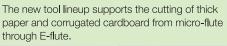
#### **Specification**

| Model name                      |                        | - 60VC   | - 120VC       | - 120MG                | - 120ES | - 180VC          | - 180ES        |  |  |  |
|---------------------------------|------------------------|--|---------------|------------------------|---------|------------------|----------------|--|--|--|
| Configuration                   |                        | Digital servo, Flatbed   |               |                        |         |                  |                |  |  |  |
| Madia hald day                  | um mothod              | VC   | VC            | MG                     | ES      | VC               | ES             |  |  |  |
| Media hold-down method          |                        | VC model : Vacuum suction *1 , ES model : Electrostatic adhesion , MG model : Magnetic   |               |                        |         |                  |                |  |  |  |
| Effective cutting area          |                        | 610 x 920 mm   | 1200 x 920 mm |                        |         | 1740 x 920mm     |                |  |  |  |
|                                 |                        | 24.0 x 36.0 inch   |               | 47.2 x 36.0 inch       | 68.5 x  | 68.5 x 36.0 inch |                |  |  |  |
| Maximum medium width            |                        | 950 mm (37.4 inch) (Y-axis direction)  |               |                        |         |                  |                |  |  |  |
| Number of pens / cutters        |                        | 2  |               |                        |         |                  |                |  |  |  |
| Maximum cutting speed           |                        | 400 mm/s (16 inch/s) (40-step range)   |               |                        |         |                  |                |  |  |  |
| Cutting force                   |                        | Pen 1: Max. 4.9N(500 gf), 40-step range (1 to 40), Pen 2: Max. 9.8N(1 kgf), 40-step range (2 to 80)  |               |                        |         |                  |                |  |  |  |
| Minimum character size          |                        | About 10 mm square (varies with the character font and media)  |               |                        |         |                  |                |  |  |  |
| Mechanical resolution           |                        | 0.0025 mm  |               |                        |         |                  |                |  |  |  |
| Programmable resolution         |                        | GP-GL mode: 0.1/0.05/0.025/0.01 mm, HP-GL™ *3 : 0.025 mm   |               |                        |         |                  |                |  |  |  |
| Cutter and pen types            |                        | Cutter blades : Supersteel, Pens : Water-based fibertip, Oil-based ballpoint, Disposable ink *4  |               |                        |         |                  |                |  |  |  |
| Cutting media                   |                        | Marking film (vinyl, fluorescent, reflective), Stiff paper/card up to 0.5 mm thick,<br>Sandblast rubber sheets up to 1.0 mm thick, High-intensity reflective film, Polystyrene foam sheets |               |                        |         |                  |                |  |  |  |
| Interfaces                      |                        | RS-232C, USB 2.0 (full speed); auto-switching  |               |                        |         |                  |                |  |  |  |
| Command sets                    |                        | GP-GL and HP-GL™ *3 emulation (selected by menu)   |               |                        |         |                  |                |  |  |  |
| Buffer memory                   |                        | 2 Mbyte  |               |                        |         |                  |                |  |  |  |
| Distance accuracy               |                        | Within ±0.1% (plotter mode)  |               |                        |         |                  |                |  |  |  |
| Repeatability                   |                        | Within 0.1 mm (plotter mode)   |               |                        |         |                  |                |  |  |  |
| Perpendicularity                |                        | Within 0.5 mm/900 mm (plotter mode)  |               |                        |         |                  |                |  |  |  |
| Power supply                    |                        | 100 to 120 VAC, 50/60 Hz; 220 to 240 VAC, 50/60 Hz   |               |                        |         |                  |                |  |  |  |
| Power consumption               |                        | 100 W or less  |               |                        |         |                  |                |  |  |  |
| Operating environment           |                        | Temperature: +10 to +35 deg.C, Humidity: 35% to 75% RH (non-condensing)  |               |                        |         |                  |                |  |  |  |
| Guaranteed precision            |                        | Temperature: +16 to +32 deg.C, Humidity: 35% to 70% RH (non-condensing)  |               |                        |         |                  |                |  |  |  |
| External dimensions (H x W x D) | Level                  | 857 x 920 x 1285mm   |               | 944 x 1568 x 1285 mm   |         |                  | 8 x 1285mm     |  |  |  |
|                                 |                        | 33.8 x 36.0 x 50.6 in.   |               | 37.1 x 61.7 x 50.6 in. |         | 37.1 x 81        | .4 x 50.6 in.  |  |  |  |
|                                 | 60degree inclination*2 | -  |               | 1687 x 1568 x 987 mm   |         |                  |                |  |  |  |
|                                 |                        | =  |               | 66.4 x 61.7 x 39.0 in. |         |                  | .4 x 39.0 in.  |  |  |  |
| Weight (including stand)        |                        | approx. 58 kg  |               | approx. 69 kg          |         |                  | x. 74 kg       |  |  |  |
|                                 |                        | 128 lbs.   |               | 152 <b>l</b> bs.       |         | 16               | 3 <b>l</b> bs. |  |  |  |

- \*1 A vacuum pump is not provided with VC models.
  \*2 The writing panel on VC models cannot be tilted.
- \*3 HP-GL™ is a registered trademark of the Hewlett-Packard Corporation of the United States.
- \*4 Disposable ink pens cannot be used with the high-force pen.

#### Supply

| Item          | Model          | Contents   | Q'ty          |
|---------------|----------------|--|---------------|
| Cutter blade  | PHP31-CB09-HS  | Used with 0.9-mm diameter cutter blades (CB09UA-5)                               | 1             |
|               | PHP31-CB15-HS  | Used with 1.5-mm diameter cutter blades, comes with one tube of grease           | 1             |
|               | PHP31-CB15B-HS | Used with 1.5-mm diameter cutter blades (CB15U-5SP, CB15U-K30-5SP)               | 1             |
|               | PHP34-CB30-HS  | Used with CB30UC-1 cutter blade for thick media                                  | 1             |
| Creasing tool | CP-001         | For card board   | 1             |
|               | CP-002         | For card board   | 1             |
| 1001          | CP-003         | For corrugated board   | 1             |
|               | CB09UA-5       | 0.9 mm diameter, supersteel blade, comes with a spring, for cutting general film | 5 blades/pack |
|               | CB15U-5        | 1.5 mm diameter, supersteel blade, for cutting slightly thick film               | 5 blades/pack |
|               | CB15U-5SP      | 1.5 mm diameter, supersteel blade, comes with a spring                           | 5 blades/pack |
| Cutter blade  | CB15U-K30-5    | 1.5 mm diameter, supersteel blade, for cutting thick materials                   | 5 blades/pack |
| Cutter blade  | CB15U-K30-5SP  | 1.5 mm diameter, supersteel blade, comes with a spring                           | 5 blades/pack |
|               | CB15UA-2       |  | 2 blades/pack |
|               | CB15UA-K30-2   | 1.5 mm diameter, supersteel blade, for cutting high-intensity reflective         | 2 blades/pack |
|               | CB30UC-1       | 3.0 mm diameter, supersteel blade, for cutting thick materials                   | 1 blade/pack  |
|               | KF550-F8       | 1 pen each in red, black, violet, brown, blue, green, orange and pink            | 8 pens/pack   |
|               | KF550-S1       | 2 black pens and 1 pen each in red, blue and green                               | 5 pens/pack   |
| Water-based   | KF551-RD       | 5 red pens   | 5 pens/pack   |
| fibertip pen  | KF552-BK       | 5 black pens   | 5 pens/pack   |
|               | KF555-BL       | 5 blue pens  | 5 pens/pack   |
|               | KF556-GR       | 5 green pens   | 5 pens/pack   |





cardboard

#### **Flatbed Cutting Lineup**

#### Standard accessories

| Standard accessories                     |   |               |  |  |  |  |
|--|---|---------------|--|--|--|--|
| Item                                     | Description   | Q <b>'</b> ty |  |  |  |  |
| Power cable                              |   | 1             |  |  |  |  |
| Cutter pen set                           | PHP31-CB15B-HS, CB15U-2SP, CB15U-K30-5SP  | 1 set         |  |  |  |  |
| Water based fiber-tip pen                | KF552-BK  | 1             |  |  |  |  |
| Sheet holder plates                      | For MG models only (2 large, 2 medium, 4 small)   | 1 set         |  |  |  |  |
| Hexagon wrench                           | For M4 bolts  | 1             |  |  |  |  |
| Height adjustment plates                 | 10 mm, 4 mm height  | 1 of each     |  |  |  |  |
| Durable flexible hose                    | For VC models only, 1.5 to 5 m (can expand/contract)<br>Connection bore diameter: $\phi$ 38 mm (-60), $\phi$ 50 mm (-120/180) | 1             |  |  |  |  |
| Hose band                                | For VC models only, $\phi$ 38 mm (-60), $\phi$ 50 mm (-120/180)   | 2             |  |  |  |  |
| Vacuum pump<br>insta <b>l</b> ation base | For VC models only  | 1             |  |  |  |  |
| USB cable (2.9m)                         | CBL1112-2.9M  | 1             |  |  |  |  |
| CD-ROM                                   | User's manual, Driver, Software(Cutting Master2, D-cut Master)  | 1             |  |  |  |  |

FC4200 series A1/A2 size flatbed cutting plotter FC4210 series
A1 size flatbed cutting plotter for product packaging mock-ups

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**Graphtec Corporation** 

503-10 Shinano-cho, Totsuka-ku, Yokohama 244-8503, Japan Tel: +81-45-825-6250 Fax: +81-45-825-6396 Email: webinfo@graphtec.co.jp







- A tool lineup for cutting of thick paper and corrugated cardboard E/F/G grade.
- Fulfilling the max high pressure 1kg, and enables you to cut thick material.
- A USB2.0 interface.
- *Software applications that improve work efficiency.*
- Achieves a best-in-class cost performance.

# **Flatbed Cutting Plotter**

# FC2250 Series

Advanced Technology for Plotting, Cutting and Creasing Applications

6 models are available. Each model has different table size and hold-down methods, allowing you to select a model which meets your needs.

- FC2250-60VC 920x610mm, Vacuum suction
- FC2250-120VC 1200x920mm, Vacuum suction
- FC2250-120ES 1200x920mm, Electrostatic adhesion
- FC2250-120MG
- 1200x920mm,
  - n, Magnetic
- FC2250-180VC 1740x920mm, Vacuum suction
- FC2250-180ES 1740x920mm, Electrostatic adhesion

Fulfilling the max high pressure 1 kg enabling you to cut thick material.

Includes speed up to 400mm/sec (16 in/sec) and 2 pens as standard equipment.

USB 2.0 interface making a plug and play.





Traffic Sign
High-intensity
Reflective film



ndblast resist rubber

**Offset Print** 





Includes a range of software applications that improve work efficiency and simplify operations.

#### **Cutting Master 2**

This plug-in software allows direct cutting from graphics applications. For higher productivity, create graphics or text in Adobe Illustrator or CorelDraw, then simply output directly to the plotter.

#### Main Features

- Direct output from the software
- · Output by layer / color
- Possible to check the cutting lines by preview window
- Multiple over cutting is possible
- ARMS can be controlled by software
- Centering, Rotate, Mirror for easy layout
- Matrix copy for higher productivity
- Auto-welding for binding same color of shapes
  Tiling / Paneling for segmentation of cutting

#### OS versi

Windows, 2000, XP, VistaMac OS X, 10.2 or later

#### Software version

- Illustrator for Windows 8, 9, 10, CS, CS2, CS3
- Illustrator for Mac 10, CS, CS2, CS3
  Corel DRAW 10, 11, 12, X3

#### Versatile software D-Cut Master

This software reads a DXF file in the AutoCAD R13 format and then enables data display, deleting, sorting, changing of the output order, specification of output setting, and saving functions as well as creation of GP-GL plot data and output to a plotter.

#### Main functions

- Output in separate layers or separate colors can be specified.
- Output conditions can be selected by layer name or color.
- Supports a sorting function to minimize media movement
- The Weed Border cutting function enables automatic output of a border to facilitate weeding of the cut media.
- Any drawing exceeding the plotter's Valid Area can be output in multiple pages using the Tiling function.
- Output conditions can be managed by media name.
- Matrix Copy function
- The Cutting Simulation function enables checking of the cut sequence, changing of the cut sequence, and tiled cutting prior to actual output.

# ARMS Advanced Registration Mark Sensing system



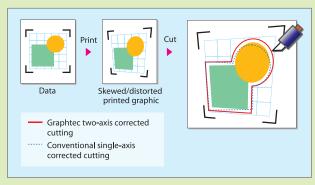
The powerful ARMS (Advanced Registration Mark Sensing system) feature simplifies contour cutting of printed images as well as significantly improving overall productivity for contour cutting items such as labels or stickers.

ARMS will automatically read several types of patterns.



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

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





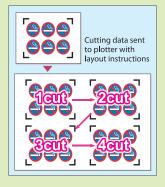
#### Segment area correction ORIGINAL

The intermediate registration marks in horizontal direction are detected to allow four-point correction for each individual segment area. This enables high-precision positioning of the whole area of prints that skewed during printing 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 excellent when high accuracy is needed when cutting an array of copies.





#### **Automatic registration mark detection**

The first registration mark is detected automatically, eliminating the need to position the head to the registration mark manually.

Subsequent registration marks are automatically

Subsequent registration marks are automatically redetected even if marks are not immediately found, saving the time of starting over.





#### **Full software support**

Registration mark commands are provided to control ARMS functions from your software applications such as the Cutting Master 2.

Cutting Master 2

### **Creasing functions**

# 2-Tool Mounting for Easy Switching

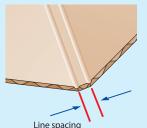
Two tools can be mounted at the same time for easy switching. If you mount the cutter plunger and the creasing tool at the same time, you can perform both cutting and scoring operations without having to exchange tools. If you mount a plotter pen, you can draw check plots before commencing the actual cutting.

#### Simple creasing function

A simple creasing function to create fold lines for clean folding on microflute and cardboard has been enabled.

- Up to three fold lines can be selected.
- Spacing between the lines can also be specified.
- Repeated creasing can also be specified for each line.

# How to determine the number of creasing lines



Single-line creasing Materials of a thickness of up to 0.1 mm

Double-line creasing
Cardboard of a thickness of approximately

Triple-line creasing

Corrugated cardboard of a t

Corrugated cardboard of a thickness of approximately 0.3 to 0.5 mm (rigid cardboard)