

CUTTING PLOTTER FC8000-60/75/100/130/160



FC8000 series

Specifications	FC8000-60	FC8000-75	FC8000-100	FC8000-130	FC8000-160
Model	FC8000-60	FC8000-75	FC8000-100	FC8000-130	FC8000-160
CPU	32-Bit				
Configuration	Digital Servo Friction feed with MicroGritroll™ drive				
Max. cut width (expanded mode)	610 mm (24 in)	762 mm (30 in)	1067 mm (42 in)	1372 mm (54 in)	1626 mm (64 in)
Mountable media	Max. width	770 mm (30.3 in)	920 mm (36.2 in)	1224 mm (48.2 in)	1529 mm (60.2 in)
	Min. width	50 mm (2 in)			
Max. cross cut area	734 mm (28.9 in)	886 mm (34.9 in)	1191 mm (46.9 in)	1496 mm (58.9 in)	1750 mm (68.9 in)
Max. cutting speed (Axial)	1485 mm / sec (58.5 in/s) at a 45° angle				
Max. axial acceleration	4.0 G (39.2 m/s ²)				
Cutting pressure	20 g to 600 g (0.196 N to 5.88 N) in 48 steps				
Min. character size *1	3 mm (0.125 in) alphanumeric Helvetica med. Font				
Mechanical resolution	0.005 mm (0.0002 in)				
Programmable resolution	GP-GL: 0.1 / 0.05 / 0.025 / 0.01 mm, HP-GL™: 0.025 mm				
Repeatability *2	Max. 0.1 mm / 2 m (0.0039 in / 60 in)				
Tools	Accepts (1) cutting blade, (1) plotting pen, or (1) pouncing tool; Second penholder (optional)				
Blade types	Supersteel (0.9 mm or 1.5 mm), Sapphire (1.5 mm)				
Pen types	Water-based fiber-tip, oil-based ballpoint, and disposable ink pens				
Pouncing tool type	Requires optional pouncing tool: (PPA33-TP 12, 1.2-mm pin diameter)				
Media types	Self-adhesive vinyl film, diamond grade, fluorescent film, reflective film, Amberlith™, Rubylith™, window film, high-intensity reflective film ³ , paint protection film, up to 0.25 mm thick, sandblast resist rubber up to 1 mm thick, etc.				
Compatible paper for pouncing	Regular paper from 0.06 to 0.13 mm thick				
Standard interfaces	RS-232C / USB2.0 (Full speed) Option: Ethernet (10 BASE-T / 100 BASE-TX)				
Buffer memory	2 MB				
Command sets	GP-GL / HP-GL™ *4				
LCD display Graphic type	3 inches LCD backlight type				
Power supply	100 to 240 VAC/50 to 60 Hz (Auto switching)				
Power consumption	160 VA max.				
Operating environment	Temperature: +10° C to +35° C				
	Humidity: 35 % to 75 % (non-condensing)				
Guaranteed accuracy environment	Temperature: +16° C to +32°				
	Humidity: 35 % to 70 % (non-condensing)				
External dimensions (W x D x H) including stand *5	1128 x 715 x 1219 mm	1278 x 715 x 1219 mm	1578 x 715 x 1219 mm	1878 x 715 x 1219 mm	2138 x 715 x 1219 mm
	44.4 x 28.1 x 48 in	50.3 x 28.1 x 48 in	62.1 x 28.1 x 48 in	73.9 x 28.1 x 48 in	84.2 x 28.1 x 48 in
Weight including stand	38 kg (83.8 lbs)	42 kg (92.6 lbs)	46 kg (101.4 lbs)	54 kg (119 lbs)	59 kg (130 lbs)
Compatible OS	Windows 2000 / Windows XP / Windows Vista / Macintosh OS 10.2 or later				
Certifications	UL, cUL, CE marking, RoHS, China RoHS				

Option	Specifications
RSK0020	Multi-media stocker for FC8000-60
RSK0021	Multi-media stocker for FC8000-75
RSK0022	Multi-media stocker for FC8000-100
RSK0023	Multi-media stocker for FC8000-130
RSK0024	Multi-media stocker for FC8000-160
ECK009-K	2 pen type (dealer option)
OPH-A21	Flange for FC8000
OPH-A23	network interface (dealer option)

- *1 The CB15UB cutter blade is recommended when cutting characters which size is 10 mm or smaller.
- *2 When operated with Graphtec specified media and conditions.
- *3 The CB15UA cutter blade and a reinforced backing sheet must be used when cutting high-intensity reflective film.
- *4 HP-GL™ is a registered trademark of Hewlett-Packard Company.
- *5 Tolerance: +/- 5 mm

Supply Item	Model	Specification
Cutter blade	CB09UA-5	Super steel with spring
	CB15U-5	Super steel
	CB15U-5SP	Super steel with spring
	CB15U-K30-5	Super steel
	CB15U-K30-5SP	Super steel with spring
Cutter plunger	CB15UA-K30-2	Super steel, for high intensity reflective film for small letter cutting
	CB15U-2	for sandblast rubber sheet
	CB15U-K20-2SP	0.9mm cutter plunger
	PHP32-CB15N-HS	1.5mm cutter plunger
Water-based fiber-tip pen	PHP31-CB09-HS	0.9mm cutter plunger
	PHP31-CB15-HS	1.5mm cutter plunger
	PHP31-CB15B-HS	1.5mm cutter with spring plunger
	KF550-S1	Black x 2, Red, Blue, Green x 1
	KF551-RD	Red x 5
Oil-based ballpoint pen	KF552-BK	Black x 5
	KF555-BL	Blue x 5
	KF556-GR	Green x 5
	KB140-S1	1Black x 2, Red, Blue, Green x 1
	KB141-RD	Red x 5
Oil-based ballpoint pen plunger	KB142-BK	Black x 5
	KB145-BL	Blue x 5
	KB146-GR	Green x 5
	PHP31-BALL	2 plungers
Cross-Cutter blade	CT01H	Standard type
Loupe	CT02U	High durability type
Pouncing pen	PHP61-LOUPE	Pen type loupe with 6x magnification
	PPA33-TP12	1.2mm

Ease of Use!
The best precision Grit-rolling Cutter

Highest cutting force in its class
600gf maximum cutting force for cutting wider variety of materials.

Fastest cutting speed in its class
1485mm/s maximum cutting speed for the higher productivity.

Reliable long-length tracking
Stronger internal structure for improved media handling. The Optional flange set, new designed media basket and 3 different pressure push rollers provides more control on long length cutting for guaranteed 50 feet tracking.

Five sizes choose from
The series come in cutting width of 24", 30", 42", 54" and 64" to fit your requirements.

*When Using with Graphtec specified media and cutting condition.

Ease-of-use operation

Cutting Plotter Controller Software enables remote control via a Pc. 3 inch LCD display with interactive operation panel.

ARMS4.0, Advanced Registration Mark Sensing system for improved handling.



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GRAPHTEC
Graphtec Corporation
503-10 Shinano-cho, Totsuka-ku, Yokohama 244-8503, Japan



EP020806 Vol.1

FC8000 series Graphtec's Flagship Grit-rolling cutter

Providing the high performance and functions and greater ease of

Family of 5 sizes with superior specifications and Enhanced functions.

Highest cutting force in its class.

600gf maximum cutting force for cutting wider range of materials.

Fastest cutting speed in its class.

1485mm/s maximum cutting speed for the highest productivity.

Reliable long-length tracking capability.

The 3 step push roller provides a more stable long length cutting for 15m (50feet) tracking guarantee for cutting wider range of materials.

*When Using with Graphtec specified media and cutting condition.

Wide range of cutting areas.

Up to 24", 30", 42", 54", 64" width media can be cut by each size of models.



3 inch LCD operation panel

3 inch LCD display with interactive operation and icon menu enables easy-to-use key operation. Further more, plotter conditions are displayed by icons, so the setting conditions can be checked without key operations.

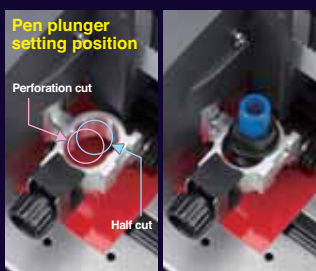
- New Operation Panel**
- Interactive Menu Screen
 - Icon Menu Screen
 - Direct Cross Cut Key
 - Direct Fast Key for Position moving



3 step push roller pressure

Push roller pressure is changeable in 3 steps. Setting of suitable pressure to match the medias is possible.

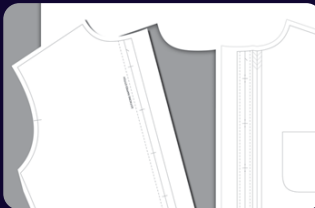
*Excluding the 60 and 75 size. For the both ends of the 100, 130 and 160 size, the pressure position is selectable from 2 steps.



Perforation cut and half cut

Using the perforation cut function, cutout of the media is possible. You can easily cutout the jobs such as stickers.

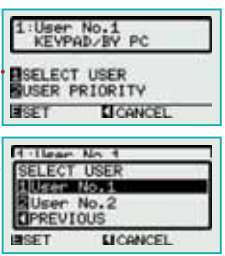
Variegated possibility of extending by cutting function



Apparel For cutting of pattern papers.

Enhanced functions for higher productivity and Expanded applications

Dual Configuration



One cutter is shared by 2 users.

Each user can self select his customized settings without effecting the other user settings.



Using multiple types of media.

Quickly change to customized setting for each type of media.



Using different software package with command language.

Instantly change to customized settings for different software packages.



Save two user settings with 8 condition settings for each user.

- Access at the user selection of control panel.
- User name assigned in PC is displayed as the user name.
- USER PRIORITY can be set as the control panel or PC.

FC8000 Setting items

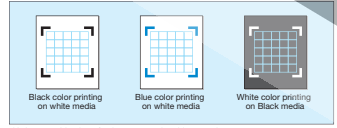
- Tool • Cutting force • Cutting speed
- Acceleration • Perforation pattern
- Tool number • Tangent control
- Distance compensation

Possible to use as if 2 cutting plotters

ARMS 4.0

New function Automatic ARMS sensitivity adjustment

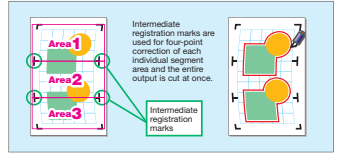
By memorizing the sensor's pre-read numbers on media and registration mark, ARMS4.0 can now read registration marks in colored background. (some contrast is necessary for ARMS4.0 to read)



* Various combination of colors may not be able to read.

ORIGINAL Segment area correction

The intermediate registration marks in the media feed direction are detected to allow four-point correction for each individual segment area. This enables high-precision positioning of the whole area of skewed prints produced using long-length printing.

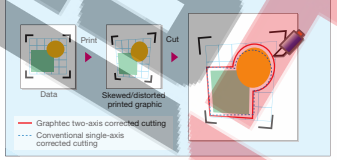


Automatic registration mark detection

The first registration mark is detected automatically, eliminating the need to move the sensor to the registration mark manually. Subsequent registration marks are automatically redetected even if sensing errors occur, simplifying the process of registration mark sensing.

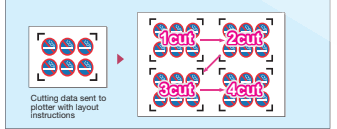
ORIGINAL Four-point registration mark (two-axis skew) correction

Four-point registration mark sensing and X/Y-axis correction uses high-precision positioning to ensure accurate cutting of graphics that have been distorted during the printing and laminating process.



Multiple registration mark correction

Layout instructions are sent together with the cutting data for designs printed using layout functions such as set in a RIP, enabling continuous detection of registration marks for cutting. This feature is valuable when high accuracy is needed for cutting an array of copies.



Supports registration mark commands

Registration mark commands are provided to control ARMS functions from a PC. Registration mark data including size and spacing can be controlled to simplify operations.

- Cutting Master 2
- Plotter Controller

Superior software to help improve the productivity and efficiency is included as standard.

Cutting Plotter Controller

Using the controller, plotter operation and setting can be executed from PC.

The tool condition which is set by controller can list up to 100 subjects, the contents of the list can be saved in PC as a file or can be read.

Also the tool conditions set by plotter operation panel are readable into controller. Read setting conditions are editable and can be reset to plotter side.

Further more obtaining and displaying plotter error information and condition information can be saved as a file.

Compatible OS Windows 2000, XP, Vista



Cutting conditions setting



Various cutting conditions such as cutting force and cutting speed can be stored. Once it is stored, you can cut with suitable cutting conditions just by selecting the pre-stored conditions

f use.



Die cut or perforation cut for sticker
For detailed or delicate cutting.



Window display
For company logo or shop sign.



Window film
For cutting of various shape of window film.



Large size print & cut
For big-size cars or window display.



High intensity reflective film*1
For traffic sign.



Sandblast rubber*2
For masking of stone material.

*1:Using CB15UA, Reinforcement of media backing by PVC film for prevention of media skew. *2:There is a limitation for maximum thickness of media for cutting.

The world's number one cutting plotter



ductivity

Cutting Master 2

This plug-in software allows direct cutting from Adobe Illustrator and Corel Draw. Create graphics or text, then output directly to the plotter.

Compatible OS Windows 2000, XP, Vista, Mac OS 10.2 or later

Software *3 Adobe Illustrator, Corel CorelDRAW

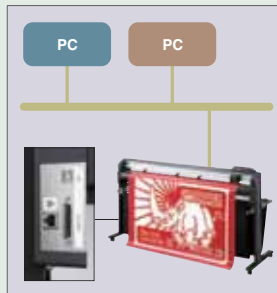
*It is necessary to log-on under the administrative right



*3:Adobe Illustrator Ver.8 or later (Mac OS Ver. 10.2 or later) / CorelDraw Ver.10.2 or later

Corresponding to Network connection (option)

Multiple plotters can be operated by one PC via network connection and also single plotter can be shared by multiple PCs. The interface allows user to access with longer cable.



2 pen : Cutter and Ball point pen (option)

With optional 2nd pen holder, both pen and blade can be mounted at the same time. The cutter will switch automatically per the software, thus improving the productivity.



Application for Garment

The FC8000 series can be used for the Apparel market, in pattern making and marking.

Light point

The light pointer provides an alternative to the automatic ARMS system, allowing users to manually detect registration marks.

Automatic cross cutter

The automatic cross cutter provides a simple solution for obtaining a straight sheet cut-off of your finished job.

Media supply mechanism

The media supply mechanism assists users to load and align the media accurately.

Multimedia Roll Holders (option)

Store up to 3 extra full-length rolls easily at the foot of your plotters.

Bi-directional media loading

For the ultimate convenience and versatility, users now have the option to load media from either the front or back of the FC8000, depending on location and requirements of the plotter.

Variety of application



Vinyl cut



Pen Plot



Pouncing



ARMS 4.0 (Automated optical sensor)

Sophisticated tangential control algorithms

When the Tangential Control mode is engaged, the FC8000 over-cuts the mechanical tangential system both in speed and output quality by controlling the blade rotation. The on-board tool height sensor detects the blade tip's landing on the media surface, then intelligently and precisely aligns the blade rotation for the following cutting operation, all in a fraction of a microsecond.

Graphtec's proprietary technology allows this sophisticated feature to completely eliminate distorted, rounded, or lifted corners-even when highly intricate design cutting is required on 0.025mm (1 mil) vinyl film or up to 1.25mm(50mil)sandblast rubber. This innovative and high precision system architecture is what enables the FC8000 to cut small text strings on vinyl. There is no other cutter/plotter on the market that can match the FC8000 Series' unsurpassed precision and built-in intelligence.

Intelligent soft Landing Tool

Improved cutting/plotting quality and prolonged tool life are just a few of the outstanding standard features you can expect from the FC8000 series, made possible by the innovative Intelligent Soft Landing Tool. The Graphtec proprietary closed-loop servo actuator, with an integrated precision sensor, ensures quick precise, yet gentle tool contact with the material surface during up and down motions. In addition to superior and accurate output, the Soft landing feature prolongs the life of the cutting/plotting tool and maximize throughput performance.

The innovative Intelligent Soft Landing Tool provides not only consistent and optimum cutting quality throughout the job but the benefit of Lower operating cost as well.