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CATALOGUE

KARA Compact CNC Cutting Machine





KCCCM



KARA Compact CNC Cutting Machine

1. Suitable for making exact cuttings in various shapes and sizes using plasma cutting techniques.
2. Possibility of plasma torch Installation on the leading head attach. (Master - Slave)
3. Having a robust and durable machining structure.
4. Having an accurate and high-speed linear motion using servo motor and precision gearbox with a Very Low Backlash.
5. Equipped with two servo motors and low backlash gearboxes at the two sides of machine for a constant and vibration less motion. (Gantry bridge)
6. possibility of transferring longitudinal motion force of cutting gate using a helical bevel gear for a fast and precise travel speed (Rack Pinion).
7. Possibility of linear movement of cutting torch on the linear ball bearings using a bevel gear for fast and precise movements (Rack pinion and linear guide).
8. Using the MicroStep torch control system.
9. Equipped with an automatic height control system for torches to prevent crashing of torch with Plate.
10. Equipped with solenoid valves for each torch to avoid oxygen and gas waste, to adjust cutting flame and easy operation.
11. Equipped with flashback arrestor for flame safety.
12. Equipped with a spring push anti backlash rack & pinion system to protect damages resulting from operator fault while working.
13. Equipped with robust, integrated and adjustable slide rails for weak inclined workshop bed.
14. Having a set of robust steel and tables and steel band stand which can be replaced bend easily.





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Main Technical Specifications

1	Effective cutting width (mm)	2000
2	Effective cutting length (mm)	3000
3	Type of cutting torches	Single: Plasma
4	Plasma cutting's power supply	KARA Plasma 200A or other brands
5	Plasma cutting thickness (mm)	0.5 – 25 for Carbon steel (Recommended) / up to 45 (Max cutting range) 0.5 – 20 for Stainless Steel (Recommended) / up to 35 (Max cutting range) 0.5 – 15 for Aluminum (Recommended) / up to 25 (Max cutting range)
6	Plasma hole piercing thickness (mm)	Max 15 mm
7	Maximum jogging speed (mm/min)	4000
8	Machine's control system (optional)	MicroStep (China)
9	Plasma torch adjustment system	Automatic height control (base on arc voltage)
10	Protection classification	IP 20
11	Machine's Electric Power Consumption	220V-50 Hz-1PH-16A
12	Cable protection and guidance system	Energy chain guide
13	Machine's linear movement system	Linear Guide + Rack & pinion
14	Machine's Driving components	Servo motors + planetary gearbox
15	Overall Machine's Dimension (mm)	4550 x 3260
16	Overall Machine's Weight (kg)	2800
17	Machine's Worktable (Options)	Standard (Compact)





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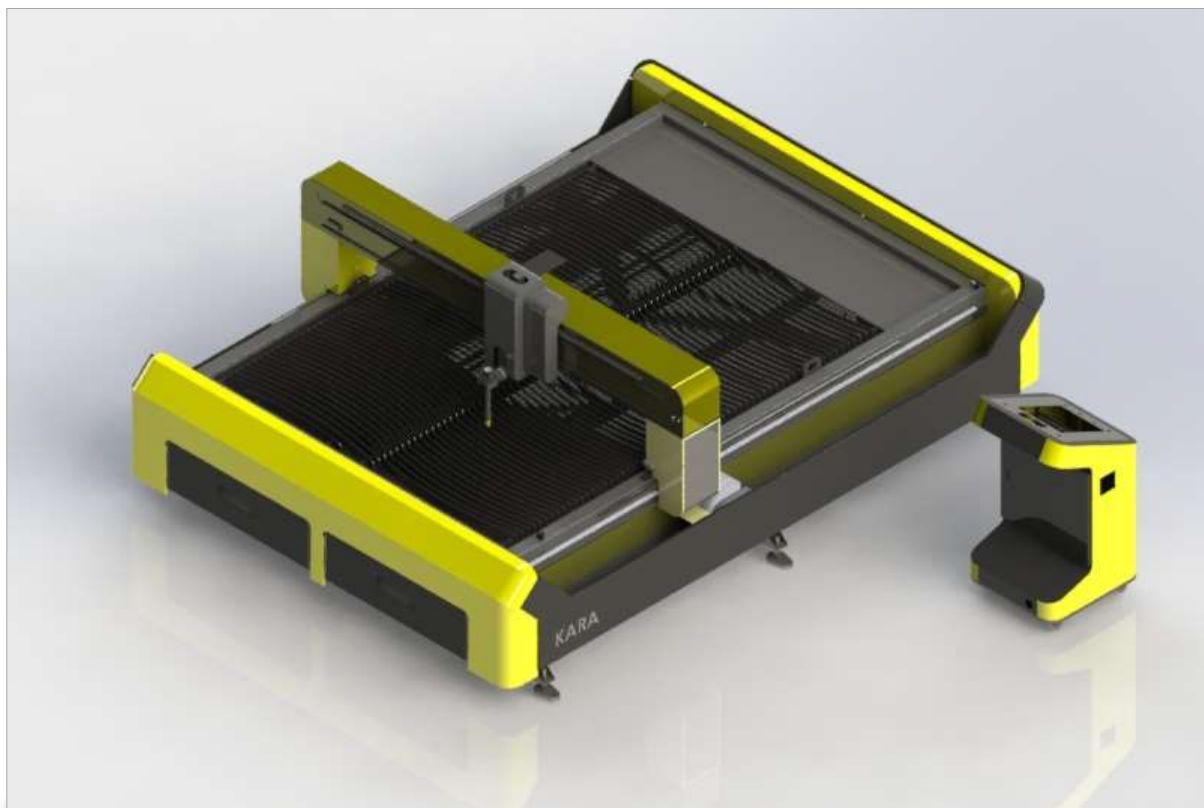


FIGURE NO.1



FIGURE NO.2



FIGURE NO.3



FIGURE NO.4



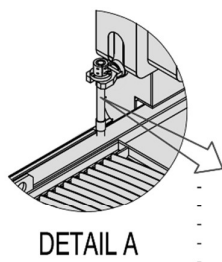


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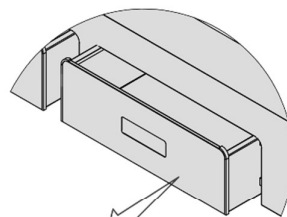
Energy Chain for Delivery of cables

WorkPiece
 - Weight : 1400KG
 - Max . Dim : 3000 x 2000 MM



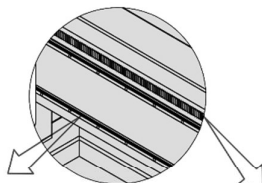
- Plasma Cutting Torch
- Height adjustment (Automatic, Manual)
- ElectroMotor : StepMotor
- Max Thickness Cut 15mm
- Min Thickness Cut 1mm

DETAIL A



- Tools Drawer
- Both Side x 2

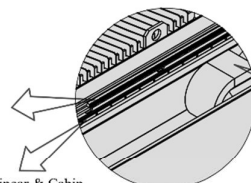
DETAIL B



Guide : Linear & Cabin

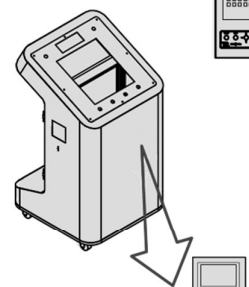
DETAIL E

power transfer: Rak & Pinion



Guide : Linear & Cabin

DETAIL D



- Electrical Control Box
- Stand Operator Pannel
- Portability
- The best height for the convenience of the operator

Energy Chain for Delivery of cables





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Machine Control System

MicroStep (China)

Technical Specifications:

1. Large LCD: 15" CC-Z4 Cutting Numerical Controller Four Torches separately control. It has many cutting types and it works well in worse environment.
2. Stronger Industrial Embedded Core.
3. Support various compound cutting, plasma, flame, laser, line-draw, drill, can steady work in the electromagnetism environment.
4. Support different cutting, such as cutting, such and so on. It can stably work under complicated electromagnetic environment.
5. Transferring file method: USB
6. Adjustable cutting torch: Kerf.
7. Predefined figure library.
8. Backward cutting facility.
9. G-code Generator: pronest software programs (in office).
10. Open loop servo control.
11. Oxy- fuel & plasma height control: External
12. User friendly.
13. Simple operator training.



PROCESSOR	DISPLAY	DIMENSION	WORKING TEMPERATURE	STORE TEMPERATURE
Industrial ARM processing chip	15" colors	390 x 418 x 64 mm	0°C ~ 55°C	-40°C ~ 60°C
NO. OF LINKAGE AXIS	I/O CONTROL	CONTROL PRECISION	STORE SPACE	HIGHEST SPEED
2-6 Axis	Input x 32 output x24	0.001 mm	8G and it supports U disk	36 m/min

Accessories products:

Remote Control: RFM1 RFS1

Arc voltage torch height controller: AHG-1 AHa-L1

Torch lifting device: AHb-M2 AHb-L2





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KARA PLASMA 200A Technical Specification

1	Type of voltage control	Thyristor Control
2	Current control steps	Stepless
3	Current / Voltage Range	25A/110v ~ 200A/200V
4	Permissible Load @100% D.C.	200A
5	Open Circuit Voltage	380V
6	Input Fuse Slow	100A
7	Input Current@ 100% D.C.	100A
8	Max Power	66KW
9	No Load power	500 W
10	Mains input power	3x380 V/50Hz
11	Over Load Protection	Thermostat
12	Cooling Type	A.F.
13	Protection Class	IP20
14	Insulation Class	H
15	Dimension L/W/H	760/590/1435 mm
16	Weight	460 Kg
17	Air Input Pressure	7 Bars
19	Air Consumption	230 L/min
20	Torch Cable Length	6 m (additional are available by request)

