

# HIGH PERFORMANCE CNC FLATBED CUTTER



GR6090



GR1612K

**GUNNER**

[www.tubaocnc.com](http://www.tubaocnc.com)



**CNC FLATBED CUTTER**

Technically-advanced cutter with outstanding quality and durability.



**CNC**

Controller of our own with advanced algorithm, it is powerful, trustable and user friendly.

With the technology accumulation and fundamental research in the past 20 years, Gunner devotes herself to produce high end vinyl cutter and CNC flatbed cutter with leading technology, reliable performance and prominent economy. Our mission is to serve more people with quality industrial cutters in a more sustainable way.

**WHY CHOOSE US**



**SOFTWARE**

We develop software by ourself, we supply software development kit for more possibilities.



We offer value for clients with leading technology and innovations.

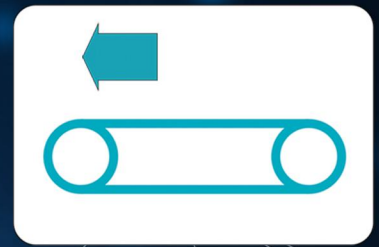


Gunner will grow together with clients in a long run.



We try our best to be your partner that you can always count on.





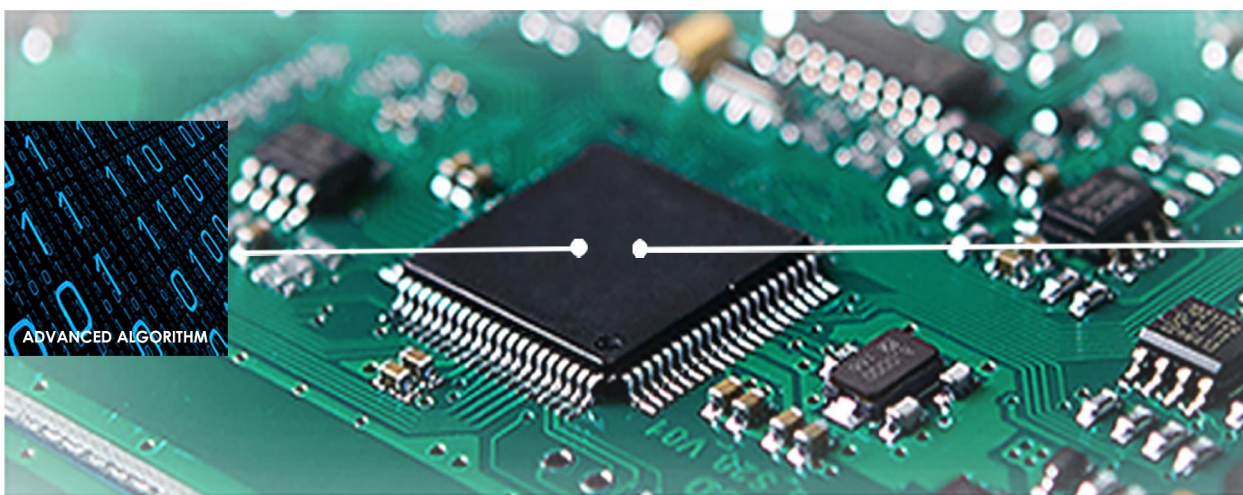
FEEDING BY CONVEYOR



CCD CAMERA

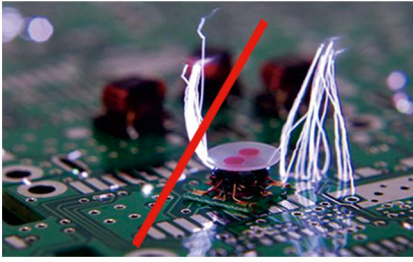
### GR1612K

A CNC flatbed cutter with conveyor feeding, it is mainly used to cut non-metal soft medias without a cutting die, it is an efficient solution of perforation cutting, half cutting, drilling, creasing, marking, etc. With more output and less cost of labor, the cutter is designed for contour cutting of graphics without a cutting die; Defective percentage caused by manual work is cut down prominently by using the GR1612K, it helps to accomplish quality cutting faster, more stably and more precisely with lower cost, the competitiveness and market share is going to be improved taking use of the GR1612K. The cutter is ideal for sign makers, traffic signs industry, 3C-industry, packaging, apparel signing, shoes designing, vehicle decoration, window tinting, bags designing, composite industry, offset printing, samples making, POP displays, and more.



### MAKING BLADE-TIP COMPENSATION BY HARDWARE

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.



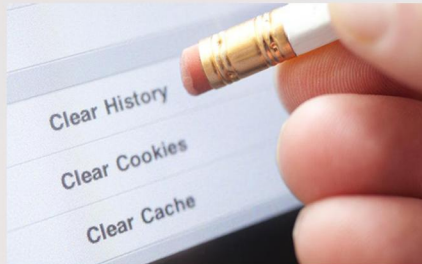
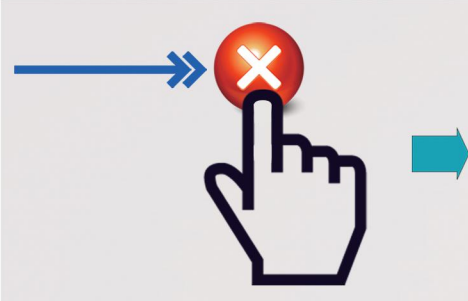
**NO ELECTRICAL SHOCK TO MAINBOARD**



**NO DISORDERED OPERATION**

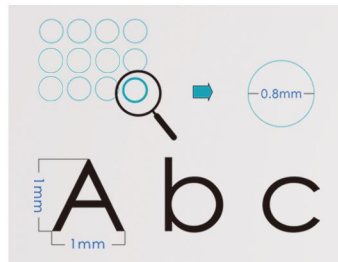
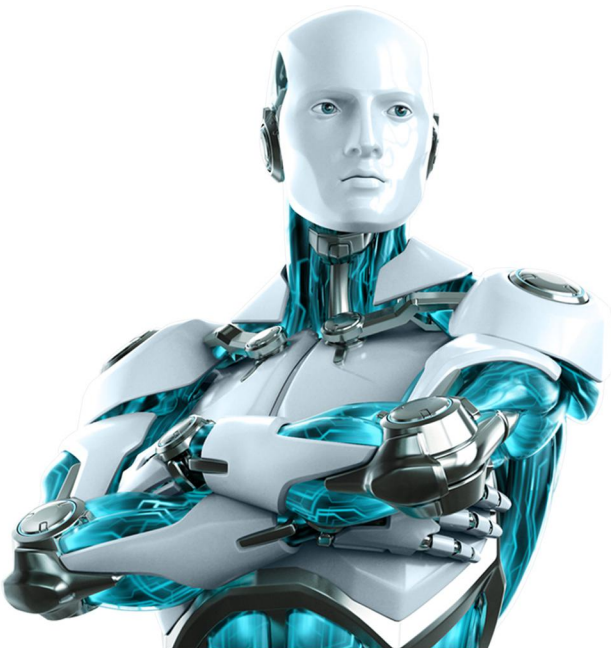
**STATIC ELECTRICITY FREE**

Static interference is a big headache to cutters, while that is not the case with Gunner, as we eliminate it and have tested year-round in different weathers.



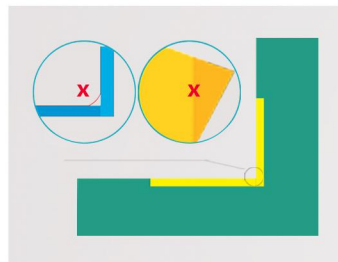
**ONE-CLICK TO CLEAR HISTORY**

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



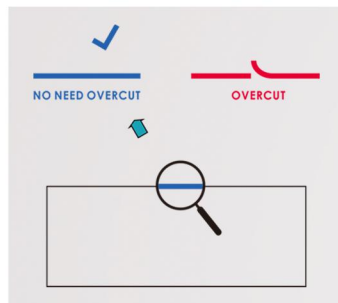
**HIGH PRECISION**

GR1612K Series is able to cut small text strings, and it is easy to tear off the scraps.



**ADVANCED ALGORITHM**

Obvious elimination of distorted, rounded or lifted corners.



**NO NEED OVERCUT**

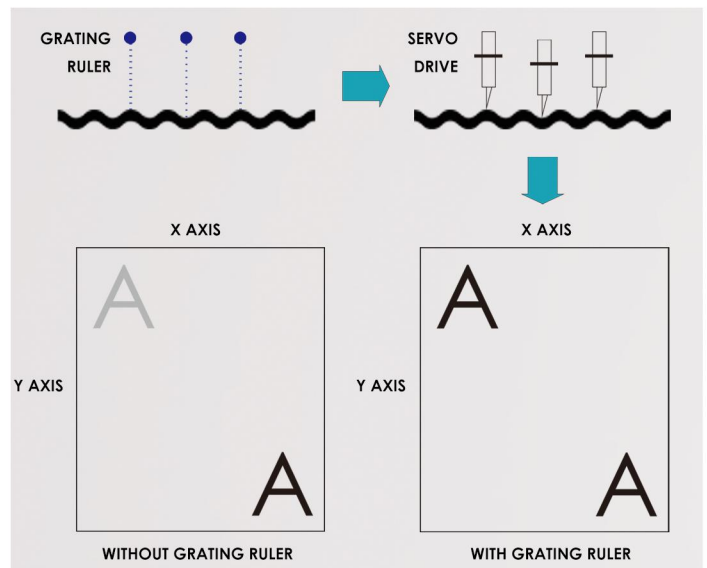
In every cutting path, the start and end nodes join with each other accurately, while no need to setup any overcut.



### GRATING RULER

Inevitably the material surface is not at the same height 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 path across the entire table.

In short, the cutting depth is consistent and no different shades.



### CLEAN SMOOTH EDGE QUALITY

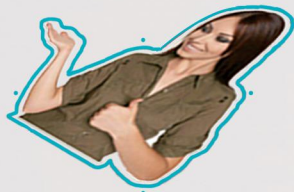
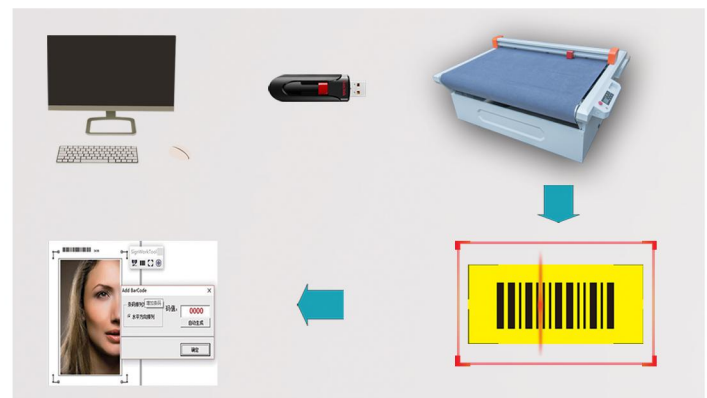
The Grating Ruler and coorespondent cutting force management deliver clean smooth edge quality, even for the most complex jobs. It is easy to peel off the waste material, which cut down workload greatly for the users.



### SCANNING BAR-CODE WHEN OFFLINE

One-click to recognize the cutting job from those saved in the USB memory by scanning the Bar-code which is pre-printed, while not requiring to connect to computer. This function is especially helpful to increase the productivity when there are many files stored in the USB memory.

USB memory / offline function is able to send same cutting job repeatedly.

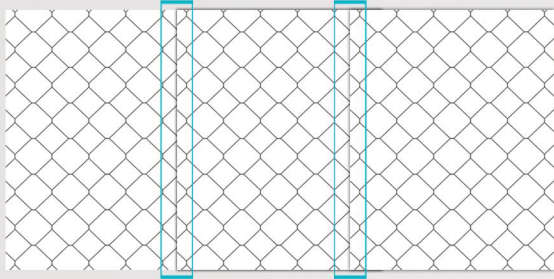


### FAST REGISTRATION MARKS DETECTION BY CCD CAMERA

With Gunner's software, it is able to generate contours in one-click, it is able to add registration marks easily also.

CCD camera, used in combination with related software is applied to detect the intricate dieless contours fastly and more efficiently. Problems caused by position error of human, poor quality printing are resolved using the CCD camera.

CCD camera is applicable for wider varieties of medias.

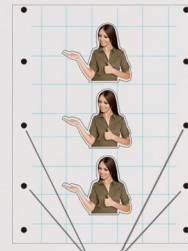


OVERLAPS

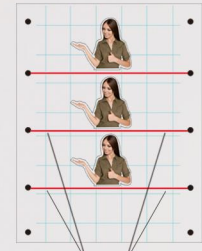
OVERLAPS

**INTELLIGENT BLEEDING FOR EASIER OVERLAPS OPERATION**

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



ADDITIONAL MARKS



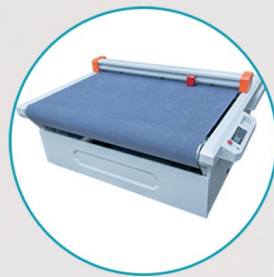
CUT CONTOURS SEQUENTIALLY

**SEGMENT AREA CUTTING OPERATION**

Additional 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.



SEND CUTTING JOB TO CUTTER BY USB MEMORY



CUTTING JOB IS RECOGNIZED

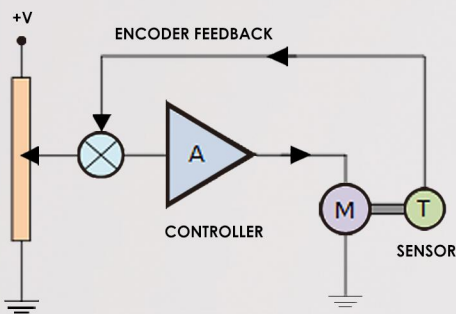


DUPLICATE CUTTING JOB WITH CONTROLLER OF CUTTER



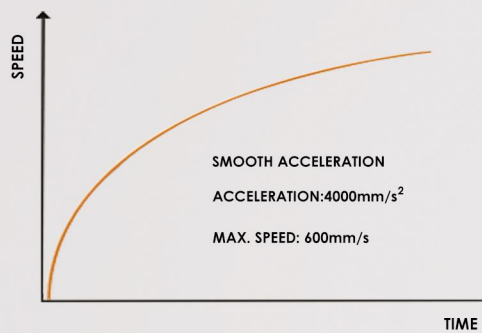
**USB MEMORY / DUPLICATE CUTTING JOBS OFFLINE**

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.



**SERVO MOTOR / CLOSED LOOP CONTROL**

Cutting / Plotting will be stopped when tool carriage is overloading, it is an important safety feature to protect tool carriage when media is jammed.



**FAST CUTTING / PLOTTING OPERATION**

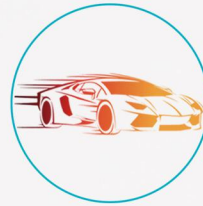
Fast speed for volume production; Servos bring out smooth acceleration, big torque, precise cutting / plotting and excellent durability.

## ADVANCED TOOL CARRIAGE

The tool carriage is structured as sportscar, it's driven by voice coil motor. It is featured as fast, agility and no overheat for long-term non-stop operation. It is a leading tool carriage in the same field.



NOISELESS VOICE COIL MOTOR



SPORTSCAR STRUCTURE



BIG CUTTING PRESSURE



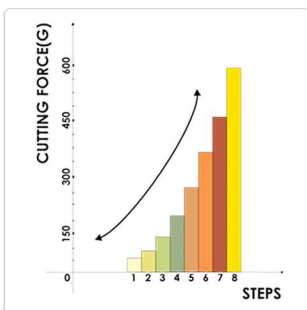
FAST



AGILITY

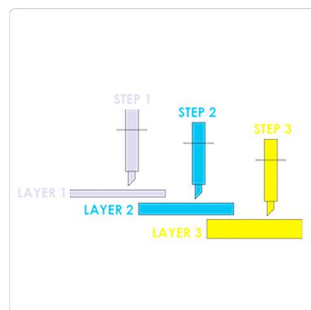


NO OVERHEAT



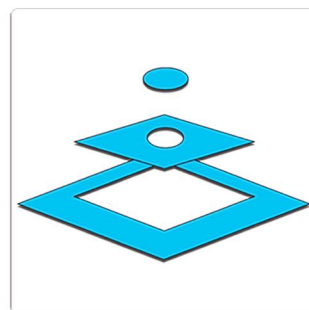
### CUTTING FORCE IN 8 STEP

Color the cutting paths differently for various force steps, set the processing sequence as color sequence.



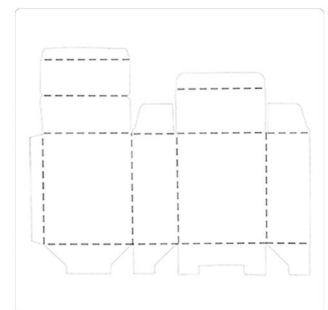
### MULTI-LAYERS SOLUTION

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



### HALF CUT / PERF 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.



### FAST FEEDING BY CONVEYOR

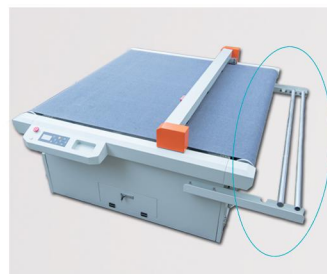
Conveyor is able to accomplish long seamless cutting / plotting.

With the combination of CCD camera, fast and accurate nesting / contour cutting is able to be performed.



### VACUUM SYSTEM

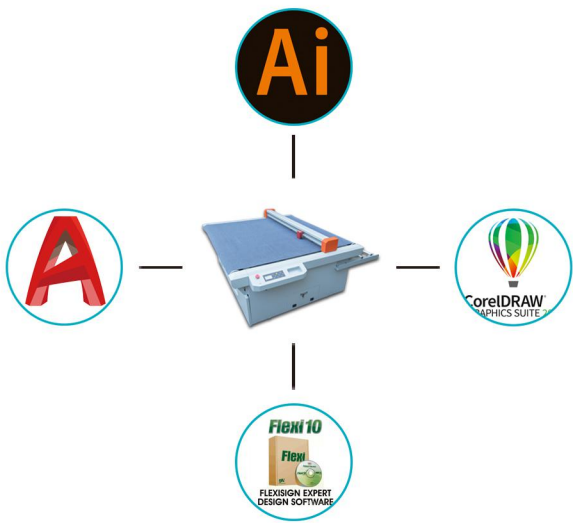
Strong air flow to hold down the media flatly and tightly against the table top so that the tool carriage can perform fast, accurate cutting / plotting.



### ORIENTED ROLL MEDIA BRACKET

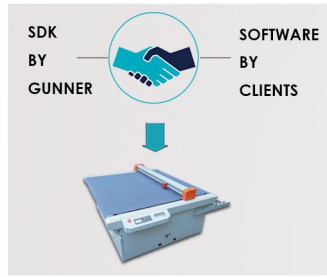
It is smooth to feed media with the media bracket, user may setup the bracket according to media feature and specs. The bracket improves productivity.





**COMPATIBLE WITH AUTOCAD, AI, FLEXISIGN, CORELDRAW**

Leading the same industry, we make software by ourself, we are able to adapt our system to the latest version of popular CAD / CAM software, such as AutoCAD, Adobe Illustrator, Coreldraw and Flexisign.



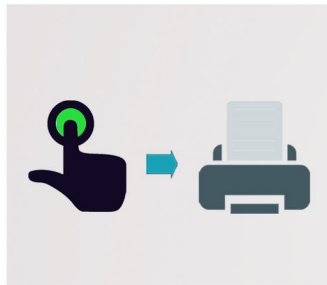
**HANDSHAKE PROTOCOL**

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



**DXF DIRECT**

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



**ONE-CLICK TO INSTALL PRINT DRIVER**

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, NMB bearing.



**NMB BEARING**

Well known as high precision, stability and long working life.

**ULTRA- SILENCE GUIDES**

Made by WON Korea with ultra-silence, high load and high rigidity.

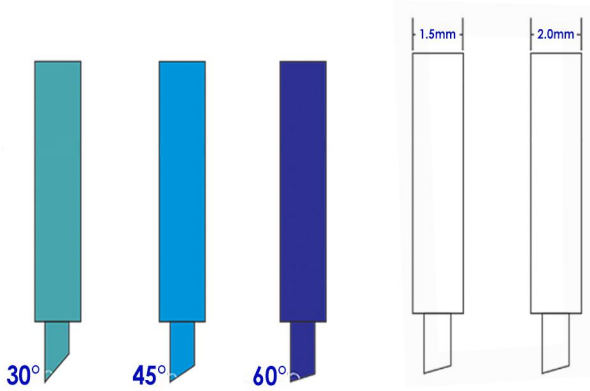
**FINE CUTTER HOLDER**

Cutters run precisely and won't drop cutting thick, sticky medias.

**LEADING CALIBRATION**

Leading calibration technique is used during manufacturing.





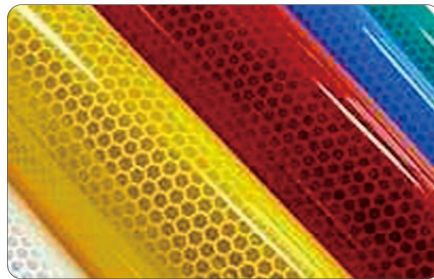
**VARIOUS CUTTER BLADES APPLICABLE**

Angle:45° / Φ1.5mm for Thick media  
 Angle:30° / Φ1.5mm for Thicker media or smaller character  
 Angle:60° / Φ2.0mm for Reflective film  
 Angle:45° / Φ2.0mm for PPF

**1 CUTTER FOR ALL POPULAR MEDIAS**



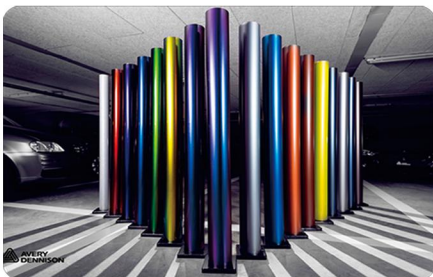
**3M**  
**DIAMOND GRADE REFLECTIVE SHEETINGS AND OTHER SERIES**



**AVERY DENNISON**  
**T11500 SERIES REFLECTIVE SHEETINGS AND OTHER SERIES**



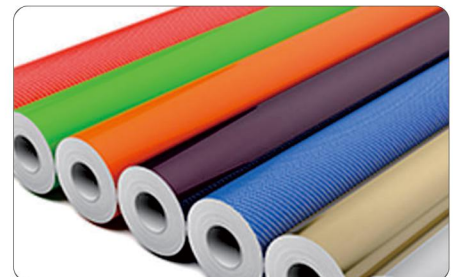
**PRISMATIC REFLECTIVE SHEETINGS WITH OTHER BRAND NAMES**



**VEHICLE WRAP**



**WINDOW TINTING**



**VINYL STICKERS**



**PVC WITH THICKNESS 0.03-0.75MM**



**PET WITH THICKNESS 0.03-0.30MM**



**CARD PAPER WITH GSM ≤500G**

With precise adjustable cutting force up to 600G, GR1612K Series is suitable for cutting reflective sheetings(Diamond grade by 3M,T11500 class by Avery Dennison,and normal ones), window tint, paint protection film(PPF), vehicle wrap, vinyl, photo-masking films, cardboard, oil board, sandblast resist rubber, PVC, PET, polyamide, microflute board or Industrial materials.

**SPECIFICATIONS**

Model	GR1612K	GR1312K
Working Size	1520 x 1200mm(non-contour cutting)	1300 x 1200mm(non-contour cutting)
	1490 x 1180mm(contour cutting)	1240 x 1180mm(contour cutting)
Applicable Media Thickness	≤1.5mm	
Applicable Media	Soft and medium rigidity medias	
Method to Feed Media	Auto feeding conveyor	
Method to Fix Media	Vacuum pump	
Max. Cutting Speed	600mm / s	
Max. Cutting Force	600G / 5.8N in 8 steps	
Cutting Force Setup	Adjustable in every 1G	
Cutter Blade Diameters	Φ1.5mm , Φ2.0mm	
Cutter Blade Angles	30° , 45° , 60°	
Dotted Lines Cutting	Included	
Drive	AC Servo	
Mechanical Resolution	0.0125mm	
Compatible OS	Win10 / 8 / 7 / XP	
Memory Buffer	2MB	
Software	Windows Driver , SignWorkPro , CADtoPlotpro	
LCD	English	
File Format	HP-GL , PLT	
Port in Standard	USB , RS-232	
Registration Marks Recognition	CCD camera	
Power Input	220V AC , 50-60Hz	
Power Consumption of Cutter	1.5kw	
Power Consumption of Vacuum Pump	1.5kw	1.1kw
Cutter Holder / Pen Holder	1 for each	
Types of Pen	Water based fiber-tip pen & Oil based ball pen	
Media Bracket	Included	
Package Size L-W-H	2150 x1920 x 1220mm	1920 x 1850 x 1220mm
Gross / Net Weight	340 / 260kg	320 / 240kg

**GR3245 / GR6090 / GR9015** are developed on the basis of GR1612S series, they share all the same features of GR1612S except the conveyor and CCD features.

**GR3245 / GR6090 / GR9015** are available with cutter blade as well as creasing tool. Cutting / plotting / creasing are intergrated solution for printing, signage, packaging proofing, pattern making, prototyping and small production runs of rigid packaging media , other sheet fed and roll fed materials.



**GR3245**



**GR6090**



**GR9015**



**SHIELDING FILM FOR FLEXIBLE PCB**



**CARD PAPER**



**MAGNETIC STICKER**

They are designed for cutting high-precision and medium-heavy material crafting jobs and suitable for cutting intricate designs on magnetic material, cardboard, vinyl sticker, photo-masking films, oil-board, sandblast resist rubber, PET (polyethylene terephthalate), PVC, polyamide, microflute board, and more.



**SPECIFICATIONS**

Model	GR3245	GR6090	GR9015
Working Size	350 x 450mm	610 x 900mm	900 x 1500mm
Applicable Media Thickness	0.03 -1mm		
Applicable Media	Soft and medium rigidity medias		
Method to Fix Media	Vacuum pump and or adhesive mat		
Max. Cutting Speed	600mm / s		
Max. Cutting Force	600G / 5.8N in 8 steps		
Cutting Force Setup	Adjustable in every 1G		
Cutter Blade Diameters	Φ0.9mm, Φ1.5mm , Φ2.0mm		
Cutter Blade Angles	30°, 45°, 60°		
Dotted Lines Cutting	Included		
Drive	AC Servo		
Mechanical Resolution	0.0125mm		
Compatible OS	Win10 / 8 / 7 / XP		
Memory Buffer	2MB		
Software	Windows Driver, SignWorkPro, CADtoPlotpro		
LCD	English		
File Format	HP-GL , PLT		
Port in Standard	USB, RS-232		
Registration Marks Recognition	GARMS with Red laser sensor		
Power Input	110 - 220V AC, 50 - 60Hz		
Power Consumption of Cutter	620w		
Cutter Holder / Pen Holder	1 for each		
Types of Pen	Water based fiber-tip pen & Oil based ball pen		
Media Bracket	Included		
Package Size L - W - H	1050 x760 x 600mm	1350 x1220 x1220mm	1950 x 1520 x 1220mm
Gross / Net Weight	84 / 44kg	160 / 90kg	300 / 220kg

**Manufacturer:**

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**Authorised Agency:**