

Foremost JFY Buss Bar Machine



The MCZ series CNC punching-cropping machine for bus is composed of two sections; punching unit and bending unit. The punching unit can do punching, channeling, edging, cornering, shearing, and so on. It is equipped with six stations, simple in structure and convenient for slug removal. The die material is of alloy steel with long service life. The dies are aligned linearly, and the base is made integrated by the processing center, thus ensuring the alignment of the die and enhancing their service life.

The different pneumatic clamps are optional based on the customer's requirement. The clamps travel along X axis at one stroke of 1000mm and the maximum stroke up to 6000mm.

The bending unit can achieve horizontal bending, vertical bending, U bending and distorting of bus with powerful function, high accuracy and stable performance.

The bending unit adopts a unique electronic cavity die. The bending angle is measured and bending error compensated automatically with the measurement accuracy within $\pm 0.1\%$ and bending accuracy within $\pm 0.3\%$. The processing accuracy, especially repetitive accuracy is up to a very high standard.

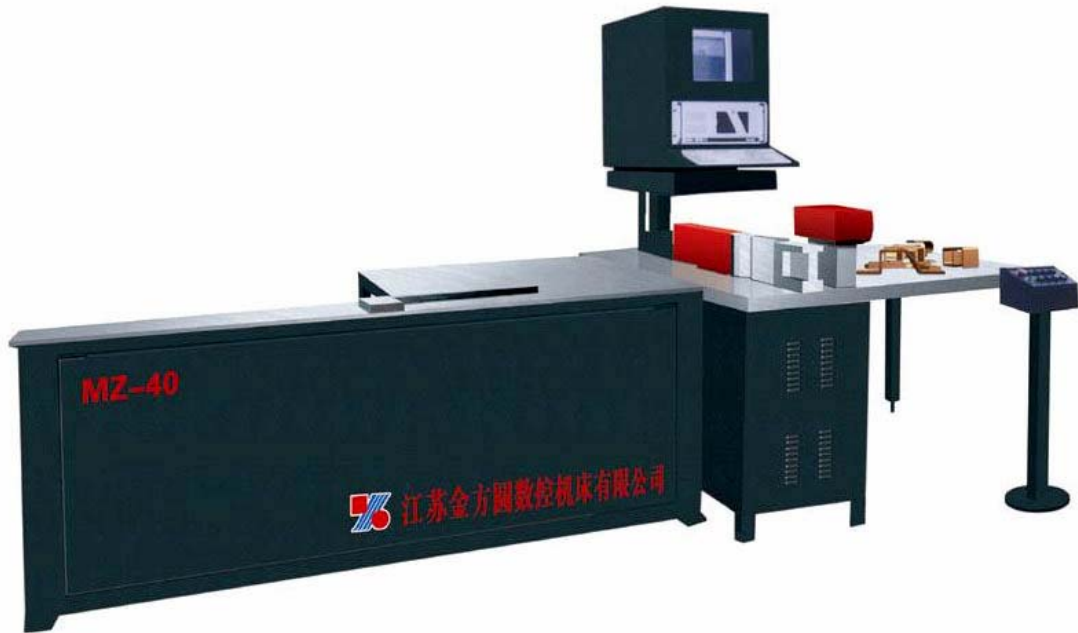
The punching unit adopts the advanced CNC and drive system, with field and background programming, and graphic simulation functions. It also has RS232 standard port. The bending unit adopts the high level industrial control computer with color graphic simulation and automatic angle compensation for precise control of backgauge.

The punching and bending units both utilize hydraulic drive. The pneumatic hydraulic and electric components are world famous brands, featuring reliable quality and stable performance.

The high precision and large lead ballscrew and linear guideway in the transmission system are world famous brands, featuring high positioning and moving accuracy.

The two machines adopt different hydraulic and CNC systems which can either be combined or controlled separately to meet different customer's requirements.

The machine features high flexibility, adaptable to different products. Whether it is a small lot with a variety of products, or it is large batch production, the customer's requirement can be easily met. It is now widely used in modern bus bar processing.



SPECIFICATION	UNIT	MC-40
Press Capacity	KN	400
Speed	m/min	40
Max.stroke X Axis	mm	1,000
Max. Stroke Y Axis	mm	1,250
Max.stroke Z Axis	mm	200
Strokes Per Minute	HPM	50
Station	# of	6
Controlled Axes		3
Accuracy	mm	± [0.2+(L/4000)]
Max Thickness	mm	Copper 15, Steel 10
Max. Diameter	mm	32
CNC		FANUC
Sheet Size	mmxmm	6000X200
Weight	Kg	4,200
Outline Dimensions	mm	8510X3120X1852
Ram Stroke	mm	26
Hydraulic Pressure	bar	270
Air Pressure	Mpa	0.5
Power	Kw	25
Clamp Size	mm	3~5,5~8,8~15

BENDING UNIT

SPECIFICATION	UNITS	MZ-40
Pressure	KN	400
Accuracy	degrees	±0.3°
Rapid Stroke	mm/s	13
Slow Stroke, adjustable	mm/s	0~13
Max. Stroke	mm	200
Max. Angle	degrees	95
Backguage Distance	mm	1,500
Backguage Speed	m/min	20
Hydraulic Pressure	bar	270

Basic Specifications

Air Pressure	Mpa	0.5
Power	Kw	7
Min. R parameter of U	mm	40
Max horizontal brake	mm	10 X 160
Max. vertical brake	mm	12 X 100
CNC Control		Industrial Computer
Weight	Kg	1950
Foundation Dimensions	mm	4325 X 1560 X 1640

PUNCH UNIT

Part name	Specification	Manufacturer
Hydraulic System		BOSCH-Rexroth
Valve		Parker
Guideway	1605-704-31/1560	Rexroth
Ballscrew	32x20Rx3. 969-5-1588	Rexroth
	32x20Rx3. 969-2-662	Rexroth
	25x5Rx3-4-505	Rexroth
CNC System		FANUC
Pneumatic Component		FESTO

BENDING UNIT

Hydraulic system		BOSCH-Rexroth
Tin-in		Parker
Guideway	1605-404-31/2040	Rexroth
Ballscrew	32x20Rx3. 969-5-2029	Rexroth
Bearings	25TAC62BDFC10PN7A	NSK
Industrial controller	IPC-610	Yanhua
Pneumatic Component	DSN-20-40-P	FESTO

DOCUMENTS			
THE	ITEMS	AMOUNTS	REMARK
1	Packing List	1 copy	
2	Quality certificate	1 copy	
3	Instruction manual (mechanism)	1 copy	
4	Operation manual	1 copy	
5	Programming manual	1 copy	
6	Diagram for grounding	1 copy	
7	Electrical diagram	1 set	
8	Instruction manual (electric)	1 set	
9	Fanuc manual	1 set	
10	Industrial controller manual	1 set	

SPARE PARTS

NO.	ITEMS	AMOUNT	REMARK
1	Clamp crow	3	MC-40-3-8 MC-40-3-11
2	Plate for clamp	1	MC-40-5-3 MC-40-5-5
3	belt	1	MZ-40-1-12

APPENDIX V; THE REQUIREMENT PROVIDED BY THE USER

1. Air supply: 0.55Mpa, the dry and clean compressed air; the air flow is 1.6m³/min
2. Power supply: 460V, 60HZ, the vibration of the voltage is among -5% to +10%
Temperature of the surrounding: 0° to +40° C;
3. Moisture of the surroundings: relative moisture 20% to 80%, (without condensation)
4. Far away form strong vibration resource and electromagnetic interference;
5. Providing the little-dust surrounding without harmful and corrosive gas;
6. The ground base should be prepared according to the Diagram for Ground Base provided by the supplier;
7. The user need to choose the proper personnel (who at lest has high school education) to accept training, and make a long term arrangement.

TECHNICAL SPECIFICATION

The MCZ series numerical control bus machine is composed of two sections, bus punching unit and bus bending unit. It is developed by absorbing the features of the similar products abroad based on the actual situation concerning bus production in China. So far, the products have been put into use in a number of domestic enterprises, such as Beijing Switchgear Factory, Tianshui Great Wall Switchgear Factory, Xii an High Voltage Switchgear Company Limited, Jiangsu Changjing Electric Appliances Company Limited, Wenzhou Zhengtai Group, Shanghai Delixi Group, Shanghai Fuji Electric Motor and Guangzhou Baiyuan Electronics.

The punching unit can realize punching, channeling, edging, cornering, shearing and roulette. It is equipped with six station tool box, simple in structure and convenient for removal. The die material is of alloy steel with long service life. The dies are aligned linearly, and the base is made integratedly by the machining center, thus ensuring the coaxiality of the die and enhancing their service life.

The different pneumatic clamps are optional based on the customer requirement. The clamp travels along X Axis at one stroke of 1000mm and maximum stroke up to 6000mm.

The bending unit can realize the horizontal bending, vertical bending, U bending and distorting of bus with powerful function, high accuracy and stable performance.

The bending unit adopts a unique electronic cavity die. The bending angle is measured and bending error compensated automatically with the measurement accuracy within ± 0.10 and bending accuracy within ± 0.30 . The processing accuracy, especially repetitive accuracy is up to very high standard.

The punching unit adopts the advanced numerical control and drive system, with field and background programming, and graphic simulation functions. It also has RS232 standard port. The bending unit adopts the high level industrial control computer with color graphic simulation and automatic angle compensation for precise control of rear stopping.

The punching and bending units both utilize hydraulic main drive. pneumatic, hydraulic and electric components are world famous brands, featuring reliable quality and stable performance.

The high precision ball and lead screw and linear guide in the transmission system are world famous brands, featuring high positioning and moving accuracy.

Two machines adopt different hydraulic and numerical control systems, which can either be combined or controlled separately to meet different customer requirement.

The machine features high flexibility, adaptable to different products. Whether it is a small lot with a variety of products, or it is large batch production, the customer requirement can be easily met. It is now widely used in modern bus processing.

We thank you for the opportunity to quote this fine machine tool. We appreciate your consideration of this offering.

Gregory H. Sweigert
General Manager
Foremost Machinery Corporation