



OMNIA **SERIES 80/100**

AUTO FEED DIE CUTTING MACHINE

Omnia has been designed to **automatically feed** and contour cut media to create exclusive packaging and unique labels. The operator can load different kinds of materials and thickness, with different sizes up to 75x80 cm / 29,5"x 31,5" (Omnia 80) and up to 75x105 cm / 29,5"x 41,3" (Omnia 100). Omnia will feed media to the cutting table using a suction system that lifts media from the feeder and drags it onto the conveyor. The feeder holds up to 600 sheets (350gsm), depending on thickness. Once in position, the camera will detect crop mark and execute the cut of the uploaded file. The processed sheets drop into the catch tray. The software can control multiple workflow options including cut files from various graphic design software, QR Code mode, and non-printed material. Omnia is perfect for die-cutting cardstock projects including packaging, folders, business card and kiss-cut on labels. With its robust design, it can also process heavy material such as corrugated cardboard, grey chip board, plastic sheets, forex and honeycomb board.



INCREASE PRODUCTION CAPACITY

The oversized feeder and the withdrawal system automatically pick up and load the materials into the cutting machine. The automatic crop mark detection allows a hands-free cutting process and a signal tower light will notify the operator that the feeder has dropped to the minimum quantity so it can be reloaded and to visually interact with the operator at distance.



REALLY INDEPENDENT WORKFLOW

Omnia Series is designed with the aim to make it work automatically all day long without the presence of an operator. Repeatability, reliability and longevity are three factors that summarize the concept of quality asseverated in Valiani Omnia.



SUPERIOR MANUFACTURING. **QUALITY AND RELIABILITY**

All Valiani machines are designed and developed with the aim to make them last forever.









Oscillating tool*.

*OPTIONAL

Main Applications

- Packaging / Luxury rigid boxes
- Stickers and Labels
- Business cards
- Greeting cards and folders
- Leaflets
- Small POS Displays
- Post press digital and offset finishing
- Photo Albumsand many more

Materials

- Folding carton and corrugated cardboard
- Rigid Cardstock
- Grey Chip board
- Coated paper
- Adhesives/Stickers/Vinyl
- PVC/FOREX and Foam boardand a lot more

Distinguishing features for every Omnia model

- Signal tower light to visually interact with the operator
- **Parallel** sheet feeding up to 37 x 105cm (14,5"x41,3")
- Conveyor with guide to prevent media from deviating from path
- Support for laptop / PC

- Oversized catch tray
- Oversized feeder 200 mm (7.87") capacity
- · Nonstop sheet media loading
- Safety mats



PARALLEL SHEET FEEDING **SRA3** OR UP TO 37 x 105 cm

(14,5" x 41,3")

FOR ANY DIGITAL AND OFFSET PRINTING HOUSES

> **FEEDER CAN STACK UP TO**

600 SHEETS OF 300 GSM CARDSTOCK

75 x 105 cm (29,5"x 41,3")

SAVE MONEY AND TIME

CHANGE CONVEYOR BELT BY YOURSELF





For more information scan the QR code or visit our website at www.valiani.com

Reasons Why

- 1. Continuous sheet media loading and processing
- 2. High-capacity Feeder (200mm 7,87")
- 3. Perfect cutting and creasing on most materials
- 4. No operator needed / Unstoppable workflow
- 5. Cutting up to 12.7 mm (1/2") rigid media
- 6. Kiss Cut Tool available for vinyl and thin paper
- 7. Processing rigid media for luxury packaging
- 8. Camera and software to ensure precise graphics alignment
- 9. SRA3 or bigger Dual sheet feeding
- 10. 100% made in Italy





Omnia Series

Tools available

Omnia can be equipped with all tools compatible with the following tool holders:

- Multifunctional **Tool Holder**
- Versa-Tool Holder • Fixed Tool Holder







Technical Data

Folding carton





Foam board

Omnia Models	80	100
Cutting Size	750x800mm (29.5"x31.5")	750x1050mm (29.5"x41.3")
Width	1780 mm (70") 2190 mm (86,2") w/ PC stand	1780 mm (70") 2190 mm (86,2") w/ PC stand
Depth	3860 mm (151.9")	4370 mm (172")
Height	1320 mm (52")	1320 mm (52")
Weight	890 Kg (1962 lbs)	950 Kg (2094 lbs)
Minimum Media Size	297x210 mm (A4) (11.6"x8.2") - Portrait	297x210 mm (A4) (11.6"x8.2") - Landscape
Maximum die-cutting size	740x790 mm (29.1"x31.1")	740x1040 mm (29"x41")
Width with safety mat	3280 mm (129,2")	
Max Cutting Speed	1350 mm (53,15") / sec	
Acceleration	4 m/s² (157 in/s²)	
Power Requirements	3 Phase - 400V 50/60 Hz	
Power Requirements 400 V	5 KVA - 13A	
Power Requirements 208/ 240 V*	6 KVA - 25A	
Air requirements	6 BAR/90 PSI (3.5 CFM) 8 BAR/115 PSI (5.3 CFM) with Oscillating tool	
File Format	SVG, .PLT, .DXF, .CF2, .HPGL, .XML, .PDF	
Tool Change	Manual	
Tools Availabile	90°, 45°, 40°, Embossing, Creasing, Oscillating tool and Kiss cut tool	
Tool Holders	2+(1F)	
Connectivity	Ethernet + USB	
Data Buffer	External PC	
Media Holding System	Vacuum	
Fixed Tool	Pen (Optional)	
Feeder Capacity	600 Sheets (300 gsm) - Height 200 mm (7,8")	
Cutting Capacity	0.1 > 5 mm (0,19") with Tangential Blade 0.1 > 12,7 mm (0,5") with Oscillating Blade	
Repeatability	≤0.1 mm	
Supported OS	Windows 7, 10, 11	
CropMarks Rec.	Camera + Software (Included)	

^{*}Countries lacking of 400V, it is necessary to use a power converter. (that we can provide if any).

TOOLS **AND HOLDERS**

The combinations between Tools and Holders make Valiani flatbed cutting machines the ideal solution for many applications and materials.



HOLDERS

All Valiani cutting machines are based on a modular tooling system that enables to assemble different tools from a set of common building blocks. Thanks to this system, users can quickly assemble tools for different finishing process. This reduces the time of tool changeover and boosts productivity.



TOOLS

Valiani has an array of tools that fit onto a multifunctional tool holder to enlarge the range of cutting process available on some models such as Oscillating knife, V-Cutting, Kiss-cutting and many others. Valiani tools grant the users both **Modularity** and **Quick-Change** capability. This versatility represents a gain in the machining capacity, providing tangible results and measurable return on investment (ROI).



INTERCHANGEABLE HEADS* (TO BE COMBINED WITH VERSATOOL)

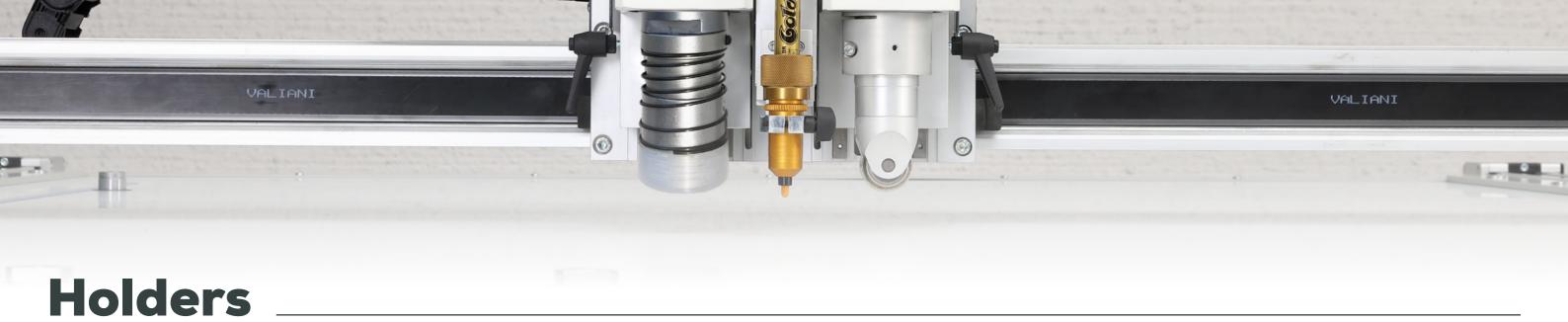
Valiani has also an array of interchangeable heads* for their entire line of flatbed cutters. These heads are retained and positioned on the cutting head assembly by means of several small, yet powerful magnets, which make locking faster and hardware unnecessary. A dedicated wedge-fork is supplied with the heads which makes easy, safe and fast the head change. Each tool head is color-coded to help simplify recognition at a glance.

*INTERNATIONAL PATENT



For more information scan the QR code or visit our website at www.valiani.com







Multifunctional Tool Holder (MTH)









The Multifunctional Tool Holder is designed to fit many different tools. The simplicity of this tool holder makes it very easy to change from one tool to another. A simple locking system allows the operator to change tools anytime the cutting process requires, in less than 10 seconds. This feature translates into the possibility of having countless tools on the machine regardless of the number of the tool holder modules. The Multifunctional Tool Holder comes as standard with a quick and easy manual adjustment to set blade depth or creasing pressure (automatic adjustment on the Integra series). Holder can be operated in pressure or position mode.

- Quick Tool Change and No calibration needed
- **High Precision and quick Adjustment Setup**
- **Long Life and Heavy-Duty Equipment**

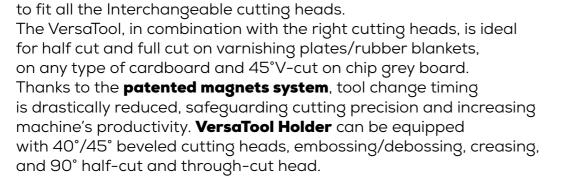












- **Quick Tool Change and No calibration needed**
- Versatility and reliability
- Limitless expandability / No Obsolescence

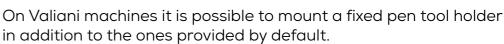












This tool holder supports every type of pen, pencil and felt-tip pen, thought to draw and write on many materials including cardboard and paper patterns for apparel market.



Tools



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O Powerful Pneumatic Oscillating knife (PPO)



For thick honeycomb cardboard, composite foam, coroplast, forex/PVC and a lot of many more materials. The oscillating cutting tool is a pneumatically powered tool, ideal for cutting heavy materials up to 20 mm (3/4")* but it can also handle thinner and softer ones. The combination of the air pressure strength and the 8 mm stroke make it suitable for a wide range of applications.

- Powerful and low-maintenance pneumatic tool
- 8 mm stroke/ 9.000 Bpm
- 20 mm (3/4") cutting capacity*
- **Compatible with MTH**

*Depending on material rigidity

Blade type: oscillating round shank blades









Pvc/Forex/Foam Honeycomb board board

Coroplast board

Rubber Gaskets



High-speed Pneumatic Oscillating knife (HPO)



Ideal on textile, foam, polyurethane and corrugated materials. The High-Speed Oscillating cutting tool is a pneumatically powered tool that combines performance with extreme precision. The 8 mm stroke and the high oscillating frequency make it capable to process softer and thinner materials at higher speed, reaching excellent quality levels at more silent pace.

- **High performance**
- 8 mm stroke/14.000 Bpm
- 20 mm (3/4") cutting capacity on very soft materials like foam board
- Compatible with MTH

Blade type: oscillating flat blades



Multi-flute

Corrugated board





Textile and

Leather





Foam board

Micro Corrugated board



Multipurpose Tangential knife (MTT)



Code 2FTDT25

For folding carton and corrugated cardboard, vinyl, thin plastics and a lot more materials. The tangential cutting tool is a precise multi-depth tool, capable to handle material up to 5 mm (3/16") thick. The tangential knife allows to cut at full speed releasing very high-quality finishes. The tool is always **included** as standard on all machines except Invicta (optional).

- **High-quality finishing**
- Versatile, handles most thin materials
- 5 mm (3/16") cutting capacity

Blade type: Pulling flat blades











Folding Carton and Paperboard

Micro Corrugated board

Crystal Adhesives for Motorbike **Decals**

Grey chip board

Kiss-cut Tangential knife (KCT)



Code 2FTDT43

The Kiss Cutting Tool is a tool designed to peel the top-layer of thinner materials. Thanks to its mechanically controlled blade, it can perform cuts with extreme accuracy. Equipped with a blade guide, the tool provides consistent and precise control over the cutting depth for various applications, from vinyl stickers to labels and decals.



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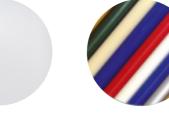
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Type: Spring-controlled pressure

- Control: Manual, rotating disc on tool holder
- Pressure: Springs up to 120g, 650g and 1800g











Adhesive PVC Adhesive vinyl **Sandblast Banner**

Protective



Ø 16 - Ø 32 mm









Ø 60 mm









Universal Creasing Tool (UCT)



The Universal creasing tool is a multi-use tool that comes as standard with 9 wheels with creasing and perforating functions. The tool is able to crease a wide variety of folding and corrugated cardboard, polypropylene, single and double flute sheets, etc.. Wheels can be easily changed thanks to the magnetic holding system.

- Adjustable creasing pressure
- Clean and precise creases
- Wheels easy mount
- Compatible with MTH

WHEELS AVAILABLE

- Set of creasers for Folding Cardboard (3 pcs)
- Set of creasers for Corrugated Cardboard (3 pcs)
- Set of perforating wheels (3pcs)



Paperboard

Folding Carton and Micro Corrugated



Board





Polypropylene Honeycomb

Archival Corrugated Board





The 4 Multi-Flute creasing wheels have been designed to handle double and triple flute thick corrugated board.

They work in combination with a special creasing tool to be bought separately.* The larger diameter of the creasers allows to produce fine creases both with and against the corrugation, Multi-Wall Creasing Wheels can be easily changed thanks to the magnetic holding system.

- Wheel easy mount
- Clean creases on double and triple wall corrugated board
- Adjustable creasing pressure

*Multi-wall creasing tool (2FTDT38) and wheels are optional upon request, not included within the above Universal Creasing Tool (2FTDT24/2FTDT34).



Single-Wall

Corrugated

Cardboard



Double-Wall Archival

Cardboard



Triple-Wall Corrugated Cardboard



Polypropylene Honeycomb Coroplast



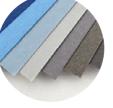
Plot Drawing Tool (PDT)



For those needing to write part numbers or job names on items prior to cutting. The Plot Drawing Tool is available for the tool holder body and it takes standard pen cartridge ball point. This tool is also ideal to label materials such as cardstock with text, marks or symbols for the apparel industry.

- High speed
- Quick pen change
- Ideal for text or marks on cardstock
- **Compatible with MTH**













Cardstock

Any cardstock for apparel patterns

Polycarbonate sheet

Polyester-based Varnishing Plates

V-Cut and Bevel Tool (VBT)

Code 2FTDT33

The V-Cutting tool is a specific tool for creating beveled edges and folding thicker materials. The tool is ideal for producing three-dimensional structural designs made of honeycomb cardboard, foam core materials or light coroplast display board. The tool has multiple blade holders* to produce bevel cuts at 15°, 22.5°, 30° (optional) and 45° (included). Thickness capacity ranges between 6 mm (0,23") and 16 mm (0,62").

- Heavy-duty
- For display racks and large-sized cardboard structures
- Variable angle*
- Compatible with MTH

*15°, 22.5°, 30° blades are optional upon request, not included within V-Cut Tool.

*Available on Optima and Integra only





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Honeycomb board





Triple-Wall

Corrugated





Foam board



Light **Coroplast**





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Routing Tool (RT)

Code 2FTDT37/2FTDT39

The 1 kW router can handle the processing of the most common rigid supports used in the graphic and sign industry including rigid PVC/Forex, acrylic/plexiglass, Dibond/aluminum composite panels and soft & hard woods up to 13 mm (0,5") thick; allowing to produce a perfect finishing of printed materials and much more. The routing bit shank reaches a maximum of 8 mm (0,315") in diameter.

- Speed range 5.000 60.000 rpm
- Routing bit tool change: manual wrench



Aluminum

composite









Soft and Hard Woods/MDF

Plexiglass/Acrylic

Pvc/Forex sheets

Interchangeable Heads*

To be combined with VersaTool













The 90° White head has been developed to cut a wide range of materials up to a thickness of 6.3 mm (1/4"), as well as to perform half-cut. It comes as standard with one pressure roller and a teflon foot. It is generally used to cut grey chip board to create lids and slipcases for luxury packaging and extremely effective on offset rubber and varnish blankets.

- Multi-purpose cutting head
- Half-cut tool on grey chip board
- Clean & precise cutting of varnish and rubber blankets
- Compatible with VersaTool Holder

PATENT

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Grey chip board



Luxury packaging board



Varnishing plates & rubber blankets



Polyester-based Varnishing Plates





The 40° Green head produces a bevel cut at 40° angle, ideal for both cutting small shapes and traditional bevel cutting. It cuts up to 2.3 mm (0,09"). Recommended for mat-board and polyester-based offset varnishing plates.

- Ideal bevel cutting tool for mat boards
- Intricated design cut on polyester based varnish plates
- Compatible with VersaTool Holder

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Polyester-based **Varnishing Plates**



Suede mat-board up to 2.3mm (6ply)



Thin Museum Archival board

Blue 45° - Bevel Cut (IHB)

The 45° Blue head produces a bevel cut at 45° angle. This head can cut up to 5 mm (3/16") thickness and performs V-Cutting as well. This application is highly demanded in the field of luxury packaging and more precisely to create rigid boxes. Excellent results are also obtained while cutting grey chip board and foam board.



- Ideal for high-end luxury boxes
- Fine edges on V-cuts
- Compatible with VersaTool Holder



Standard mat-board





Foam board up to 5 mm (3/16")



Grey chip board up to 5 mm (3/16")



Luxury packaging board





Purple - Embossing / Debossing (IHP)



The Embossing/Debossing Purple head includes 4 different tip types and it is used to create thin decorations by applying pressure on different materials.

Any shape or design can be elegantly embossed/debossed on the surface of the material depending on its rigidity and consistency.

- Give your design another dimension
- Raise the surface of your design
- Ideal for braille characters applications
- Compatible with VersaTool Holder

Standard

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mat-board







Coated and **Folding** laminated paper Cardstock

Braille characters



Grey 90° - Straight Cut (IEH)



The 90° Grey head has been developed to perform a straight cut on a wide range of materials up to a thickness of 5 mm (3/16"). It releases a perfect finishing results on folding and thin corrugated cardboard, vinyl adhesives, thin plastics and more. It has a similar function of the Multipurpose Tangential knife (MTT).

- Universal straight cutting tool
- It comes as standard with a metal and teflon foot
- Compatible with VersaTool Holder

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Grey chip

board





Micro Corrugated

board



Heavy cardstock for apparel patterns

Crystal Adhesives for Motorbike **Decals**

Brown - Creasing/Scoring (IHBr)



The Creasing Brown Tools set consists of one head with **9 wheels** of various geometry, which have been developed for the packaging market for those who need to crease cardstock, flute board, corrugated board and polypropylene. It has the same function of Universal Creasing Tool (UCT).



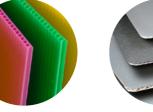
- Clean and precise creases
- Wheels easy mount
- Compatible with VersaTool Holder

WHEELS AVAILABLE

- · Set of creasers for Folding Cardboard (3 pcs)
- Set of creasers for Corrugated Cardboard (3 pcs)
- Set of perforating wheels (3pcs)







Folding Carton and Paperboard

Micro Corrugated board

Polypropylene Honeycomb

Archival Corrugated board

Brown - Creasing Wheels (Part of IHBr)



Ø 16 - Ø 32 mm

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Blade tool: Metal round-knife

wheel, Ø 32 mm diameter.



Perforating tool: Serrated cut wheel, Ø 32 mm, 3-1 mm step.







Scoring tool: 32 mm diameter, 1.5 mm round crest



Scoring tool: 32 mm diameter, 1 mm round crest



- 7 Scoring tool: 16 mm diameter, 0,7 mm round crest.
- 8 Scoring tool: 16 mm diameter, 1 mm round crest.
- 9 Scoring tool: 16 mm diameter, 1,5 mm round crest.

Fixed Tools



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Multipurpose Drawing Tool (MDT)



Code 2FTDT30

On every machine it is possible to mount a fixed tool as a third or second optional tool depending on the machine model. The Multipurpose Drawing tool is very user-friendly since it takes standard drawing tools such as felt-tip pens and ballpoint pens.

- Available for Invicta, Optima, Integra and Omnia
- Precise on any type of writing or decoration
- Works with any type of pen
- **Compatible with Fixed Tool Holder**









Mat-board

Cardstock

Any cardstock for apparel patterns

Micro and Double Corrugated board



PEN CARTRIDGES (INCLUDED)

48 | Tools and Holders



Bronze/Gold: Upper and lower diameter

15-8.5 mm



Black/Red: Upper and lower diameter 8,5-5,5 mm



Orange/Blue: Upper and lower diameter 11-5,8 mm

SOFTWARE AND PROGRAMS

What makes Valiani special is the ability to integrate innovative and extremely easy-to-use software solutions.

You can choose among different software and applications to make your Valiani perform at its best.



OptiCrop is the software X valiani

that allows you to manage contour cut on pre-printed images and create endless application. Used in conjunction with a high-resolution camera, it allows you to identify crop marks, realign graphics to match them and adjust the print skew. (optional)



V-STUDIO

V-Studio is the Valiani

desktop application software, developed to improve the man/ machine experience. Thanks to an optimized design environment and equipped with innovative tools, users will be able to cut any .SVG, .PDF and .PLT, as well as .CFF2 and DXF. This user-friendly software makes it easy producing customized packaging models* and perform contour cuts** on pre-printed materials. With the intuitive user interface and powerful toolset, anyone can cut a job like a professional after a short training.

*Packaging models are within the M3 or M3 Art software. **Contour cut can be performed with Opticrop Software.

M3 AND M3 ART

M3 and M3 Art software are the perfect way to start producing boxes and POP/POS Displays. Using their large parametric library, that includes models for folding carton, corrugated board, honeycomb board and rigid grey board, you have virtually endless possibilities. (optional)

(included)

V-STUDIO

THE SIMPLEST WAY TO MAKE THE BEST FROM YOUR VALIANI

INCLUDED



FULL CONTROL OVER YOUR VALIANI

You can set plotting process, tools, pressure and speed, overcut, multi-cut, blade offset, mirroring, cut selection and many others.



SUPPORTING MOST COMMON GRAPHIC SOFTWARE

Works perfectly with Adobe Illustrator or Corel Draw through .SVG or .PDF file format, CAD software through .DXF file format and last but not least most of the Packaging CAD through .CFF2 file format. Other file formats for importation from most popular graphics R.I.P software available.



CONTOUR CUTTING

Easy adds crop marks over your print with a script for Adobe Illustrator and a Macro for CorelDraw, recognizes different plotting process through predefined color strokes and allows new pairing when needed, a colors swatch is also available for both graphic software.



DETECTING CROP MARKS IN COMBINATION WITH OPTICROP

Reads crop mark of multiple sizes and shapes, including white marks on dark materials. Manages single sheet, multiple poses, or large print with multiple crop marks, as well as layers and groups to optimize cutting workflow.



PROTECTING YOUR BUSSINESS

Stores your machine configuration on our Cloud for easier configuration restore and prevents from losing data.



REASSURING

Guarantees free updates* on V-Studio from Valiani website so that all users could always benefit of the latest features.



MANAGING MATERIALS DATABASE

Optimizes the software usage by storing all your materials details including their cutting parameters, relevant tools and blades, cutters or creasers.



UNIVERSAL COMPATIBILITY

If English in not your first languages, V-Studio is available in 10 more languages which includes Italian, French, Spanish, Japanese, Chinese, Russian, Flemish, German and Korean.

Supported by Windows Operating System.



For more information scan the QR code or visit our website at www.valiani.com

*Latest software might not be compatible with very old Valiani machines, please contact customer support before proceeding.



- Fully compatible with Adobe Illustrator and Corel Draw.
- Cutting process through colors matching.
- QR/BarCode File Import.
- Integrated with most of Packaging CAD and R.I.P. Software.
- Capable to handle most common vector file formats (.SVG, .PLT and .PDF).
- VXML file format compatibility for both Output and Input.
- Available for Windows 11, 10, 8 and 7.
- Translated into 10 languages.
- Optimize cutting path to reduce working time.
- Option to cut only selected objects.
- Capable to import 2D project from most of CAD software through .DXF file format.

OPTICROP

GIVING SHAPE TO PRINTS

ADVANCED CROP MARK DETECTION SYSTEM

OptiCrop* is the software that allows you to manage contour cut on pre-printed images and create endless application. Used in conjunction with a high-resolution camera, it allows you to identify crop marks, realign graphics to match them and adjust the print skew.



CROP MARK DETECTION

Once the camera is positioned on the first printing mark, OptiCrop automatically detects the 2nd, 3rd and 4th marks, redrawing the artwork according to its position on the cutting table. Retry mode is a time saving feature that allows the user to repeat the crop mark acquisition cycle.



PRINT ALIGNMENT

Through the crop mark detection Opticrop is capable to straighten the cutting trace and compensate print distortion. This operation can be performed on a single sheet or even on multiple sheets. Number of crop mark determines the precision of contour cutting. 4 crops ensure maximum precision for almost any kind of distortion, whereas 2 -3 crops can be faster but with limited compensation.



VECTOR FILE IMPORT

OptiCrop works with .SVG (Adobe Illustrator or Corel Draw), .VXML and PDF files.

OptiCrop software works with vector files, it is possible to set-up plotting process using different pen colors on your artwork. It is also possible to use group function and layers to optimize work flow. This feature also recognizes different colors and allows the user to set-up halftone colors.

* optional



For more information scan the QR code or visit our website at www.valiani.com



- Straightening cutting process available up to +/- 44°.
- QR code import QR code can be used to identify the job and automatically load it. QR code can be acquired directly by the built-in machine camera.
- Barcode import Barcode can be used to import file.
- Squared and rounded shape crop marks, whether black or even white on a dark background.
- Customizable registration crop mark sizes.
- · Mirror Mode for Reverse side processing.
- Quick crop mark detection time.
- · Print distortion compensation.





Valiani srl

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