### **Baoma Numerical Control** Equipment Co., Ltd.

Suzhou Baoma Numerical Control Equipment Co., Ltd. Is Located in Chinese accurate electrical research, producing base-Suzhou, Jiangsu province. It specializes in researching, manufacturing and selling EDM machines and obtains the Double system certification (ISO9001:2000 Quality System Certification and ISO14001:2004 Environmental System Certification) and Export Quality Authentication which are seldom acquired by other companies in the same field.

So far, Baoma brand EDM equipments gain customers' trust and praise through our wise marketing judgment, excellent quality guarantee and professional & quick service after sales. We wins five national exclusive patents and two golden prizes, moreover, and is awarded as national famous company, reliable products of national consumer by central authority and satisfied enterprise of products quality after-sale service These products far sell to European, East-South Asia, Middle-East region and South America etc. We have firmly established the leading and outstanding brand rank in the field.

With the assistance of advantaged technology& science and a high efficient team, we first put our products in up-market position. Our company comprehensively brought in the top -level Germany technology, spent considerable capital in developing, producing the accurate CNC milling machine, accurate High Speed Vertical Machining Center, accurate Engraving machine with first class function. They have surpassed the same domestic products through their flawless superiority on rigidity, operation, stability, precision, capacity, network, efficiency and environment etc. They are the best weapon for accurate machining.

There is no obstacle of high-vision, as a national well-known enterprise, Baoma holds quality assures service all long, takes the customer is God into practice. We persistently hold the spirit of unremitting research and innovation.



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THE RELENTLESS PURSUIT OF PERFECTION, LET'S MAKE MACHINES BETTER









# DIAO XI CNC ENGRAVING

BMDX series engraving machine is especially developed for mould making, it is very fit for processing the metal mould which its size is small and cutting depth is not deep, the process efficiency and smoothness can be improved greatly if the engraving cooperate with machining center. You also can add tool magazine and change the spindle with auto- tool changing device for processing color metal machine parts. Because of its solid construction and excellent accuracy, it can take place of some works of NC milling machine and high speed processing machine, but the price is lower, so this machine is the best choice for mould manufacture and machine parts manufacture.

#### **NEWEST CONSTRUCTION DESIGN**

1. Integral Gantry Structure, high rigidity machine body

The crossbeam rigidity improved by 15% and the dynamic capacity improved by 30% compare with separated construction of gantry through using finite element analysis.

The solid machining bed design and using the heavy guide ways make the machine bed only having transmutation 0.012mm under bearing 400kg load, it can meet the requirements of completing some heavy machining jobs.

2. Convenient to load big work piece by hoist

The opening metal sheets shield design makes big work piece loading easily.

3. Advanced finite element analysis

In design use the advanced finite element software to do dynamic simulation and construction analysis in order to ensure the machine possess the best construction rigidity, machining precision and machining steady.

4. Precision ball bearing screw

X,Y,Z use precision ball bearing screw,all with pre-strech process,which will ensure machine get the best precision and make the position error to the lowest.

5. Scrap can be easily cleaned

The slop bed and the big capacity water tank make scrap to be cleaned easily.

6. High speed and precision spindle

The one key to make sure the machining result excellent is high speed and precision spindle. The power source for small tool engraving comes from the electric motor of high speed and precision spindle. If you want to make the small tool working in good condition, the spindle electric motor has the follow characteristics: high speed rolling, small rolling shake, small rolling noise.

7. Humanity design on the Control Cabinet

Excellent design make the machine convenient to operate.















#### ADVANCED TESTING INSTRUMENT

Baoma Company persists in supplying the best NC machining tool to meet completely or even exceed customers' demand. Always we use advanced test instrument to execute strict test according to the International quality system.

#### Ballbar circle testing

RENISHAW Precious ballbar testing system inspects moving roundness when the servo axes move in a certain surface, which ensures the precision while curve cutting.

#### Laser testing –dynamic testing

RENISHAW High precision laser testing system-dynamic testing system inspects the accuracy and the repeatability of positioning for all axial movements, which ensures

Spindle dynamic calibration machine Spindle dynamic calibration machine tests dynamic balance precision of spindle, it can also inspect the vibration of spindle while it runs in high speed on the product.









BMDX5040

BMDX8060



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#### BMDX120100 BMDX10080

#### ADVANCED CONTROL SYSTEM

Advanced & Reliable CNC Controller

Baoma insist do best to offer best products to clients, we off optional control system upon custome request: TAIWAN SYNTEC, TAIWAN LNC & SPAIN FAGOR

#### TAIWAN SYNTEC 10A

- 1 Connectable to Human-Machine interface like Easyview Didital &etc, high affinity. (i) Support MODBUSMisabithi FX2 Interface, Support input/output programme via FLOPPY or 10/100Mbps Ethernet, be able connect to Easywide or Didital via RS232/RS422 (2) Customers can develop their own high affinity Human-Machine interface
- 2 Wide support for ancillary equipment

- 2 whoe support for anchiary equipment
  (1) Connect with Video system can compensate positioning error
  (2) Connect with Harddisk can run big size programe file
  (3) Connect signal comparing receiver to realize compensate speed/position error
- 3 Convenient graphical dialogue
- (1) Open Structure (2) Custom UI
  (3) Custom UI parameters (4) No need input G Code or M Code
- 4 Easy Update software via Diskette (1) Easy Updating plc/Marco via Diskette Driver
- (2) Remote Control via Network reduce the cost
- 5 Support multi Axis PLC Asynchronous control
- (1) Support for multi-axis asynchronous control the start and stop, Handwheel control program feed
  (2) Support run two or more programmes at same time
  (3) PLC Execute servo command
- 6 Support Video system compensation
- (1) Connect ancillary video system via RS232 (2) Correct the digitize deviation distance immediately
- (3) Keep high precision after running for a long time
- $7\ Nice\ Panel\ design\ \&\ Steady\ controller\ design\ \\ (1)\ Equip\ standard\ SYNTEC\ controller\ in\ small\ size\ \qquad (2)\ Anti-oil\ corrosion\ metal\ shrapnel\ Button\ \\ (3)\ Standard\ I/O\ 32\ input\ and\ output\ ,128\ I/A\ voltage\ output\ offer\ spindle\ control\ \\$



LNC from Taiwan

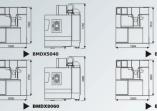


Optional Famous Control System FAGOR from Spain

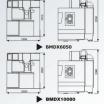


Specific	auon		BMDX5040	BMDX6050	BMDX8060	BMDX10080	BMDX120100
Travel/ Space	X/Y/X axis Travel	mm	400/500/210	500/600/260	600/800/350	800/1000/450	1000/1200/550
	Table upper surface to spindle nose end face	mm	80-290	120-380	90-440	140-590	140-690
Accuracy	Positioning	mm	±0.005/300	±0.005/300	±0.005/300	±0.005/300	±0.005/300
	Repeatability	mm	±0.003/300	±0.003/300	±0.003/300	±0.003/300	±0.003/300
Table	Table dimension	mm	420X600	550X700	650x900	850x1100	1050x1300
	Max.table load	kg	200	400	500	700	800
	Power(X/Y/Z)	kw	0.75,0.75,0.75	0.85,0.85,0.85	0.85,0.85,0.85	1.8,1.8,1.8	1.8, 1.8, 1.8
	T shape groove	mm	14TXP80X5	14TXP100X5	14TXP120X5	18T XP120X7	18TXP150X7
Spindle	Speed/power/bore	rpm/ kw	24000rpm2.2kw/ER20 (Tool diam ete rΦ3.175-Φ12)	24000rpm/4kw/ER25 18000rpm/5kw/BT30 (Tool 48.175-4916)	24000 rpm/4kw/ER25 18000 rpm/5kw/BT30 (Tod Ф3.175Ф16)	18000 грт\7.5kw/ВТ30	18000rpm/7.5kw/BT30
Feeding Speed	Rapid speed	mm/ min	7500	7500	7500	15000	15000
	Cutting speed	mm/ min	6000	6000	6000	6000	6000
Outer size	Machine height	mm	1750	2050	2600	2900	3050
and weight	Roor space	mm	1600X1560	1894X1910	2000X2700	2500X2850	2700X3045
	Net weight	kg	2000	3000	3800	6500	7500
Total input power kw		kw	12	14 or 16	14 or 16	22	22

All pictures on this catalogue are just for reference, if there is difference between picutures and actual machine, please refer to actual machine Our company reserves the right to change or disable products' outlook and configuration



Optional accessories:





#### Stander accessories:

- Auto lubrication
   Spully closed sheet metal cover for prevent chip
- 3)Alarming lamp with three color 4)Foundation block 5)Operation & maintenance manual
- 6)Composite fixing plate 7)Flat clamp 8)Transfers line
- 9)ER25 tool holder: ⊄4, ⊄6, ⊄8, ⊄10, ⊄12
- 10)Electrical hand wheel

1)Oil cooler for spindle 2)Tool setting gauge 3)Auxiliary table 4)Rotary table 5)Umbrella magazine

## Multi-spindle CNC High Speed milling machine Series

Applied in the following industrial lines:
Medical machinery, household electrical appliances, mobile-making,
Tablet PC and Ceramics –making, etc

#### Advantage:

It can improve the producing efficiency of huge quantity parts greatly.

#### Processing subjects:

Aluminum alloy, ceramics, ethoxyline resin, and LCD glass etc.

Optional multi-spindles:

5 spindles, 7 spindles, 10 spindles, spindle speed: 24000, 30000, 60000 rpm





MOD	LE	BMDX6050-5Z	BMDX10080-7Z  Single spindle x axis travel 120mm Y axis travel 1000mm Z axis travel 130mm	
XYZ Tr	avels	Single spindle x axis travel 120mm Y axis travel 1000mm Z axis travel 130mm		
Distance between spindle	e nose to the worktable.	50~180mm	70~200mm	
Control system		Syntec 10A	Syntec 10A	
	Model	Electrical spindle	Electrical spindle	
O	Bore	ER20	ER20	
Configuration of	Speed	24000rpm	24000rpm	
each spindle	Power	2.2KW	2.2KW	
	Distance between two spindles: 120mm		120mm	

### THE ADVANTAGE OF BM-SERIES WORKING SOLUTION

1. Baoma Company's BM series working solution for WireEDM machine is a Environment protection working solution for machines. BM series working solution consist of 100% water-soluble material and can be fixed with tap water. Solution to the solution for material and can be fixed with tap water. Solution water working the solution of the solution of the solution of the solution. The solution water wate

2.After sometime using of BM series working solution, the waste fluid easy to be deal with and ProEnvironment. You can put the fluid together in a tank. After around 3 days, the ferrous powder, which cut from the workpiece, will separated from the fluid and settle to down of the tank. The up level will be clear fluid, which can be reused. The precipitation on the bottom of the tank can be recycle. All this compiled with the ISO14001 environment requirement. In the other side, if you environment requirement. In the other side, if you deal with and it is very dirty and the cost to treatment is very excessive.

3. Baoma series working solution is no bad influence on the health of the operator, no damage to the skin and breathing. Improving the working environment for the operator and keep the machine clear and keep the health of the operator. The spondification is very bad for the health of the operator, if it touch the skin or cloth of the operator, will be very difficult to clear.

4. Baoma group is a top-notch manufacturer specialized in manufacturer EDM wire cut and CNC Machine Center machines. Baoma brand machine is first class machine machines are supported to the same strain of the same strain o

5.Improve machining efficiency and precision, steady be better BM can be used for ferrous metal, copper and aluminum, which can keep the machine tools be used for a long time without rusting, so BM series working solution bring a new generation for high quality and economic cost.





www. bmnc.cn / 06

#### Show great foresight:

The saponification waste liquid is very difficult to deal with, many countries forbid to discard directly, it must be Harmless treatment, the cost of treatment is very high. Now more and more people from all over the world pay attention to the Environment, so the trend working solution replace the sponification can not be reversed.

According to the statistics from the authority of the State sector. From 2006, the pro-environment working solution increased 10% per year. This the beginning of the revolution of "from saponification pro-environment working solution"

