GRAPHTEC

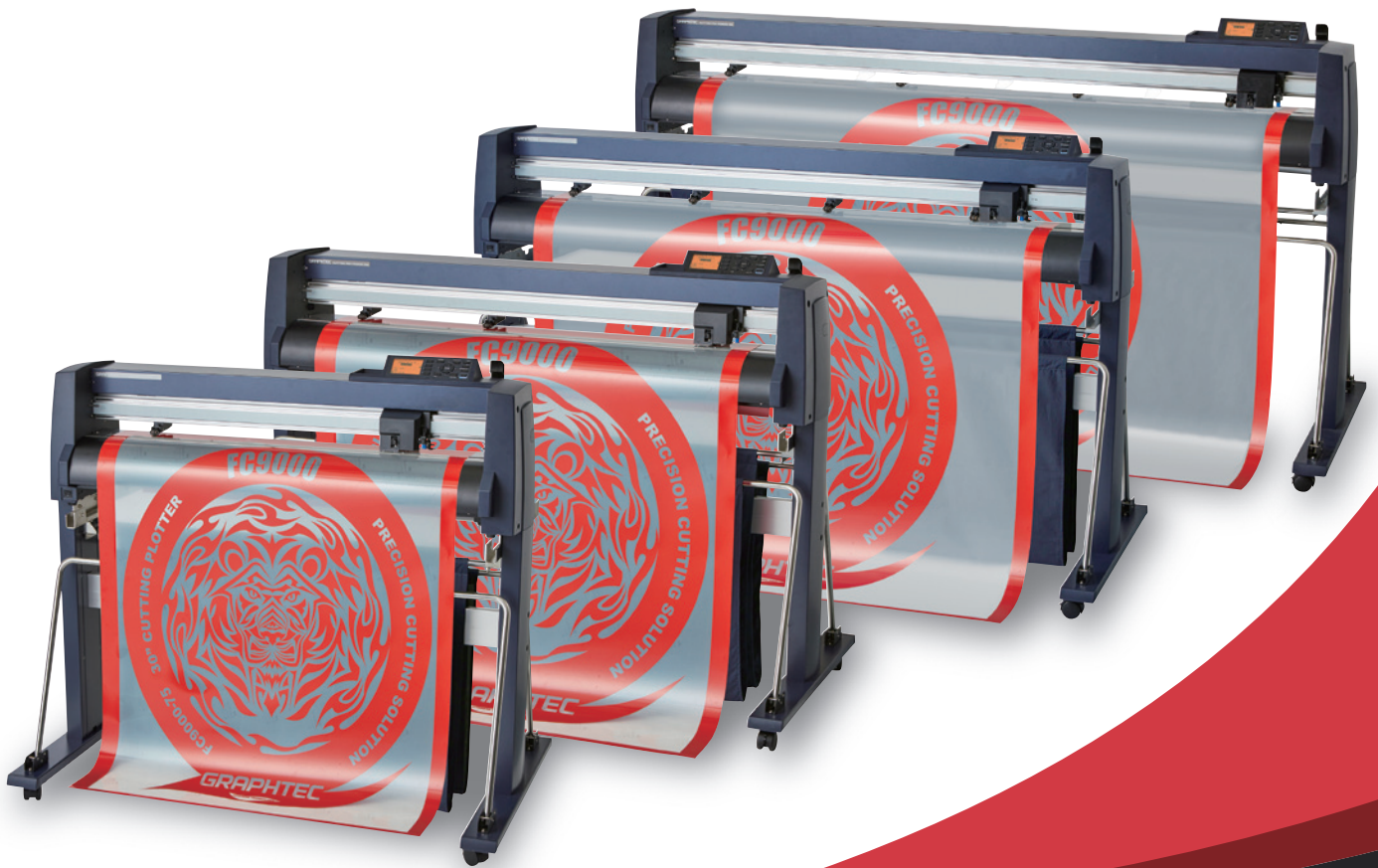## CUTTING PRO
FC9000 75/100/140/160 Series

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

Highest Level Performance
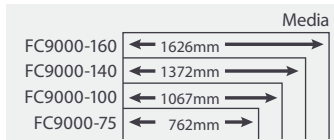
Best in class ability

1485mm/s maximum cutting speed, 39.2m/s² 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.
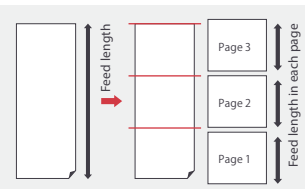
Second pen holder kit (option)

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.

Feed length

Page 3
Page 2
Page 1

Feed length in each page

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.

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(*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.
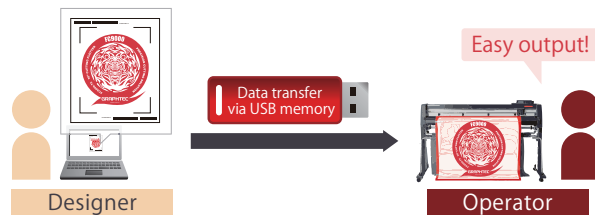   -Width of roll media should be the same as width of paper tube at winding side.
 * It cannot be winded if media is folded or overlapped inside the basket.

Data output via USB flash memory without PC

When cutting data designed with Cutting Master 5 or Graphtec Studio 2 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.
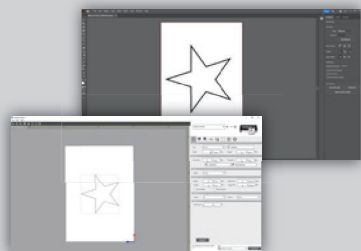* The USB flash memory format only supports FAT32. Please note that NTFS and exFAT are not supported.

Easy output!

Data transfer via USB memory

Designer → Operator

Improved Standard Software

Adobe Illustrator / CorelDRAW plug-in software
Cutting Master 5

Cutting Master 5 is Graphtec plug-in software for Adobe Illustrator and CorelDRAW.
This software has variety of useful functions in cutting operation, including the function to set the cutting condition to be applied to cutting plotters. It allows users to make the best use of Graphtec's cutting plotters, working with major graphic design softwares users are familiar with.
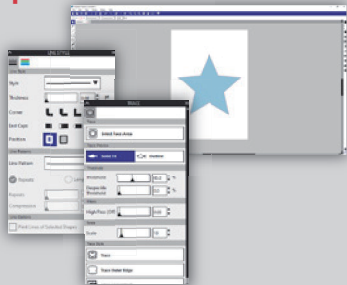
Supported OS (*3)	Windows 11 (Home / Pro / Enterprise / Education), Windows 10 / Windows 10 x64 Edition (Home / Pro / Enterprise / Education)	
	macOS 10.13 (High Sierra) ~ 14 (Sonoma) *Supported for 64 bit PC only	
Software (*3)	Adobe Illustrator	CC2015, CC2017 - 2019, 2020 - 2024 *Supported for Windows CC2015 only
	CorelDRAW (Windows Ver. Only)	X7 - 8, 2017-2024 *Please update X7 to versions newer than X7.6

<Main Features>
●Syncronize cutting condition between software and plotter
●Put registration marks ●Tiling ●Matrix copy
●Insert weeding line ●Set cutting condition by layers and colors
●Offline output by USB flash memory ●Manage data by barcode
●Copy cutting of cutting data with registration marks ●Support trim mark of Adobe Illustrator

Graphic design software
Graphtec Studio 2

This software is for creating, editing and outputting cutting data.
Anyone can use this software easily as it is equipped with design creating tools that can be used intuitively.

Supported OS (*3)	Windows 11 (Home / Pro / Enterprise / Education), Windows 10/ Windows 10 x64 Edition (Home / Pro / Enterprise / Education)	
	macOS 10.13 (High Sierra) ~ 14 (Sonoma) *Supported for 64 bit PC only.	
Supported Import Format (*4)	File Format	Adobe Illustrator, Corel DRAW, Portable Document Format, Auto CAD Interchange Format
	Extention	AI, CDR, PDF, DXF

<Main Features>
●Syncronize cutting condition between software and plotter
●Put registration marks ●Tiling ●Matrix copy
●Insert weeding line ●Set cutting condition by layers and colors
●Offline output by USB flash memory ●Manage data by barcode
●Copy cutting of cutting data with registration marks ●Merge objects ●Tracing

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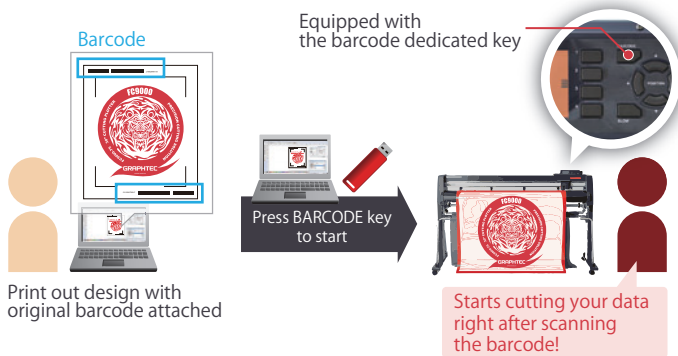(*4) Images can be traced.

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.

Barcode

Equipped with the barcode dedicated key

Press BARCODE key to start

Print out design with original barcode attached

Starts cutting your data right after scanning the barcode!

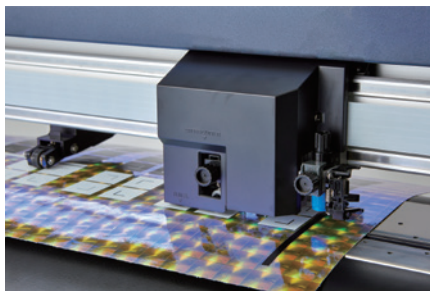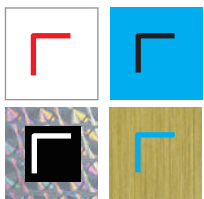## Continuous Cut (Data Link function)

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.

Barcode

G1100ATW0-F

Start Mark
Wind in either direction!

feeding direction

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.
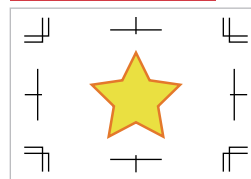
Ex.

* Sensor may not be able to read certain combinations of specialty media and colored marks.
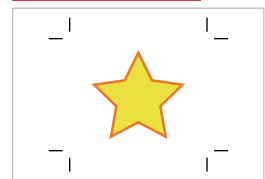
Supports Adobe Illustrator "Crop Marks"

Using the plug-in software Cutting Master 5, Adobe Illustrator crop marks will be availble.

Japanese type crop mark

Roman type crop mark

It is mainly used in several Asian countries.

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 allignment.
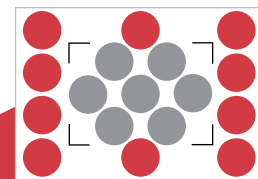
The middle marks on both X & Y-axis direction are settable.

※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.

For more information on "ARMS", please visit our website.

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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 × 50m	1067mm × 50m	1372mm × 50m	1626mm × 50m
Cutting area of guaranteed accuracy (*1)	742mm × 15m	1047mm × 10m / 762mm × 15m	1352mm × 10m / 762mm × 15m	1607mm × 10m / 762mm × 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^2 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)	Cutting Master 5, Graphtec Studio 2, Windows Driver			
Power source	100 V to 240 V AC, 50 / 60 Hz			
Power consumption	Max. 120W			
Operating environment	10 to 35 ºC, 35 to 75 % R.H. (non-condensing)			
Guaranteed accuracy environment	16 to 32 ºC, 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

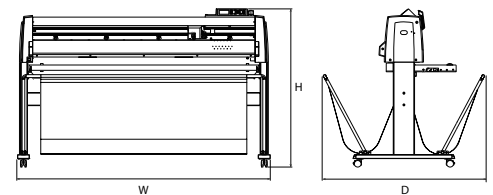| Item	Part No.	Description
Automatic Take-up Roller	OPH-A43	For FC9000-140
	OPH-A44	For FC9000-160
Additional push roller kit	OPH-A47	For FC9000-140 or FC9000-160
2nd pen holder	ECK0013	For dual tool configuration (dealer option)
Flange	OPH-A21	Flange for media holding

Supplies

Item	Part No.	Description	Package
Cutting blade holder	PHP33-CB09N-HS	For CB09U series blade	1 set/pack
	PHP33-CB15N-HS	For CB09U 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. 45º angle, Supersteel	5 blades/pack
	CB09UB-5	0.9mm dia. 45º angle, Supersteel	5 blades/pack
	CB09UB-K60-5	0.9mm dia. 60º angle, for Car-film	5 blades/pack
	CB15U-5	1.5mm dia. 45º angle, for paper/cardboard	5 blades/pack
	CB15U-K30-5	1.5mm dia. 30º angle, for paper/cardboard	5 blades/pack
	CB15UA-5	1.5mm dia. 45º angle, for high intensity reflective film	5 blades/pack
	CB15UA-K30-5	1.5mm dia. 30º angle, for high intensity reflective film	5 blades/pack
Cross-cutter blade	PM-CC-002	Supersteel type	1 blade/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.)
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.

eco RoHS compliant product

CE

FC9000_JE111002_6D