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**ANTISHINE**

# PBE SERIES

## CNC PANEL BENDER

- Max. Bending Length: 1400/2000/2500/3000mm
- Sheet Feeding Type: C Arm



\* Picture for reference only

# Technical Details

## MODEL PBE SERIES CNC PANNEL BENDER

Max. Bending Length: 1400/2000/2500/3000mm

Sheet Feeding Type: C Arm

### PBE Series



The multi-lateral bending center does not need to change the mold, the working stroke is short, and the feed is fast.

Comprehensive efficiency is 3 to 4 times that of manual bending machine.

According to the bending process, it can be automatically folded up and down, so as to realize the bending of arcs, dead edges, and various angles.

Highly intelligent operation control system, which can efficiently bend different workpieces.

Energy saving and consumption reduction, reducing labor and mold costs.

Name		Unit	PBE-1400	PBE-2000	PBE-2500	PBE-3000
Max. Bending Length		mm	1400	2000	2500	3000
Max. Sheet Width		mm	1400	1250	1250	1250
Max. Bending Height		mm	170	170	170	170
Min. Workpiece Size (four sides bending)		mm	170	200	200	200
Min. Workpiece Size (single side bending)		mm	170	170	170	170
Bending Angle		°	±180	±180	±180	±180
Max. Pressing Force (Standard thickness plate)		T	28	38	50(3 AXES)	115(3 AXES)
Min. Sheet Thickness		mm	0.35	0.35	0.35	0.35
Power(Standard thickness plate)		KW	40	49	60	80
Max. Sheet Thickness	SS	mm	1.0	1.0	1.0	1.0
	MS	mm	1.5	1.5	1.5	1.5
	AL	mm	2.0	2.0	2.0	2.0
Dimensions (L×W×H)		mm	2350x4600x2700	3100x5700x2700	3580x5700x2700	3100x5700x2700
Working Voltage		V	380V±10%	380V±10%	380V±10%	380V±10%

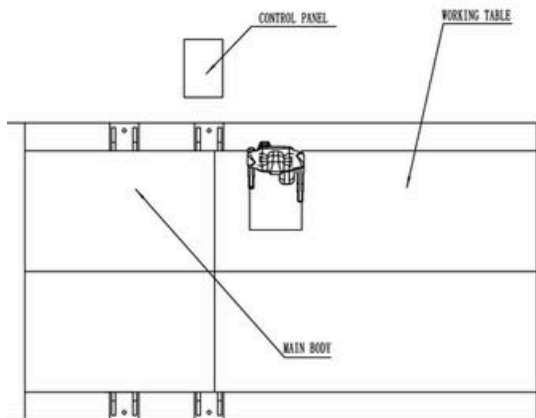
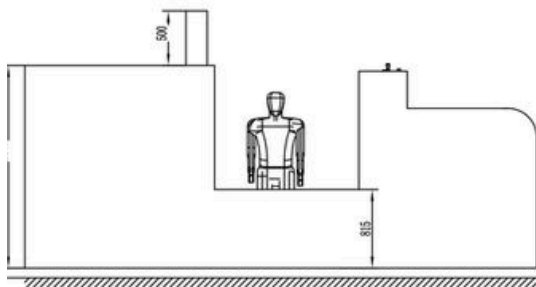
## Main Components Configuration

NO.	Item	Brand
1	Controlling System	SYNTEC/NLKER
2	Servo Driver	SYNTEC/WISTRON
3	Servo Motor	SYNTEC/WISTRON
4	Motor Reducer	NEWSTART/SHAMPO
5	Ball Screw	HIWIN/NGY
6	Bearing	NACHI/NSK
7	Linear Guide	HIWIN/NGY
8	Coupling	MIKIPULLEY
9	Lubrication System	BAOTN
10	Electric Component	Schneider
11	Pneumatic Component	Airtac/JULY

## Function Configuration

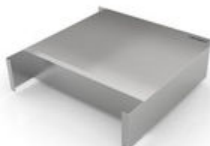
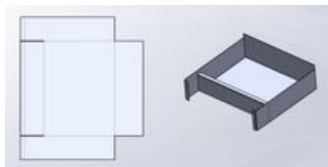
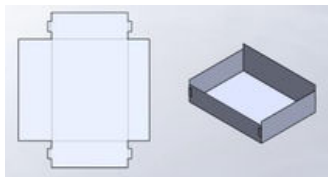
Name	Configuration
Feeding Type	Arm Hold Dual Rotate
Table Type	Brush
Speed Adjustment	Standard
Senior Command	Standard
Arc Command	Standard
HEM Command	Standard
Robot Connection	Standard

## Machine Layout



## OPTION: Auxiliary Short Blade

The auxiliary blades are used for partial bending of which the bending line is broken or offset bending of which the bending line is not at the same line with the main bending line.



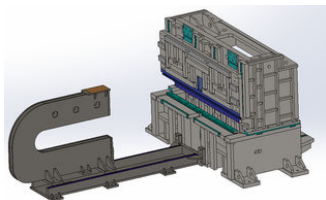
## Main Features

### PLATE WELDING FRAME

Because of the high-strength motion requirements of the bending center, the frame adopts an arch design, thickened, thickened and widened, the frame is tempered, heat-treated, annealed and tempered, and aged twice to ensure the long-term running accuracy, stability and high rigidity of the machine.

The frame is welded by carbon dioxide shielded welding, which has many advantages such as stable welding process, no internal defects, and minimal spatter.

The frame adopts a high-precision temperature-controlled furnace, which is tempered, heat-treated, annealed and modulated according to the temperature curve corresponding to the material, which ensures the lasting stability of the overall accuracy of the machine tool.



### UNIVERSAL TOOLING

The standard bending tool is powerful, which can make both UP and DOWN bending process, without rotate the sheet.

It can also make HEM bending and big ARC bending automatically.



UP BENDING  
PROCESS



DOWN BENDING PROCESS



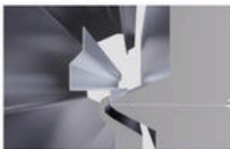
HEM BENDING PROCESS

## Operating mode: simple and quick

Bending on each side of the sheet is achieved thanks to the controlled interpolated movements of the blades.



**Down Bend**  
**NEGATIVE**



**Up Bend**  
**POSITIVE**



**Flattened Bend**  
**HEM**



**Big Radius Bend**  
**UP/DOWN ARC 45/90°**



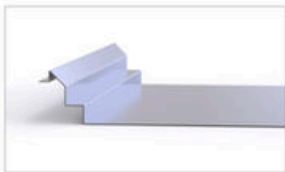
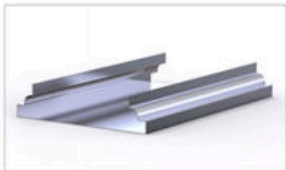
**Big Radius Bend**  
**UP/DOWN ARC 135/180°**

## Universal Tooling

The Flexible Panel Bender bends the sheet metal with one universal tooling, able to bend various complex shapes.

It can fold 90 angle, non 90 angle, circular ARC, positive/negative and other complex shapes, now days flexible panel bender become more and more popular in the metal forming field of different industries and different workpieces.

Here listed some typical applications:



## SERVO SYSTEM

The pure electric servo fully closed-loop system is adopted, and the system supports up to 16 axes concurrent linkage, so that the bending action is smooth, the mechanical operation is highly coordinated, and the combination of various complex actions can be smoothly realized. The whole machine has high working efficiency and low daily maintenance workload. It has a self-lubricating system for the whole machine. When the oil amount is lower than the specified value, the system will automatically alarm. Just follow the program prompts to add lubricating grease.



IO Config.



BENDING CONTROLLER



ALL IN ONE SERVO DRIVER

## CONTROLLING SYSTEM

SYNTEC System Functions and Features

- 116-axis linkage, BUS CNC controller
- 2Industrial controller, stable quality, in line with various standards
- 3Bus absolute servo motor
- 4Good openness and high adaptability



The Software Features:

- 5Order-style graphic programming, easy to use
- 6Real-time display of programming bending results, what you see is what you get
- 7The processing speed is fast, and the distance of retraction and rotation is automatically matched for workpieces of different sizes
- 8Support a variety of processes, complex angles/hemming/arcs/special actions and other complex actions can be formed in one step
- 9Support various process parameters and automatic matching compensation module
- 10Support torque limit function, protect the life of the machine while ensuring the compression of the workpiece
- 11Support handwheel simulation function to ensure that there will be no interference and collision during the debugging process
- 12Support 3D graphics import function in step format, start processing after direct import

## Working Conditions

Power Source : 380V±5%、50Hz, 30KVA

Environment : Clean & Less dust

Max. Temp. : 40 °C

Min. Temp. : -5 °C

Relative Humidity : 55~85%

Altitude : 1000m

## Accessories List

No	Name	Qty	Unit	Remark
1	Feet Pedal	1	Piece	
2	Support Screw	1	Set	
3	Flat Pad	1	Set	
4	Spring Pad	2	Set	
5	Allen Key	1	Set	
6	Oil Syringe	1	Piece	

## Documents List

No	Name	Qty
1	Operating Manual	1
2	Controller Manual	1
3	Electric Diagram	1
4	Foundation	1
5	Certificate of Approval	1
6	Packing List	1
The above documents are bound in the same file.		

## Company Brief



ANTISHICNC is a professional machine tools & CNC machines manufacturer that specialized in R&D and manufacturing of all kinds of CNC machine tools for sheet metal industry, includes punching, bending, laser cutting and shearing.

The company aims to provide the optimal solution for global customers and is always focusing on improving efficiency and decreasing the processing cost of customer.

With years of development, ANTISHICNC Brand becomes the pronoun of high-quality and high-efficiency. The thunder-speed pre-sale and after-sale service mechanism is another factor of sound reputation.

Because of excellent products quality and passion of our people, ANTISHICNC is keeping create miracles in sheet metal machinery industry.

### **"MACHINE EXPERT FOR SHEET METAL PROCESSING"**



ANTISHICNC is **enabling** the upgrading of conventional sheet metal fabricating industry and **reimagining** what can be made.