

New Roll to Roll cutting plotter

“Stay sharp” More profit per cut

CG-AR Series CUTTING PLOTTER

CG-60/100/130 AR

Product Guide



MIMAKI ENGINEERING CO.,LTD.

SG Marketing Group

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This content is subject to change without notice due to technical improvements, etc.

Main Feature of CG-AR Series

1. Highroad of cutting plotter with stable functionality

- Cut functions of CG-AR Series to meet a variety of needs
- Clamp pressure can be changed between two levels to match the media

2. An evolved cutting plotter

- Highest cutting pressure in its class of 550g
- Maximum cutting speed: 105% faster than previous models
- Addition of a thick paper cutting option for creation of paper crafts and packages up to A3 size
- Standard pinch roller that can be raised and lowered in the center for more stable cutting
- Increased flexibility in sheet setting by reviewing clamp fixing points
- Additional grit roller support for stable transport (CG-60AR only)

3. Improved cutting efficiency

- Saving labor cost and efficient Print & Cut with ID Cut function
- Ethernet support for a free and efficient work environment
- Remote control to allow operation of the unit from a distance with your smartphone

4. More advanced usability

- Windows plotter driver supported! Easy to operate for first time users
- Design with usability in mind

System Configurations

PC



Connection

Ethernet and USB2.0 cable of 5m is recommended



Recommended specifications

OS: <Windows> Microsoft® Windows® 7/8.1/10/11
<Macintosh> Mac OS X 10.7.5~10.11
MacOS 10.12~11

Software: Adobe® Illustrator®
CS6/CC/CC2014/CC2015/CC2015.3/
CC2017/CC2018/CC2019/2020/2021/2022

Design Software



NEW



- Compatible format PS, EPS, TIFF, BMP, JPEG, PDF etc.
- PC, initial ink cost, transportation cost, installation cost, training cost, etc. are not included.
- CorelDRAW is only compatible with the overseas version of FineCut.

CG-AR Series System Configuration

CG-60/100/130 AR



Standard price

CG-60AR:

CG-100AR:

CG-130AR:

- Stand: Option of CG-60AR
Standard equipment of CG-100/130AR
- Sheet basket: Option of CG-60/100/130AR

<Software of CG-AR Series> Bundled

fine Cut/Coat 9 for Illustrator®

fine Cut/Coat 9 for CorelDRAW™



Option/Supply NEW

- OPT-C0242 Sheet table (1 set)
- SPC-0888 Cutting sheet (2 sheets / 1 set)
- OPT-C0243 Creasing (1 piece)
- SPB-0092 Cutter for Heavy paper (3 pcs/set)

Application examples of CG-AR Series

Sticker



Label



Car Film



POP



Sign board



Traffic sign



Window sign



Wall sign



Iron rubber



Pen Plotting



NEW

Papercraft



NEW

Package

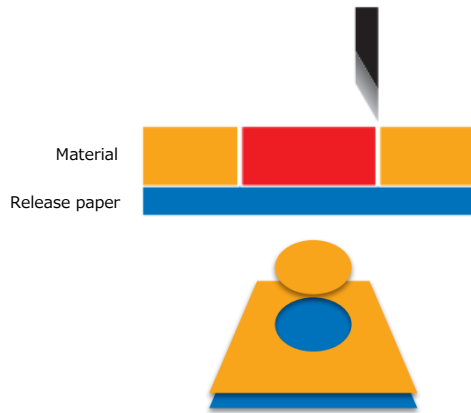


1. Highroad of cutting plotter with stable functionality

Cut functions of CG-AR Series to meet a variety of needs (1-1)

● Normal Cut, Die Cut, Half Cut

【Normal Cut】



Cut leaving the base paper.

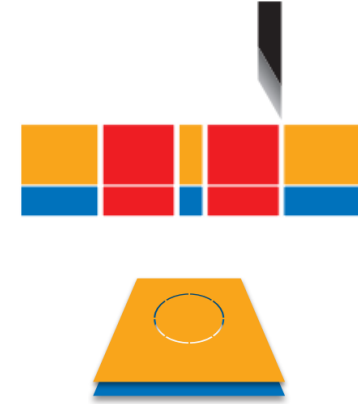
NEW

【Die Cut】



The base paper is also cut so that it can be cut out along with the design.

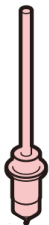
【Half Cut】



Cuts while leaving a small seam. Can be used to cut sticker contours and create POP folds.

● Plotting pen, Creasing

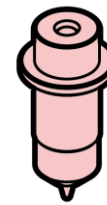
【Plotting pen】



Accurate pen drafting for detailed architectural designs etc.

NEW

【Creasing】



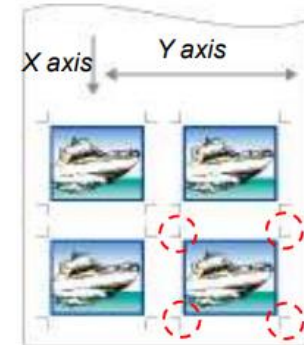
To draw fold line on thick paper

1. Highroad of cutting plotter with stable functionality

Cut functions of CG-AR Series to meet a variety of needs (1-2)

● Continuous Crop Mark Detection

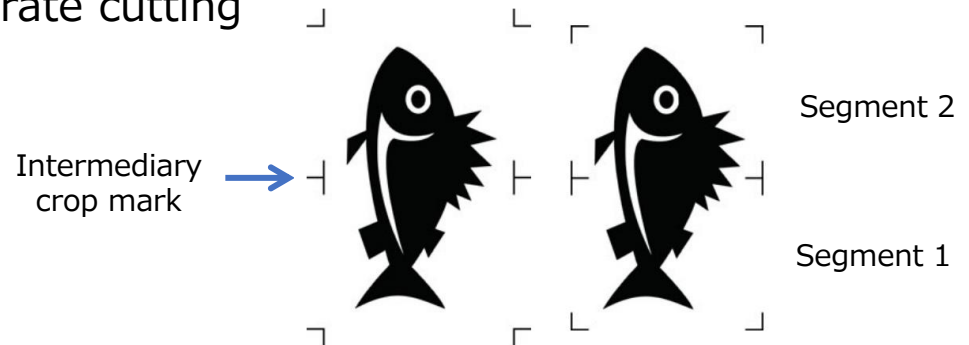
- A maximum of four crop marks are automatically and continuously detected so that printed images are accurately cut.
- Media can be cut efficiently without waste.



Continuous Crop Mark Detection

● Segment Compensation

Reads intermediate marks and corrects each segment before cutting, enabling accurate cutting without deviation even for long data.

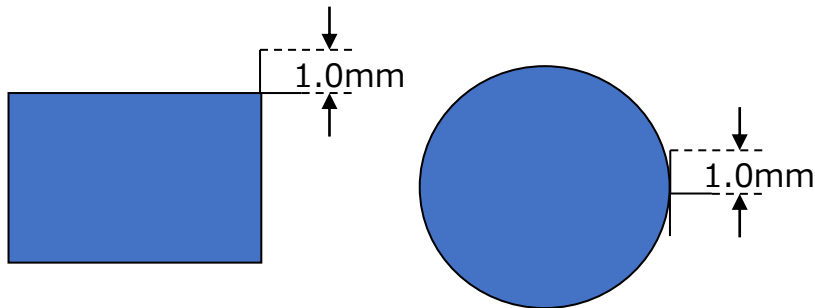


1. Highroad of cutting plotter with stable functionality

Cut functions of CG-AR Series to meet a variety of needs (1-3)

【Over cut】

By overlapping the start and end points of the cut, even thick or sticky media can be cut without leaving any residue.

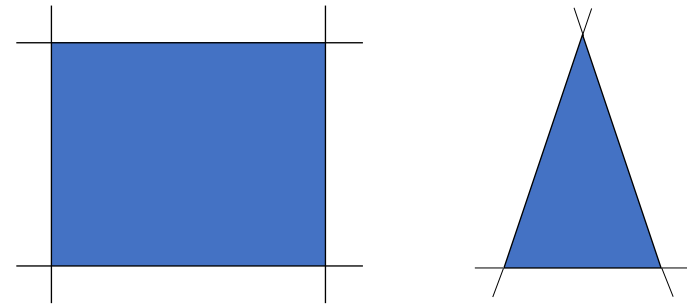


If an over cut length is specified, the tool will automatically add an extra length of cut at the beginning and the end of it.

(setting values: OFF, 0.1~1.0mm)

【Corner cut】

When cutting data that contains sharp corners, the edges can be cut sharply.



Not only the start and end point, but all corners have an extra length cut. Ideal for sharp edges.

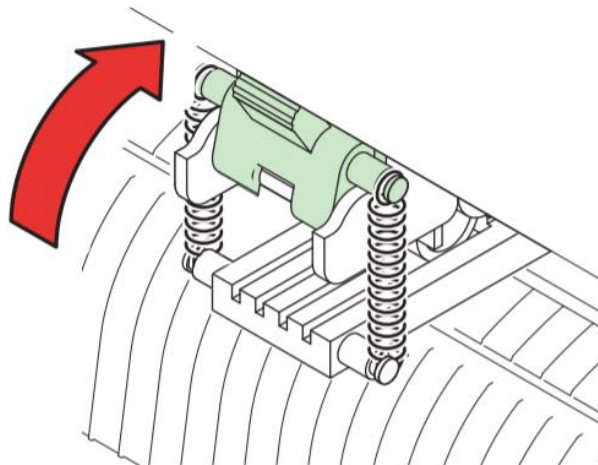
1. Highroad of cutting plotter with stable functionality

Clamp pressure can be changed to match the media

Two-stage-pressure switching structure to expand the range of usable sheets. Can be set to suit the application to improve cutting accuracy.

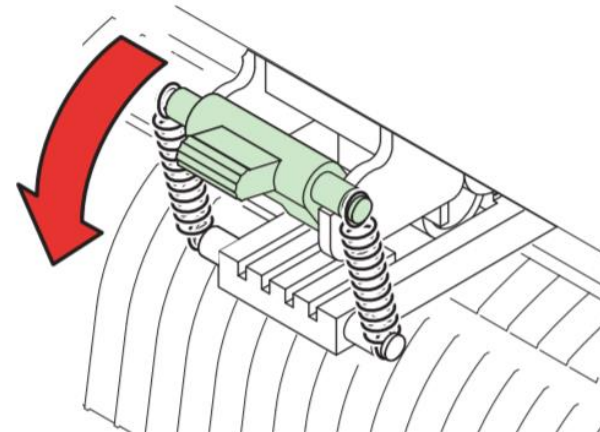
- High mode: For heavy-weight sheet of media (70 kg or 81g/m² or more) is used.
- Low mode: To minimize the impression of the pinch rollers on the sheet of media.

High mode



Raise the clamp pressure lever.

Low mode



Lower the clamp pressure lever.

2. An evolved cutting plotter

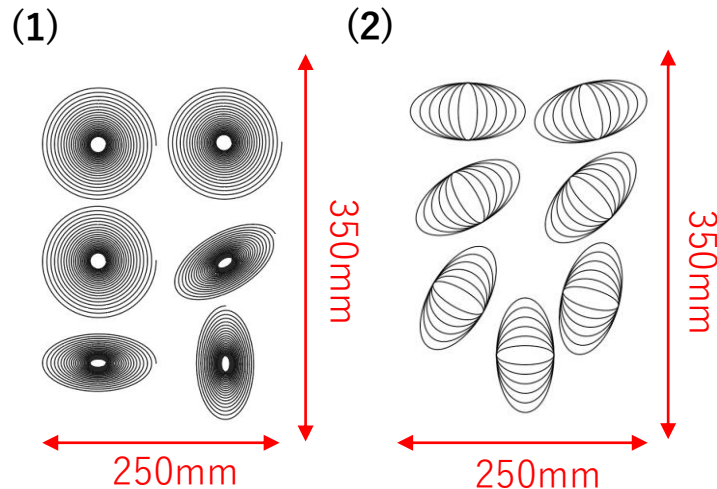
NEW Highest cutting pressure in its class of 550g

With a cutting pressure of 550g, the range of materials that can be cut is expanded.

CG-AR Series can also cut out cardboard, coated cardboard, etc.

NEW Maximum cutting speed: 105% faster than previous models

- Maximum cutting speed is higher than ever before, further improving productivity.



(1), (2) Data cut verification at maximum speed and other conditions are same.

Data	Item	CG-60/100/130AR Mimaki (73cm/s)	CG-60/100SRIII Mimaki (70cm/s)
(1)	Cut Time	57 seconds	58 seconds
(2)	Cut Time	33 seconds	35 seconds

Up to 2 seconds faster

*It may vary depending on the cut data.

2. An evolved cutting plotter

NEW Addition of a thick paper cutting option for creation of paper crafts and packages up to A3 size

- CG-AR Series can cut out cardboard by adding optional products for cardboard cutting.

(1) Sheet table (2) Cutting Sheet (3) Cutter for Heavy paper (4) Creasing tool

Sheet
Adhesive surface
Mounting paper

420 mm
297 mm

Paper Craft Paper Illustration

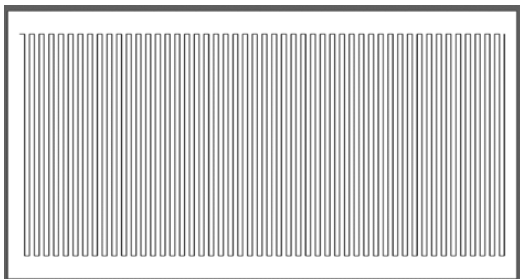
Figure Bookmark Package

Good for paper crafts and packages!

2. An evolved cutting plotter

● Coated Board Cut Verification Results *

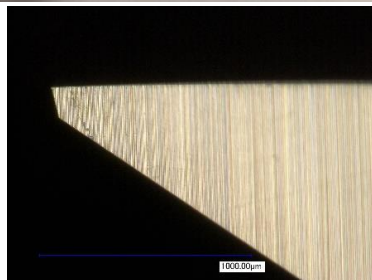
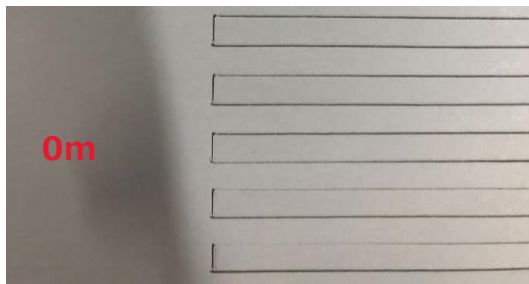
·1,500m (25m/sheet x 60 sheets) cut verification of the following data.



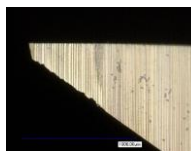
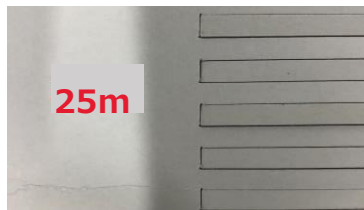
【Cutting conditions】

- Speed 20cm/s ·Pressure 400gf ·Offset 0.75mm
- 0.8mm blade projection ·100% up height
- Sheet setting Heavy

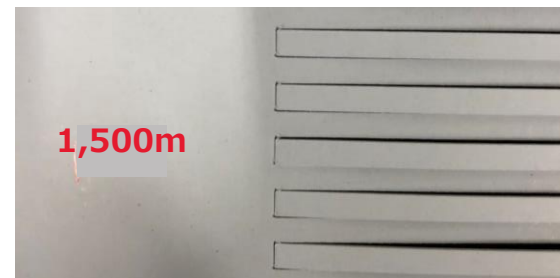
【Before cutting】



Blade wear begins at 25m



【 60 sheets After cutting 】



After 1,500m of cutting, there is wear,
but the above level of cutting is possible.

The corners are a bit obtuse.

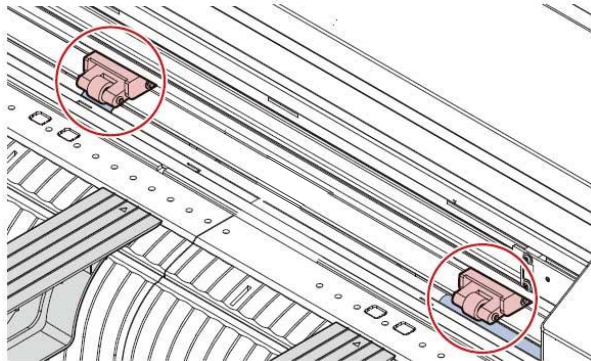
For cut line data of 3m or less per sheet, over 500 sheets of A3 size can be cut.*

***The above information is based on our own evaluation and does not guarantee the quality.**

2. An evolved cutting plotter

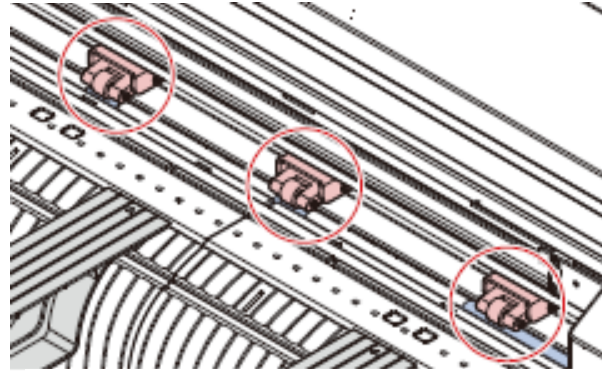
NEW Standard pinch roller that can be raised and lowered in the center for more stable cutting

CG-60SR III

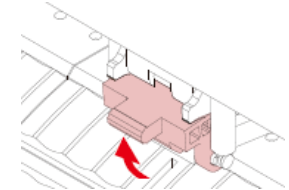


2 pinch rollers are equipped

CG-60AR



3 pinch rollers are equipped



Center Pinch Roller OFF



Center Pinch Roller ON

- This center pinch roller can be raised or lowered depending on sheets.
- Capable of stably transporting sheet of different thicknesses and sheet that are difficult to transport.

[Advantages of using a lowered center pinch roller]

- Prevents misalignment of cuts - Enables stable transport

[Advantages of using a raised center pinch roller]

- Leaves no marks on the sheet - Can be used to prevent the sheet from floating

2. An evolved cutting plotter

NEW Increased flexibility in sheet setting by reviewing clamp fixing points

CG-60SRIII



3 Pinch roller placement areas are equipped.

+ 1
➔

CG-60AR



4 Pinch roller placement areas are equipped.

Plotter Size	CG-SRIII Series	CG-AR Series
600mm	3 places	4 places
1,000mm	6 places	8 places
1,300mm	8 places	10 places

Up to two additional grit rollers allow for greater flexibility in seat sets.

3. Improved cutting efficiency

NEW Saving labor cost and efficient Print & Cut with ID Cut function

■ It prevents mistakes in post processing

- With the ID Cutting function, set the media printed with JV100 Series to CG-AR Series and read the register marks to automatically start cutting. It reduces the labor of checking media set direction, and sending cutting data, also saves sending a wrong data.

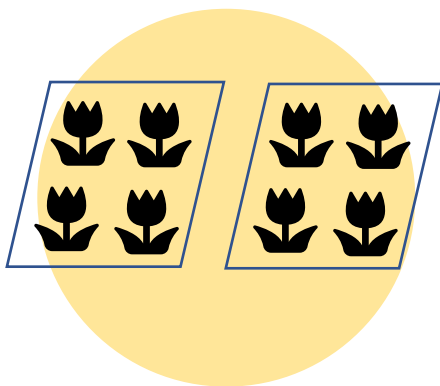


【ID Cut (with RasterLink 7)】

An ID that records cut and rotation information is printed at the same time around the job. When the crop mark sensor reads the ID, it requests the cut data information from the PC and starts cutting automatically. Since the ID is printed in four directions, the machine recognizes the orientation of the media and cuts it correctly no matter which way it is set.

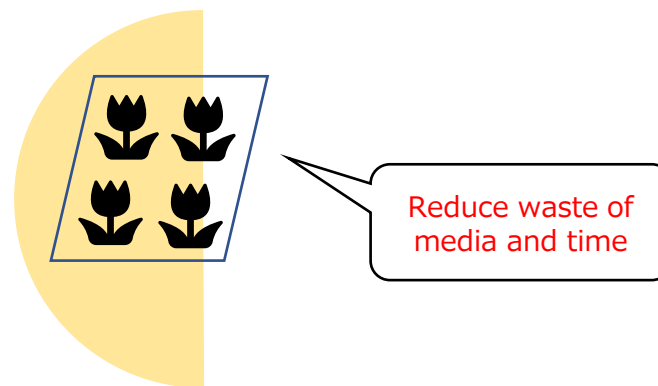
Conventional operation

- A careful confirmation of media set direction is required after laminating.
- If cut mistake occurs, reprint is necessary. Operator often prints extra numbers for precaution.



CG-AR Series

- No fear to set the direction of media.
- Not any extra prints are necessary for the care of mistake. ⇒ Reduce extra media and operation time



* If you use ID Cut, you will need to purchase a Mimaki's printer.

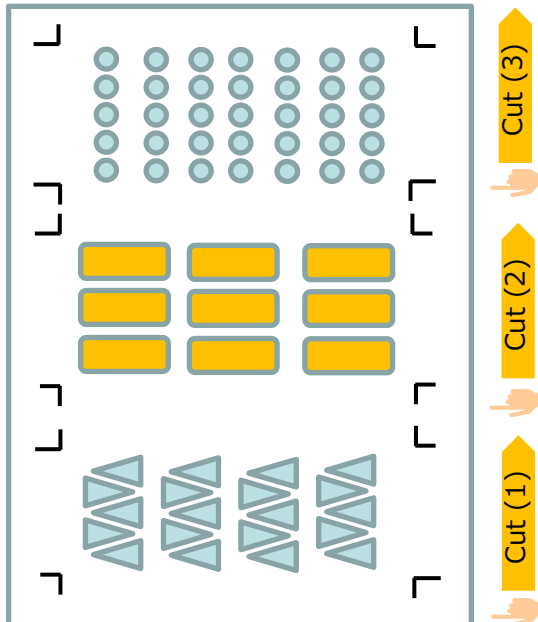
3. Improved cutting efficiency

■ Multiple types of cut by small lot of each is available easily by unmanned operation

● The ID cut function automatically and continuously reads the marks that used to be required for each data. The number of times the operator's hands are required is dramatically reduced because the cut can be made continuously.

■ Previously

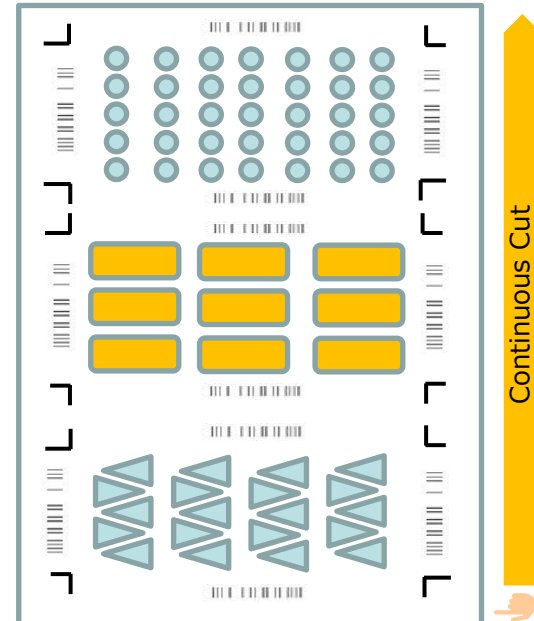
In the case of small quantities of various kinds of data, operator must cut one data at a time.



Operator is always necessary for confirming end of cutting and designating data.

■ CG-AR Series

No matter how many data there is, operator only need to do the cut operation once.



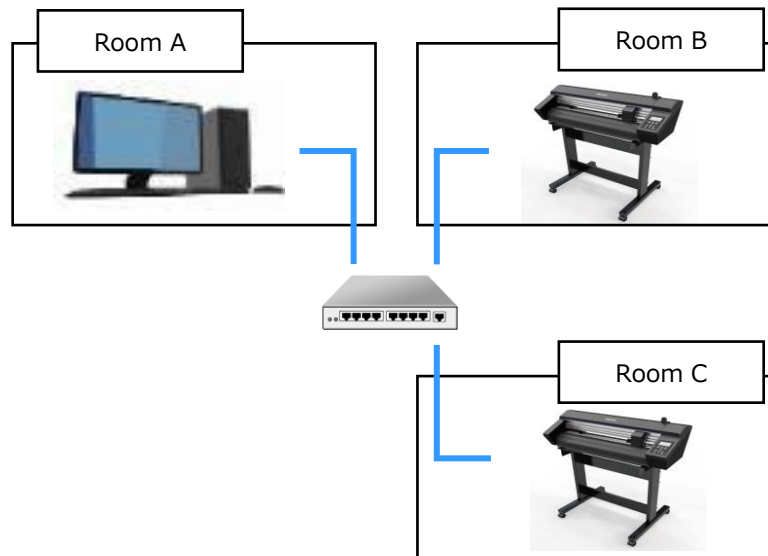
While cutting, unmanned operation is available.

*  Requirement timing of operator work.

3. Improved cutting efficiency

Ethernet support for a free and efficient work environment

In addition to the conventional USB connection, Ethernet connection is now possible. This is useful when working with client PCs and printers in separate rooms, or when connecting multiple printers. Installation is easy because it only adds cables to the office network environment.






- * Simultaneous use with USB is not possible
- * Use a Category 6 (CAT6) network cable.
- * Connection via a router is not possible
- * When printing from Ethernet, build the printer and output PC in the same network.
- * Use a 1000BASE-T compatible device when using a switching hub.
- * Cutting may stop depending on the network environment.

3. Improved cutting efficiency

NEW Remote control to allow operation of the unit from a distance with your smartphone

Mimaki Remote Access

【 Supported OS / Download method 】

Windows		Download from Microsoft Store
iPhone		Download from App Store
Android		To be supported in Ver. 1.2

Printer/Plotter

Windows PC



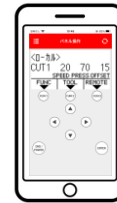
Same segment Network



Wireless router



Mimaki Remote Access

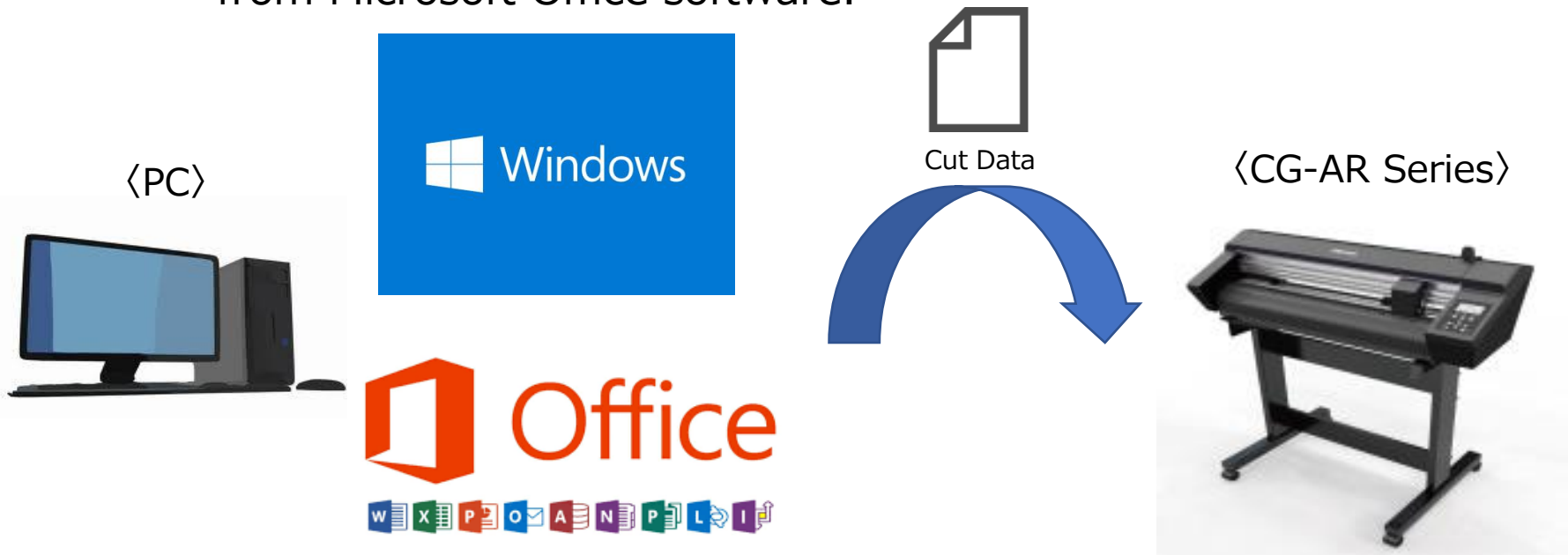


Enables status check and remote control from a distance.

4. More advanced usability

NEW Windows plotter driver supported! Easy to operate for first time users

Windows plotter driver supported and enable to cut from Microsoft Office software.



You can output as if you were using a multifunction printer.

*If you want to use advanced functions such as cut order control and cut data with crop marks, you need to use Mimaki FineCut.

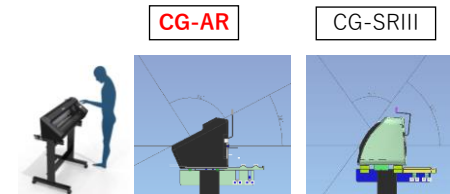
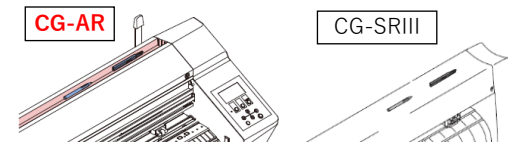
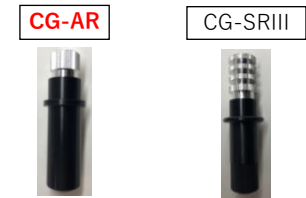
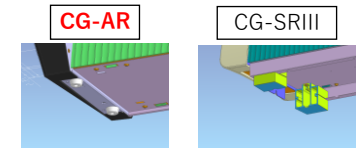
4. More advanced usability

NEW Design with usability in mind

- Improved assembly and installation due to design change. **Weight reduction of up to 30% simplifies assembly.** Furthermore, the addition of rubber feet makes **tabletop installation easier and more stable than before.**
- Cutter holder improvement. **The cutter blade can be changed with fewer operations than before.**
CG-SRⅢ: 4.5 turns → CG-AR: 2.5 turns on the knob
- Improved trays for small items. Storage for tools and small items such as cutting blades. **The deep groove design prevents small objects from falling out.**
- Improved angle of operation monitor. Control panel angle closer to the horizontal for a better view and **easier operations.**

(Weight comparison)

Plotter Size	CG-AR Series	CG-SRⅢ Series
600mm	17kg	24kg
1,000mm	35kg	41kg
1,300mm	43kg	46kg

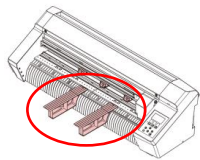


1. Sheet table

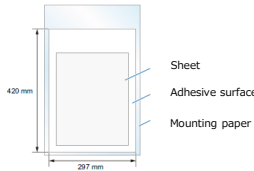
Prevents the sheet from floating or shifting when using the Cutting Sheet.

2. Cutting Sheet

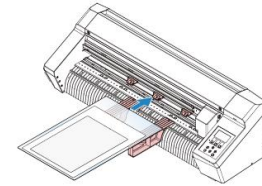
Sheets for cutting out thick paper and coated cardboard.



Sheet table

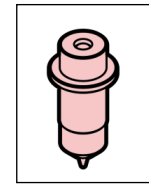


Cutting Sheet
(420mm×297mm)

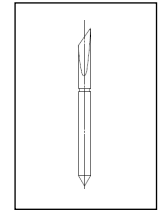


3. Creasing tool

Fold lines can be drawn on thick paper or coated cardboard.



Creasing tool



Cutter for
Heavy paper

4. Cutter for Heavy paper

Blade suitable for cutting out thick paper and coated cardboard.

5. Cutter holder

Configuration change to add a new cutter holder.



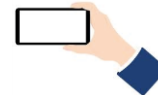
Cutter holder

6. STAND FOR CG-60AR

Newly added by design change to reduce weight and simplify assembly.

Blade supply list

CG Series Genuine Cutter Blade
For details, please refer to the video (access by QR code)



CG Series Introduction of 6 blade types

① Blade for Low pressure (SPB-0030) **Standard**

Standard attachment to the CG series for vinyl chloride sheets. The cutting pressure can be set lower than SPB-0001. High quality cutting is possible, even when cutting thin PVC.



② Carbide cutter (SPB-0001)

Blade for vinyl chloride sheets. More durable than SPB-0030 and effective for cutting thick PVC and thick rubber sheets under high pressure.



③ Blade for small letters (SPB-0003)

This is a blade for PVC sheets that can cut cleanly small letters of 20 mm or less.



④ Blade for reflective sheet (SPB-0006)

Ideal blade for cutting reflecting sheet. High durability thanks to its titanium coating.



⑤ Cutter for fluorescent sheet (SPB-0007)

Blade for fluorescent sheets. Effective for cutting fluorescent sheets, which are harder than PVC and more durable than cutters for vinyl chloride.



⑥ Cutter for thick rubber (SPB-0084)

Blade is for rubber sheets up to 0.8 mm thick. The backing paper of the rubber sheet must be hard.



Specifications

Item	CG-60AR		CG-100AR		CG-130AR	
Acceptable sheet width	90~740 mm	4~28 inches	90~1,250 mm	4~48 inches	90~1,550 mm	4~60 inches
Effective cutting area*1	606 mm x 51 m (23.9 in x 55.8 ft)		1,070 mm x 51 m (42.1 in x 55.8 ft)		1,370mm x 51m (53.9 in x 55.8 ft)	
Maximum speed	Cutting: 73 cm/s (28.7 in/s) , Moving at 45° direction: 103 cm/s (40.5 in/s)					
Speed setting (cutting/plotting)	1~10 cm/s (in 1 cm/s steps) (0.4~3.9 in/s (in 0.4 in/s steps)) 10~70 cm/s (in 5 cm/s steps) (3.9~27.6 in/s (in 2.0 in/s steps))					
Mechanical resolution	X: 2.5 μm, Y: 5 μm					
Program steps	25, 10 μm (MGL-IIc)		100, 50 μm (MGL-Ic1)			
Repeatability	0.2 mm / 2m (excluding expansion/contraction due to film temperatures) 0.0079 in / 6.6 ft. (excluding expansion/contraction due to film temperatures)					
Guaranteed range of accuracy	586 mm x 2m (23.9 in x 6.6 ft.)		1,050 mm x 2m (42.1 in x 6.6 ft.)		1,350mm x 2m (53.9 in x 6.6 ft.)	
Maximum pressure	550 g					
Pressure setting	Cutter	10~20 g (2 g step)	20~100 g (5 g step)	100~550 g (10 g step)		
	Pen	10~20 g (2 g step)	20~100 g (5 g step)	100~150 g (10 g step)		
	Creasing (Option)	10~20 g (2 g step)	20~100 g (5 g step)	100~550 g (10 g step)		
Compatible films	PVC sheets (0.25 mm thick or less, included laminated sheet), fluorescent sheets*2, reflective sheets*2, rubber sheet, Coated cardboard*3 (with option)					
Applicable tools	Eccentric cutters, Ball-point pens*4, Creasing tool (Option)					
Commands*5	MGL-IIc, MGL-Ic1					
Interface	USB, RS-232C, Ethernet					
Receiver buffer	Approximately 27 MB standard (Approximately 17MB when the sorting function is effective.)					
Operating environment	5 to 35°C (41 to 95°F), 35 to 75 % (Rh) Non-condensing					
Power capacity	AC100 to AC240 V 140 W to 168 W		AC100 to AC240 V 190 W to 228 W			
Outside dimensions (W x D x H)	1,030 mm x 287 mm x 335 mm (40.6 in x 11.3 in x 13.2 in)		1530 mm x 580 mm x 1,150 mm (60.2 in x 22.8 in x 45.3 in)		1,830 mm x 580 mm x 1,150 mm (72.0 in x 22.8 in x 45.3 in)	
Weight	17 kg (without stand), 27 kg (with stand)		35 kg		43 kg	
Stand	Option		Standard equipment			
Sheet basket	Option		Option			

*1. The maximum feed length is limited by the software and by the sheet setting condition or by the effect of obstacles encountered on the sheet path.

As a rule of thumb, limit the maximum feed length for one of the data to 2 m.

*2. When using the blade dedicated for fluorescent sheets (SPB-0007) or the blade dedicated for reflective sheets (SPB-0006).









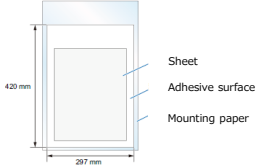
*3. Thick coated paperboard may degrade the cutting quality and accuracy.

*4. Use the tools supplied as standard accessories.






If any other ball-point pen available on the market is to be used, select the one whose diameter is 8 to 9 mm and which is free from bumps or taper in the area to be clamped. The image quality is not guaranteed because the pen tip position differs depending on the pen in use.

*5. With the USB connection, the ESC type commands among the MGL-IIc commands cannot be used.

FAQ#1

#	Questions	Answers
1	How to install FineCut9?	<p>下記リンクよりインストール方法の動画をご参照ください。 https://mimaki.com/product/cutting/c-roll/cg-srIII-series/video.html</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Installation of FineCut for Illustrator (Windows Version)</p> </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  <p>Installation of FineCut for Illustrator (Macintosh Version)</p> </div> <div style="text-align: center;">  </div> </div> <p>How to install the Windows version. How to install the Macintosh version.</p>
2	How to operate FineCut9?	<p>Please click on the link below to see a video on how to operate it. https://mimaki.com/product/cutting/c-roll/cg-srIII-series/video.html</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Video explanations FineCut for Illustrator Part 1 (Introduction of various functions of FineCut)</p> </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  <p>Video explanations FineCut for Illustrator Part 2 (Introduction of the different functions of the Plot window)</p> </div> <div style="text-align: center;">  </div> </div> <p>【Part1】 Introduction of various functions of FineCut. 【Part2】 Introduction of the FineCut Plot window.</p>
3	What is the quantity of contents for each of the newly added options and supplies?	<p>Please refer to the following table for the quantity of the newly added options and supplies.</p> <ul style="list-style-type: none"> OPT-C0242 Sheet Table (1 set) SPC-0888 Cutting Sheet (2 sheets / 1 set) OPT-C0243 Creasing Tool (1 piece) SPB-0092 Cutter for Heavy Paper (3 blades / 1 set)
4	How long can the SPC-0888 Cutting Sheet be used?	The maximum number of times that can be used is 10 times.
5	What is the paper size that can be set for the SPC-0888 Cutting Sheet ?	<p>If the size is 420mm (16.5inch) long x 297mm (11.7inch) wide, it can be set.</p> <div style="text-align: center;">  </div>

FAQ#2

#	Questions	Answers
6	Can the old model cutter holder be used with the CG-AR Series?	The cutter holder configuration is different, but it can still be used.   CG-AR Series 新カッターホルダー 旧機種カッターホルダー
7	Can the old model CG-60 legs (stand) be used?	The CG-60 legs cannot be used due to their different configuration.
8	Does the software come standard?	FineCut9、SimplePOPが標準添付となります。   
9	Which cutter blade comes standard?	SPB-0030 eccentric replacement blade for PVC low pressure is attached as standard.
10	Does it support FineCut8?	No it doesn't. Please update to FineCut9.
11	Which version of FineCut9 is supported?	Please use FineCut9 Ver2.3 or later.
12	Which version of SimplePOP is supported?	Please use SimplePOP Ver. 2.0 or later.
13	Which version of CuttingLink is supported?	Please use CuttingLink Ver1.1.6 or later.
14	Does it support CorelDRAW?	Only international versions are supported.
15	Are there any options common to the CG-SR III Series?	Only the seat basket is a common option.
16	Are there any common supplies with CG-SR III Series?	Cutter blades, cutter holders, etc. can be used in common.
17	Is a USB cable included as standard?	It is not included as a standard accessory. Please prepare separately.