

EVO-GO

SINCE  
1988

**PBE-Series**

Sheet metal  
working  
machines

PANEL BENDER

**NEW**



\* Picture for reference only



# One Step Forward in Bending

## MODEL: PBE-1400~2500

Max. Bending Length: 1400 ~ 2500mm

ACCURL China has launched its new sheet metal CNC panel bender, designed to satisfy the most demanding market needs. With an innovative design, this is the result of more than 35 years of ACCURL's own know-how in the field of bending as Panel Bender VS Press Brake.



## PBE Series

The PBE Smart CNC panel bending machine cell is a revolutionary bending solution thanks to the "safety integrated" concept that allows the operator to focus only on value-added operations, aided by visual devices and sound signals. Its compact layout and combined loading and unloading sequence guarantee high productivity, constituting a very important investment for anyone looking for a flexible and semi-automatic panel bender.

ACCURL PBE Smart automatic panel bender has been designed with a modular concept, so that it may incorporate a large range of accessories and offer fully automated solutions

## Specifications

Name		Unit	PBE-1400	PBE-2000	PBE-2500
Max. Bending Length		mm	1400	2000	2500
Max. Sheet Width		mm	1500	1500	1500
Max. Bending Height		mm	170	170	170
Min. Workpiece Size (four sides bending)		mm	110x200	110x200	110x200
Min. Workpiece Size (single side bending)		mm	110	110	110
Min. Radius		mm	1.2	1.2	1.2
Bending Angle		°	±180	±180	±180
Max. Bending Speed		s/bending	0.5	0.5	0.5
Min. Sheet Thickness		mm	0.35	0.35	0.35
Max. Sheet Thickness	SS	mm	1.0	1.0	1.0
	MS	mm	1.5	1.5	1.5
	AL	mm	2.0	2.0	2.0
Dimensions (L×W×H)		mm	3100x5300x2600	3100x6050x2600	3100x6050x2600
Full Power		KW	45	45	45
Working Voltage		V	380V±10%	380V±10%	380V±10%

## Perfectly equipped for sensitive bending Energy efficient solutions

The Panel bender with its easy to use control units, rigid body frame, perfect design, high efficiency, multiple tool usage solutions for Automatic bending,

Compact Solution

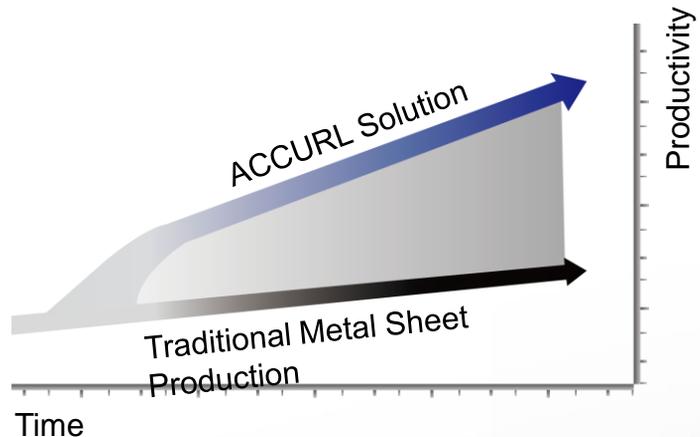
100% Full Servo-Electric System

Electrical Energy Savings

Regular Production Independent From the Operator

### Industries that use PBE

Office Furniture  
Heating & Ventilation  
Air Conditioning  
Domestic Appliances  
Shelving  
Lighting Fixtures  
Telecommunications  
Electronics  
Subcontracting Enclosures



PBE panel bender increases productivity much more than traditional press bending method.

### Unlimited bending

Its universal tool concept, along with the possibility of changing customized shaped tools, make the PBE machine the all-in-one highly versatile solution, allowing the manufacturing of a wide range of bending applications.

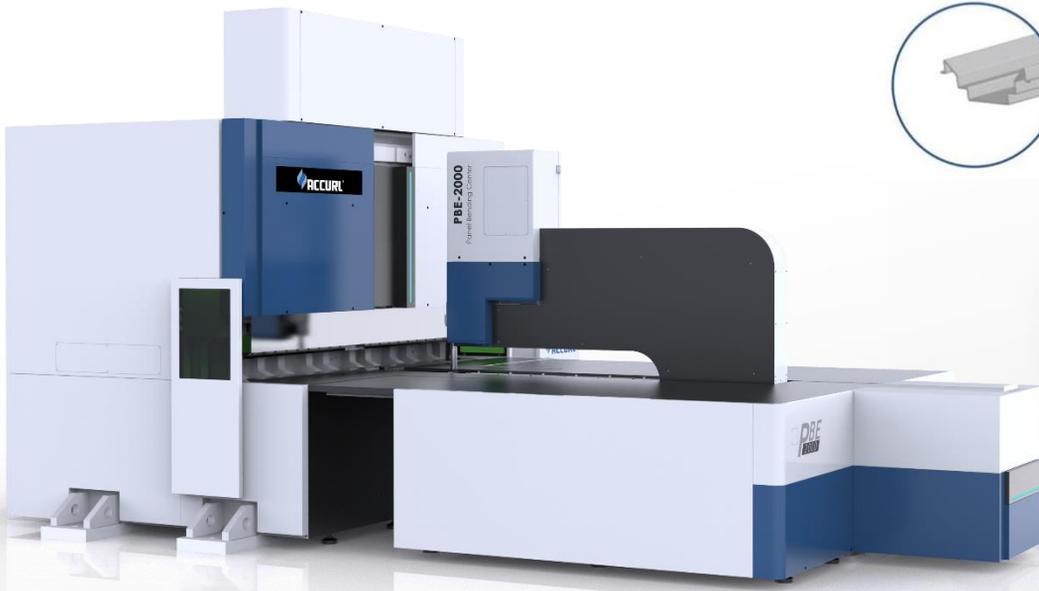
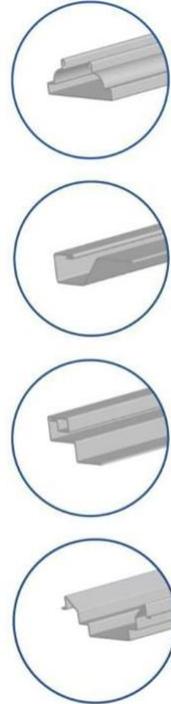
The universal tooling can make both UP and DOWN bending process, without switching surface of the sheet.

It can also make HEM bending and big ARC bending automatically. Achieving this type of bendings brings ADDED VALUE to the final part.

**PBE** Series panel bender is the new generation automated bending solutions, a benchmark that indicates the upgrading to automation of sheet metal fabricating industry. It can obviously reduce the labor cost and at the same time it can realize 300% higher efficiency comparing to traditional press brake up to 0.3s per bending. Full electro servo transmission plus closed-loop BUS control makes the accuracy far better.

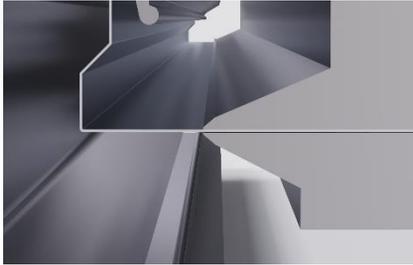
#### Features

- Fully automatic bending, high efficiency, energy saving and environmental protection.
- Bus control, which can be directly connected to the IOT(Internet of Things) for remote control and monitoring.
- Special high-load screw and guide rail structure, high load-bearing capacity, high positioning accuracy and long life.
- Fully automatic lubrication system, maintenance-free.
- C-arm feeding structure design, double servo rotation up and down, automatic downward press structure, rapid downward press, adjustable pressure, high rotation positioning accuracy.

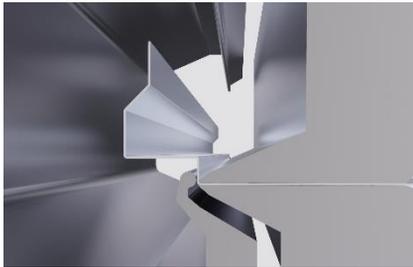


## Operating mode: simple and quick

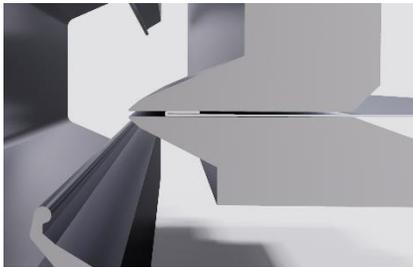
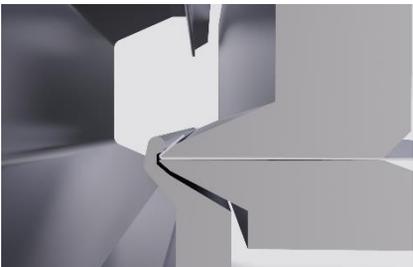
Bending on each side of the sheet is achieved thanks to the controlled interpolated movements of the blades.



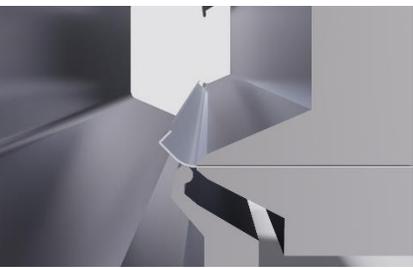
**Down Bend**  
**NEGATIVE**



**Up Bend**  
**POSITIVE**



**Flattened Bend**  
**HEM**



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



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

Finish complex parts in one set up.

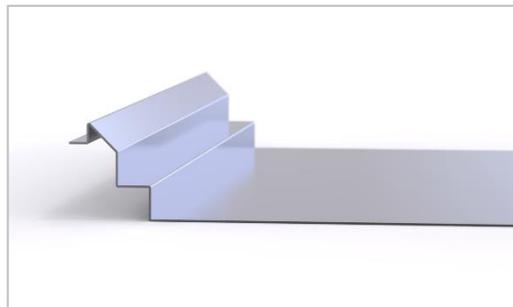
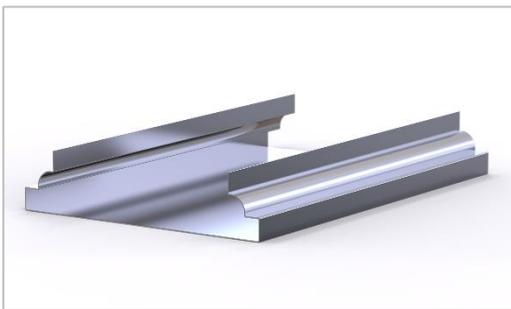
ACCURL

## 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.

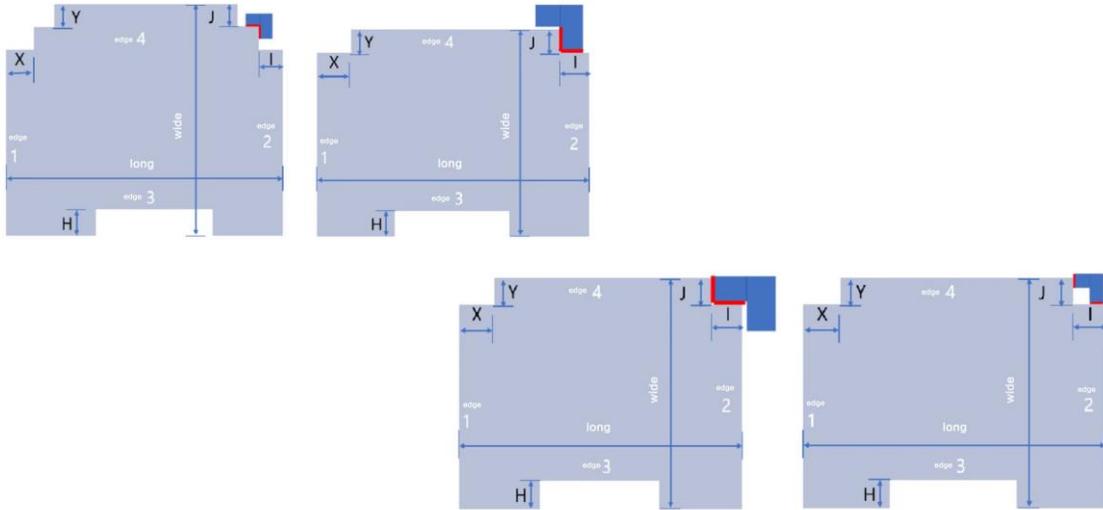
**Here listed some typical applications:**



## Main Features

### PLATE WELDING FRAME

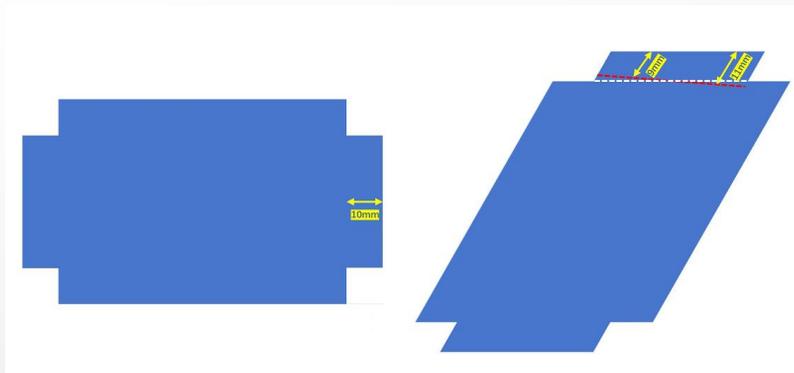
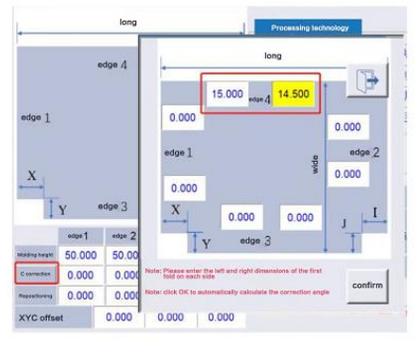
The servo motor controls the movement of the positioning L-block, which is fast and accurate.



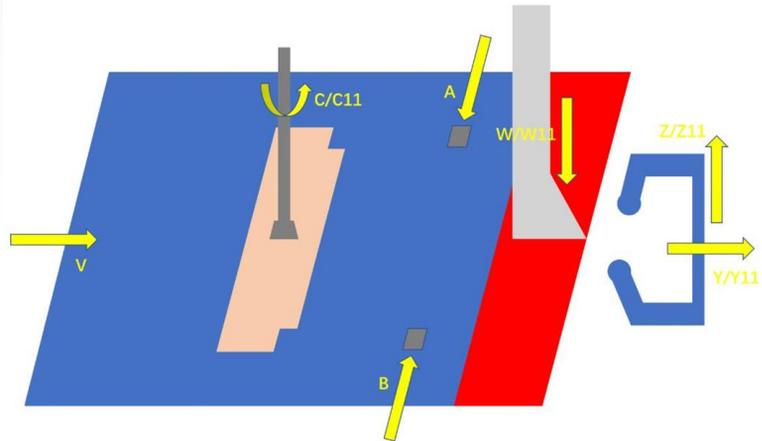
### FEATURE-AUTOMATIC CORRECTION OF ROTATION ANGLE

The arc bending process requires repeated bending of the plate. If the rotation angle is not in place, the bending error will accumulate each time, resulting in the folded workpiece is not an arc, but a cone.

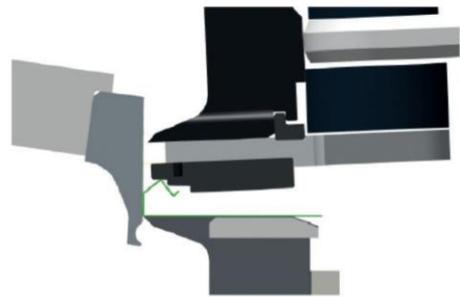
The automatic correction function can automatically adjust the C/C11 axis to compensate for sheet rotation errors.



## CNC AXES-11 AXES



- A/B axes: Positioning axes
- V axis: Feeding axis
- C/C11 axes: Rotation axes
- W/W11 axes: Pressing axes
- Z/Z11 axes: Tooling up&down motion axes
- Y/Y11axes : Tooling forward&dbackward motion axes



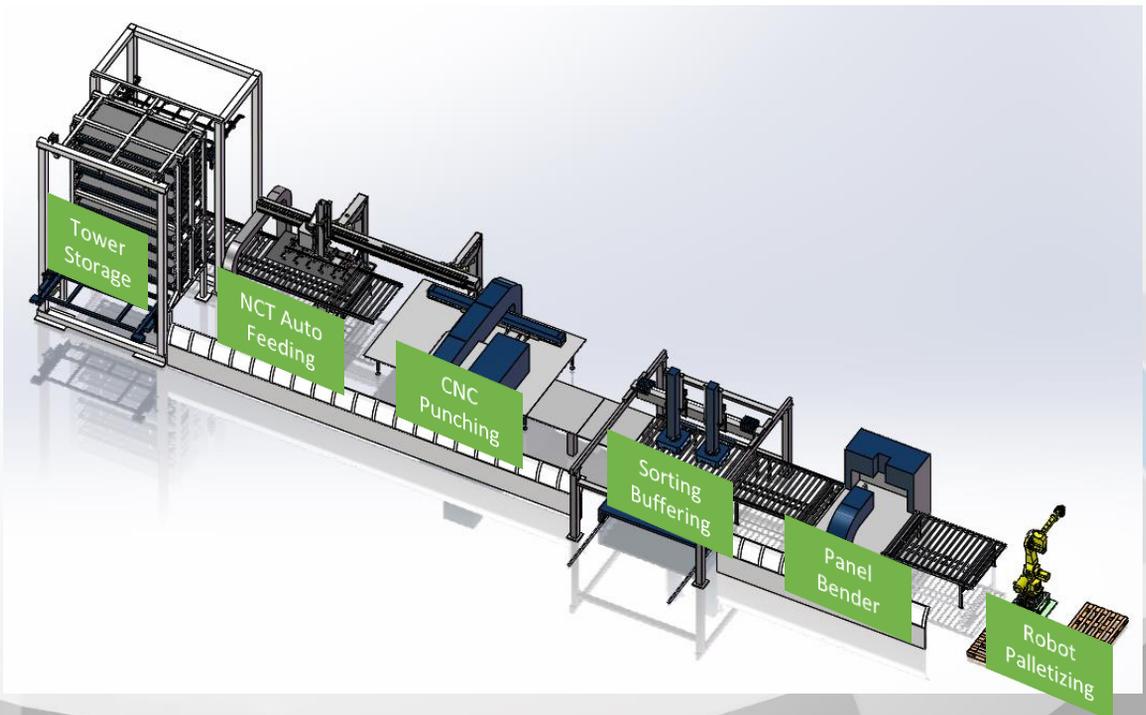
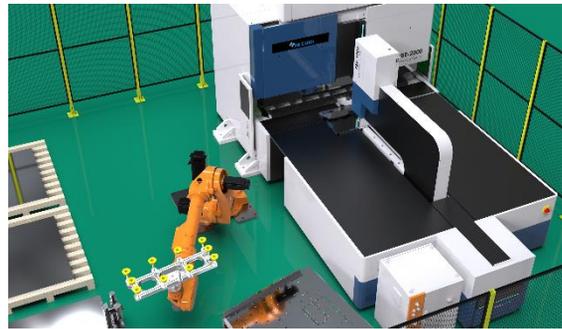
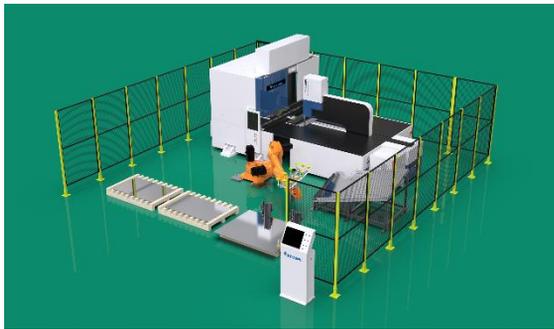
## CONTROLLING SYSTEM

In view of the high-intensity motion requirements of the panel bender, the frame adopts an arch design, which is thickened and widened.



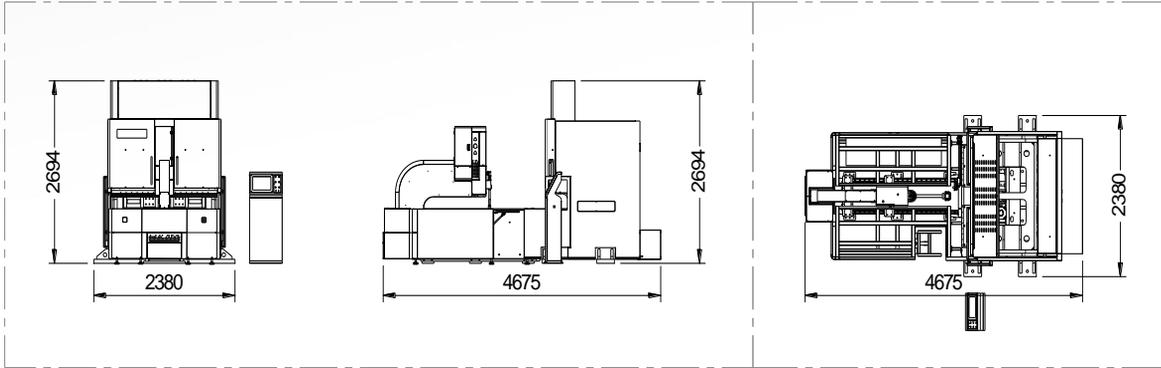
The frame is tempered, annealed and aged twice to ensure the long-term running accuracy, stability and high rigidity of the machine.

## Automation & Production Line

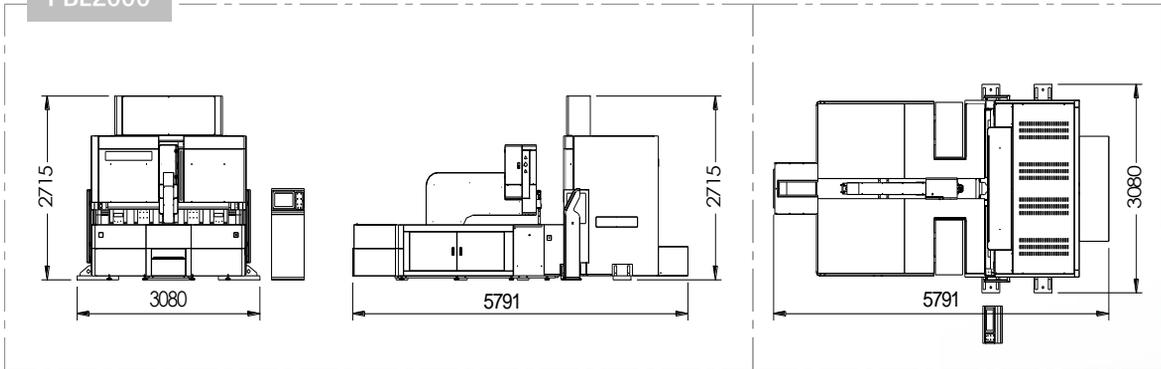


## Machine Installation Layout

PBE1400



PBE2000



## Vessel Container Required

PBE1400



16T



1/2 40HC

PBE2000



19T



40HC\*

\* The best way for PBE2000 delivery is 20OTx1 and 20GPx1 because of over height.