

# DIGITAL FLATBED DTF CUTTER

**VFC90**

Professional DTF Cutting Solution



## PRODUCT PROFILE

The VICUT roll feeding digital flatbed cutter VFC90 designed with conveyor table, grating ruler and 8-levels cutting force settlement, it is mainly used to cut soft medias without cutting dies, it is an efficient solution of full cutting, half cutting, perforating, marking, etc. It works along with DTF printers and heat transfer machine to provide one-stop DTF solution.

## SUITABLE MATERIALS

**PET Film for DTF Printer.**  
DTF,direct transfer film,which is a new technology for heat transfer-digital offset heat transfer.

**Other flexible media thickness from 0.03-1.5mm.**  
Such as reflective films, heat transfer films, Paint Protection Film / PPF,Vehicle Wrap,Window Tint,Vinyl Sticker, Magnet Sticker, Sandblast Resist Rubber, Mobile Phone Decoration Film, Multiple Layer Film, Film for Flexible Circuit, Glass film, PVC film and more.

**Paper Cards**  
up to 500gsm.

### Advanced Algorithm

Obvious elimination of distorted, rounded or lifted corners.

### Static Free

Static electricity cannot disappear and can only be guided away. Through reasonable circuit design, VF flatbed cutter successfully removed the static electricity generated in the cutting process and avoids disturbing the CPU. The problem of electrostatic interference is really solved.

### No Need OVERCUT

In every cutting path, the start and end point join with each other accurately, while no need to setup any OVERCUT.

### Multiple Layers Solution

For medias with multiple layers, different cutting force is applied for different layer.

### Cutting Force in 8 Step

With our dedicated software, user is enabled to put different colors for different cutting paths, and set the processing sequence as color sequence. This is a important feature for cutting medias with multiple layers, which requires different cutting force in different layer.

### One-click to Clear History

One-click deletion button for the currently print document and clear it completely from buffer memory.

### Half Cut / Perforation Cut

Half cut / Perforation cut are available, every time you may carry out either one or both.

### Dotted Lines Cutting

Dotted line cutting is available for medias with 2 layers typically and also kinds of paper.

### DXF Direct Output

VFC cutter is compatible with DXF file directly while no need any format transition.

### High Precision

VFC flatbed cutter Series is able to cut small text strings, and it is easy to tear off the scraps.

### Handshake Protocol

We supply Software Development Kit / SDK to match with client's software, which deepen cooperation between our team and Professional clients.

## TECHNICAL PARAMETERS

MODEL	VFC90
Working size on X axis	Non-contour cutting: 735mm; contour cutting: 725mm
Working size on Y axis	Sheet media: 900mm; roll media: whole roll
Max.media width	800 mm
Cut media thickness	0.03mm-1.5mm
Applicable media	Soft and medium rigidity medias
Method to fix media	Vacuum table(1.1kw vacuum pump with muffler)
Method to feed media	Conveyor belt & roll media bracket
Max.cutting speed	600mm/s
Max.cutting force	600G/5.8N in 8 steps
Cutting force setup	Adjustable in every 1G
Cutter blade diameter	Φ2.0mm
Cutter blade angles	60°
Dotted lines cutting	included
Drive	AC Servo
Mechanical resolution	0.0125mm
Compatible OS	Win 10/8/7/XP
Memory buffer	2MB
Software	CDR.Plugin/Maintop, Cadlink/Flexi
LCD language	English/Chinese
File format	HP-GL, PLT, DXF, CAM
Port in standard	USB cable, U-Disk
Reg marks detection	CCD Camera
Working tools	1 pcs blade holder, 1 pcs pen holder, 3 pcs cutting blades
Working Voltage	110V/220V,50-60HZ
Power consumption	2200W (including vacuum pump)
Floor size (W-L-H)	1793x1293x1020mm
Packing size (L-W-H)	1600x1400x1240mm
Weight (N.W/G.W)	210kg/305kg

## DETAILS DESCRIPTION



### Advanced Tool Carriage

The tool carriage adopts the structure of sports car, using of silent voice coil motor makes it outstrip it's rivals. The tool carriage is featured as fast, agile and no overheat for long-time non-stop operation. It is a leading tool carriage in the same field in China.



### Suction cup feeding device

Several suction cups are installed on the beam of the cutter to help drag the media to the forefront of the machine for convenient processing.



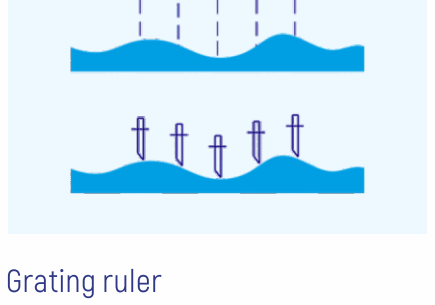
### Vacuum System

Strong air flow to hold down the media flatly and tightly against the table top so that the tool carriage can perform fast, accurate cutting / plotting, continually working more than 24 hours without overheating issues.



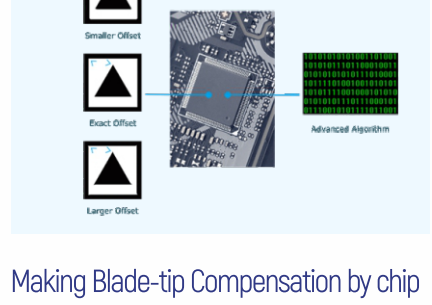
### Roll feeding device.

It is smooth to feed media with the media bracket, user may setup the bracket according to media feature and specs. The bracket improves productivity.



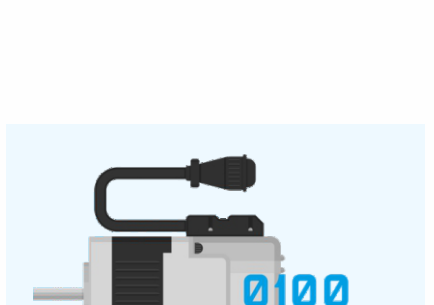
### Grating ruler

Inevitably material surface is not level from point to point, the grating ruler is applied to measure the distance between blade tip and material surface, and the cutting depth is adjusted in every 0.01mm by the controller accordingly. Then the blade travels up and down as material surface goes to keep the same cutting depth at any position of the tool paths across the entire table. In short, Grating Ruler is of key importance for consistent cutting depth.



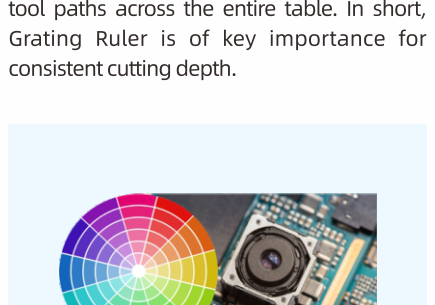
### Making Blade-tip Compensation by chip

Our system makes blade-tip compensation by hardware(main board) instead of software, the cutter works with constant high precision no matter what kind of CAD / CAM software is applied.



### Servo Motor / Closed Loop Control

Intelligent servos bring out smooth acceleration, big torque, precise cutting / plotting operation, excellent durability and volume production. Servos ensure the vinyl cutter to run at Max. Speed: 600mm/s.



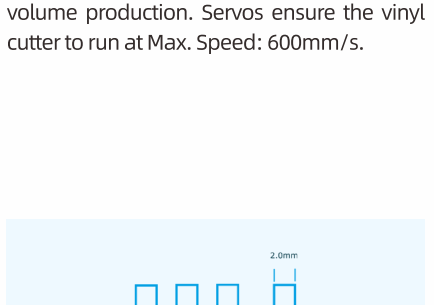
### Fast Registration Marks Detection with CCD Camera.

With dedicated software, it is able to generate contours in one-click, and it is easy to add registration marks.CCD camera, used in combination with related software is applied to detect the intricate dieless contours fast and more efficiently. Problems caused by position error of human, poorquality printing are resolved. CCD camera is applied for wide varieties of medias.



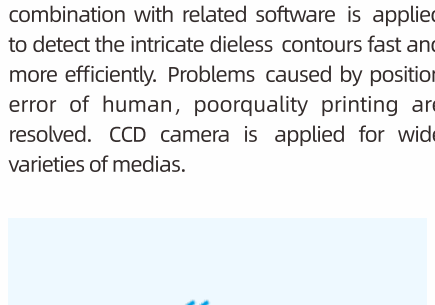
### Segmented Area Cutting Operation with CCD Camera

Additional registration marks are available for more precise axis alignment. Contour cutting is performed sequentially in each segmented area, which improves accuracy and tracking for heavier media or media that has been laminated.



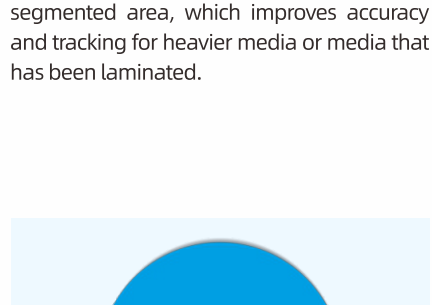
### Series Cutter Blades Available

Angle: 30° / Φ2.0mm for prismatic reflective sheeting, thick media or small character  
Angle: 60° / Φ2.0mm for reflective film  
Angle: 45° / Φ2.0mm for PPF



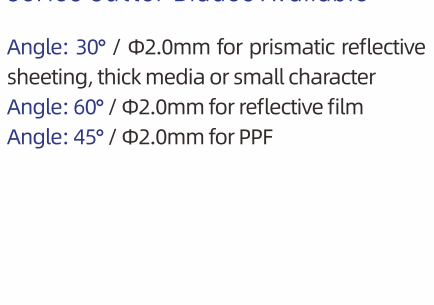
### Auto Feeding Conveyor System.

Conveyor is able to accomplish long seamless cutting / plotting. With the combination of CCD camera, fast and accurate nesting / contour cutting is performed.



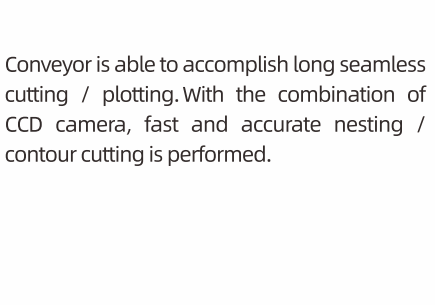
### Clean Smooth Edge Quality

The grating ruler and correspondent cutting force management deliver clean smooth edge quality, even for the most complex jobs. Peeling off the cutting piece/waste material easily can cut down workload greatly for the users. Advanced algorithm eliminates the distorted, rounded and lifted corners obviously.



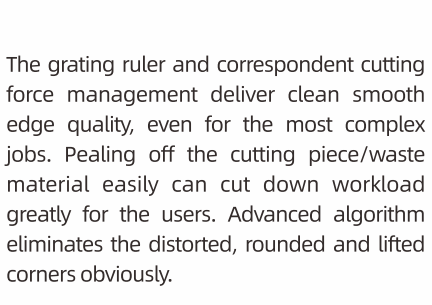
### Leading Compatibility

Leading the latest industry, VFC is able to adapt to the latest version of popular CAD / CAM software, such as AutoCAD, Adobe Illustrator, Coreldraw, Flexsign, CADLINK Various pattern software in automotive aftermarket like 3M™ Pattern and Solutions Center (PSC), Core by LUMAR, INTEGO are already compatible to this system.



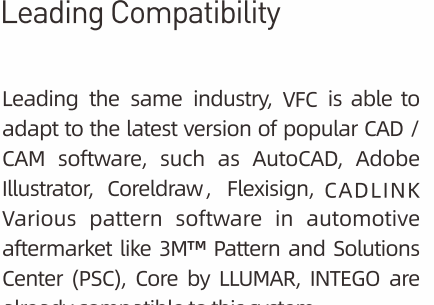
### Intelligent Bleeding for Easier Overlap Operation.

Intelligent Bleeding function makes overlap operation easier for the installers, this feature is very important for making and installation of big signs / indicators.



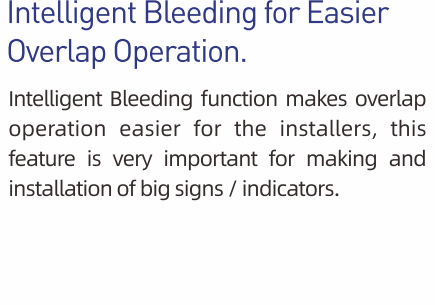
### Usb Memory / Duplicate Cutting Jobs Offline

Knowing exactly what trouble the users and what they want, we design the cutter to fix those practical headaches. With our machine,users are enabled to duplicate the cutting jobs offline, which is much convenient than doing that with connecting to PC by USB cord. The function of duplicating cutting jobs with USB memory is a leading technology that developed by ourself. This feature is important for efficient volume production.



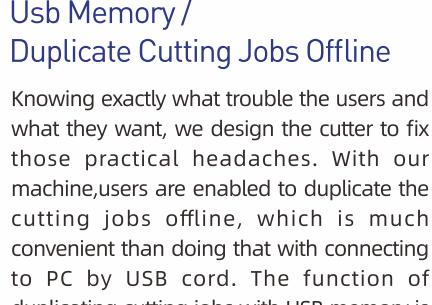
### One-click to Load Print Driver

Optimized the process of loading print driver by one-click. User can easily send cutting jobs by any CAD that with printer feature.



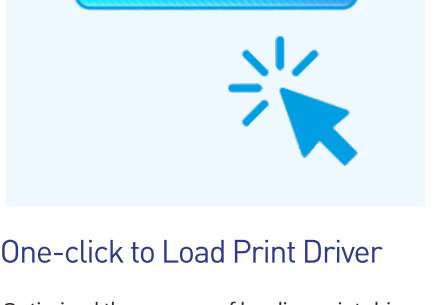
### Quality Components.

For outstanding performance and long-term reliable working, we only use world class brand name components like BANDO belt,WNB bearing, Ultra-silence Guides made by WON Korea, etc.



### Leading Calibration

Industry leading technology is applied to calibrate the perpendicular between different axes and the parallelism between track of gantry and table top.



### Fine Cutter Holder

Cutter blade runs precisely and won't drop cutting thick, sticky medias.

## WORKING SAMPLES

