

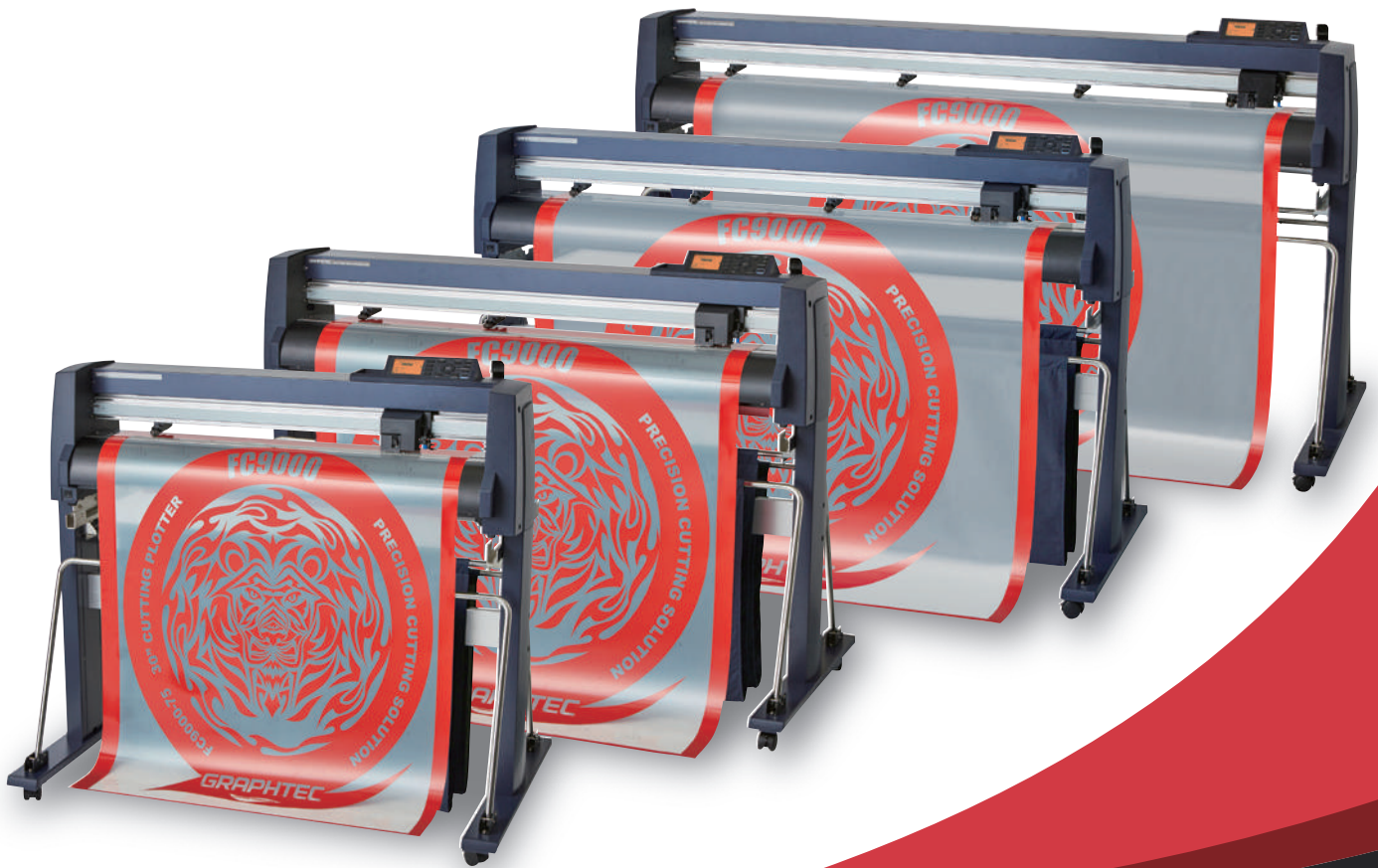
# GRAPHTEC

CUTTING PRO

## FC9000<sup>75/100/140/160</sup> Series

***World's best cutting quality***

*High-end flagship model with advanced operation and efficiency-boosting features*



### Highest Level Performance

Best performances in its class of grit-rolling cutting plotters.

### High Productivity

Equipped with advanced functions for high productivity, such as enhancing ease-of-use and shortening cutting time.

### Useful Software

Easily create and cut high quality designs with included software.

[www.graphteccorp.com](http://www.graphteccorp.com)

## Highest Level Performance

### Best in class ability

1485mm/s maximum cutting speed, 39.2m/s<sup>2</sup> maximum acceleration, 5.88N (600gf) maximum cutting force. The FC9000 Series offers best in class productivity and abilities with a wider range of medias from thick to thin.



Second pen holder kit (option)

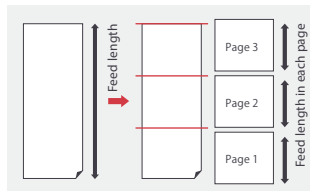
### Wide area for full use of paper

Maximum cutting width depends on each machines; 762mm(30 inch), 1067mm(42 inch), 1372mm(54 inch), 1626(64 inch).

	Media
FC9000-160	← 1626mm →
FC9000-140	← 1372mm →
FC9000-100	← 1067mm →
FC9000-75	← 762mm →

### Auto panelling

To prevent skew of long-length cutting, this function makes possible to automatically split long-length jobs into smaller pages that are cut sequentially. It shortens feed length and enables stable cutting. It is useful for cutting with higher accuracy or beyond guaranteed long length.



### User-friendly control panel

3.7inch LCD display and easy-to-use control panel supports 10 languages.



### Reliable long-length tracking (Automatic Take-up Roller)

It supports long-length, 15m (50ft) (\*1) and makes possible to cut large signs/pops with stable paper carriage and high accurate cutting quality. In addition, if Automatic Take-up Roller as option (\*2) is equipped to plotter, it becomes possible to automatically wind media and improve your work efficiency.



(\*1) Operated with Graphtec specified media and conditions.

(\*2) Corresponding Models: FC9000-140/160

• Guaranteed accuracy length: 20m (Under 1.2m per job)

• Maximum diameter of winding roll: φ180mm

\* Winding conditions: -End face of roll media and end face of paper tube should be aligned.

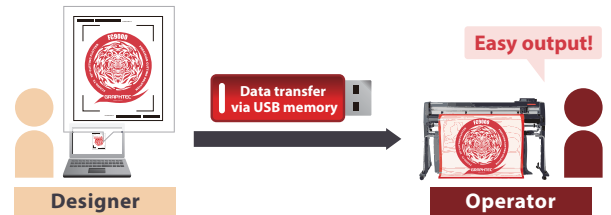
-Width of roll media should be the same as width of paper tube at winding side.

\* It cannot be wound if media is folded or overlapped inside the basket.

### Data output via USB flash memory without PC

When cutting data designed with Cutting Master 4 or Graphtec Pro Studio / Plus are saved to USB flash memory, they can be output directly to the cutting plotter by plugging in. This simplified work-flow enables users to operate without a computer.

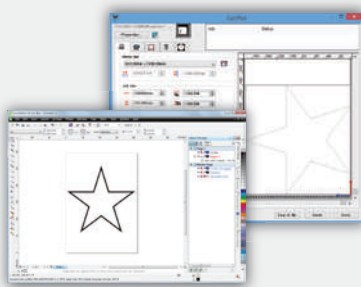
\* The USB flash memory format only supports FAT32. Please note that NTFS and exFAT are not supported.



## Improved Application Software

Adobe Illustrator / CorelDRAW plug-in software

### Cutting Master 4



Cutting Master 4 is Graphtec plug-in software for Adobe Illustrator and CorelDRAW Graphic Suite. It sends cutting data to the plotter and includes a variety of functions such as: preview, registration mark creation, tool conditions, cut job settings and more. Cutting Master 4 is easy to use and enables you to get the best performance from your plotter. Trim marks for Adobe Illustrator is finally available.

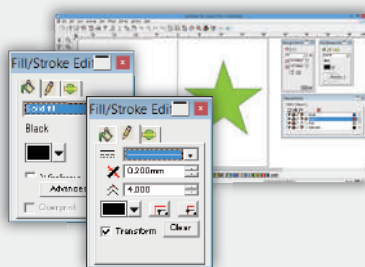
Supported OS (*3)	Windows 11/10/8.1, macOS 10.13 (High Sierra) ~ 13 (Ventura)
Supported software (*3)	Adobe Illustrator: CC2017~2023 CorelDRAW: Graphics Suite X4~X8, 2017~2022

#### <Main Features>

- Move, expand, shrink the object directly from the preview window
- Create object outline, recognize the line width and overlap
- Output by layer or color ● Insert weeding line
- Split an object into small pieces with tilling function
- Connectable and switchable to multiple plotters

Graphic design software

### Graphtec Pro Studio Graphtec Studio



Easy-to-use application software for creating original designs. It has many enhanced functions such as auto-shapes, shading, and editing functions. It can also configure the cutting conditions and other setting on plotter. EPS, Ai(\*5), CMX(\*5), and PDF(\*5) file formats are supported. Graphics created with other popular design software can be imported into the software.

Supported OS (*3)	Graphtec Pro Studio: Windows 11/10/8.1 Graphtec Studio: macOS 10.13(High Sierra) ~ macOS 13 (Ventura)
-------------------	--

#### <Main Features>

- Create designs using auto-shape, various line types, etc.
- Texts edit (rotate, mirror, fit-to-shape, etc.)
- Auto-trace (supporting bmp, tiff, jpeg, gif, etc. image format)
- Connectable and switchable to multiple plotters
- EPS, DXF format files and other raster format files are supported
- Layer (\*5) ● Output by colour ● Insert weeding line (\*5)

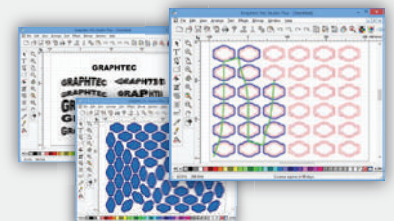
## Multi-Function Optional Software

Option | Advanced Graphic Design Software

### Graphtec Pro Studio Plus

NEW LINEUP Limited Edition Software

- Graphtec Pro Studio Plus for Rhinestone
- Graphtec Pro Studio Plus for Auto Nesting



Graphtec Pro Studio Plus is the enhanced edition of Graphtec Pro Studio. It is optional software with functions for improving productivity and advanced design. Additional functions include: transformation of characters and graphics, automatic sequence number insertion, bar-code creation, templates for rhinestone creation, nesting, directional change of cutting lines, changing cutting order, and more.

Supported OS (*3)	Windows 11/10/8.1
-------------------	-------------------

#### <Main Features of Graphtec Pro Studio Plus>

- Text and shape deformation, shadow / stripe effects ● Spelling check
- Vector ● Filter for bitmap image ● Power Nest (Nesting)
- Serialized numberings, Barcode, QR code, etc. ● Cutting simulation (Changing cutting order) ● Output by layer or color ● Insert weeding line
- Rhinestone design support

#### <Main Features of Graphtec Pro Studio Plus for Rhinestone>

- Rhinestone design support

#### <Main Features of Graphtec Pro Studio Plus for Auto Nesting>

- Nesting (Auto, Power Nest, intelligent)

(\*3) For more information about compatibility of the latest OS or application software, please check the Graphtec website or contact your local representative of Graphtec.

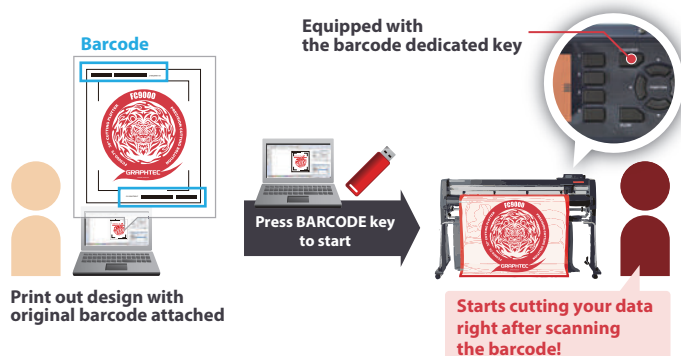
(\*4) CS4 is supported with Windows only. (\*5) Supported on Graphtec Pro Studio only

## Improved ARMS for high precision cutting (ARMS 8.0)

The **A**dvanced **R**egistration **M**ark **S**ensing system delivers precise Print & Cut results by using sensors to detect registration marks and perform axis alignment. Countless efficiency boosting features improve productivity for print & cut applications such as stickers and decals.

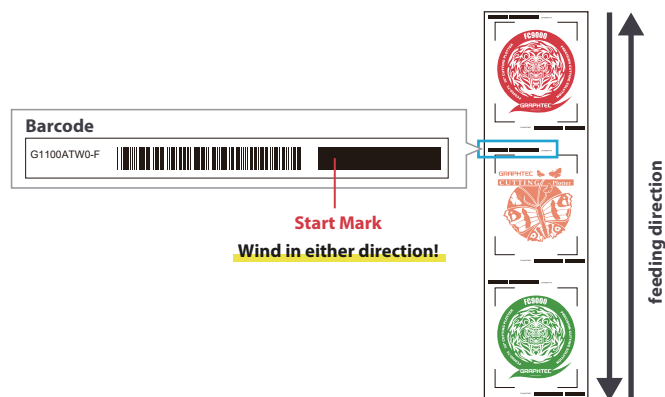
### Data Link Function (Barcode Data Management/Continuous Cutting)

By reading Graphtec original barcode, FC9000 automatically detects its linked data from PC or USB flash memory. This function is available regardless of which printer or RIP software is used.



### Continuous Cut (Data Link function)

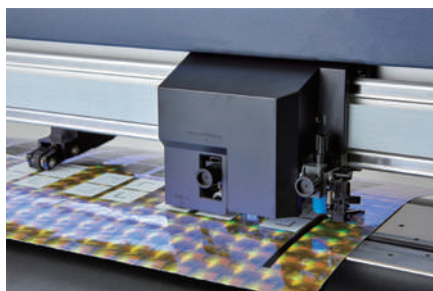
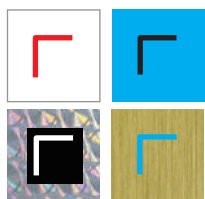
Barcode data management allows cutting different data sequentially by detecting the "Start Mark" of the new type of barcode. Sequential P&C process with roll-media is now available.



### Supports colored marks / specialty media

A wide variety of media types including holographic paper and reflective sheets are now compatible due to improvements of the ARMS sensor algorithm.

Ex.

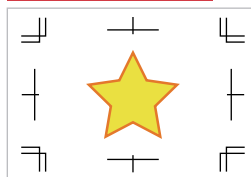


\* Sensor may not be able to read certain combinations of specialty media and colored marks.

### Supports Adobe Illustrator "Crop Marks"

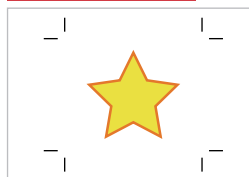
Using the plug-in software Cutting Master 4, Adobe Illustrator crop marks will be available.

#### Japanese type crop mark



It is mainly used in several Asian countries.

#### Roman type crop mark



It is commonly used in many countries.

### Segment Area Compensation (XY)

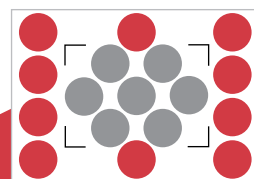
This function has been implemented in addition to the current X-axis Direction Segment Area Compensation. Middle mark is now available not only for X but also Y-axis alignment.



※The middle mark of Y direction is only available when distance between registration marks are over 600mm.

### Expanded Cutting Area

It expands the cutting area to include objects outside of the area enclosed by registration marks. Production efficiency is enhanced by reducing media waste.





Specifications					
Item		FC9000-75	FC9000-100	FC9000-140	FC9000-160
Configuration		Grit rolling type			
Drive method		Digital servo drive			
Max. cutting area (W x L) (*1)		762mm x 50m	1067mm x 50m	1372mm x 50m	1626mm x 50m
Cutting area of guaranteed accuracy (*1)		742mm x 15m	1047mm x 10m / 762mm x 15m	1352mm x 10m / 762mm x 15m	1607mm x 10m / 762mm x 15m
Mountable media width	Min. (*2)	50mm			
	Max.	920mm (36.2 inch)	1224mm (48.1 inch)	1529mm (60.1 inch)	1850mm (72.8 inch)
Mountable roll media diameter		76 to 200mm (160mm when the optional paper flange (OPH-A21) is installed)			
Mountable roll media mass		12kg	16kg	20kg	24kg
Compatible take-up roll width		-		200 to 1372mm	200 to 1626mm
Compatible take-up roll mass		-		20kg	
Maximum cross cut width		762mm	1067mm	1372mm	1626mm
Max. cutting speed		1485 mm/s at 45° direction			
Axial acceleration		Max. 39.2m/s <sup>2</sup> at 45° direction			
Cutting force		Max. 5.88N (600gf)			
Minimum character size		Approx. 5 mm alphanumeric (varies depending on character font and media)			
Mechanical resolution		0.005mm			
Programmable resolution		GP-GL : 0.1/0.05/0.025/0.01mm   HP-GL™ (*3) : 0.025mm			
Repeatability (*1)		Max. 0.1 mm in plot up to 2 m (Excluding media expansion and contraction)			
Number of push rollers		2 rollers	3 rollers	4 rollers (Max. 5 (option))	
Mountable number of tools		1 tool (mountable 2 tools (option))			
Blade types		Supersteel			
Pen types		Oil-based ballpoint pen, Water-based fiber-tip pen			
Media types		Thickness 0.25mm or less Marking film (PVC film / fluorescence / reflective), Polyester film (on condition), High Intensity reflective film (Diamond grade, Engineer grade) (*4)			
Display		Graphic type LCD with back-light (240dots x 128dots), supports 10 languages			
Interface		USB 2.0(Full Speed), Ethernet 10BASE-T/100BASE-TX			
Buffer memory		2MB			
Command sets		GP-GL / HP-GL™ (Set by command or auto-detect) (*3)			
Compatible OS (*5)		Windows 11/10/8.1 macOS 10.13 (High Sierra) to 13 (Ventura)			
Supported software (*6)		Graphtec Pro Studio(Windows)(*7), Graphtec Studio(Mac), Cutting Master 4(*7), Windows Driver			
Power source		100 V to 240 V AC, 50 / 60 Hz			
Power consumption		Max. 120W			
Operating environment		10 to 35 °C, 35 to 75 % R.H. (non-condensing)			
Guaranteed accuracy environment		16 to 32 °C, 35 to 70 % R.H. (non-condensing)			
External dimensions (W x D x H) (*8)		Approx. 1360 x 1151 x 1232 mm	Approx. 1665 x 1151 x 1232 mm	Approx. 1970 x 1151 x 1232 mm	Approx. 2224 x 1151 x 1232 mm
Weight (approx.) (*8)		49 kg	56 kg	64.0 kg (80.9kg with installed automatic take-up roller)	70.0 kg (88.5kg with installed automatic take-up roller)
Safety		PSE, UL/cUL, CE mark			
EMC		VCCI Class A, FCC Class A, CE mark			

Option		
Item	Part No.	Description
Automatic Take-up Roller	OPH-A43	For FC9000-140
	OPH-A44	For FC9000-160
Additional push roller kit	OPH-A47	For FC9000-140 or FC9000-160
2nd pen holder	ECK0013	For dual tool configuration (dealer option)
Flange	OPH-A21	Flange for media holding
Graphtec Pro Studio Plus	OPS682-PLS	Design software including all advanced functions (1 license)
Graphtec Pro Studio Plus for Rhinestone	OPS682-RSF	Limited edition of rhinestone function only (1 license)
Graphtec Pro Studio Plus for Auto Nesting	OPS682-ANF	Limited edition of auto nesting function only (1 license)

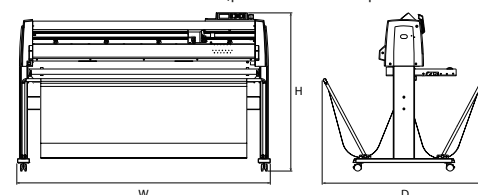
Supplies			
Item	Part No.	Description	Package
Cutting blade holder	PHP33-CB09N-HS	For CB09U series blade	1 set/pack
	PHP33-CB15N-HS	For CB15U series blade	1 set/pack
	PHP35-CB09-HS	For CB09U series blade	1 set/pack
	PHP35-CB15-HS	For CB15U series blade	1 set/pack
Cutting blade	CB09-P	0.9mm dia. 45° angle, Supersteel	5 blades/pack
	CB09UB-5	0.9mm dia. 45° angle, Supersteel	5 blades/pack
	CB09UB-K60-5	0.9mm dia. 60° angle, for Car-film	5 blades/pack
	CB15U-5	1.5mm dia. 45° angle, for paper/cardboard	5 blades/pack
	CB15U-K30-5	1.5mm dia. 30° angle, for paper/cardboard	5 blades/pack
	CB15UA-5	1.5mm dia. 45° angle, for high intensity reflective film	5 blades/pack
Cross-cutter blade	PM-CC-002	Supersteel type	1 blade/pack
	PM-CT-001	Checking blade length, for PHP33 and PHP35 series	1 set/pack
Loupe	PM-CT-001	Checking blade length, for PHP33 and PHP35 series	1 set/pack
Fiber-tip pen holder	PHP31-FIBER	Pen holder for KF700 series pen	1 set/pack
Water-based fiber-tip pen	KF700-BK	Pen (black)	10 pens/pack
	KF700-RD	Pen (red)	10 pens/pack
Ballpoint pen holder	PHP34-BALL	Pen holder for KB700 pen	1 set/pack
Oil-based ballpoint pen	KB700-BK	Pen (black)	10 pens/pack
Pouncing tool	PPA33-TP12	Steel pin 1.2 mm dia.	1 set/pack
Cutting mat	PM-CR-005	For FC9000-75 replacing cutting mat	2 sets/pack
	PM-CR-006	For FC9000-100 replacing cutting mat	2 sets/pack
	PM-CR-007	For FC9000-140 replacing cutting mat	2 sets/pack
	PM-CR-008	For FC9000-160 replacing cutting mat	2 sets/pack

Standard accessories		*Please read Cutter Blade Manual before use.
Item	Qty	Description
Power cord	1	The type of cord is different by destination.
USB Cable	1	2.9m long
Cutting blade holder	1	PHP33-CB09N-HS
Cutting Blade	1	CB09UB-1P
Loupe	1	PM-CT-001
Fiber-tip pen holder	1	PHP31-FIBER
Water-based Fiber-tip pen	1	KF700-BK (black)
Stand	1	
Media Stocker	1	
Basket	1	
Flange set	1	OPH-A21 (Only in limited sales area.)
DVD-ROM	1	User manual, Windows driver, Graphtec Pro Studio (Windows, 1 license), Graphtec Studio (Mac), Cutting Master4
Printed document	1	Setup Manual, Cutter Blade Manual and Safety Manual

- \*1 Operated with Graphtec specified cutting condition and media. For long-length cutting, the basket is used.  
 \*2 There are conditions for operability when setting media.  
 \*3 HP-GL™ is a registered trademark of Hewlett-Packard Company.  
 \*4 CB15UA/CB15UA-K30 blades and reinforced backing sheets are recommended for certain grades of high-intensity reflective film.  
 \*5 Graphtec does not support software/driver used with operating systems that have become obsolete and are no longer supported by the OS developer.  
 \*6 The software can be used by downloading from Graphtec website.  
 \*7 It requires an Internet connection in order for activation or registration when starting the software for the first time.  
 \*8 Includes stand and basket.

#### External dimensions

For the dimension of each model, please refer to the "Specifications" section.



- Brand names and product names listed in this brochure are the trademarks or registered trademarks of their respective owners.  
 • Items mentioned are subject to change without notice. For more information about product, please check the web site or contact your local representative.



For using equipment in correctly and safely

Please read the user's manual before use and operate accordingly.

To avoid an occurrence of malfunction or an electric shock by leakage, please ensure ground connection and use it in specified power source.

# GRAPHTEC

Graphtec Corporation

503-10 Shinano-cho, Totsuka-ku, Yokohama 244-8503, Japan  
 Tel : +81-45-825-6250 Fax : +81-45-825-6396

Website <http://www.graphteccorp.com>

eco RoHS compliant product



FC9000\_JE10810\_5D