Flatbed Cutting Plotters

**Work Smarter, Not Harder.**

The Graphtec FCX2000 is the ultimate solution for prototyping and small production runs of rigid materials without the use of a cutting die. Reduce media waste / processing time with Graphtec’s precision cutting and dedicated software. Added offline (USB) operation*1 enables users of all skill levels to easily process materials.

Advanced model with wide variety of tools and highest performance

**FCX2000 Series**

- Max. force: 9.8N (1 kgf)
- Speed: 400 mm/s

610, 1200, 1800mm width table sizes with choice of vacuum suction, or electrostatic media hold-down methods depending on application.

- FCX2000-60VC
- FCX2000-120VC
- FCX2000-180VC

*1: FCX2000 series only.
*FCX2000-60VC shown.

New

Desktop model offering high performance and cutting speeds up to 750 mm/s

**FC4500 Series**

- Max. force: 5.88N (600 gf)
- Speed: 750 mm/s

A2 size FC4550-50 and A1 size FC4510-60 can be installed anywhere.

- FC4550-50
- FC4510-60

(* FCX2000-120 ES is available in limited region.)

www.graphtecamerica.com
Expanded industrial applications

Precision cutting is achieved by enhancements to the rigidity of the moving mechanism, which reduces deflection due to pressure during cutting. This has enabled new functions such as cutting / creasing / scoring lines. Graphtec flatbed cutting plotters meet the wide variety of applications used in prototyping and short production runs of packaging and industrial materials.

Enhanced functions for higher productivity and work efficiency

- Offline operation supported by use of USB flash memory (FCX2000 Series Only)

  **Offline operation using USB flash memory**
  Plot data is created from the design by using Cutting Master 4 or Graphtec Pro Studio, then the data is saved to USB flash memory. The plot data file can be selected from the USB by menu operation on the plotter, then cutting is performed. This simplified workflow enables users to operate without a computer.

  **Data management using barcode function with USB flash memory**
  In Print & Cut (referred to as "P&C") operation, the cutting data is automatically selected from USB flash memory by scanning the barcode printed on the media then performs contour cutting. This prevents the usage of incorrect data, and improves work efficiency.

- Enhanced ARMS (Advanced Registration Mark Sensing system) for improved productivity of P&C applications

  **Four-point compensation - Precise cutting even of distorted printed graphics**
  This feature compensates for any skewing or distortion in printed graphics to ensure precise contour cutting.

  **Reverse side Cutting/Creasing using ARMS**
  Cutting and creasing of printed graphics is possible even on the reverse side of the media. This prevents any scratches or damage to the printed graphic. On the FCX2000 Series, operation is simple using Cutting Master 4 or Graphtec Pro Studio.

  **Automatic ARMS Sensitivity Adjustment**
  Marks are detectable when there is reasonable contrast against the background. For example, a white mark on a colored background.

- Expanded cutting area (FCX2000 Series only)

  **ARMS Copy function**
  After data is sent the first time, it can be copied multiple times without a PC. In the FCX2000 Series, the first four marks are scanned on the first sheet, and only the first mark in subsequent sheets. This improves productivity by shortening scan detection time.

  **Print data**
  Print data is created from the design by using Cutting Master 4 or Graphtec software.

- Enhanced ARMS (Advanced Registration Mark Sensing system) for improved productivity of P&C applications

  **Supported by standard crop marks (FCX2000 Series only) - special marks are not required for cutting**
  P&C is performed by printing the industry standard crop marks. Adding special marks with Graphtec software is not necessary. Operation is simple when crop mark information is entered within Cutting Master 4 software.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Standard mark example</th>
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<tbody>
<tr>
<td>P &amp; C</td>
<td>Pressing object</td>
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</tbody>
</table>

- Enhanced ARMS (Advanced Registration Mark Sensing system) for improved productivity of P&C applications

  **Expanded cutting area (FCX2000 Series only)**
  This function expands the cutting area to include objects outside of the area enclosed by registration marks. Production efficiency is enhanced by reducing media waste.
Precision cutting is achieved by enhancements to the rigidity of the moving mechanism that reduces deflection due to pressure during cutting. This has enabled new functions such as curved creasing / scoring lines. Graphtec flatbed cutting plotters meet the wide variety of applications used in prototyping and short production runs of packaging and industrial materials.

**Improved application software**

The cutting plotter is ready for use with the supported software, with other advanced features available via plug-ins and optional software.

**Cutting Master 4**

Cutting Master 4 is Graphtec plug-in software for Adobe Illustrator and CorelDRAW Graphics Suite. It sends cut 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.

**Graphics design software**

Graphtec Pro Studio

Easy-to-use application software for creating original designs. It has enhanced functions such as auto-shapes, shading, and editing functions. It can also configure the cutting conditions and other settings on the plotter. Importing of EPS, AI, CMX, and PDF file types are supported. Graphics created with other popular design software can be imported into the software.

* It is available on the Graphtec Pro Studio.

For MAC OS user Included Graphtec Studio

Advanced software

Option Graphtec Pro Studio Plus

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, barcode creation, templates for rhinestone creation, nesting, directional change of cutting lines, changing cutting order, and more.

**Table size and Media hold-down method**

<table>
<thead>
<tr>
<th>Table size</th>
<th>Media hold-down method</th>
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</thead>
<tbody>
<tr>
<td>FCX2000 Series</td>
<td>FC4500 Series</td>
</tr>
<tr>
<td>FCX2000-60</td>
<td>FCX2000-120</td>
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<tr>
<td>Vacuum suction</td>
<td>Vacuum suction</td>
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<tr>
<td>FCX2000-180</td>
<td>Cling mat system</td>
</tr>
<tr>
<td>FC4510-60</td>
<td>860</td>
</tr>
<tr>
<td>CM-0004</td>
<td>860</td>
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<tr>
<td>Cling mat system</td>
<td></td>
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<tr>
<td>For holding a wide variety of media, there are two types of cling mat available. CM-0004 holds film based media. CM-0005 is used for paper based media. CM-0005 is made with soft plastic, which creates better creasing lines compared to our existing models.</td>
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<tr>
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* It is available on the Graphtec Pro Studio.

**Provided tools suitable for many applications**

**Creasing / scoring tool**

PM-CT-002 is a new tool. This reduces peeling and cracking on the printed surface during the creasing/scoring process compared to our existing models.

**Loupe for cutting blade**

The Loupe is a standard accessory used to easily adjust extruded blade length with the PHP33 and PHP35 blade holders. (It is a attached to the FCX2000 as standard accessory.)
Specifications

**Media type**

- **Type of media**
  - Self-adhesive marking film
  - Film: 435 x 610 mm
  - Materials: paper, vinyl, reflective, etc.

**Support cutting blade**

- 60VC Series: Cutting blade (1 set)
- 120VC Series: Cutting blade (2 sets)
- 180VC Series: Cutting blade (5 sets)
- 120ES Series: Cutting blade (2 sets)
- 180ES Series: Cutting blade (5 sets)

**Internal media**

- (Included in the media holder)
  - Cutting blade: 6 sets
  - Cutting blade holder: 2 sets

**External media**

- (Included with optional media holder)
  - Cutting blade: 6 sets
  - Cutting blade holder: 2 sets

**Tools**

- 60VC Series: Cutting blade (1 set)
- 120VC Series: Cutting blade (2 sets)
- 180VC Series: Cutting blade (5 sets)
- 120ES Series: Cutting blade (2 sets)
- 180ES Series: Cutting blade (5 sets)

**Cutting force**

- Tool 1: Max. 4.9 N (500 gf)
- Tool 2: Max. 5.88 N (600 gf)
- Tool 3: Max. 5.88 N (600 gf)

**Weight (Approx.)**

- 60VC Series: 76 kg (Including stand) (3)
- 120VC Series: 116 kg (Including stand) (3)
- 180VC Series: 99 kg (Including stand) (3)
- 120ES Series: 93 kg (Including stand)
- 180ES Series: 19 kg

**External dimensions**

- (Including stand) (3)

**Software**

- (Included with optional media holder)
  - Cutting blade: 6 sets
  - Cutting blade holder: 2 sets

**Option**

- For CB30U series blade
  - 0.9mm dia. 60º, for thin film
  - 1.5mm dia. 30º, for high intensity reflective film

**Supplies**

- Cutting blade holder: PHP33-BALL
- Cutting blade holder: PHP35-CB15-HS
- Cutting blade: CB15U (2 blades), CB15U-K30 (5 blades)
- Cutting blade: CB15U2 (2 blades), CB15U-K30 (5 blades)
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