

Roland® CAMM 1 GX-24E

Versatile and Popular Cutting Machine for Vinyl, Card, etc. Fantastic for Print and Cut with OPAS

What is a GX-24E?

CAMM 1 machines are designed to cut film materials with a knife blade. Thus, shapes drawn on a CAD system can be cut-out as simply as using a printer. The GX-24E is Roland's latest model following on from a long line of machines that have set the school standard for over 14 years. The GX-24E is proving to be an amazingly popular machine and this popularity will undoubtedly develop as more and more schools upgrade to 2D Design V2.

What's new about the GX-24E?

Over the years Roland have always led the way with continued improvements in performance and specification. The GX-24E now has servo technology for even faster and smoother cutting. OPAS is another innovation from Roland which is standard on the GX-24E (see *OPAS The Technology Explained* below).

OPAS technology allows drawings, printed using conventional ink-jet or laser printers, to be transferred to the CAMM 1 for cutting. The printed image is automatically and accurately lined up with a cut path. Thus, for example, a design for a sandwich box label can be printed onto self-adhesive label paper then put into the CAMM 1 for accurate cutting out. Of course this process is not limited to label paper; card, printable iron-on vinyl, and printable vinyl are also ideal materials for the OPAS process (see below for further details).



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What about the rest of the machine?

As well as OPAS technology the machine has a large working area, combined with a very good turn of speed. Full software control over speeds, cutting force, etc., is possible. When combined with 2D Design V2, this means that all cutting parameters can be set through the software, making multi-stage operations such as cutting and scoring card a real breeze. In general operation the CAMM 1 is as simple to set up and use as a printer.

What about software?

Simple - all you need to make the most of your GX-24E, including print and cut with bitmap images, is 2D Design V2! (See page 4.)

What can I do with a CAMM 1 in school?

To illustrate the versatility of this machine, we have listed below just some of the materials that can be cut with the GX-24E and what they can be used for. Also included are some materials that TechSoft have introduced specifically to help make full use of this exciting new OPAS process.

Vinyl

The ability to cut self-adhesive vinyl (or fablon, etc.) to produce lettering, logos, etc., can enhance many projects. Forget rough hand drawn or painted artwork. Quality product detailing is achieved, which is vital to provide the professional standard of finish that pupils (and examiners!) expect. For items such as toys and games, this is virtually indispensable.

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The Technology Explained

What does OPAS stand for?

OPAS stands for Optical Print Alignment System.

How does it work?

The GX-24E has an optical sensor fitted near to the cutter. When a design is created, three registration marks (black circles) are added at specific locations. The design is then printed out onto label paper, card, iron-on vinyl, etc., using a standard printer. The material is then put into the GX-24E. The machine "finds" the registration marks and automatically aligns the cutpath to the image. It even compensates for minor misalignments of the material in the machine.

How do I add the registration marks?

If you are using 2D Design V2 the registration marks are generated automatically and are visible but not active, so they cannot be moved accidentally. Should you wish to alter the position of the marks the software will send the new positions to the GX-24E before the machine looks for them. If you are using Version 1 there are blank templates for A4 and A3 sheets with the registration marks pre-drawn. If you reposition the marks you will need to alter the data on the CAMM 1 yourself before outputting.

How do I tell the CAMM 1 what to cut?

There are several options, the simplest is just to choose a colour not used in the design and to draw the cutting path in that colour. The driver can be set just to cut that colour, easy!



Card

The ability to score and cut card, brings the power of CAD/CAM to cardboard engineering, modelling, packaging, etc. Card may be used for toys, games, masks for painting, etc. This is an ideal way to bring project work to life, and to add "real" end products - a great motivator for pupils of all ages and abilities! Unique to TechSoft is the ability to crease the card as well as to print and cut it. Creasing allows card to be folded without showing a cut line, essential for perfect packaging. Thus commercial quality printed packaging, etc., can now be produced in schools with ease.

Label Paper

This allows high quality self-adhesive labels to be made for food packaging, decals, point of sale displays, etc.

Standard Iron-on Vinyl

Iron-on vinyl has many uses in Textiles Technology. It is ideal for Tee shirts and other garments. The process has many educational implications for textiles design work. Schools can easily badge their own uniforms, produce "specials" such as sweatshirts for trips interstate, personalise the sports kit with students' names and numbers (what a psychological advantage for inter-school games!), etc.

Printable Iron-on Vinyl

When printed then cut, superb durable full colour iron-on motifs can be produced. For garment decoration this is a must.

Iron-on Flock

Iron-on flock is similar to standard iron-on vinyl, but it has a textured finish to add an extra dimension to textile products.

Ceramicon

Ceramicon is a thin layer of ceramic glaze. Once cut it can be applied to a tile, plate, mug, etc., and fired in a kiln for a permanent dishwasher-proof finish.

Cutronic Foil for PCBs

Using Design Tools - PCB Design and Make, PCBs may be cut directly from self-adhesive copper foil to make "stick-on" circuit boards.

Plastic

Very thin plastic sheet (styrene, polycarbonate, etc.) can easily be scored, so that shapes may be snapped out for templates, ergonomic figures, etc.

Printable Vinyl

A special vinyl that can be printed and cut, to produce really high quality full colour decals.

FEATURES

- | Max. plotting area 584 x 25000mm
- | Max. plotting speed 500mm/sec
- | Optical Print Alignment System
- | Digital servo motor drive
- | USB and Serial interfaces
- | Dimensions 855(W) x 315(D) x 240(H)mm
- | Weight 16Kg
- | 1 year warranty.
- | TechSoft Education Inset Pack - Inset Course Booklet, CD, Accessories and Materials

Why should I buy a GX-24E?

CAMM 1s are already pretty much standard equipment in most D&T departments. They enhance the quality of outcomes in all areas of D&T and they have proved to be versatile, child friendly and reliable.

The OPAS feature of this machine makes it an absolute essential for any course with elements of graphic products or product design. It has undoubtedly also become a firm favourite for teachers of Textiles Technology, Food Technology, etc.

When you add in the respected and trusted manufacturer, and the unrivalled technical support for most schools the question should not be "should we have a GX-24E?", but "how many should we have?".



**FREE
EDUCATION
INSET PACK**

A free TechSoft Education Inset Pack is supplied with each machine. This includes an Inset Course booklet with "hands-on" tutorials, a tutorial CD, accessories and sample pieces of material.

