

# Marking Machine



## pneumatic marking machine

### Basic Principle:

Computer controls Marking-Pin to move on the traces of pre-edited letters, numbers, codes and graphs, meanwhile, to strike on work pieces at a high frequency under the application of compressed air, to form the edited information on work pieces.

### Major Function:

- (1) Capable to mark Chinese letters, English letters, Arabic numbers, Graphs, Serial numbers, VIN Codes, Data codes, Random codes and Dividing rulers.
- (2) Supporting Barcode Scan
- (3) Supporting Barcode marking and Database marking
- (4) Optional Marking Mode: Line Marking or Dot Marking
- (5) Optional Connection Mode: USB port or Serial port
- (6) Several sets of Marking Machine can be controlled by One Computer via USB port.

### Applicable Scope:

- (1) Motor Industry: to mark Manufacturing Number and Date, Company Name, Brand, etc., on Vehicle Body, Frame, Base Plate, Pillar, Engine, Connection Rod, Cylinder, Piston, Cylinder Sleeve, etc.
- (2) Mechanical Industry: to mark on Mechanical Part, Machine Tool, Hardware Product, Steel Tube, Sleeve, Collar, Roller, Pump Valve, Ring Flange, Valve, and Fastener, etc.
- (3) To mark on Apparatus, Electro-mechanical Instrument.
- (4) To mark on Plastic and Leather product.
- (5) To mark Manufacturing Number and Date, Company Name, and Brand on Name Plates with Aluminum, Copper, Stainless Steel or PVC material.
- (6) To mark Dividing Rulers on Dial Plate.

### Technical Parameters:

Marking Contents: Chinese letters, English letters, Arabic numbers, Vector graphs, and Coders.

Size of Letters: Adjustable

Marking Speed: 100-7000mm/min (adjustable, marking quality subject to marking speed)

Marking Material: Metals or Non-metals with hardness under HRC55

Marking Depth: 0.02-1.5mm (adjustable, relevant to material)

Repeat Precision: 0.02-0.05mm (can mark English letters with 0.5mm or Chinese letters with 0.8mm)

Power Source: AC220V $\pm$ 10% 50-60Hz (AC110V $\pm$ 10% 50-60Hz)

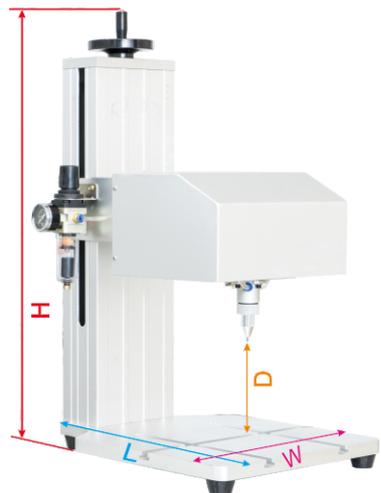
Energy Consumption: 100W (Air Compressor and Computer excluded)

Pneumatic Pressure: 0.3-0.7Mpa (relevant to Marking Depth)

Atmosphere Consumption: 25-120L/min (relevant to Marking Depth)

Work Environment: regular working environment

**NCQ/A Flat Marking Machine Type**



Marking Surface: Flat surface or curved surface with flatness not exceeding 3mm

Applicable Scope : Motor part, Mechanical part, Machine tool, Hardware product, Valve, Pump valve, Electro-mechanical equipment, Plastic product, Name plate (Labels), etc.

Function Introduction: Name plates can be marked semiautomatically with Labelling Fixture(which is optional accessory); Mechanical part can be marked without Labelling Fixture (some require a Simple fixture to fix the marking position of product.)

Major Parts: Main Machine, Flat Marking Controller, Marking Software (Labelling Fixture if choosed)

Items	Marking Area(mm <sup>2</sup> )	Max iumm Height(mm)	Weight (kg)	Dimensions (mm)				Remarks: machine can be customized; we can make machine according to your requirements.
				L	W	H	D	
NCQ/A-135-85	135*85	280	22	430	330	675	0 - 280	
NCQ/A-200-110	200*110	280	23.5	465	390	675	0 - 280	
NCQ/A-250-200	250*200	280	49	540	435	685	0 - 280	

## NCQ/B Flat and Cylindrical Marking Machine Type



Items	Marking Area (mm)		Instruction
	Flat	Diameter Of Circle	
NCQ/B-135-85	135*85	Φ5-200	Two-Axis rotary working, weight of products should better under 10kgs for conventional configuration
NCQ/B-200-110	200*110	Φ5-200	
NCQ/B-250-200	250*200	Φ5-200	
NCQ/3B-135-85	135*85	Φ5-260	Three-Axis rotary working, weight of products should better under 20kgs for conventional configuration
NCQ/3B-200-110	200*110	Φ5-260	
NCQ/3B-250-200	250*200	Φ5-260	
Remarks:machine can be customized according to your particular requirements. Main machine of NCQ/B type are the same to the ones of NCQ/A type			

**pneumatic marking machine**

Marking Surface: Flat surface, Cylindrical surface

Applicable Scope : Motor part, Mechanical part, Machine tool, Hardware product, Valve, Pump valve, Steel Tube, Ring flange, Electro-mechanical equipment, Plastic product, Name plate (Labels), etc.

Function Introduction: Machines are applicable to mark the information on Flat surface, also to mark on Name Plates with Labelling Fixture (which is optional accessory); with Rotary Marking Fixture, can mark on Circular tube and Cylinder products like Ring flange and Steel tube with 360 degree entire circumference surface.

Major Parts: Main Machine, Rotary Marking Controller, Marking Software, Rotary Marking Fixture (Labelling Fixture if choosed)

**NCQ/C-Portable Marking Machine Type**



Marking Surface: Flat surface or curved surface with flatness not exceeding 3mm

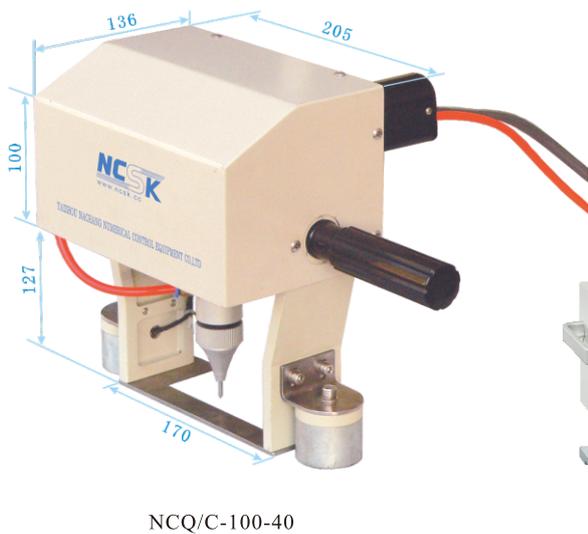
Applicable Scope : To mark on Vehicle Body, Frame, Base Plate, Vehicle Rear Axle, Pillar, Engine, Large-scale Valve, Mould, Heavy Casting and other Large and Heavy products, etc.

Function Introduction: Main Machine can mark on Large And Heavy products by Hand, through long marking cable, far away from Computer and Marking Controller.

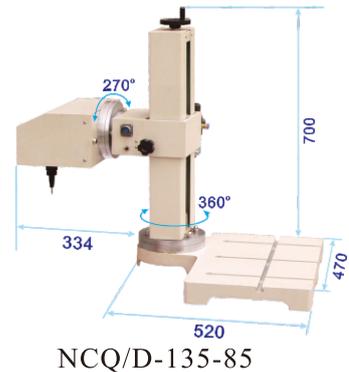
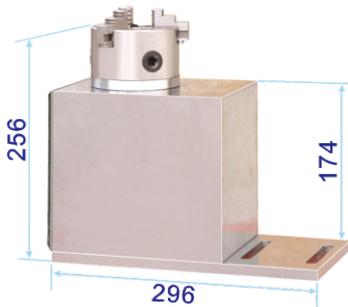
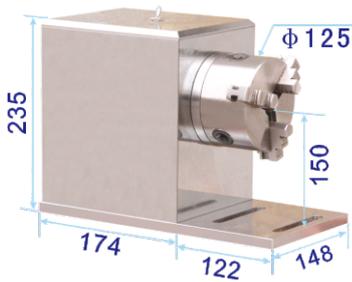
Major Parts: Main Machine, Marking Controller, Marking Software

Items	Marking Area(mm <sup>2</sup> )	Weight (kg)	
		No electro-magnet	With electro-magnet
NCQ/C-100-40	100*40	5	5.8
NCQ/C-150-40	150*40	6	6.8
NCQ/C-135-85	135*85	10.5	12
NCQ/C-160-85	160*85	12	13.5

Remarks: Machines can be customized according to your special equipments and characteristics of the products.



**NCQ/D-Multifunctional Marking Machine Type**



Items	Marking Area(mm)		Weight(kg) (Rotary fixture Excluded)	Instruction
	Flat	Diameter Of Circle		
NCQ/D-135-85	135*85	Φ5—200mm	53	Three-Axis rotary working, weight of products should better under 10kgs for conventional configuration
NCQ/D-200-110	200*110	Φ5—200mm	54	
NCQ/D-250-200	250*200	Φ5—200mm	56	
NCQ/3D-135-85	135*85	Φ5—300mm	53	Three-Axis rotary working, weight of products should better under 20kgs for conventional configuration
NCQ/3D-200-110	200*110	Φ5—300mm	54	
NCQ/3D-250-200	250*200	Φ5—300mm	56	
Remarks: Machine can be customized according to your special products and marking requirements				

Marking Surface: Flat surface, Cylindrical surface, Conical surface

Applicable Scope : Motor part, Mechanical part, Machine tool, Hardware product, Valve, Pump valve, Steel tube, Ring flange, Dial plate, Electro-mechanical equipment, Plastic product, Name plate (Labels), etc.

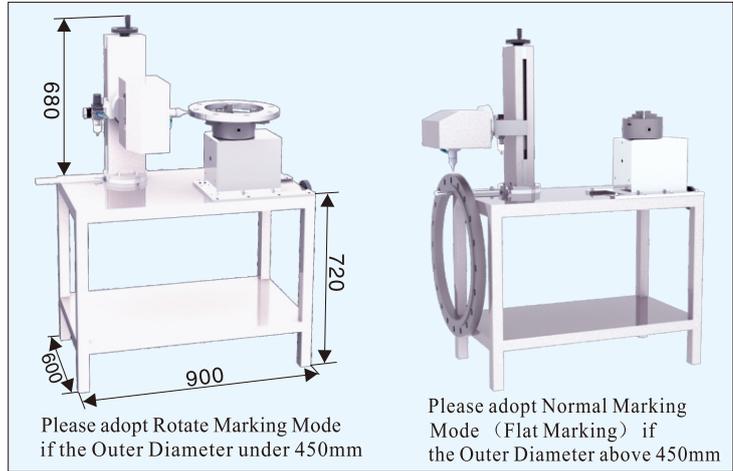
Function Introduction: To mark on small product, like on Finger Ring, as well as, on large product, like on Large-scale Ring Flange with 360 degree entire circumference surface; total marking head with marking pin can be directed freely to any direction; Rotary marking fixture can be undergone either standing or lying.

Major Parts: Main Machine, Rotary Marking Controller, Marking Software, Rotary Marking Fixture (Labelling Fixture if choosed)

**NCQ/D2- Flange Marking Machine Type**



This type Marking Machine is applicable to mark information on Ring Flanges with Outer Diameter under 1000mm, with high speed and precision marking quality.

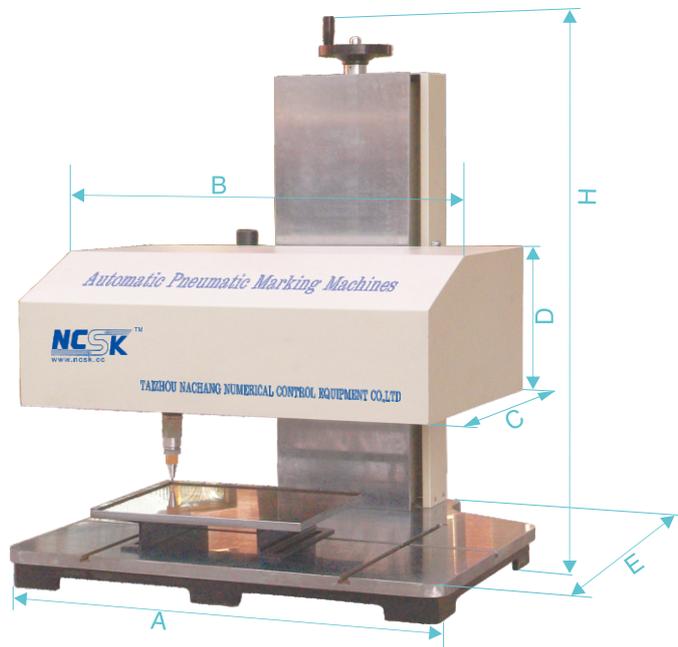


**NCQ/E-Large Coverage & Heavy Duty Marking Machine Type**

Marking Surface: Flat surface or curved surface with flatness not exceeding 3mm

Applicable Scope : To mark Date, Serial Number, Data, etc. on large Name Plates of Transformer, Machine Tool, Injection Moulding Machine, also to mark on Mechanical Part, Pump Valve, Electro-mechanical Equipment, etc.

Major Parts: Main Machine, Marking Controller, Marking Software ( Simple Labelling Fixture if choosed)



Items	Marking Area (mm <sup>2</sup> )	Maximum Height(mm)	Weight (kg)	Dimensions(mm)					
				A	B	C	D	E	H
NCQ/E-320-270	320*270	300	115	530	492	436	232	626	918
NCQ/E-400-270	400*270	320	140	625	578	436	232	626	918
NCQ/E-500-320	500*320	320	155	730	680	488	240	670	920

The Repeat Precision of this kind of Marking Machine is about 0.08-0.15mm (can mark English letters with 1.5mm)

### NCQ/F-High Torque Marking Machine Type

This type of Marking Machine is used to mark on Large and Heavy products, like Ring Flange, Valve, and Flywheel with 360 degree entire circumference surface, applicable to mark on products with Inertia Moment under 15 kg·m<sup>2</sup>



Table of Comparisons between Max. Diameter and Mass of Products

No.	1	2	3	4	5	6	7	8
Max. Dia (mm)	1100	1000	900	800	700	600	500	450
Mass (kg)	70	80	100	140	190	260	350	500

### Spare parts——Marking Heads & Marking Pins



**Marking Sample**

Mark on Name Plate



Marked by NCQ/A-135, also can mark by following types: NCQ/A-200, NCQ/B-135, NCQ/B-200 or NCQ/D-135 etc.

Mark on Engines Box



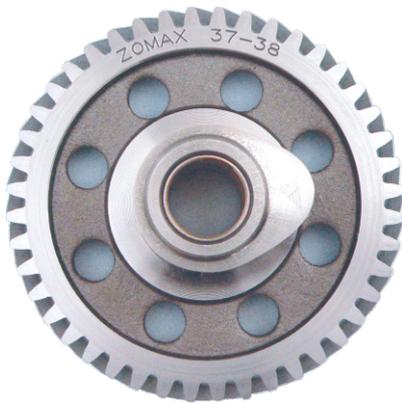
Marked by NCQ/A-135, also can mark by following types: NCQ/A-200, NCQ/B-135 or NCQ/B-200, NCQ/D-135 etc.

Mark on Stainless Steel



Mark by NCQ/A-135, also can mark by following types: NCQ/A-200, NCQ/B-135 or NCQ/B-200, NCQ/D-135 etc.

Mark on Gear



Mark by NCQ/A-135, also can mark by following types: NCQ/A-200, NCQ/B-135 or NCQ/B-200, NCQ/D-135 etc.

Mark on Stainless Steel



Mark by NCQ/A-135 types, also can mark by following types: NCQ/A-200, NCQ/B-135 or NCQ/B-200, NCQ/D-135 etc.

Mark on Stainless Steel



Mark by NCQ/A-135 types, also can mark by following types: NCQ/A-200, NCQ/B-135 or NCQ/B-200, NCQ/D-135 etc.

Mark on Stainless Steel Product



Mark by NCQ/A-135 type, also can mark by following types: NCQ/A-200, NCQ/B-135 or NCQ/B-200, NCQ/D-135 etc.

Mark on Mechanical Part



Mark by NCQ/A-135 type, also can mark by following types: NCQ/A-200, NCQ/B-135 or NCQ/B-200, NCQ/D-135 etc.

Mark on Pressure Regular



Mark by NCQ/A-135 type, also can mark by following types: NCQ/A-200, NCQ/B-135 or NCQ/B-200, NCQ/D-135 etc.

**pneumatic marking machine**

**Marking Sample**

Mark on mechanical part



Mark by NCQ/A-135 type, also can mark by following types: NCQ/A-200, NCQ/B-135 or NCQ/B-200, NCQ/D-135 etc.

Mark on mechanical Part



Mark by NCQ/B-135 type, also can mark by following types: NCQ/D types, NCQ/D2 or NCQ/F types.

Mark on mechanical part



Mark by NCQ/D-135 types, also can mark by following types: NCQ/B-135, NCQ/D-200 etc..

High-Precision Marking



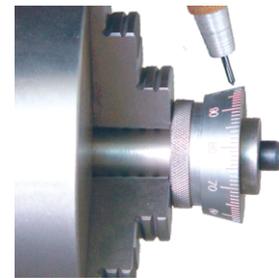
Mark by NCQ/B-135 type, also can mark by following types: NCQ/B-200 or NCQ/D etc.

Mark on Inner Bore



Mark by NCQ/D-135 type, also can mark by following types: NCQ/D-200 etc.

Mark on Dial Plate



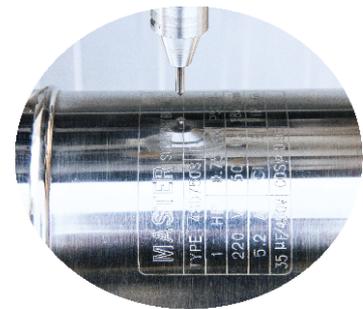
Mark by NCQ/D-135 type, also can mark by following types: NCQ/D-200 etc.



Mark by NCQ/B-135 type, also can mark by following types: NCQ/B-200 or NCQ/D etc.



Mark by NCQ/A-135 type, also can mark by following types: NCQ/A-200, NCQ/B-135 or NCQ/B-200, NCQ/D-135 etc.



Marking Sample



## Laser Marking Machine

The function of Laser Marking Machine Software is strong, being compatible with documents of CorelDRAW, AutoCAD and Photoshop software; supporting PLT, AI, DXF, BMP, JPG, TIF format; and supporting Coding, marking Serial number, Batch number, Date, Bar code, Letters, and Data Matrix, etc.

Mechanical Industries, Hardware Products, Tools, Bearings, Name Plates, Watches, Appliances, Glasses, Cigarette Lighters, Sanitary Wares, Buttons, Jewellery, Rubbers, Electronic Components, Communication Equipments, Medical Equipments, Auto Parts, etc.

## NC Fiber Laser Marking Machine



Suitable materials : most metal and nonmetal such as Nylon,ABS,PVC,PES,Steel,Ti,Gold,,Sliver,Copper, Aluminium,Silicon etc.Widely apply to machinery electrical industries,such as electronic and communication products,Motor parts,Tools,Knives,bearing, Watches,glasses,Name Plate , Mechanical equipment, Jewellery,foods, Artwork ornament,maquillage etc.

### Technical Parameters

Type	NC-J-10W	NC-J-15W	NC-J-20W	NC-J-30W	NC-J-50W
Input Voltage	220V/50Hz/5A				
Power Consumed	≤500W				
Laser power	10W	15W	20W	30W	50W
Adjust power range	5-100%				
Laser wave-length	1064nm				
Modulation frequency	20-30kHz, 20-80kHz, 20-200kHz				
Liner speed	≤8000mm/s				
Min.liner width	0.02mm				
Min charact size	0.2mm×0.2mm				
Repetition accuracy	±0.001mm				
Marking depth	0.01mm-0.3mm				
Marking area	Flat 100mm×100mm				
Optical range	70mm×70mm	150mm×150mm	180mm×180mm		
Control interface	USB				
Cool system	Air-cooled				
Working system	24 Hours				
Life of the laser module	100,000 Hours				

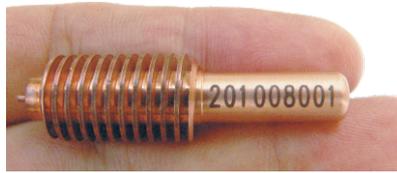
Remarks: The standard configuration is chinese laser mould. Imported laser IPG & SPI are optional. If you need rotary marking ,so please choose Rotary fixture. The machine can be design according your requirements.



Laser Marking Machine



**Laser Marking Application**



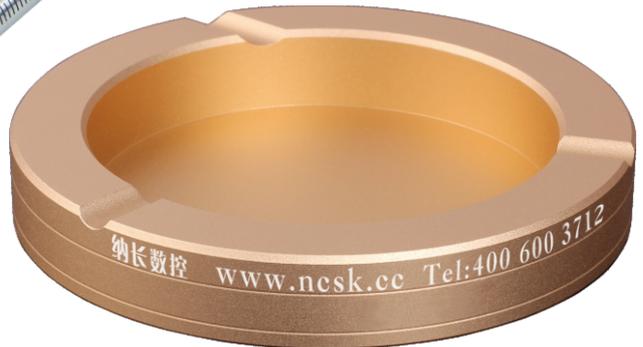
**Laser Marking Machine**



Laser Marking Machine



Laser Marking Machine



Laser Marking Machine



**NC-J-CO2 (carbon dioxide) laser marking machine**

Choosing industrial application standard modular design and metal packaging RF CO2 laser with fast beam deflection , focusing system expansion, high stability. Computerized production, simple operation, flexible and convenient, in high marking accuracy and speed. CO2 laser marking machine heat-affected zone is small, fine processing, low cost, easy operation, conventional methods can not achieve the completion of some process.

CO2 laser marking machine is a non-contact process, does not produce mechanical compression or mechanical stress. Suitable for marking and cutting on nonmetal materials, widely apply to Leather, wooden device, bamboo products, paper, acrylic, ceramics, organic glass, common glass, EP, ABS, PC,PVC, PET, all kinds of plastic products marking; Bags.Electronic devices IC, capacitor, water bottle,plastic cooking oil Glue bottle, 3 M labels, mark; Food, medicine, cosmetic Product package mark

**Technical Parameter**

Type	NC-J-CO2-10W	NC-J-CO2-20W	NC-J-CO2-25W	NC-J-CO2-50W	NC-J-CO2-100W
Input Voltage	220V/50Hz/5A			220V/50Hz/15A	220V/50Hz/20A
Power Consumed	≤600W			≤1.8kW	≤3.5kW
Laser Power	10W	20W	25W	50W	100W
Power adjustment range	5-100%				
Laser Wave-length	10.64 μm				
Modulation frequency	1-20kHz				
Marking speed	≤7000mm/s				
Min line width	0.07mm	0.1mm	0.12mm	0.15mm	0.18mm
Min.character size.	0.3mm	0.3mm	0.4mm	0.5mm×0.5mm	
Reaptition accuracy	±0.01mm				
Marking depth	≤1.5mm	≤2mm	≤3mm	≤5mm	≤8mm
Marking Area	100mm×100mm				
Optical range	70mm×70mm/180mm×180mm/300mm×300mm/500mm×500mm				
Control inference	USB				
Cooling System	Air-cooled			Water-cooled	
Working System	24 Hours				



NC-J-CO2-25W



NC-J-CO2-25W



Mark on bamboo



Mark on wood product



Mark on Bottle



Mark on glass

## Company Profiles:

We, Taizhou Nachang Numerical Control Equipment Co., Ltd, are a high-tech enterprise, specialized in developing and researching Pneumatic Marking Machines and Laser Marking Machines.

Since our establishment in 1994, we have continuously strived to be the premier manufacturer of Marking Machines in China by our utmost effort in practical operation with accumulated technology.

Our machines are enjoying great popularity both at home and abroad. We will contribute to the development of Marking Machines Industry by producing qualified machines.

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