [No].

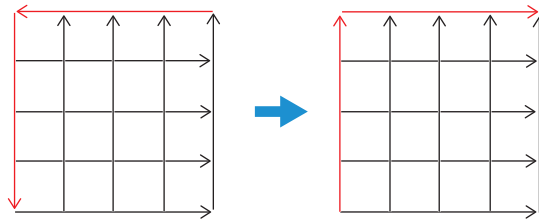
5.2 Line functions

Changing line cutting direction

Change the cutting direction for shape line segments as follows. By changing the cutting direction, you may be able to reduce cutting errors caused by cutter eccentricity. (The number of cuts can be changed only for V-cut compatible plotters.)



- The following data cannot be processed:
Data for output off layers, ellipse data, spline data, text data



1 Select a shape.



- If it is grouped, ungroup it. ["Grouping/ungrouping shapes"\(P. 89\)](#)

2 From the CAMLINK2 menu bar, select [Output(&O)] > [Line Direction(&V)].

- Cutting direction is indicated by red arrows.



- The [Line Direction(&V)] menu is not available when multiple shapes are selected.

3 Click a line segment to change.

- Each click of the line segment changes the direction of arrows (indicating the cutting direction).



Plotters supporting V-cutting

- Each click of a line segment switches the line-cutting direction and V-cutting method (single/double cut). ["V-Cutting"\(P. 115\)](#)

Single cut

Single cut
Cutting direction changed

Double cut

Double cut
Cutting direction changed

- To output a double cut as a triple cut, use the [V Cut] tab for [Cut Condition]. ["Cut Condition > \[V Cut\] tab"\(P. 65\)](#)
- Specifying V-cutting and switching the V-cutting method are only possible when the cut data consists of straight lines.

4 Press the [Enter] key after you have changed the cutting direction.

- A confirmation dialog box is displayed.

5 Click [Yes] to apply your changes to the cutting direction.

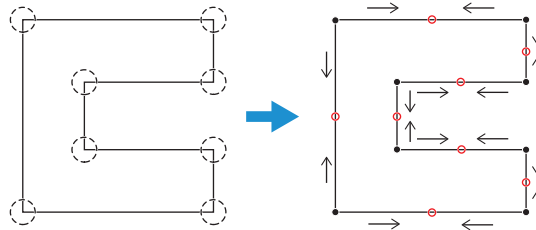
- To cancel changes, click [No].

Dividing line segments

Divide straight lines in a shape and cut from the opposite end as follows. You can avoid overcutting by dividing line segments where you wish to avoid this.



- The following data cannot be processed:
Data for output off layers, data other than straight lines



- There is no need to divide line segments when using an auto division function on the plotter output screen. ["Plotter Out"\(P. 74\)](#)

1 Select a shape.



- If it is grouped, ungroup it. ["Grouping/ungrouping shapes"\(P. 89\)](#)

2 From the CAMLINK2 menu bar, select [Output(&O)] > [Line Division(&D)].

- Red arrows on each line segment indicate the cutting direction.
- Line segments already divided are marked with a red X in the middle.



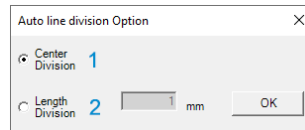
- The [Line Division(&D)] menu is not available when multiple shapes are selected.

3 Click a line segment to divide.

- When division is specified, a red circle is added to the middle of the line segment.
- To cancel this operation, click the same line segment again. The red circle is cleared, and the line segment is no longer marked for division.

4 After selecting all line segments to divide, press the [Enter] key.

- The [Auto line division Option] dialog box is displayed.



5 Specify a method of division.

- Center Division: Divides in the middle of the line segment.



- Length Division: Divides at your specified position. Set the distance from the line segment base point.

**6 Click [OK].**

- A confirmation dialog box is displayed.

7 Click [Yes] to divide the line segment.

- To cancel division, click [No].

Changing the cutting start position

Change where line segment cutting begins for shapes as follows.



- The following data cannot be processed:
Data for output off layers, ellipse data, spline data, text data

1 Select a shape.

- If it is grouped, ungroup it.  ["Grouping/ungrouping shapes"\(P. 89\)](#)

2 From the CAMLINK2 menu bar, select [Output(&O)] > [Cutting Start Position(&T)].

- The first line segment to cut is shown as a solid line.

3 Click the line you wish to cut first.

- A confirmation dialog box is displayed.

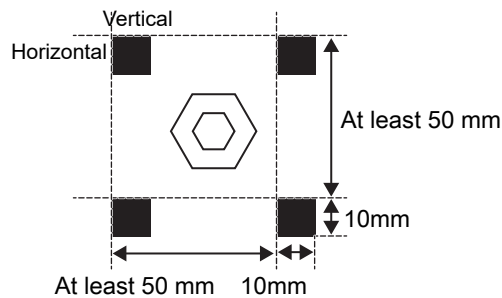
4 Click [Yes] to apply your changes to the cutting start position.

- To cancel changes, click [No].

5.3 Shape/size of registration marks

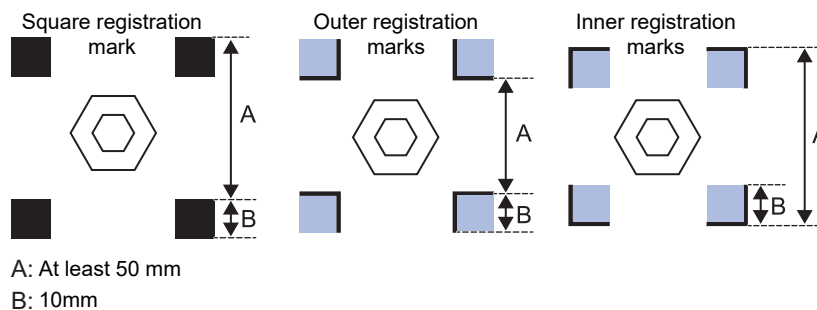
Refer to the following information when setting the shape and size of registration marks.

● Registration mark size



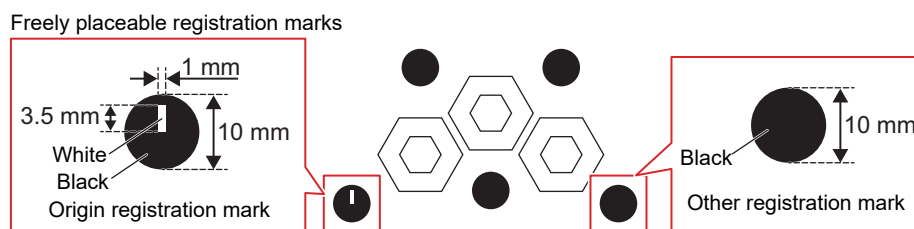
● Registration mark shape

Three types of registration mark shapes are available, as follows, in addition to a shape that can be placed more freely.




- Do not place data in the light blue areas of outer or inner registration marks in the figure above. Moreover, do not place data near the registration marks. Failure to do so may prevent normal detection of the marks.
- When using square registration marks, outer registration marks, and inner registration marks, place the registration marks outside all of the cut data.

- When using the freely placeable registration mark, see "Using freely placeable marks to cut"(P. 106).



5.4 Cutting printed works (data with registration marks)

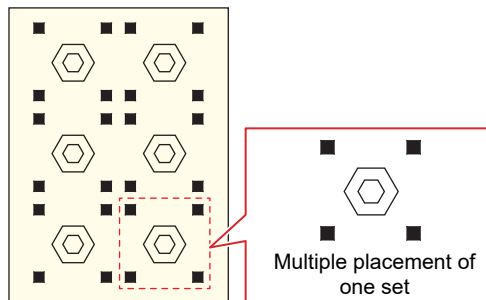
Process of cutting data with registration marks

Include registration marks in the layout if you will cut the printed work. When using the freely placeable registration mark, see  ["Using freely placeable marks to cut"](#)(P. 106).

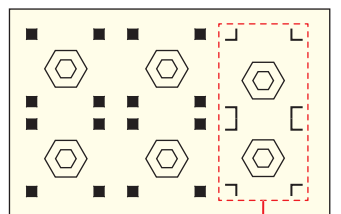


Continuous registration mark detection and cutting

- When using CAD or other software to create data, create only one set of cut data with registration marks, and place multiple sets before printing. Only one set of registration marks is imported by CAMLINK2.





- Use only one type of registration mark. Registration marks cannot be detected if they have different shapes.



Cannot be detected

1 Prepare cut data (a DXF file) with registration marks in CAD software or the like.

-  ["DXF Versions"](#)(P. 12)
- For the registration marks and cut data, prepare cut data with different layers or in different colors.
 ["Shape/size of registration marks"](#)(P. 101)



- For details on the available area for placing cut data and registration marks (spacing, size, etc.), refer to the plotter operation manual.

2 Use a printer to print on the work.



- Refer to the printer operation manual.



- When arranging shapes with registration marks consecutively, set the number of shapes and the spacing between them.  ["Register Mark Setting"](#)(P. 77)

3 Load the printed work on the plotter.



- Load the work so that the registration marks are straight horizontally and vertically.



- For details on how to load the work and using the plotter, refer to the plotter operation manual.

4 Attach the tool to be used to the plotter.

5 Detect the registration marks with the plotter, which will enter [Remote] mode.

- Detect the registration mark closest to the origin. ["Origin"\(P. 32\)](#)



- Configure plotter settings, including the type of registration mark. For details on settings and detection methods, refer to the plotter operation manual.



- If registration marks cannot be detected, see ["If registration marks cannot be detected"\(P. 105\).](#)

6 Start CAMLINK2. ["Starting CAMLINK2"\(P. 37\)](#)

7 Confirm that your plotter is selected. ["Checking the current plotter"\(P. 40\)](#)



- If not selected, select your plotter. ["Changing the current plotter"\(P. 41\)](#)

8 Check the blade type in the CAMLINK2 database.

- Register a blade if no blade has been registered. ["Registering Blades"\(P. 48\)](#)

9 Import cut data (a DXF file) into CAMLINK2. ["Importing Cut Data \(DXF Files\)"\(P. 46\)](#)

10 Set the cut conditions. ["Setting Cut Conditions"\(P. 53\)](#)

11 Set the output conditions. ["Setting Up Layers"\(P. 67\)](#)



- Be sure to configure [Cut Condition] settings for layers you will output (cut).
- Be sure to set registration marks in [Cut Condition] for the layer to be used for these marks. Registration marks can only be set on one layer.
- If registration marks have not been placed on the layer they are intended for, execute [Move Layer] for them. ["If registration marks have not been placed on the intended layer"\(P. 70\)](#)


12 Set the registration mark shape. ["Detecting registration marks"\(P. 104\)](#)

- Select the registration mark shape used.

13 Set [Plotter Out] and start cutting. ["Sending to a Plotter"\(P. 74\)](#)

- Configure [Register Mark Setting] items. ["Register Mark Setting"\(P. 77\)](#)

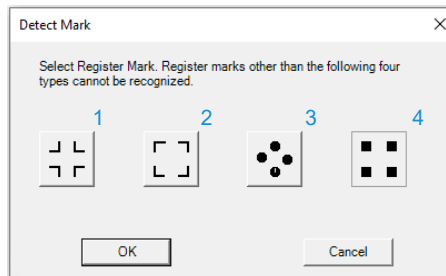
Detecting registration marks




If you will cut using registration marks, make sure the registration marks are detected.  ["Cutting printed works \(data with registration marks\)"\(P. 102\)](#)

1 From the CAMLINK2 menu bar, select [Setup(&S)] > [Detect Mark].

- The [Detect Mark] confirmation dialog box is displayed.



2 Select the type of registration mark and click [OK].



1	Outer registration mark	Select this option to detect outer registration marks  .
2	Inner registration mark	Select this option to detect inner register marks  .
3	Freely placeable registration mark	Select this option to detect freely placeable marks consisting of a black dot. There are no restrictions on the quantity or position.  "Using freely placeable marks to cut"(P. 106)
4	Square registration mark	Select this option to detect black square marks.

Important!

If the registration marks cannot be detected, check the following.

- The shape and size of the registration marks must match the settings.  ["Shape/size of registration marks"\(P. 101\)](#)
- Files that include registration marks must be imported.
- Registration marks must be set in the cut conditions ([Setup(&S)] > [Layer Setting]).  ["Setting Up Layers"\(P. 67\)](#)
- The layer for registration marks must only include registration marks.
- The selected type of registration mark ([Setup(&S)] > [Detect Mark]) must be correct.

● Canceling registration mark detection

1 From the CAMLINK2 menu bar, select [Setup(&S)] > [Exit Detection].

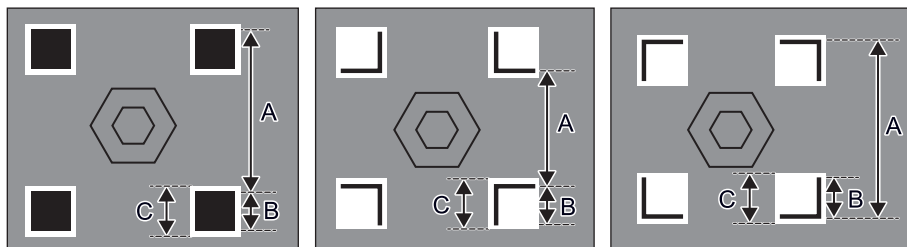
- Registration mark detection is canceled.

If registration marks cannot be detected

● Problems due to work material, etc.

If the plotter cannot detect registration marks, fill in the area around them with a 12 mm white square. If the marks cannot be detected even after the white shading is added, the data with these registration marks cannot be cut.

- Square registration mark

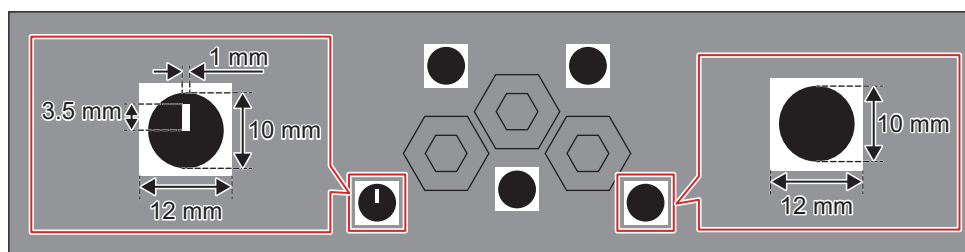


A: At least 50 mm

B: 10mm

C: 12mm

- Freely placeable registration mark



5.5 Using freely placeable marks to cut



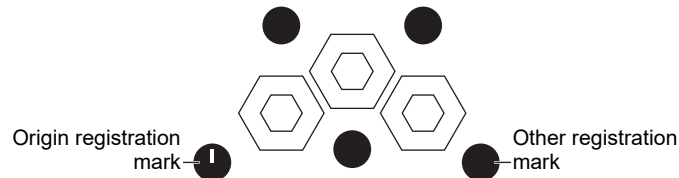
Plotters supporting freely placeable marks

- CFX Series (with camera unit)

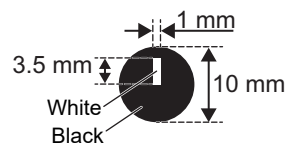
Suitable placement of freely placeable marks can improve cutting accuracy. The tool for freely placeable marks can be used to place any number of registration marks at any position.

● Freely placeable registration marks

Two types of freely placeable marks are available: origin marks and other marks. The marks are distributed from the Mimaki website. When preparing your own marks, use the following dimensions.



- Origin registration mark
 - This is the first registration mark detected, and only one can be placed on a figure.
 - Shape: Black 10 mm circle. 1 mm wide 3.5 mm long rectangle extending upward from the center.
 - Line color: Black
 - Hatching: White



- Other registration mark
 - Shape: Black 10 mm circle.



1 Prepare cut data (a DXF file) with freely placeable registration marks in CAD software or the like.

- ["DXF Versions"\(P. 12\)](#)
- For the registration marks and cut data, prepare cut data with different layers or in different colors.
["Shape/size of registration marks"\(P. 101\)](#)



- For details on the available area for placing cut data and registration marks (spacing, size, etc.), refer to the plotter operation manual.

2 Use a printer to print on the work.



- Refer to the printer operation manual.

3 Load the printed work on the plotter.



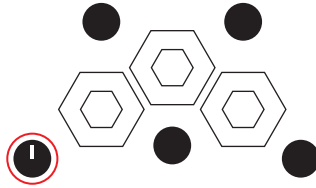
- Load the work so that the registration marks are straight horizontally and vertically.



- For details on how to load the work and using the plotter, refer to the plotter operation manual.

4 Attach the tool to be used to the plotter.

5 Detect the origin registration marks with the plotter, which will enter [Remote] mode.



- Configure plotter settings, including the type of registration mark. For details on settings and detection methods, refer to the plotter operation manual.



- If registration marks cannot be detected, see ["If registration marks cannot be detected"\(P. 105\)](#).

6 Start CAMLINK2. ["Starting CAMLINK2"\(P. 37\)](#)

7 Confirm that your plotter is selected. ["Checking the current plotter"\(P. 40\)](#)



- If not selected, select your plotter. ["Changing the current plotter"\(P. 41\)](#)

8 Check the blade type in the CAMLINK2 database.

- Register a blade if no blade has been registered. ["Registering Blades"\(P. 48\)](#)

9 Import cut data (a DXF file) into CAMLINK2. ["Importing Cut Data \(DXF Files\)"\(P. 46\)](#)

10 Set the cut conditions. ["Setting Cut Conditions"\(P. 53\)](#)

11 Set the output conditions. ["Setting Up Layers"\(P. 67\)](#)



- Be sure to configure [Cut Condition] settings for layers you will output (cut).
- Be sure to set registration marks in [Cut Condition] for the layer to be used for these marks. Registration marks can only be set on one layer.
- If registration marks have not been placed on the layer they are intended for, execute [Move Layer] for them. ["If registration marks have not been placed on the intended layer"\(P. 70\)](#)

12 Set the registration mark shape. ["Detecting registration marks"\(P. 104\)](#)

- Select the freely placeable mark.

13 Set [Plotter Out] and start cutting. ["Sending to a Plotter"\(P. 74\)](#)

- Configure [Register Mark Setting] items. ["Register Mark Setting"\(P. 77\)](#)

5.6 Reverse cutting of printed works (data with registration marks)

If surface cutting does not produce a neat finish or you prefer a different approach, cutting from the reverse side may provide a cleaner finish.



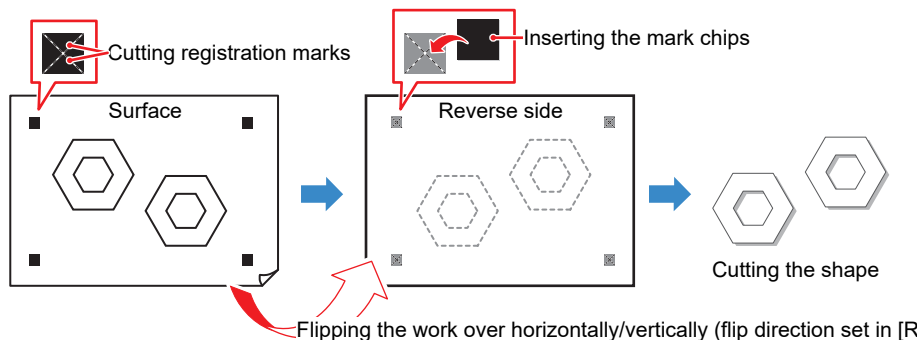
- Text data cannot be output.

Reverse cutting can be performed using the following methods.

- Detect two edges and registration marks, then cut from the reverse side.
- Detect registration marks on the surface and then cut before inserting the included black mark chips from the reverse side and cutting from the reverse side.

Check the usage conditions when using the edge detection function. ["Edge detection"](#)(P. 113)

After cutting with square marks from the surface, insert the included black mark chips from the back side and use them as registration marks. (When not using edge detection)



Cut Condition for reverse cutting

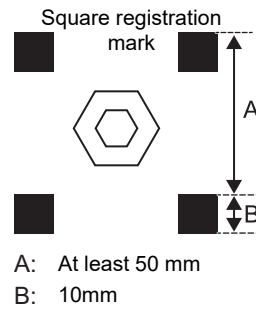
- Work Thickness: At least 3 mm
- Works with the thickness described above should be used only with the mark chip method.

● Registration marks you can use in reverse cutting

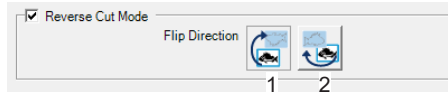
The marks are distributed from the Mimaki website. When preparing your own marks, use the following dimensions.

- Registration mark shape

- Square registration mark



- Mark chips may not be detected on dark works.
- [Reverse Cut Mode] settings must be completed. ["Plotter Out"\(P. 74\)](#)



1 Prepare cut data (a DXF file) with registration marks in CAD software or the like.

- ["DXF Versions"\(P. 12\)](#)
- For the registration marks and cut data, prepare cut data with different layers or in different colors. ["Shape/size of registration marks"\(P. 101\)](#)



- For details on the available area for placing cut data and registration marks (spacing, size, etc.), refer to the plotter operation manual.

2 Use a printer to print on the work.



- Refer to the printer operation manual.



- Continuous registration mark detection and cutting is not possible with reverse cutting.
- Registration marks cannot be detected with CAMLINK2 even when placing a series of shapes with registration marks.
- Text cannot be output when reverse cutting.

3 Load the printed work on the plotter.



- Load the work so that the registration marks are straight horizontally and vertically.



- For details on how to load the work and using the plotter, refer to the plotter operation manual.

4 Attach the tool to be used to the plotter.



- When edge detection is not used, cut the registration marks before cutting the data. Load a tool capable of cutting out the work together with the output conditions in the plotter first.

5 Detect the registration marks with the plotter, which will enter [Remote] mode.

- Detect the registration mark closest to the origin. ["Origin"\(P. 32\)](#)
- Registration marks will not be detected when using the edge detection function with reverse cutting.



- Configure plotter settings, including the type of registration mark. For details on settings and detection methods, refer to the plotter operation manual.

6 Start CAMLINK2. ["Starting CAMLINK2"\(P. 37\)](#)**7 Confirm that your plotter is selected.** ["Checking the current plotter"\(P. 40\)](#)

- If not selected, select your plotter. ["Changing the current plotter"\(P. 41\)](#)

8 Check the blade type in the CAMLINK2 database.

- Register a blade if no blade has been registered. ["Registering Blades"\(P. 48\)](#)

9 Import cut data (a DXF file) into CAMLINK2. ["Importing Cut Data \(DXF Files\)"\(P. 46\)](#)**10 Set the cut conditions.** ["Setting Cut Conditions"\(P. 53\)](#)**11 Set the output conditions.** ["Setting Up Layers"\(P. 67\)](#)

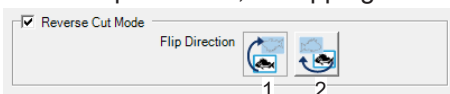
- Be sure to configure [Cut Condition] settings for layers you will output (cut).
- Be sure to set registration marks in [Cut Condition] for the layer to be used for these marks. Registration marks can only be set on one layer.
- If registration marks have not been placed on the layer they are intended for, execute [Move Layer] for them. ["If registration marks have not been placed on the intended layer"\(P. 70\)](#)

12 Set the registration mark shape. ["Detecting registration marks"\(P. 104\)](#)

- Select the registration mark shape used.

13 Set [Plotter Out] settings. ["Plotter Out"\(P. 74\)](#)

- Set [Reverse Cut Mode].
Set the flip direction, for flipping the work horizontally or vertically.



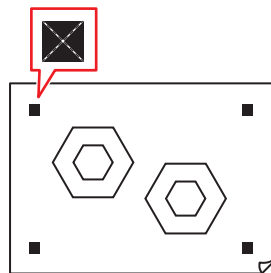
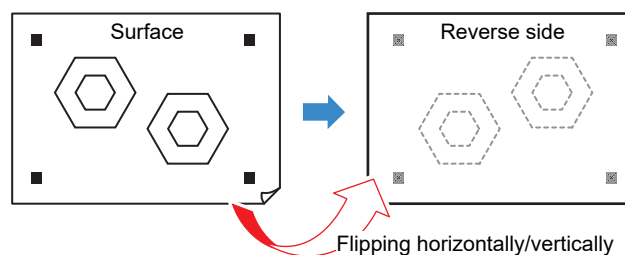
- Configure [Register Mark Setting] items. ["Register Mark Setting"\(P. 77\)](#)
- For edge detection, configure [Edge Detect] item. ["Edge Detect"\(P. 76\)](#)
- For test cutting, see Try it out (Specifications may be subject to change.) (To be corrected when finalized).

14 Click [Start].  "Sending to a Plotter"(P. 74)● **When using edge detection**

- (1) Use the jog keys to move the light pointer to the bottom right corner of the work as instructed on the plotter operating panel, then press the [ENTER] key.
 - Edge detection is performed.
- (2) Use the jog keys to move the light pointer to the registration mark position as instructed on the plotter operating panel, then press the [ENTER] key.
 - Registration mark detection is performed.
 - The plotter returns to [Local] mode.

● **When not using edge detection**

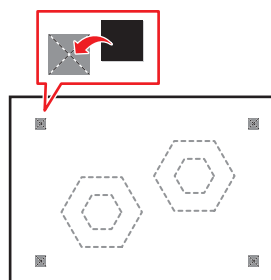
- Registration mark detection is performed.
- A cut is made for inserting the mark chip over the registration mark.
- Once the cut is complete, the plotter starts the head retraction operation. The plotter switches to standby state while the head is being retracted.

**15** Flip over the work in the set direction as instructed on the plotter operating panel, then press the [ENTER] key.**16** The reverse side edges and mark chips are detected.● **When using edge detection**

- Use the jog keys to move the light pointer to the following positions on the work as instructed on the plotter operating panel, then press the [ENTER] key. Cutting starts once edge detection is complete.
- When work is flipped left to right: Bottom left corner
- When work is flipped vertically: Top right corner

● **When not using edge detection**

- Insert mark chips in the mark cutouts and press the [Enter] key.
- Use the jog keys to move the light pointer to the mark chip position as instructed on the plotter operating panel then press the [ENTER] key.



17 The edges and mark chips are detected by the plotter, and cutting starts.

5.7 Edge detection

The work edges can be detected.

This eliminates the need to enter the work size and enables cutting to be corrected even when the work is skewed.

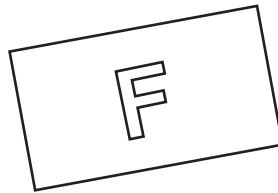


- Plotter supporting edge detection function
- CFX Series (with camera unit)
- Edge detection can be performed only on works with right angle (90 degree) corners.
- Check that the corners of the work are not curled up.
It may not be possible to detect edges if the corners are curled or dirty.
- Edge detection may not be possible depending on the work color.

Scenarios where edge detection is used

Edge detection is used in the following cases:

- Surface cutting using data without registration marks ["Edge detection and surface cutting using data without registration marks"\(P. 113\)](#)



- Reverse cutting using data with registration marks ["Reverse cutting of printed works \(data with registration marks\)"\(P. 108\)](#)



Edge detection and surface cutting using data without registration marks

- 1 Load the work with the surface facing up, then set the work thickness.



- Refer to the plotter operation manual.

- 2 Attach the tool to be used to the plotter.

- 3 Start CAMLINK2. ["Starting CAMLINK2"\(P. 37\)](#)







- 4 Confirm that your plotter is selected. ["Checking the current plotter"\(P. 40\)](#)

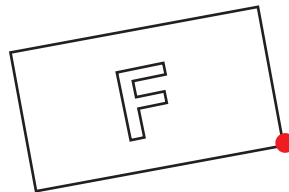


- If not selected, select your plotter. ["Changing the current plotter"\(P. 41\)](#)

- 5 Check the blade type in the CAMLINK2 database.

- Register a blade if no blade has been registered. ["Registering Blades"\(P. 48\)](#)

- 6** Import cut data (a DXF file) into CAMLINK2.  ["Importing Cut Data \(DXF Files\)"\(P. 46\)](#)
 - The placement position defines the offset distance from the work edge origin.
- 7** Set the cut conditions.  ["Setting Cut Conditions"\(P. 53\)](#)
- 8** Set the output conditions.  ["Setting Up Layers"\(P. 67\)](#)
- 9** Set [Plotter Out] settings.  ["Plotter Out"\(P. 74\)](#)
 - Configure the [Edge Detect] setting items.  ["Edge Detect"\(P. 76\)](#)
- 10** Click [Start].  ["Sending to a Plotter"\(P. 74\)](#)
- 11** Use the jog keys to move the light pointer to the bottom right corner of the work as instructed on the plotter operating panel, then press the [ENTER] key.
 - Cutting starts once edge detection is complete.



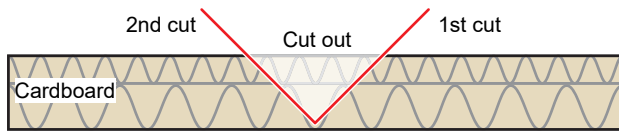
5.8 V-Cutting

Important! • V-cutting is possible only when the cut data consists of straight lines.

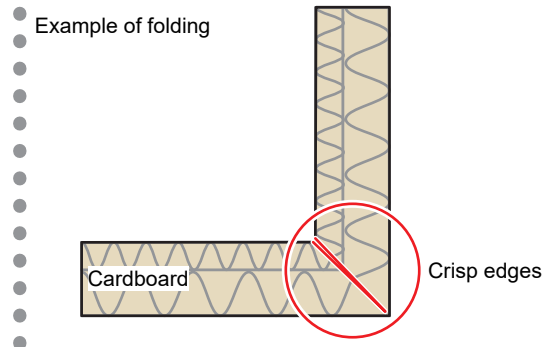
Lightbulb icon: Plotters supporting V-cutting
 • CFX series: Attach the V-cutting tool.

The V-cutting tool can be used to create crisp edges at bends when works such as thick corrugated cardboard are bent.

Example of cutting



Example of folding



• Types of V-cutting

The following methods of V-cutting are available. Choose the method that suits your application.

Type	Simulated image
Single cut	
Double cut	
Triple cut	

Lightbulb icon: • It will be difficult to remove the cut portion if the following double cutting is used when [V Cut Offset] is set. To make removal easier, use triple cutting.

1 Attach the V-cutting tool to the plotter.



- For details on the available area for placing cut data, refer to the plotter operation manual.

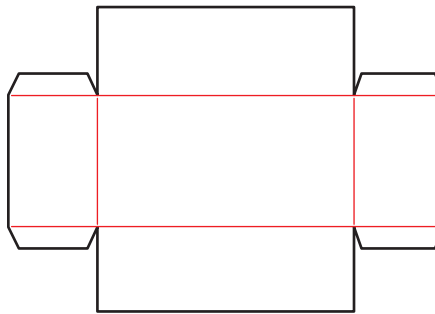
2 Set the work and switch to [Remote] mode.



- For details on how to load the work and using the plotter, refer to the plotter operation manual.

3 Prepare cut data (a DXF file) with CAD software or the like.

- Prepare V-cutting data in a separate layer.
- Example: V-cutting data indicated with red lines



4 Select a V-cut compatible plotter.

- ["Changing the current plotter"\(P. 41\)](#)

5 Check the blade type in the CAMLINK2 database.

- When using for the first time or if the desired blade is not registered, register a new blade. ["Registering Blades"\(P. 48\)](#)

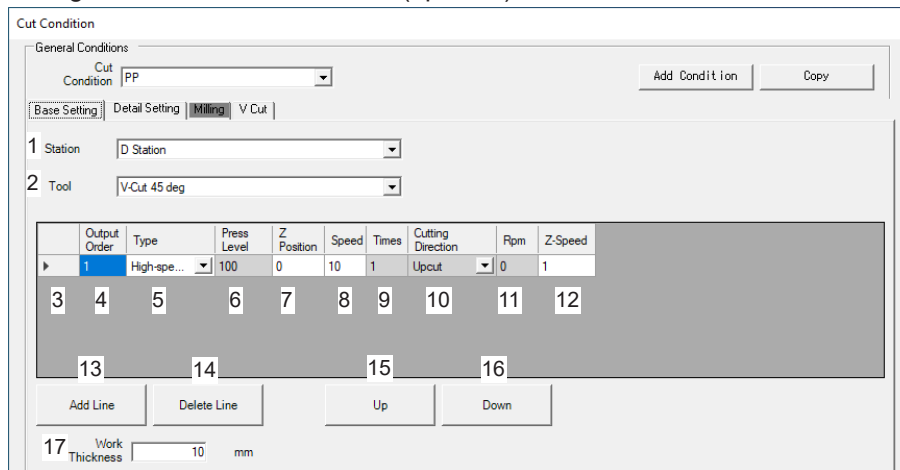
6 Import cut data (a DXF file) into CAMLINK2

- ["Importing Cut Data \(DXF Files\)"\(P. 46\)](#)


7 Configure the cutting conditions and click [OK]. "Setting Cut Conditions"(P. 53)


(1) [Base Setting] tab: Set [Tool] to [V Cut].  "Cut Condition > [Base Setting] tab"(P. 56)

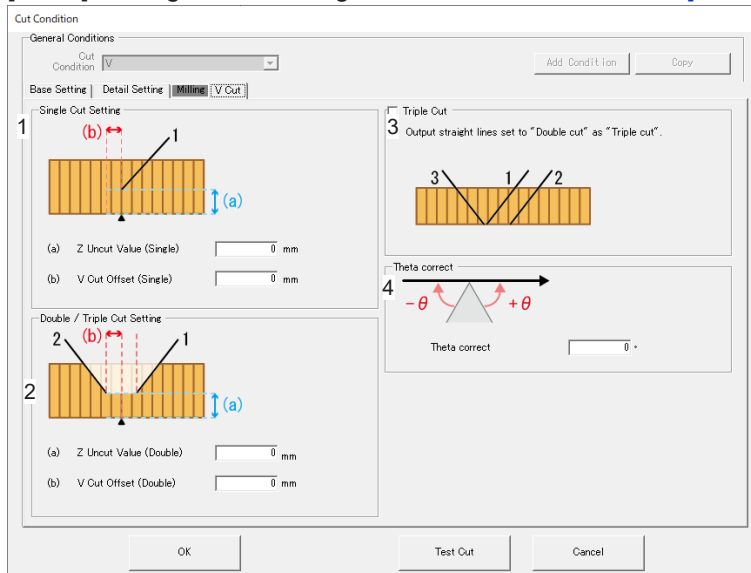
- Configure other items as needed (optional).



	Output Order	Type	Press Level	Z Position	Speed	Times	Cutting Direction	Rpm	Z-Speed
▶	1	High-spe...	100	0	10	1	Upout	0	1
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
	11								
	12								
	13								
	14								
	15								
	16								

(2) [Detail Setting] tab: Configure setting items as needed (optional).  "Cut Condition > [Detail Setting] tab"(P. 59)

(3) [V Cut]: Configure the setting items.  "Cut Condition > [V Cut] tab"(P. 65)




8 Configure layer settings. "Setting Up Layers"(P. 67)

- Select cutting conditions for V-cutting on the V-cutting layer.




If there is no V-cutting layer

- Move the data for V-cutting to a layer for this purpose.  "Moving shapes to other layers"(P. 92)

9 Specify the cutting direction/number of cuts.

-  "Changing line cutting direction"(P. 98)

10 Check the Preview.

- Check the V-cut cut line, direction, and other parameters using Preview before outputting the plot.  "Preview"(P. 72)

11 Send the data to the plotter.

-  ["Sending to a Plotter"\(P. 74\)](#)

5.9 Milling



Plotters supporting milling functions

- CFX series: Attach the milling tool.

Rotating milling tools are used for cutting.

1 Attach the milling tool to the plotter.



- For details on the available area for placing cut data, refer to the plotter operation manual.

2 Set the workpiece and switch to [Remote] mode.



- For details on how to load the work and using the plotter, refer to the plotter operation manual.

3 Select a plotter supporting milling.

- ["Changing the current plotter"\(P. 41\)](#)



4 Check the blade type in the CAMLINK2 database.

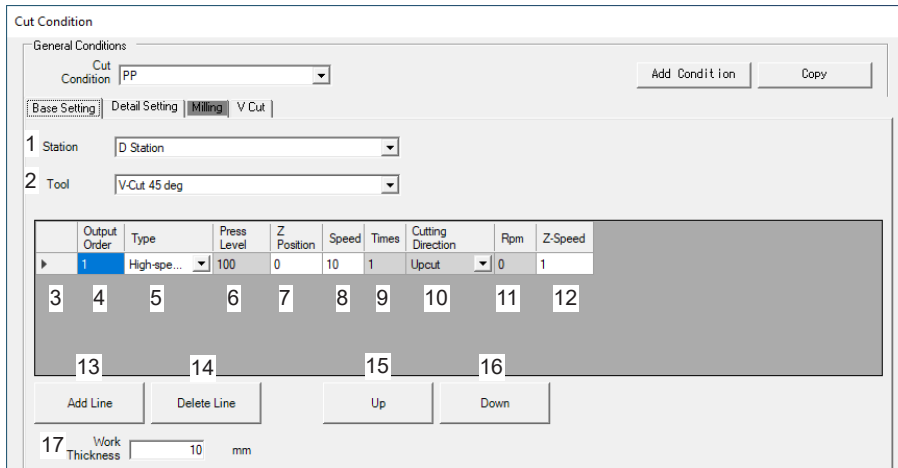
- Register a blade if no blade has been registered. ["Registering Blades"\(P. 48\)](#)

5 Import cut data (a DXF file) into CAMLINK2



- ["Importing Cut Data \(DXF Files\)"\(P. 46\)](#)
- The [Set Database] dialog box is displayed.

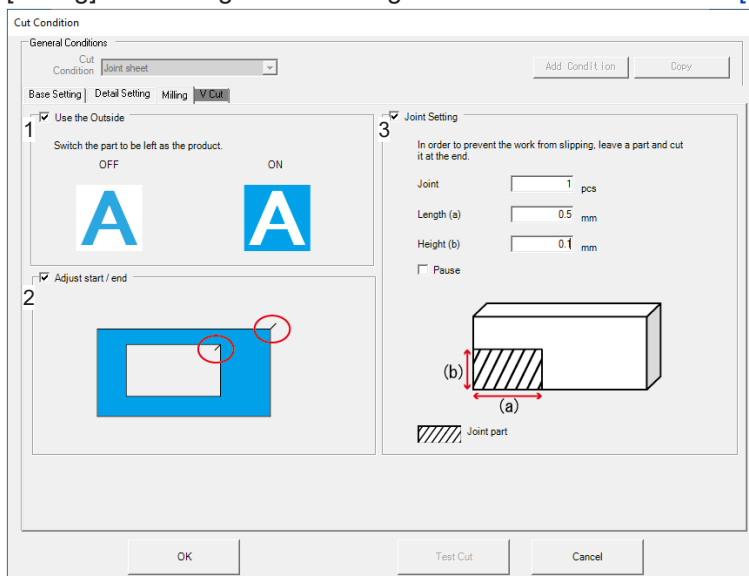
6 Configure the cutting conditions and click [OK]. "Setting Cut Conditions"(P. 53)

-  "Cut thickness with [Joint Setting] configured"(P. 63)
- (1) [Base Setting] tab: Set [Tool] to [Milling].  "Cut Condition > [Base Setting] tab"(P. 56)
 - Set [Cutting Direction], [Rpm], and [Z-Speed].



Output Order	Type	Press Level	Z Position	Speed	Times	Cutting Direction	Rpm	Z-Speed
1	High-spe...	100	0	10	1	Upcut	0	1
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

- Configure other items as needed (optional).
- (2) [Detail Setting] tab: Configure setting items as needed (optional).  "Cut Condition > [Detail Setting] tab"(P. 59)
-
- (3) [Milling] tab: Configure the setting items.  "Cut Condition > [Milling] tab"(P. 60)




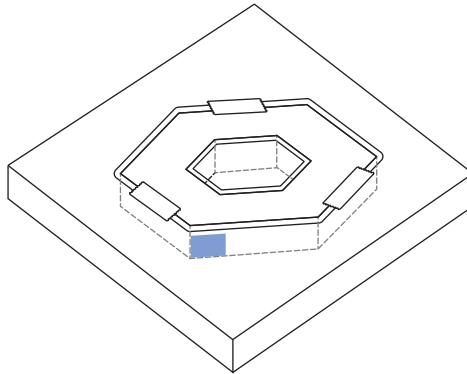
7 Configure layer settings. "Setting Up Layers"(P. 67)

8 Send the data to the plotter.

-  "Sending to a Plotter"(P. 74)



- When the [Pause] check box for [Joint Setting] is selected in  "Cut Condition > [Milling] tab"(P. 60), the head is temporarily retracted to leave end points uncut. After securing the work with tape or the like, press the plotter [Remote] button to resume cutting.

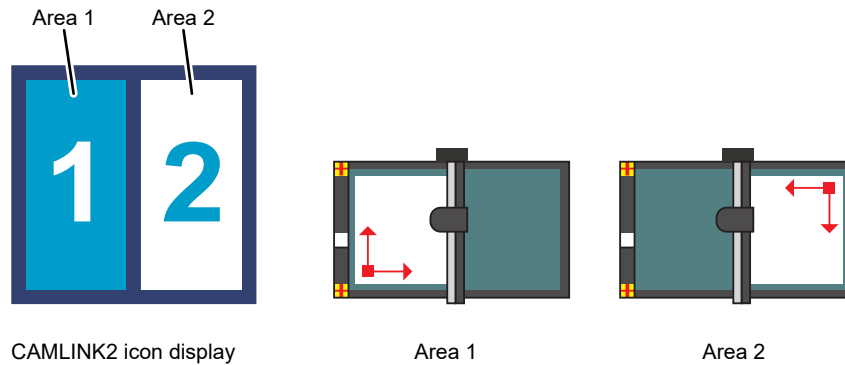


5.10 Toggle Cutting

This function is available on CFX series plotters when an expansion table is connected.

It enables more efficient cutting by dividing the cutting area into two, so that while one area is being cut the other can be prepared for subsequent cutting.

- These divided cutting areas are referred to as Area 1 and Area 2.
- Separate cut data can be sent to each of the two areas.
- Each area is the same size.



- A CFX plotter can be connected to up to two expansion tables. There will be two cutting areas even when two expansion tables are connected.

• Starting cutting in Area 1

1 Prepare cut data with CAD software.

2 Activate toggle cutting on the plotter's operating panel.



- Refer to the plotter operation manual.

3 Load the work on Area 1.



- For details on how to load the work and using the plotter, refer to the plotter operation manual.

4 On the plotter, set the work origin, then enter [Remote] mode.



- Refer to the plotter operation manual.

5 Turn on the vacuum for Area 1.

6 Start CAMLINK2. ["Starting CAMLINK2"\(P. 37\)](#)

7 Confirm that your plotter is selected. ["Checking the current plotter"\(P. 40\)](#)

Important! • If not selected, select your plotter. ["Changing the current plotter"\(P. 41\)](#)

8 Close all open figures.

- 9 Use the toggle button in the menu or select [Setup(&S)] > [Toggle Setting] in the CAMLINK2 menu bar.



- 10 Creates a new figure.
- Make sure the active working space corresponds to the toggle area.
- 11 Check the blade type in the CAMLINK2 database.
- Register a blade if no blade has been registered. ["Registering Blades"\(P. 48\)](#)
- 12 Import cut data (a DXF file) into CAMLINK2 and place it in the toggle area. ["Importing Cut Data \(DXF Files\)"\(P. 46\)](#)
- 13 Set the cut conditions. ["Setting Cut Conditions"\(P. 53\)](#)
- 14 Set the output conditions. ["Setting Up Layers"\(P. 67\)](#)
- 15 Set [Plotter Out] settings. ["Plotter Out"\(P. 74\)](#)
- 16 Click [Start]. ["Sending to a Plotter"\(P. 74\)](#)
- The [Plotter Out] dialog box is displayed.

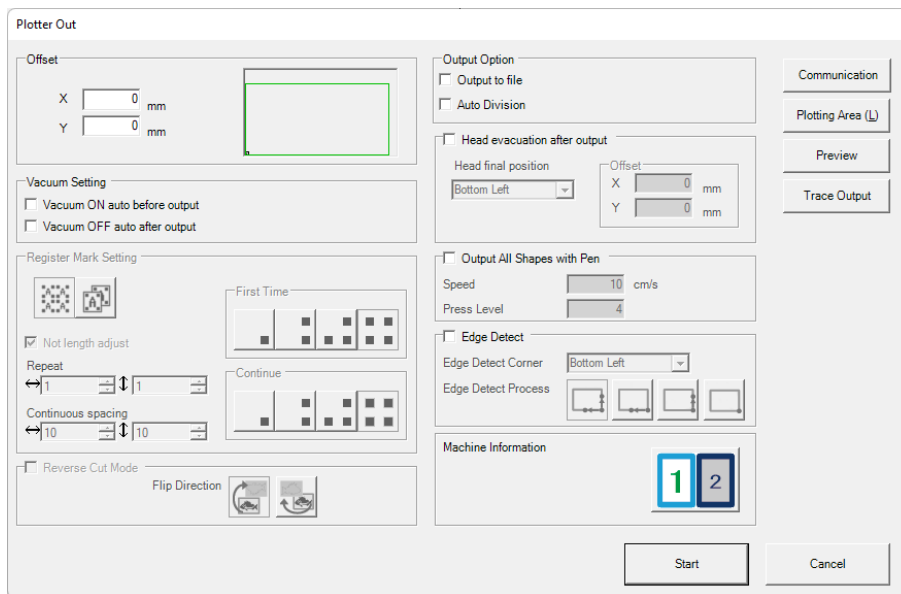
17 Check the output toggle area and click [OK].

- Cutting now begins in Area 1.

Output to Area 1



Output to Area 2



- Next, cutting begins in Area 2.

● Starting cutting in Area 2

1 Load the workpiece on Area 2.



- For details on how to load the work and using the plotter, refer to the plotter operation manual.

2 On the plotter, set the work origin, then enter [Remote] mode.



- Refer to the plotter operation manual.

3 Turn on the vacuum for Area 2.

4 Creates a new figure.

- Make sure the active working space corresponds to the toggle area.

5 Import cut data (a DXF file) into CAMLINK2 and place it in the toggle area. "Importing Cut Data (DXF Files)"(P. 46)

6 Set the cut conditions. "Setting Cut Conditions"(P. 53)

7 Set the output conditions. "Setting Up Layers"(P. 67)

8 Set [Plotter Out] settings. "Plotter Out"(P. 74)

9 Click [Start]. "Sending to a Plotter"(P. 74)

- The [Plotter Out] dialog box is displayed.

10 Check the output toggle area and click [OK].

- Cutting now begins in Area 2.

- If necessary, start the next cutting in Area 1.

Chapter 6 Function Explanation



This chapter

This chapter describes menu functions.

File(&F) Menu.....	128	Setup(&S) Menu.....	133
Edit(&E) Menu	129	Window(&W) Menu	134
View(&V) Menu	131	Changing how windows are displayed.....	134
Output(&O) Menu	132	Help(&H) Menu.....	136

6.1 File(&F) Menu



- Some menus and icons may not be available (grayed out), depending on figure and shape conditions.



Function	Icon	Description	Shortcut keys
New(&N)		Creates a new figure. <ul style="list-style-type: none"> • Multiple figures can be created, but the number of figures you can work with at one time depends on the available computer memory. 	Ctrl+N
Read DXF		Imports cut data (a DXF file) prepared in CAD software into a figure. "Importing Cut Data (DXF Files)"(P. 46)	Ctrl+F
Open(&O)		Opens a figure saved in MDT2 format (an original CAMLINK2 format). Data (MDT format files) created in CAMLINK cannot be opened.	Ctrl+O
Load(&L)	-	Imports an additional figure saved in MDT2 format (a CAMLINK2 format) into the open drawing.	-
Save(&S)		Saves the figure being edited as a file with the same name.	Ctrl+S
Save As...(&A)	-	Saves the figure being edited as a file with a different name.	-
Close(&C)	-	Closes the figure being edited. "Closing figures"(P. 39)	-
Print Setup(&U)	-	Used to specify the printer, paper, and orientation used for output. <ul style="list-style-type: none"> • Full scale: Prints at actual size. • Object fit: Scales the <u>shape</u> to your specified paper size and prints it. • Work fit: Scales the <u>entire figure</u> to your specified paper size and prints it. 	-
Print(&P)	-	Prints the open figure to the printer selected in [Print Setup].	Ctrl+P
Quit(&X) CAMLINK2	-	Quits CAMLINK2. "Quitting CAMLINK2"(P. 38) <ul style="list-style-type: none"> • [Save changes to File?] is displayed if a figure is open. 	Ctrl+Q

6.2 Edit(&E) Menu



- Some menus and icons may not be available (grayed out), depending on figure and shape conditions.

Function	Icon	Description	Shortcut keys
Undo(&U)		<p>Cancels and undoes the last action performed.</p> <ul style="list-style-type: none"> • Only one previous state can be restored. • Changing working layers cannot be reverted. 	Ctrl+Z
Redo(&R)		<p>Redoes an undone action.</p> <ul style="list-style-type: none"> • Only one action can be redone. 	Ctrl+Y
Cut(&T)		Cuts the selected shape.	Ctrl+X
Copy(&C)		Copies the selected shape.	Ctrl+C
Paste(&P)		<p>Pastes the copied (or cut) shape.</p> <ul style="list-style-type: none"> • Shapes are pasted to the layer set as the working layer in the [Layer Setting] dialog box. "Setting Up Layers"(P. 67) • Shapes are pasted in the same position (at the same coordinates) as the original copied/cut shape. 	Ctrl+V
Move(&M)		Moves the selected shape. "Moving shapes"(P. 81)	-
Link Copy(&Y)		Creates a linked copy of a shape, with information in the original and the copy linked. "Creating linked copies of shapes/canceling linkage"(P. 82)	-
Cancel Link Copy	-	<p>Cancels linkage between an original shape and copy, enabling separate editing of cutting conditions etc. "Creating linked copies of shapes/canceling linkage"(P. 82)</p>	-
Rotate(&O)		Rotates the selected shape. "Rotating shapes"(P. 85)	Ctrl+R
Mirror		Flips the selected shape horizontally or vertically. "Horizontally or vertically flipping (mirroring) shapes"(P. 86)	-
Resize(&E)		Resizes the selected shape. "Resizing shapes"(P. 86)	-
Multi Copy(&I)		Creates your specified number of copies of all shapes on the figure, in your specified direction. "Creating multiple copies of shapes"(P. 88)	-
Delete(&D)	-	Deletes the selected shape.	Del
Select All(&A)	-	Selects all shapes on the figure.	Ctrl+A
Group(&G)		Groups selected shapes into a single shape. "Grouping/ungrouping shapes"(P. 89)	Ctrl+G
Ungroup(&N)		Ungroups grouped shapes. "Grouping/ungrouping shapes"(P. 89)	-
Disassemble the Shape(&V)	-	Disassembles selected shapes into line segments. "Disassembling shapes"(P. 90)	-
Comment Parameters		Used to enter text on figures. "Entering comments"(P. 90)	Ctrl+T

Function	Icon	Description	Shortcut keys
Move Layer	-	Moves selected shapes to another layer that you specify.  "Moving shapes to other layers"(P. 92)	-
Group by layer	-	Groups shapes together by layer.  "Grouping by layers"(P. 92)	-

6.3 View(&V) Menu












- Some menus and icons may not be available (grayed out), depending on figure and shape conditions.

Function	Icon	Description	Shortcut keys
Grid(&G)	-	Displays a grid with your specified pitch. "Showing/canceling the grid"(P. 93) <ul style="list-style-type: none"> • A "G" (for "grid") in the upper left of the figure indicates that the grid is enabled. 	-
Zoom In(&I)		Magnifies the figure. <ul style="list-style-type: none"> • Operation <ul style="list-style-type: none"> – Click: Doubles image magnification, centered on the clicked position. – Drag: Magnifies the area of the figure you drag. • To cancel zooming in/out <ul style="list-style-type: none"> – Right-click to cancel. 	-
Zoom Out(&O)		Reduces the figure. <ul style="list-style-type: none"> • Operation <ul style="list-style-type: none"> – Click: Reduces image magnification to 2/3, centered on the clicked position. – Drag: Reduces display by an amount calculated from the area you drag. • To cancel zooming in/out <ul style="list-style-type: none"> – Right-click to cancel. 	-
All Shape(&S)		Magnifies all shapes in the layout to fit the screen size.	Ctrl+H
Work Space(&W)		Displays the entire working area or active working space. If work size settings have not been set, the active working space is displayed.	Ctrl+M
Redraw	-	Refreshes figure display.	F5
Move Screen(&M)	-	Moves the screen.	-
Point(&P)		Moves the screen by a distance corresponding to source and destination points you click on the figure. You can also specify source and destination coordinates in the coordinate panel.	-
Left(&L)	-	Moves the screen left.	←
Right	-	Moves the screen right.	→
Up(&U)	-	Moves the screen up.	↑
Down(&D)	-	Moves the screen down.	↓

6.4 Output(&O) Menu



- Some menus and icons may not be available (grayed out), depending on figure and shape conditions.

Function	Icon	Description	Shortcut keys
Plotter Out(&P)		Sends figure data with your specified cutting conditions to a plotter.  "Sending to a Plotter"(P. 74)	-
Display(&S)	-	Used to check the output order for shapes. --- リンクがありません ---	-
Shapes Order(&O)	-	Used to check the output order for grouped shapes.  "Changing/resetting grouped shape output order"(P. 96)	-
Initially Order(&I)	-	Restores grouped shapes to the state after importing.  "Changing/resetting grouped shape output order"(P. 96)	-
Line Order(&L)	-	Changes the output order for line segments.  "Changing line segment output order"(P. 97)	-
Line Direction(&V)	-	Changes the cutting direction/number of cuts (only for V-cut compatible plotters) for line segments.  "Changing line cutting direction"(P. 98)	-
Line Division(&D)	-	Divides line segments and cuts from the opposite end.  "Dividing line segments"(P. 99)	-
Cutting Start Position(&T)	-	Changes where line segment cutting begins.  "Changing the cutting start position"(P. 100)	-
Send a Spool File(&F)	-	Sends data saved in Plot Command File Format (*.PLT,  "Plotter Out"(P. 74)) to a plotter.	-

6.5 Setup(&S) Menu



- Some menus and icons may not be available (grayed out), depending on figure and shape conditions.

Function	Icon	Description	Shortcut keys
Detect Mark/Exit Detection		Starts or stops detection of registration marks. "Detecting registration marks"(P. 104)	-
Work Size/ Remove Work Space(&W)		For configuring the shape and size of the space for your work. "Setting Up work space"(P. 94)	Ctrl+W
Cut Condition(&D)	-	For setting cut conditions to suit the work material and other details. "Setting Cut Conditions"(P. 53)	Ctrl+D
Environment(&V)	-	For configuring tool settings. Plotters can be set when a figure is not open. "Configuring the environment"(P. 33)	-
Set Database(&A)	-	Blades and cut condition names can be registered in the database. "Registering Blades"(P. 48)	-
Database Backup(&B)	-	Manually backs up the database. <ol style="list-style-type: none"> 1. Specify a destination folder and enter a file name. 2. Click [Save]. <ul style="list-style-type: none"> • Selecting a folder that already contains backup files will overwrite the files. If you prefer not to overwrite files, be sure to select a different folder. • For details on automatic database backup, see "Database Backup" in the following section. "[Environment Setup] > [Other] tab"(P. 36) 	-
Layer Setting	-	For changing the working layer and actions such as naming, renaming, and deleting layers. "Setting Up Layers"(P. 67)	Ctrl+L
Toggle Setting		Divides the cutting area into two to improve cutting efficiency. "Toggle Cutting"(P. 122)	-

6.6 Window(&W) Menu



- Some menus and icons may not be available (grayed out), depending on figure and shape conditions.

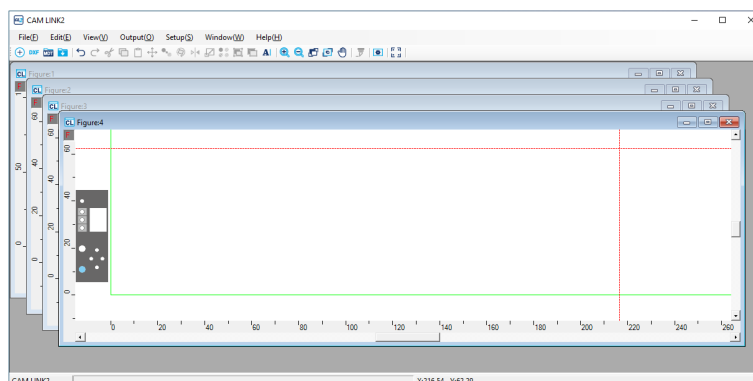
Function	Icon	Description	Shortcut keys
Cascade(&C)	-	Displays all open figures as a cascaded stack of figures. "Changing how windows are displayed"(P. 134)	-
Tile(&H)	-	Arranges all open windows for viewing at the same time. "Changing how windows are displayed"(P. 134)	-
Arrange Icons(&A)	-	Arranges icons to the lower left (only applies to minimized figures). "Changing how windows are displayed"(P. 134)	-
Figure names	-	The names of all open figures are listed at the bottom of the menu. Click a figure name to access the figure.	-

Changing how windows are displayed

Change figure window display as follows.

● Cascaded display

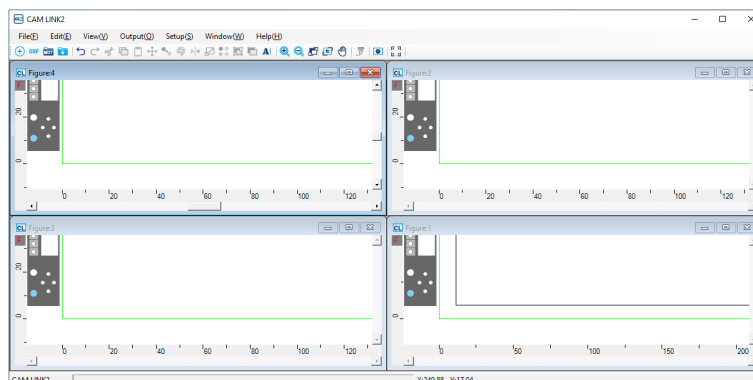
To display all open figures as a cascaded stack of figures, select [Window(&W)] > [Cascade(&C)].



● Tiled display

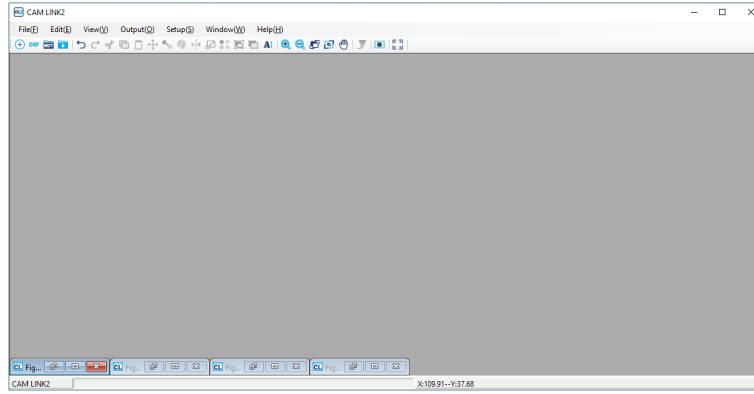
You can arrange all open windows for viewing at once.

For tiled display of all open figures, select [Window(&W)] > [Tile(&H)].



- **Icons arranged in the lower left (only applies to minimized figures)**

To align icons to the bottom left, select [Window(&W)] > [Arrange Icons(&A)].



- **Displaying your preferred figure in front**

The names of all open figures are listed at the bottom of the menu when you click the [Window(&W)] menu. Click a figure name to display that figure in front.

6.7 Help(&H) Menu

Function	Icon	Description	Shortcut keys
CAMLINK2 Info(&A)	-	Shows CAMLINK2 version information.	-
Manual	-	Shows a URL where the manual is available.	-

Chapter 7 Troubleshooting



This chapter

This chapter provides troubleshooting tips.

Troubleshooting by case example.....	138	How to deactivate the license if the computer fails	139
Files cannot be imported, or the database cannot be opened	138	Uninstallation.....	140
CAMLINK2 does not start	138	Deactivating the license	140
Cannot send data to a plotter.....	138	Deactivation from the [License activation] menu	140
Forgot to deactivate the license	138	When the CAMLINK2 computer has no internet access.....	141
Lost the serial key	138	Uninstallation	144

7.1 Troubleshooting by case example

If an issue persists even after you take the corrective action, contact your local dealer or our service office.


Files cannot be imported, or the database cannot be opened

- Restart CAMLINK2.  ["Starting CAMLINK2"\(P. 37\)](#)

CAMLINK2 does not start

- Run the Windows Task Manager and see if CAMLINK2 is running. If CAMLINK2 is running, the CAMLINK2 window might be displayed outside the viewable area of your monitor.


Cannot send data to a plotter

- Make sure the plotter is correctly connected to your computer.
- Confirm that [Default plotter] is set to the plotter you will use.  ["\[Environment Setup\] > \[Plotter\] tab"\(P. 33\)](#)



Forgot to deactivate the license

You can activate the license as many times as you wish on the first computer where you activated the license, unless you activate the license on another computer.

● To use CAMLINK2 on the same computer

- (1) Reinstall CAMLINK2.
- (2) Start the license activation and enter the same serial key.
 - The license is reactivated.  ["License Activation"\(P. 17\)](#)

● To use CAMLINK2 on a different computer

- (1) Deactivate the license online.
 -  ["How to deactivate the license if the computer fails"\(P. 139\)](#)
- (2) Install CAMLINK2 on another computer.
- (3) Start the license activation and enter the serial key for the license you deactivated in step (1).
 -  ["License Activation"\(P. 17\)](#)

Lost the serial key

- The serial key has been lost
 - The license key will be displayed after you deactivate and reactivate the license. Make a note of the license key displayed.
- After I deactivated the license, I realized I didn't have a serial key
 - The computer will retain serial key information provided the [Delete the serial key information] check box on the [Deactivation] screen is unchecked when deactivating the license.



Details on [Delete the serial key information]

- If unchecked (default):
The license is deactivated while keeping serial key information. When the license is reactivated, it will be displayed as originally entered.
- If checked:
All serial key information is deleted.

7.2 How to deactivate the license if the computer fails

If you cannot follow the normal license deactivation process and use CAMLINK2 on another computer, you can deactivate the license as follows.

Important!

- If you can use the normal license de-activation process, do not use this function. CAMLINK2 may not be able to work properly.
☞ "Deactivating the license"(P. 140)

- 1 Open a web browser and visit the following page.**
 - <http://miws.mimaki.jp/license/agencytop.aspx>
 - The license activation screen appears.
- 2 Click [Deactivation (When the PC broken)].**
- 3 In the serial-key-entry form, enter the serial key for the activated license.**
- 4 Click [Deactivation].**
 - The deactivation of the license is now completed.

7.3 Uninstallation

When CAMLINK2 is no longer needed or you wish to install it on another computer, deactivate the license before uninstalling CAMLINK2.



Important!

- Unless you deactivate the license first, you will not be able to activate the license when installing CAMLINK2 on another computer, which will prevent you from using CAMLINK2.

Deactivating the license

● How to deactivate your license


The license can be deactivated as follows.

- On a computer connected to the internet
 -  ["Deactivation from the \[License activation\] menu"](#)(P. 140)
- On a computer not connected to the internet
 -  ["When the CAMLINK2 computer has no internet access"](#)(P. 141)

Deactivation from the [License activation] menu

1 From the Windows [Start] menu, select [All apps] > CAMLINK2] > [License Activation].

2 Click [Next].

- The software connects to the server to deactivate the license.
- If using a proxy server, this will need configuring.  ["When using a proxy server"](#)(P. 19)



Details on [Delete the serial key information]

- If unchecked (default):
The license is deactivated while keeping serial key information. When the license is reactivated, it will be displayed as originally entered.
- If checked:
All serial key information is deleted.



- If using a personal firewall, a connection confirmation screen may appear. If the connection confirmation screen appears, allow the connection.

3 Click [Complete].

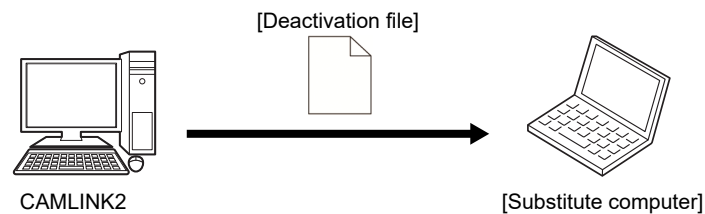


When the CAMLINK2 computer has no internet access

1 Create a deactivation file

- ["Creating the deactivation file"\(P. 141\)](#)

2 Copy the deactivation file to a computer with internet access.



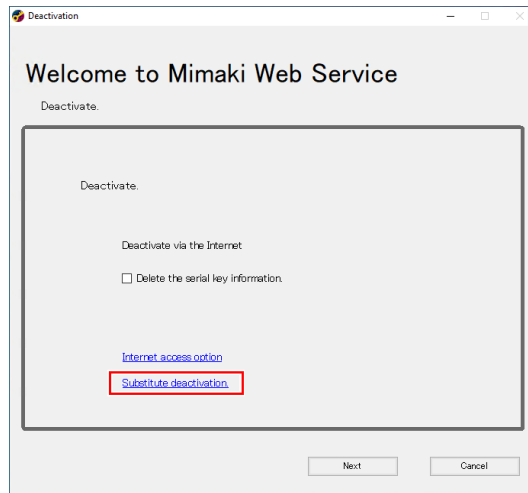
3 Deactivate the license.

- ["Deactivating the license"\(P. 143\)](#)

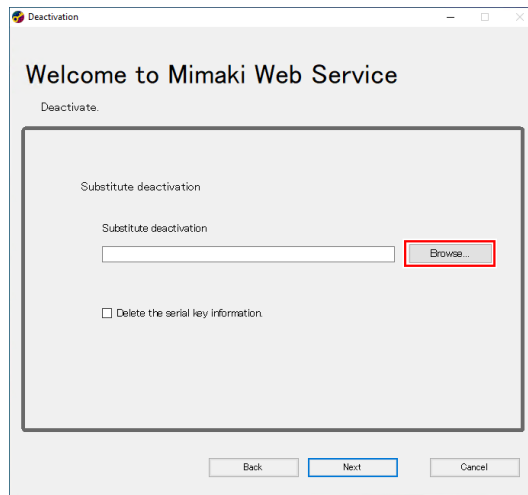
Creating the deactivation file

1 From the Windows [Start] menu, select [All apps] > CAMLINK2 > [License Activation].

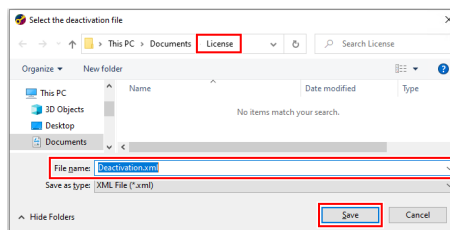
2 Click [Substitute deactivation].



3 Click [Browse].



4 Specify a storage location and name for the file to save.



5 Click [Save].

6 Click [Next].

- The deactivation file is created.

**7** Click [Complete].

- Keep the deactivation file in a safe place. If you lose the file before license deactivation, you will be unable to use CAMLINK2 on another computer.

Deactivating the license**1** Access the following URL to display the activation page.

- <http://miws.mimaki.jp/license/agencytop.aspx>

2 Click [Deactivation].

Activation
If you have the activation file by Substitute License Activation.

Activation

Deactivation
If you have the deactivation file by Substitute License Deactivation.

Deactivation

Deactivation (When the PC broken)
Can not deactivation because the PC running RasterLink/MPM/Simple POP is broken.

Deactivation
(When the PC broken)

3 Click [Select File].

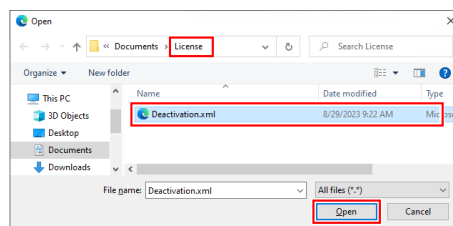
Please select the deactivation file created on RasterLink/MPM/Simple POP.

Choose File No file chosen

Deactivation

4 Select the license deactivation file you created and click [Open].

-  ["Creating the deactivation file"\(P. 141\)](#)



5 Click [Deactivation].

- The license is deactivated.

Please select the deactivation file created on RasterLink/MPM/Simple POP.

Choose File Deactivation.xml

Deactivation

Uninstallation



- Uninstall the software as a user with administrator privileges.
- Uninstalling the software will clear all CAMLINK2 settings. Before uninstalling, confirm the following.
 - (1) CAMLINK2 is not running.
 - (2) The CAMLINK2 database is not open.
 - (3) The license for CAMLINK2 has been deactivated.

1 In the Windows [Start] Menu, click [Settings].


2 Click [Apps] > [Apps & features].

3 Select [CAMLINK2] in the [Apps & features] list, and then click [Uninstall].

4 Click [Uninstall].

- Uninstallation starts.

Important!

- If you have not deactivated the license, the screen to prompt you to do so appears. When you click [Yes], the [Deactivation] screen appears.  ["Deactivating the license"\(P. 140\)](#)
- If you click [No], uninstallation continues without license deactivation.

5 Click [Complete].

Index

A

Active Working Space	34
Add	88
Add Layer	69
All Shape	131
Allowable Point	36
Arrange Icons	134
Auto Division	75

B

Baud rate	35
Blade	56, 59

C

CAMLINK2 Information	136
Cancel Link Copy	129
Canceling shape selection	80
Cascade	134
Cell for selecting the row	56
Circle Theta correct	59, 66
Close	128
Column	88
Comment Parameters	129
Communication	75
Connection Plotter	35
Coordinate panel	27
Copy	129
Square registration mark	104
Correction	49, 75
Cut	129
Cut Condition	53, 59, 69, 133
Cutting Direction	57, 72, 120
Cutting Order	72
Cutting Start Position	132

D

Data bits	35
Database Backup	36, 133
Default plotter	33
Delete	88, 129

Delete Layer	69
Detect Mark	133
Diameter	49
Disassemble the Shape	129
Display	132
Display Setting	72
Down	131
E	
Edge Detect	75
Edge Detect Corner	76
Edge Detect Process	76
End Position	72
Environment	133
Exit Detection	133
F	
Figure names	134
Freely placeable registration mark	104
G	
Grid	131
Grid mark	27
Group	129
Group by layer	92
H	
Head evacuation after output	75
Height	49
Horizontal	74
I	
Initially Order	132
Inner/outer registration mark	104
IP Address	35
L	
Layer	
Color	68
Layer Name	69
Layer output order	
Down	69
Up	69
Layer Setting	133

Left	131
Line Direction	132
Line Division	132
Line Order	132
Link Copy	129
Link Copy Numbers:	88
Link Copy Times:	88
Load	128

M

Machine information	54
Menu bar	27
Message area	27
Milling	60, 119
Min Arc Radius	59
Min Diameter	59
Minimum Straight Line	49
Mirror	129
Move	72, 129
Move Layer	130
Move Screen	131
Multi Copy	129

N

Name	49
New	128
Number of cut for small circle	60

O

Offset	74
Offset X	88
Offset Y	88
Open	128
Origin	34
Output All Shapes with Pen	75
Output layer	68
Output Order	56, 68
Output to file	75
Over Cut	75

P

Parity	35
Paste	129

Plotter Out	132
Plotter communication port.....	35
Plotting area	75
Point	131
Port.....	35
Pressure	59
Pressure (Press Level).....	56
Preview.....	72, 75
Print	128
Print Setup.....	128

Q

Quit.....	128
-----------	-----

R

Read DXF.....	128
Redo.....	129
Register mark	
Detections for the second and subsequent times	77
Continuous mode.....	77
Continuous spacing.....	77
Detections for first time	77
Length adjust.....	77
Mill end mode.....	77
Repeat.....	77
Register Mark Setting	74
Rename Layer.....	69
Repeated cutting	57, 58
Resize	129
Reverse Cut Mode	74
Right.....	131
Rotate.....	129
Rpm.....	57, 120
Rulers	27

S

Save	128
Save As	128
Scroll bars	27
Select All	129
Send a Spool File.....	75, 132
Set Database.....	133
Shape Size	88
Shapes Order	132

Show layer.....	68
Show Original	72
Simulation.....	72
Space X.....	88
Space Y	88
Speed	57, 59
Start Position	72
Station	59
Stop bit	35

T

Tile.....	134
Times.....	57
Toggle Setting	133
Tool	56, 59, 120
Tool attachment.....	56
Tool Position.....	72
Tool Setting	54
Toolbar	27
Total	88
Trace Output	75
Triple Cut.....	66
Type	49

U

Undo.....	129
Ungroup.....	89, 129
Uninstallation.....	140
Up.....	131
Use XON/XOFF parameters	35

V

V Cut	65, 115
V Cut Offset.....	65, 66
V Cut Path	72
Vacuum setting.....	74
V-cut tool angle	66
Vertical	74

W

Width	49
Work Size	133
Work Space.....	131

Work Thickness	57
Working area	88
Working layer	68

Z

Z Position	56, 58
Z setting procedure	34
Z Uncut Value	65, 66
Z Uncut Value and V Cut Offset	66
Zoom In	131
Zoom Out	131
Z-Speed	57, 120

CAMLINK2 ReferenceGuide Draft

March,2024

MIMAKI ENGINEERING CO.,LTD.
2182-3 Shigeno-otsu, Tomi-shi, Nagano 389-0512 JAPAN

D203660-10-11032024

