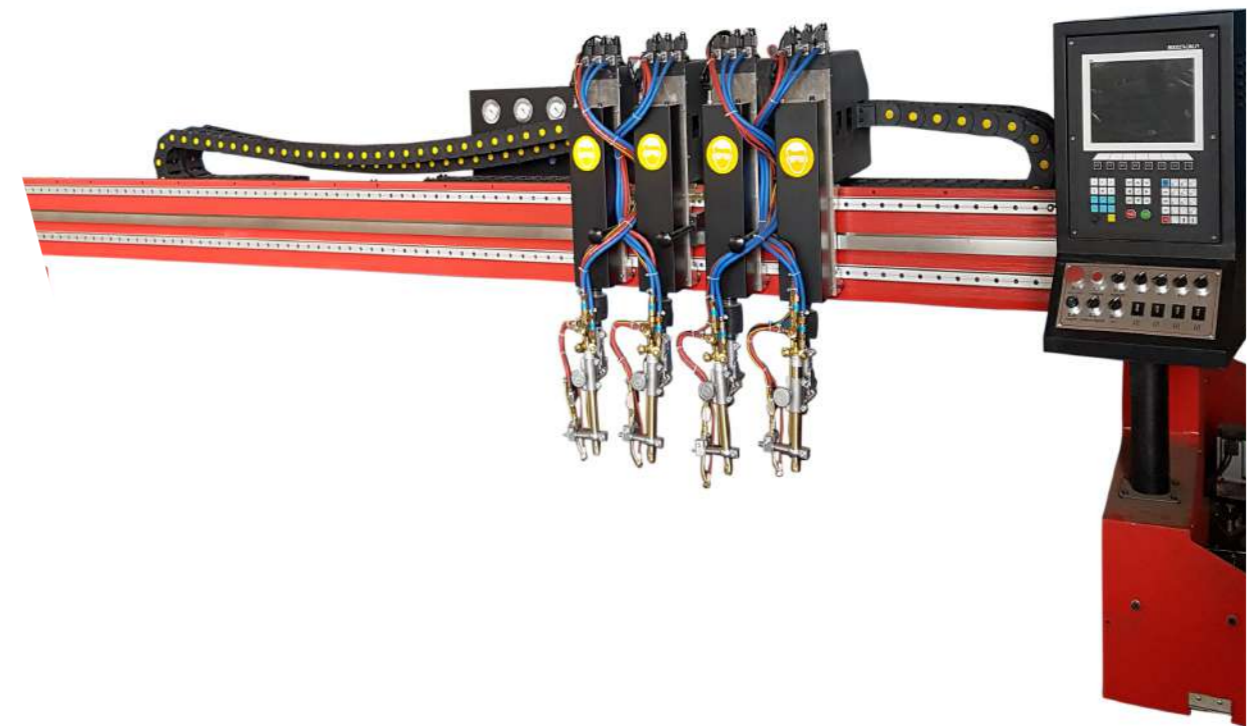
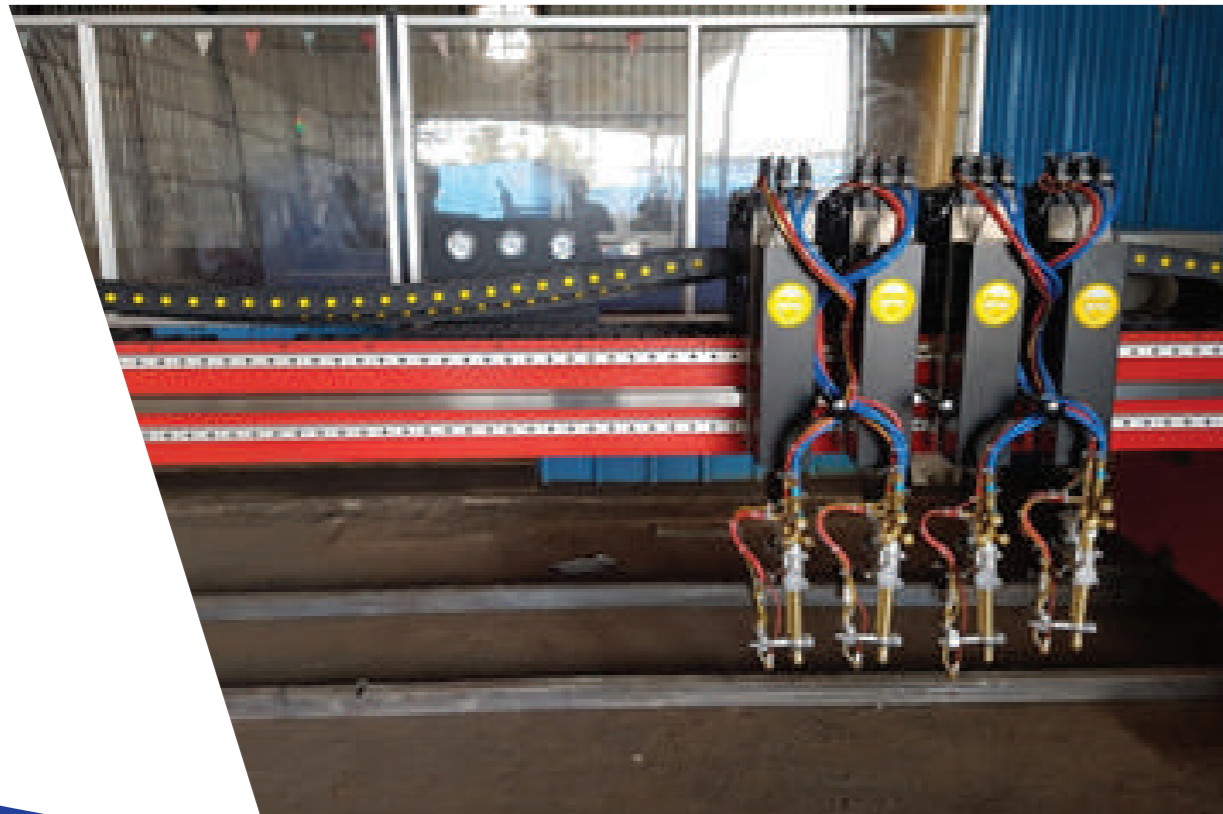




G-MAKTM
Smart Cutting Solutions



FIRM CUTTM

• FIRM CUT is a registered Trademark of GK Profiles

www.gmakcnc.com



ABOUT US

- **Company Mission**
Committed to providing own CNC cutting machines to every small & medium scale industries with advanced, high-quality and economical cutting solutions.
- G-MAK Smart Cutting Solutions, G-MAK CNC, EASY CUT, CLASSI CUT & FIRM CUT are registered Trademarks of GK PROFILES.
- G- -MAK is a CNC Plasma & Profile Cutting Machine Manufacturing Division of M/s GK PROFILES, an IATF 16949:2016 certified company. We, GK Profiles, a professionally managed organization, began its operations in the year 2007 with a goal to serve all our customers, suppliers and partners with complete business transparency and with quality delivery. we are specialists in CNC profile & Plasma cutting machines. With over 15 years of experience in CNC Machines Manufacturing and expertise in the domain, we manufacture in-house wide range of CNC Plasma Cutting and CNC Flame Cutting Machines with our state-of-the-art facilities like CNC Laser Cutting, Plasma Cutting & CNC Bending and complete Fabrication setup conforms to our customer requirements, industry standards and guidelines utilizing the finest resources and leadership of skilled professionals. Our products are very reasonably priced in the market combined with many features and dedicated customer service 24x7 in place than our competitors.



G-MAKTM
Smart Cutting Solutions

FIRM CUT

Product Description :

- Very good choice for flame and plasma cutting & suitable for large scale industry & JOB SHOP where high volume of cutting required
- It is specially designed for metal plate cutting process
- Machine size can be produced depends upon customer requirement
- Strong gantry system ensures durability, stability and quick speed
- Both driving end and cross beams adopt box-beam welding structure, it features compact structure, light weight, good rigidity, small deformation and artistic appearance
- The driving of the main longitudinal end beam and moving of transverse torch adopts Japan Panasonic AC servo driver and motor which drives Gearbox reducer through rack-and-pinion gearing
- The side of driving end beam equipped with horizontal guiding wheels which can make the guiding wheel press rail tightly by adjusting its eccentric shaft, therefore, the stability and accuracy during the whole moving can be assured
- The longitudinal guide rails are all made by high intensity track, all the contact surfaces of track have precision machining and accurate grinding racks are installed outside the guide way
- The longitudinal guide rails are firmed by pressing plate backing board and connecting sleeve, which can ensure the longitudinal straightness and parallelism of rail
- Automatic igniter and height controller of torch can be chosen according to customer's requirement, with convenient operation





G-MAKTM
Smart Cutting Solutions

FIRM CUT

Technical Parameters :

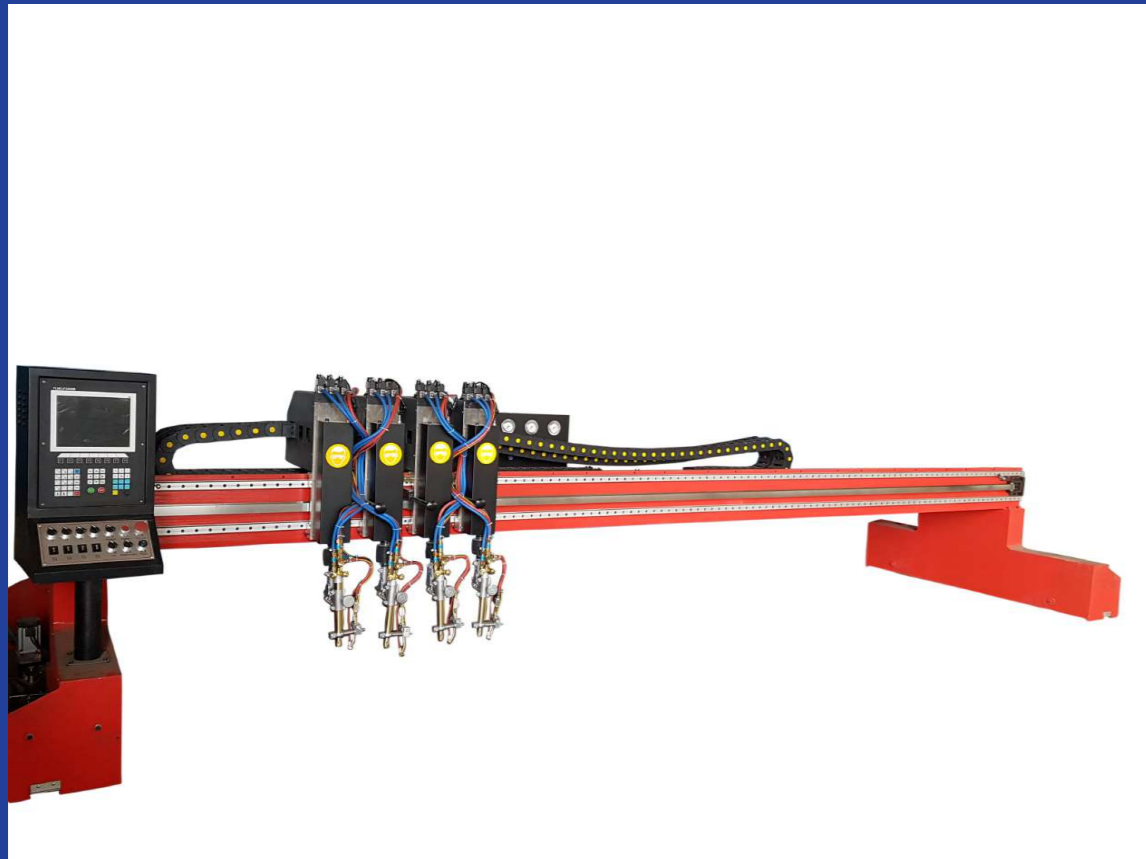
MODEL	FIRM CUT
● Cutting Model	Plasma , Flame
● Input Voltage (V, HZ)	230V, 50 HZ
● Effective Cutting Width (mm)	3000, 4000, 5000
● Effective Cutting Length (mm)	6000, 8000, 10000, 12000
● CNC Controller	10 inch colorful monitor, USB port
● CNC torches	1-4 sets
● Positioning accuracy(mm)	±0.5/1000
● Repeating accuracy(mm)	±0.2/1000
● Positioning Speed (mm/min)	10000
● Flame cutting gas	Acetylene, LPG
● Flame cutting thickness(mm)	5-200
● Flame cutting speed(mm/min)	50-750
● Plasma cutting thickness	Depend on plasma unit
● Plasma cutting speed	Depend on plasma unit
● Compatible plasma unit	Suits Hypertherm Powermax45 65 85 105 125Amps
● DUAL DRIVE , X & Y AXES	750 WATTS PANASONIC AC SERVO MOTOR

Firm Cut Video Link : <https://youtu.be/S81z1klkjiw>



G-MAKTM
Smart Cutting Solutions

FIRM CUT





G-MAK CNC CONTROLLER

Characteristics :

- Compact keyboard design and easy to input files.
- Shape has some operations such as Proportion, Rotate, and Mirror.
- Shape can be arrayed in matrix, interaction, stacked modes.
- Steel plate can be adjusted according to any steel side.
- Coordinate system can be customized to support the two dimensional coordinates of all eight kinds.
- All input and output port type and the number can be customized (normally open or normally closed).
- Self-diagnostic function, to diagnose the key status and all the IO status, facilitate inspection and debug.
- Provide a front USB interface for copying files.
- System can be upgraded by USB interface easily, and we provide lifetime upgrade service.
- All functions and techniques can upgrade online and don't worry about the after sale service.
- Import and export files by single or all files.
- Parameters backup and parameter restore.
- Support the Flame, Plasma, Marker and Demonstration four kinds of mode.
- Including various types of processing parameters to meet the needs of different processes.
- Flame and Plasma are separated in the control IO ports.
- Support THC(Torch Height Control), two-level preheat, three-level pierce in flame mode.





G-MAKTM
Smart Cutting Solutions

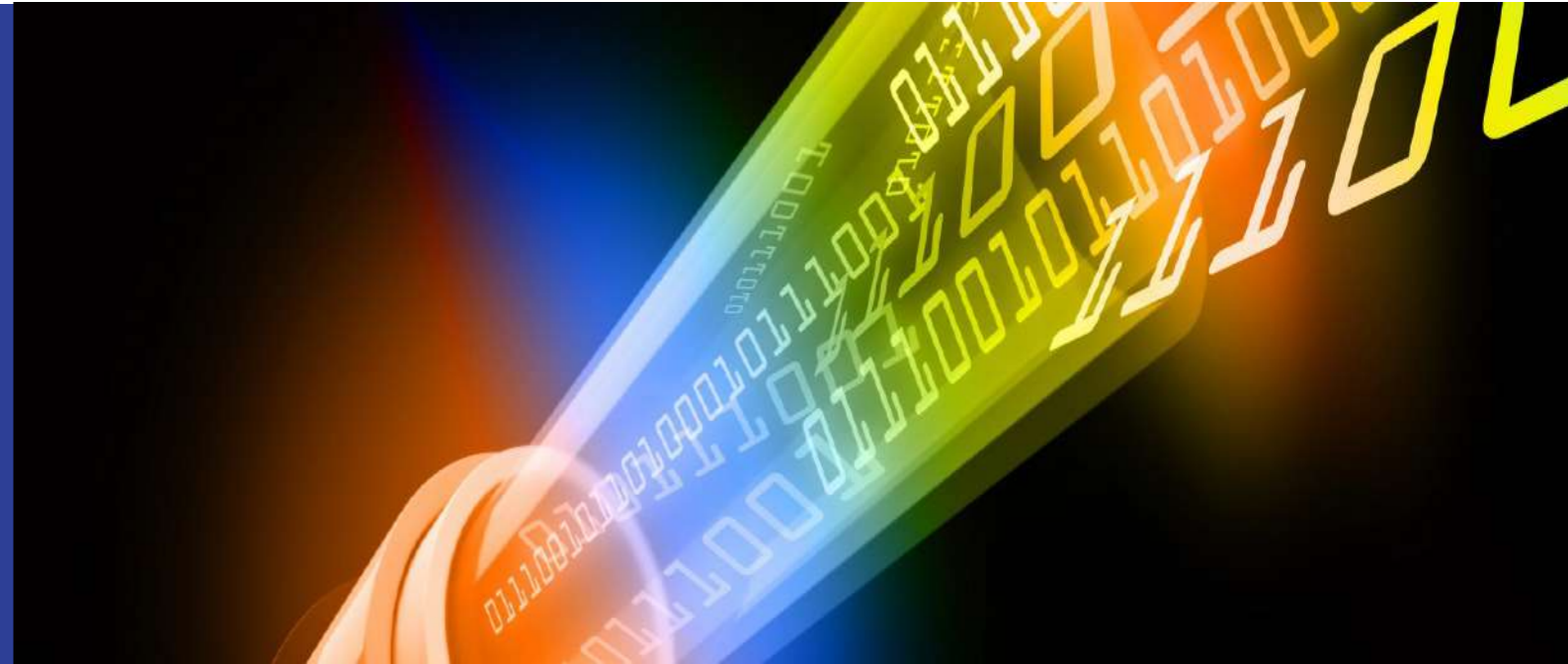
G-MAK CNC CONTROLLER

Technical Specifications

- Control Axis: 2 axis linkage(3 axis customizable)
- Control accuracy: +/-0.001 mm
- Coordinate range: +/- 99999.99mm
- Max pulses: 200 kHz.
- Max speed: 15,000 mm/m
- Max lines of code: 80,000lines
- Max size of single code file: 4M
- Time resolution: 10ms
- Working Voltage: DC +24V direct-current power input, power > 80W。
- Working Temperature: -10°C~+60°C. Relative Humidity, 0~95%.
- Max power of drive arc THC motor: 45W (suitable for models with "T"). if need more power, can select maximum value: 200W.

Colour

- Colour of the machine is Red or Blue as per customer choice





G-MAKTM
Smart Cutting Solutions

G-MAK CNC CONTROLLER

Hardware Configuration :

Monitor: 10.4 inch 800*600, high definition 16 million colors and high brightness LCD

- Memory: 64M SDRAM
- Program space available for user: 256M electronic hard disk
- CPU frequency: 400MHz
- USB: USB 1.1 front interface, at least 16GB U disk supportable
- Keyboard: PCB keyboard
- Chassis: full-steel structure completely shielded which defends electromagnetic radiation, interference and static electricity

GAS TORCH

- Cutting capacity 200 mm M.S. (1 torch)
- Stable Flame Torch with motorized and manually x/y adjustment for easy setting
- Cutting/ fuel gas: Oxygen & Acetylene or LPG



G-MAKTM
Smart Cutting Solutions

G-MAK CNC CONTROLLER

Features :

- High/ low gas pressure setting for automatic sequencing of rapid preheating followed by automatic switching to settings suitable for cutting. Also available by flip of switch from panel
- Smooth ball screw driven torch up/ down slide and Automatic torch ignition
- Easy to access set of regulators for gas pressure setting on pierce assembly
- Ease on pierce assembly to provide smooth, and clean and spatter free piercing
- Manual gas control valves on each torch for preheat Oxygen and fuel gas to adjust or set the flame
- Flash back arrestors provided on cutting station for safety of the machine

NESTING SOFTWARE

FAST CAM PROFESSIONAL CAD CAM CNC Software Series for Plate Shape Cutting with integrated 2D drawing, tool pathing, true shape nesting, code verification & NC generation, offering a complete low-cost solution to profile cutting. The FastCAM[®] System has been designed to draw, nest and cut metal as simply and efficiently as possible. Ease of use is as important as the high levels of materials utilization and optimization the software provides. FastCAM[®] is more affordable and far less complex than other systems. Easy Editing & Verification of geometry combined with one step nesting makes the system instantly productive. FastCAM's long experience in heavy plate fabrication makes the system ideal for even the largest construction jobs. The FastCAM[®] System is used successfully in Service Centers, Shipbuilding, Mining, Steel Fabrication, Metal Fabrication & Sign Cutting. FastCAM[®] supports all combinations of machine and controller as well as ESSI, EIA and ISO NC languages in both inch and metric. NC output can be Absolute or Incremental. Where drawing information exists electronically, FastCAM[®] has an extremely Powerful CAD interface that cleans and compresses code ready for quality cutting. FastCAM[®] Reads and / or Nests DXF, DWG, DSTV/NC1, StruCAD, IGES and PDF file formats.



G-MAKTM
Smart Cutting Solutions

FACTORY ADDRESS

- **GK PROFILES**

(G-MAK Smart Cutting Solutions - CNC Machine
Manufacturing Division Of GK Profiles)
NO. 517, THIRUVERKADU ROAD,
KONRAJAN KUPPAM, AYANAMPAKKAM,
CHENNAI-600095, TAMILNADU, INDIA

- Mobile: +91 - 72990 66691 / +91 - 94435 71588
- Email : sales@gmakcnc.com | gmak@gkprofilesindia.com
- www.gmakcnc.com