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)	30" × 164'	42" × 164'	54" × 164'	64" × 164'
Cutting area of guaranteed accuracy (*1)	29.21" × 50'	41.22" × 32' / 30" × 50'	53.22" × 32' / 30"× 50'	63.26" × 32' / 30" × 50'
Mountable media width — Min. (*2)	1.96"			
Mountable media width — Max.	36.2"	48.18"	60.19"	72.83"
Mountable roll media diameter	2.99" to 7.87" (6.29" when the optional flange (OPH-A21 is installed)			
Mountable roll media mass	26 lbs	35 lbs	44 lbs	52 lbs
Take-up possible roll media width	-		7.87" to 54"	7.87" to 64"
Take-up possible roll media mass	-		44 lbs	
Maximum cross cut width	30"	42"	54"	64"
Max. cutting speed	58.46 inches per second at a 45° direction			
Axial acceleration	Max. 1543 in/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	3.7" 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 10/8.1/7 Mac OS X 10.6 〜 10.11 / macOS 10.12 〜 10.14 (Graphtec Studio: 10.6 - 10.14, Cutting Master 4: 10.7 - 10.14)			
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. 140 VA			
Operating environment	50 to 95 ºF, 35 to 75 % R.H. (non-condensing)			
Guaranteed accuracy environment	60 to 89 ºF, 35 to 70 % R.H. (non-condensing)			
External dimensions (W x D x H) (*8)	Approx. 53" x 45" x 48"	Approx. 65" x 45" x 48"	Approx. 77" x 45" x 48"	Approx. 87" x 45" x 48"
Weight (approx.) (*8)	108 lbs	123 lbs	141 lbs 178 lbs with automatic take-up roller	154 lbs 195 lbs with 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)
Media 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. 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	Standard 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 set/pack
	PM-CR-006	For FC9000-100 replacing cutting mat	2 set/pack
	PM-CR-007	For FC9000-140 replacing cutting mat	2 set/pack
	PM-CR-008	For FC9000-160 replacing cutting mat	2 set/pack

Standard accessories

Item	Q'ty	Description
Power cord	1	The type of cord is different by destination.
USB Cable	1	9.5 feet long
Cutting blade holder	1	PHP33-CB09N-HS
Cutting Blade	1	CB09UB
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
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 is available for download from Graphtec's 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.
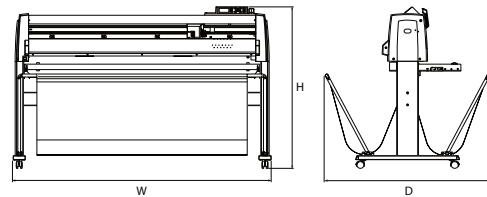
RoHS compliant product

GRAPHTEC

NEW

High-Performance
FC9000 Series
75/100/140/160

Re-engineered for greatness

A re-engineered feeding system, tool head, and new ARMS sensor further contribute to the FC Series' class leading performance.

Print & Cut, perfected

New ARMS 8.0 features the introduction of the Datalink Barcode System in addition to other accuracy and efficiency boosting functions.

All-in-one System

Easily create and cut high quality designs with Cutting Master 4 and Graphtec Pro Studio software. Included Media Flanges and Blade Loupe ensure accurate tracking and blade setup.

Precision Cutting Solutions
www.graphtecamerica.com

Best in class ability

58.46 inches per second maximum cutting speed, 1543in/s² maximum acceleration, and 600gf maximum force. The FC9000 Series offers best-in-class productivity and abilities with a wider range of compatible medias from thick to thin.

Second pen holder kit (option)

Wide cutting area for full media utilization

The Minimum cutting width is 1.96". The Maximum cutting width depends on the model.

	Media
FC9000-160	64"
FC9000-140	54"
FC9000-100	42"
FC9000-75	30"

Auto panelling

This function automatically splits long-length jobs into smaller pages that are cut sequentially to prevent skewing.

Feed length
Feed length in each page
Page 3
Page 2
Page 1
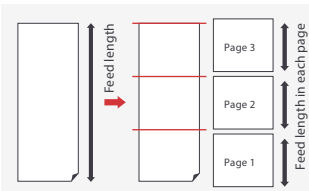
User-friendly control panel

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

Reliable long-length tracking with Auto Take-up Reel (*2)

The optional take-up reel supports cuts up to 50ft (*1) and makes cutting large signs/POPs with stable paper carriages possible. Media may be automatically wound in either direction to improve efficiency.

(*1) Operated with Graphtec specified media and conditions.
(*2) Corresponding Models: FC9000-140/160
・Guaranteed accuracy length: 65 feet (Under 4 feet per job)
・Maximum diameter of winding roll: φ7 inches
* 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 the width of the paper tube on the winding side.
* It cannot be wound if media is folded or overlapped inside the basket.

Load & cut via USB flash memory without a 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.
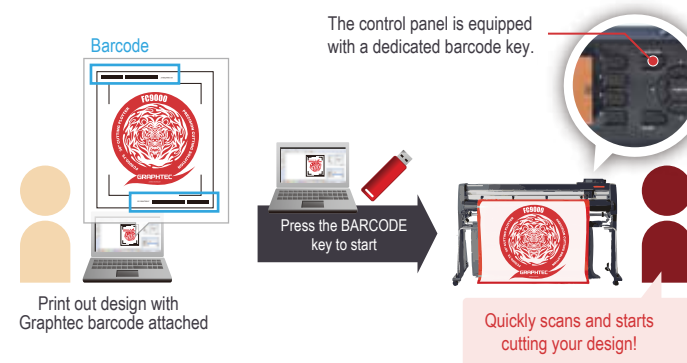
Simple!

Data transfer via USB memory

Designer

Operator

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 are now available.

Supported OS (*3)	Windows 10/8.1/7, Mac OS X 10.7~macOS 10.14
Supported software (*3)	Adobe Illustrator : CC2019/CC2018/CC2017/CC2015.3/CC2015/CC2014/CC/CS6/CSS/CS4 (*4) Corel DRAW : Graphics Suite 2018/2017/X8/X7/X6/XS/X4

<Main Features>
● Move, expand, and shrink objects directly from the preview window
● Create object outline, detect the line width and overlap
● Output by layer or color　● Insert weeding line
● Split an object into small pieces with the 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 in addition to configuring cutting conditions and managing settings on the plotter. EPS, Ai(*5), CMX(*5), and PDF(*5) file formats are supported. Graphics created with other popular design software are also importable.

Supported OS (*3)	Graphtec Pro Studio	Windows10/8.1/ 7
	Graphtec Studio	Mac OS X 10.6~macOS 10.14

<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, 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)

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 10/8.1/7

<Main Features of Graphtec Pro Studio Plus>
● Text and Shape deformation, shadow / stripe effects　● Spellcheck
● 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

<Main Features of Graphtec Pro Studio Plus for Rhinestone>
● Rhinestone template 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

The Advanced Registration Mark Sensing system delivers precise Print & Cut results by using sensors to detect registration marks and performance axis alignment. Efficiency boosting functions improve productivity for Print & Cut applications such as labels and decals.

Datalink Barcode System - Cutting via USB

By reading the Graphtec barcode, the 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

The control panel is equipped with a dedicated barcode key.

Press the BARCODE key to start

Print out design with Graphtec barcode attached

Quickly scans and starts cutting your design!

Datalink Barcode System - Continuous cutting

Barcode data management allows cutting different jobs with different data sequentially by detecting the Start Mark of each new job.

Barcode
G1100ATW0-F

Start Mark
Wind media in either direction!

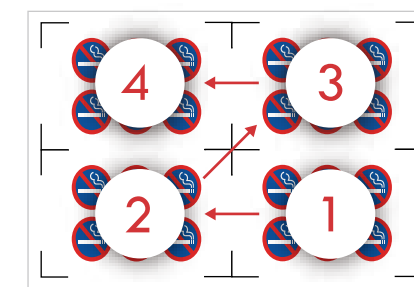feeding direction
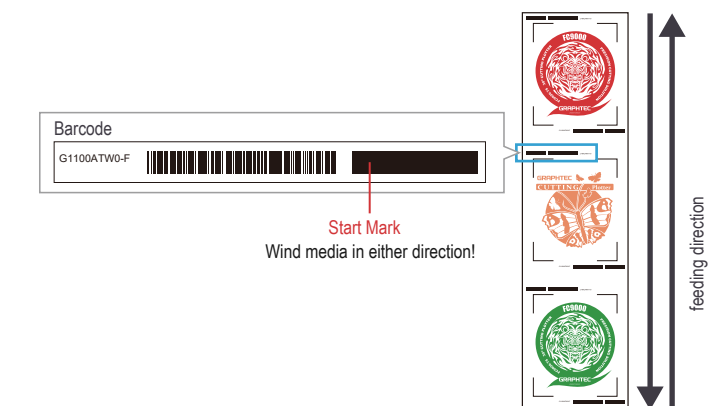
Supports colored marks / specialty media

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

Ex.

* Sensor may not be able to read certain combinations of specialty media and colored marks.
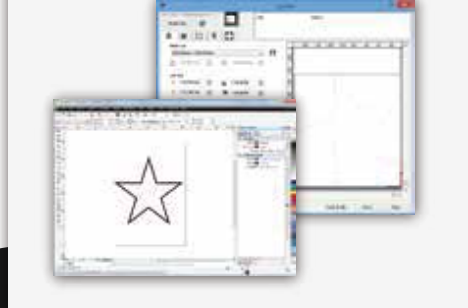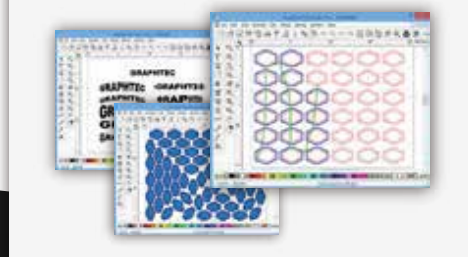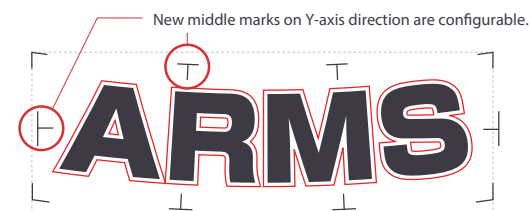
Multiple-mark compensation

The action of reading the mark and contour cutting is repeated for each copy, significantly improving productivity for Print & Cut applications.
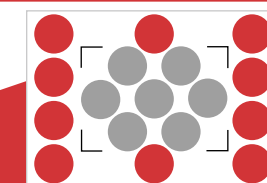
4　3
2　1

Segment area compensation (XY)

In addition to the current X-axis Direction, new Y-Axis compensation has been added. The sensor refers not only to the X but also Y-axis to correct the distortion of media, greatly enhancing accuracy.

New middle marks on Y-axis direction are configurable.

ARMS

Expanded cutting area

This function expands the cutting area to include printed objects outside of the enclosed registration marks - increasing production efficiency and reducing media waste.

GRAPHTEC