GRAPHTEC
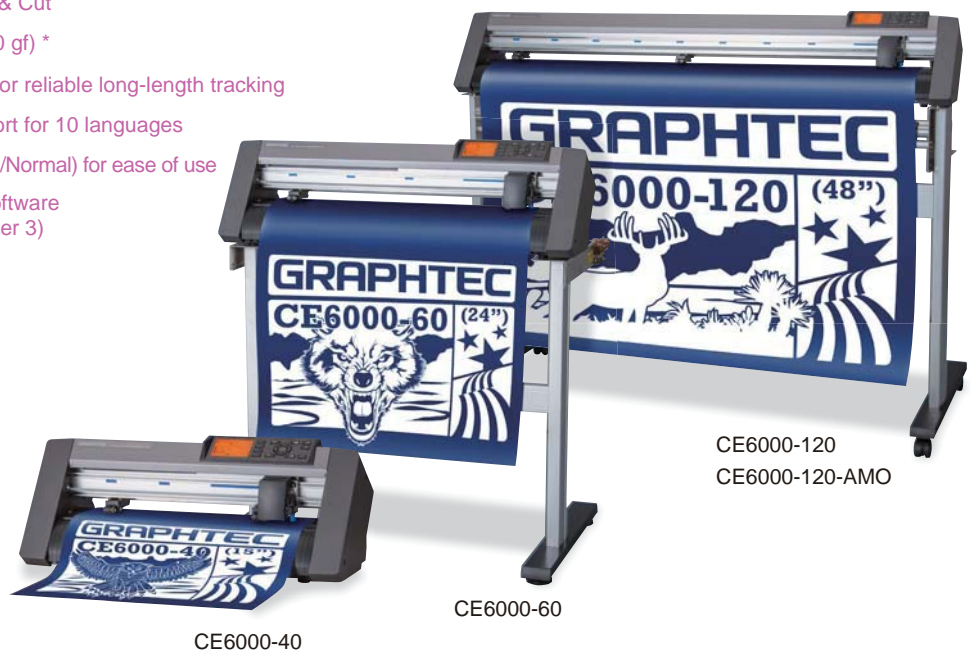
Cutting Plotter
CE6000 series
40/60/120/120-AMO

Simple Operation with Extend functions
Grit-rolling cutter

- Family of four models in three sizes to match all requirements
- New ARMS 5.0 for improved Print & Cut
- Increased cutting force 4.41 N (450 gf) *
- Rugged design with new features for reliable long-length tracking
- Large graphic type LCD with support for 10 languages
- Switchable operation modes (Simple/Normal) for ease of use
- Includes high quality application software (Graphtec Studio and Cutting Master 3)

  * In the CE6000-60/120/120-AMO

CE6000-120
CE6000-120-AMO

CE6000-60

CE6000-40

www.graphteccorp.com

Reliable cutting quality
Intuitive operation, easy to use

Cutting plotter CE6000 series, Price and Performance Leader

The CE6000 series sets the standard for high performance, low cost cutting plotters.

It is equipped with professional-level features such as registration mark sensing

and perforation cutting for producing a dividing line in labels or packaging mock-ups.

The advanced features of the CE6000 series improve your work efficiency and increases productivity.

Expand the range of possible cutting applications

Window display (Indoor signage) | Vehicle decoration/restyling | Outdoor signage | Custom clothing (Heat transfer) | POP/POD | Labels/Stickers (Print & Cut)

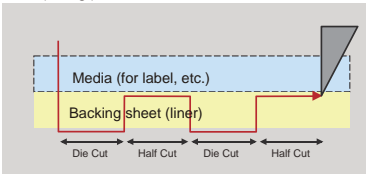## Reliable quality and consistent performance

Wider range of applications due to increased cutting force of 4.9 N (500 gf)*

Supports down force of 4.9 N (500 gf)* when the blade is down. Increases the range of media that can be cut.

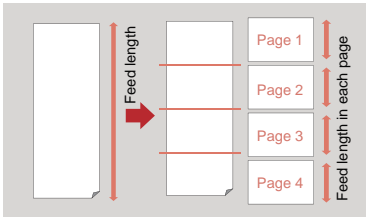 * Guaranteed maximum cutting force is 4.41 N (450 gf) on CE5000-60/120/120-AMO.

Supports perforation cutting `NEW`

Perforation cutting is performed by controlling the cutting force instead of blade up/down movements, increasing throughput. This is perfect for cutting separation lines for tearing out labels, fold lines for POP signs, and others.

Media (for label, etc.)

Backing sheet (liner)

Die Cut | Half Cut | Die Cut | Half Cut

Automatic paneling `NEW`

Auto-paneling is a new feature that automatically splits long-length jobs into smaller pages that are cut sequentially but without any gaps. The result is a seamless, long-length finished job. Media movement is limited to the smaller page being cut, improving accuracy and tracking.

Feed length

Page 1
Page 2
Page 3
Page 4

Feed length in each page

Reliable long length tracking

The new media stocker ensures a more stable media feed.

A brake system is built in to prevent uncontrolled roll media unwinding. It assists the correct loading of heavy roll media.

On the CE6000-120/120-AMO, the pressure of the centre push roller has two settings to suit all media. It prevents media lifting without leaving a trace mark on the media and provides for stable long-length cutting.

The optional basket improves long-length cutting even further.

Media brake on the media stocker

Switching the pressure of the push roller (CE6000-120/120-AMO)
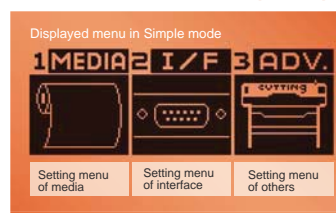

Basket (Option) for 60, 120, 120-AMO

Intuitive operation and easy to use

New large LCD for easy menu settings

Settings of the CE6000 can be easily set up using the large LCD (240 x 128 dots) and tactile control panel. It is icon driven and can be set up in 10 languages.

Auto-detect command set feature

Supports auto-detection function for changing the command set automatically. Multiple applications can be used without concern for the types of commands used in each application.

Easier to cut in simple operation mode `NEW`

Displayed menu in Simple mode

1 MEDIA 2 I/F 3 ADV.

Setting menu of media | Setting menu of interface | Setting menu of others

Two set up menus, Simple and Normal, are available and can be chosen by the operator as desired.
In the Simple operation mode, selecting the type of media also sets the necessary cutting conditions.

Simple mode: Basic menus to ensure easy operation are displayed.
Normal mode: Menus for setting of all the functions are displayed.
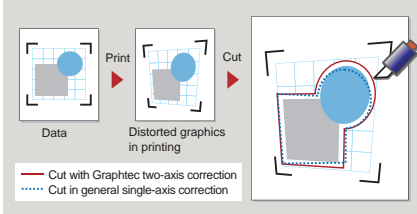
Saving cutting conditions

8 separate cutting conditions for different media types can be set and stored on the CE6000, making switching between media types easy.

■ Enhanced functions for higher productivity

Improved ARMS 5.0 for high precision cutting

ARMS
Advanced **R**egistration **M**ark sensing **S**ystem

4-point axis alignment
This feature compensates for any distortion on the X-axis and Y-axis using world beating algorithms. (Two-axis correction is Graphtec's proprietary technology.) This leads to more accurate registration and improves the reliability and quality of Print & Cut.

Data | Print | Distorted graphics in printing | Cut

— Cut with Graphtec two-axis correction
‥‥ Cut in general single-axis correction

M Multiple marks compensation
When the design is printed in the matrix copy function, the action of reading the marks and contour cutting is repeated in each copy. It can significantly improve productivity for Print and Cut.

* This function is available when the Graphtec Studio or the Cutting Master 3 software is used.
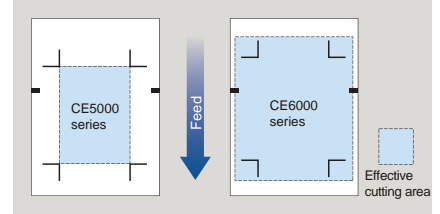
A Segment area compensation
The 4-point axis alignment is performed for each segmented area this is performed by reading the mark in the middle of the media feeding direction and provide high-precision alignment in the Print & Cut of long-lengths.
* This function is available when the Graphtec Studio or the Cutting Master 3 software is used.
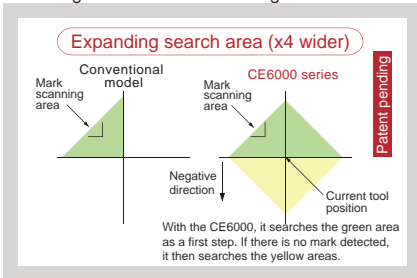
Expanded effective cutting area [NEW]
The new fifth generation ARMS system expands the cutting area to include outside of the area enclosed by the registration marks. This increases the production efficiency by reducing media waste.
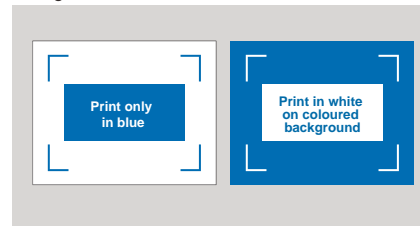
CE5000 series | Feed | CE6000 series | Effective cutting area

Auto mark detection [NEW]
The first registration mark is automatically detected within a wide search area; this eliminates the need to manually move the sensor near the registration mark position. Subsequent marks are automatically located which improves the operation of the registration mark searching.

Expanding search area (x4 wider)

Conventional model | CE6000 series
Mark scanning area | Mark scanning area
Negative direction | Current tool position

Patent pending

With the CE6000, it searches the green area as a first step. If there is no mark detected, it then searches the yellow areas.

Auto sensitivity adjust [NEW]
The sensitivity of the registration mark sensor is automatically set by measuring the reflective level of the mark and the background of the actual media. The mark can be detected when the colour of the mark has a reasonable contrast against the background. For example, a white mark can also be detected on a coloured background.

Print only in blue | Print in white on coloured background

C Copy with ARMS [NEW]
The COPY key has now been added to the control panel to allow fast access for making multiple copies of the downloaded data. It also supports the cutting data including the ARMS control command for processing multiple sheets without a PC.

Supports ARMS commands
The special command for controlling the registration mark sensing system (ARMS) is also supported. The setting parameter for ARMS can be set from the PC using the software.

Cutting Master 2, Cutting Master 3, Graphtec STUDIO, Plotter Controller

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■ Improved application software is included

Plug-in software for Illustrator & CorelDRAW
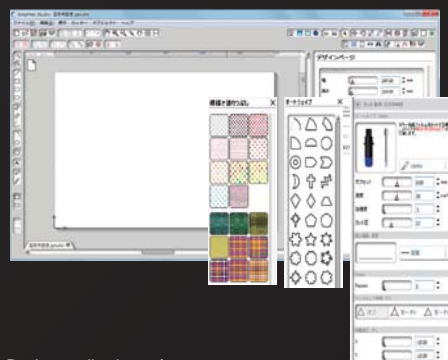### Cutting Master 3
This plug-in software sends the cutting object created by Illustrator or CorelDRAW to the plotter, and can also be used to control the plotter. It has a variety of features such as registration mark creation, matrix copy, tiling, weed settings, tool conditions, cut job settings, and others. It is easy to use and enables you to get the best performance from your plotter.

< Main Features >
- Editing the position, expansion, and reduction directly within the preview window
- Creating an outline of the character, recognising a line width and an overlap
- Output by a layer or colour, and inserting a line for weeding (horizontal, vertical)
- Splits an object into small pieces by the tiling function
- Supports the connection and switching of multiple plotters

| Supported OS * | Windows 7/Vista/XP, Mac OS 10.5.8 to 10.8 |
| Supported software * | Illustrator CS6/CS5/CS4, CorelDRAW X6/X5/X4 |

Design application software
Graphtec Studio
This is an easy-to-use application software for creating original designs. Images can be easily created by using the program icons that are arranged around the drawing area. It has enhanced features such as auto-shapes, shading, and editing functions. It can also configure the cutting conditions and other functions on the plotter.

< Main Features >
- Creating designs using autoshape, various line types, and others
- Editing the characters using rotate, mirror, fit-to-shape, and outline
- Autotrace (bmp, tif, jpg, etc. image format)
- Supports the connection and switching of multiple plotters

| Supported OS * | Windows 7/Vista/XP, Mac OS 10.5.8 to 10.8 |

Plotter control software
Plotter Controller
This software can control various settings of the CE6000 from a PC, improving work and operating efficiency. This controller can be started from the plotter driver when the print operation is executed by the Print menu of the application software. It can be run concurrently with the design software so the design and cutter control windows are open to smoothly run a series of tasks from image design to cutting media.

< Main Features >
- Configuring the cutting conditions
- Executing the test cut
- Setting the parameter for the ARMS and executing the ARMS functions
- Setting the rotation of the data (to match the direction of loaded media)
- Moving the tool position
- Setting the origin of the plotter
- Operation with the short-cut keys

| Supported OS * | Windows 7/Vista/XP |

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

Specifications

Item	CE6000-40	CE6000-60	CE6000-120	CE6000-120-AMO
CPU	32-bit CPU			
Configuration	Grit rolling type			
Drive method	Digital servo drive			
Maximun cutting area (W x L)	375 mm x 50 m [*1]	603 mm x 50 m [*1]	1213 mm x 50 m [*1]	
Cutting area of guaranteed accuracy (W x L) (when using the basket)	356 mm x 2 m [*1]	584 mm x 2 m [*1] (584 mm x 5 m) [*1]	1194 mm x 2 m [*1] (1194 mm x 5 m) [*1]	
Mountable media width	Max. 484 mm Min. 50 mm	Max. 712 mm Min. 50 mm	Max. 1346 mm Min. 120 mm	
Number of push rollers	2 rollers	2 rollers	3 rollers	4 rollers
Maximum cutting speed	600 mm/s (All directions)	900 mm/s (at 45º direction)	1000 mm/s (at 45º direction)	
Maximum acceleration	21.2 m/s^2 (at 45º direction)		13.9 m/s^2 (at 45º direction)	
Maximum guaranteed cutting force	2.94 N (300 gf) in 31 steps	4.41 N (450 gf) in 38 steps	4.41 N (450 gf) in 38 steps	
Instantaneous max. force (un guaranteed)	3.2 N (330 gf)	4.9 N (500 gf)	4.9 N (500 gf)	
Minimum character size	Approx. 5 mm alphanumeric (varies depending on character font and type of media)			
Mechanical resolution	0.005 mm			
Programmable resolution	GP-GL: 0.1 / 0.05 / 0.025 / 0.01 mm, HP-GL™: 0.025 mm			
Repeatability	Max. 0.1 mm in plot up to 2 m [*1]			
Mountable number of tools	1 tool			
Blade type	Supersteel			
Pen type	Oil-based ballpoint, Water-based fibre-tip pen			
Media type	Self-adhesive marking film (vinyl, fluorescent, reflective) excluding high-intensity reflective film, up to 0.25 mm thickness Polyester film, up to 0.25mm thickness (un guaranteed accuracy)			
Perforation cutting	Yes (performed by force control)			
Interface	RS-232C, USB2.0 (Full Speed)			
Buffer memory	2 MB			
Command sets	GP-GL / HP-GL™ emulation (Set by the menu or the command, and selects from GP-GL, HP-GL™, or Auto detect)			
Display	Graphic type LCD with backlight (240dots x 128dots), supports 10 languages			
Registration mark sensing system	Scans the mark by optical sensor (ARMS5.0), Segment area and Multiple marks compensation, 4-points axis alignment, Auto mark detect			
Power source	100 to 120, 200 to 240 V AC (Auto switch), 50 / 60 Hz			
Power consumption	120 VA			
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)	Approx. 672 x 338 x 266 mm	Approx. 900 x 593 x 1046 mm	Approx. 1541 x 736 x 1250 mm	
Weight	Approx. 10.5 kg	Approx. 21 kg (including stand 8.1 kg)	Approx. 40.5 kg (including stand 16.4 kg)	
Included software [*2]	Windows Driver, Graphtec Studio, Cutting Master 3, Plotter Controller			
Compatible OS [*2]	Windows 8 / 8 Pro / 7 (excluding Starter and Home basic) / Vista / XP, Mac OS 10.5.8 to 10.8			
Compatible Standards	Safety	cUL, CE mark		
	EMC	VCCI Class A, FCC Class A, EN55022 Class A		

*1: Operated with Graphtec specified cutting condition and the media. In long-length cutting, the basket is used.
*2: For more information about compatibility of the OS or application software, please check the Graphtec website or contact your local representative of Graphtec.

Options

Item	Part No.	Description
Stand	ST0100	Stand for CE6000-60
Basket	PG0100	Bastet for CE6000-60
	PG0101	Basket for CE6000-120/120-AMO

Supplies

Item	Part No.	Description	Package
Cutting blade holder	PHP33-CB09N-HS	For 0.9mm dia. blade (CB09U series)	1 set/pack
	PHP33-CB15N-HS	For 1.5mm dia. blade (CB15U series)	1 set/pack
Cutting blade	CB09UB-5	0.9mm dia. supersteel blade	5 blades/pack
	CB09UB-K60-5	0.9mm dia. for cutting thin film	5 blades/pack
	CB15U-5	1.5mm dia. supersteel blade	5 blades/pack
	CB15UB-2	1.5mm dia. for cutting small character	2 nlades/pack
Water-baced fiber-tip pen	KF700-BK	Black colour pen	10 pens/pack
	KF700-RD	Red colour pen	10 pens/pack
	KF700-BL	Blue colour pen	10 pens/pack
Fiber-tip pen holder	PHP31-FIBER	For KF700 series	1 set/pack
Oil-based ballpoint pen	KB700-BK	Black colour pen	10 pens/pack
Ballpoint pen holder	PHP34-BALL	For KB700 series	1 set/pack
Carrier sheet	CR09300-A3	A3 size, for no liner type media	2 sheets/pack
Cutting mat	CE6-CM40-2	For CE6000-40	2 mats/pack
	CE6-CM60-2	For CE6000-60	2 mats/pack
	CE6-CM120-2	For CE6000-120	2 mats/pack

Standard accessories

Item	Q'ty	Description
Power cord	1	The type of cord varies by destination
Cutting blade holder	1	PHP33-CB09N-HS for CB09 series cutting blade
Cutting blade	1	CB09UB, 0.9mm dia. supersteel blade
Separate cutter	1	Cutter to cut off media manually
Fibre-tip pen holder	1	PHP31-FIBER for KF700 series fibre-tip pen
Water-based fiber-tip pen	1	KF700-BK (black ink)
Carrier sheet of media	1	A3 size, 1 sheet/pack for CE6000-40
Tray for roll media stock	1	For CE6000-40, 60[*3]
Stand	1	For CE6000-60[*3], CE6000-120/120-AMO
USB cable	1	USB cable, 2.9m long
DVD-ROM	1	User manual, Windows driver, Software (Plotter Controller, Cutting Master 3, Graphtec Studio)

*3: In the CE6000-60, either the roll media stock tray or the stand will be included depending on the order.

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Specifications are subject to change without notice.