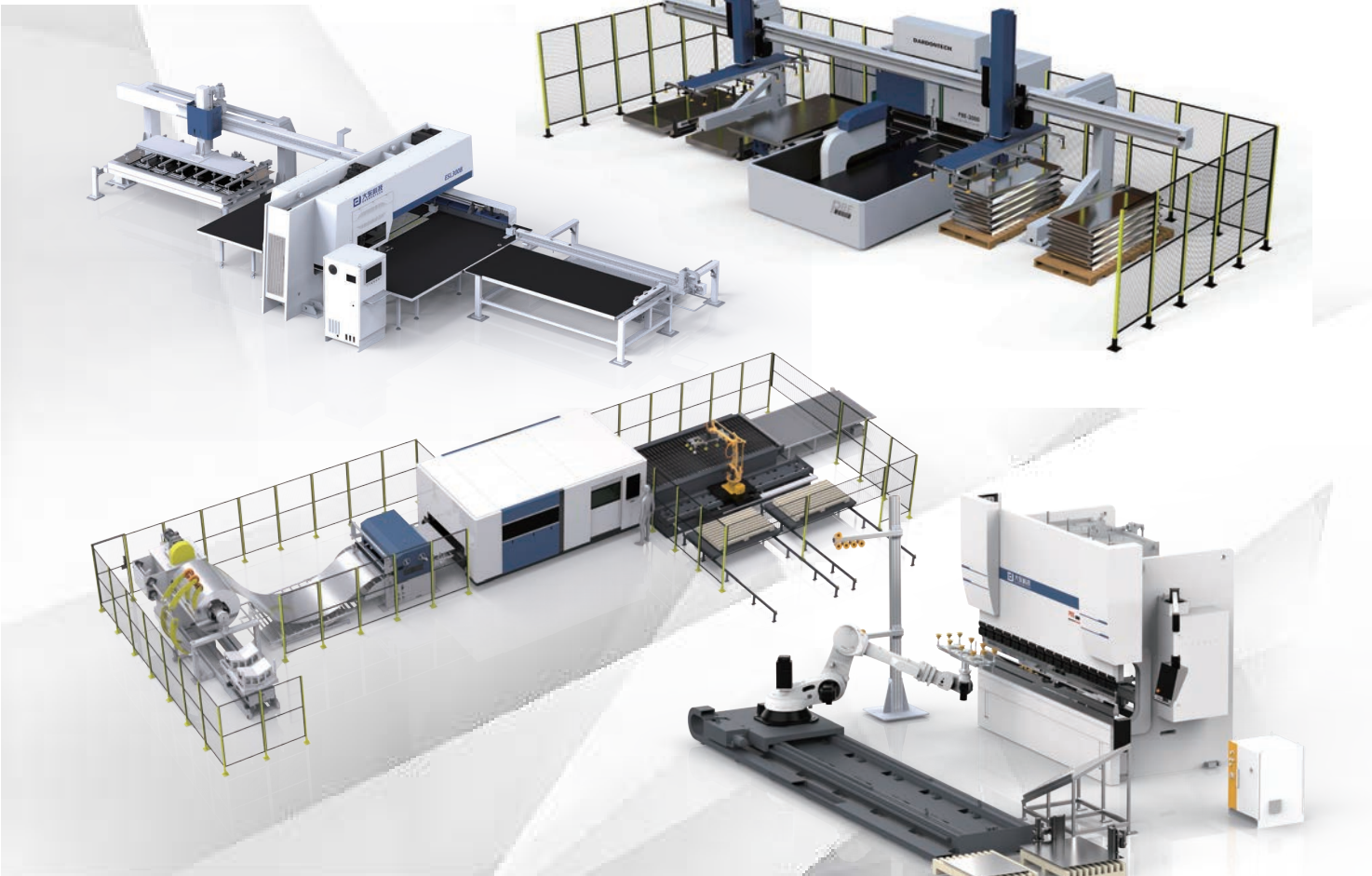


DARDONTECH

Enable Global Manufacturing



- Laser Cutting Machine
- CNC Press Brake
- CNC Turret Punch Press
- Panel Bender
- Punch and Laser Combined Machine

C COMPANY PROFILE



Scan to view and step into DARDONTECH

Qingdao Dadong Automation Technology Co., Ltd. was founded in March 2013. In August 2018, invested 36.5 million US dollars in the construction of the Intelligent CNC Equipment Technology Park in Qingdao Marine High-tech Zone, which was put into use in August 2019. The Second Phase (also known as the large tonnage press brake project) has an investment of 30 million US dollars, and the Third Phase (also known as the Sheet Metal Intelligent Manufacturing Automation Production Line Project) has an investment of 53 million US dollars. The total area is 128,000 m². Together, these phases have formed the "China Sheet Metal Equipment Intelligent Transformation Base".

The company is specialized in CNC machine tools for sheet metal industry, such as Punch & Laser Combined Machine, Fiber Laser Cutting Machine, CNC press brake, CNC Turret Punch Press, and Panel Bender, as well as CNC flexible production lines. They are widely used in metal processing industries including power complete sets of equipment, cabinets, curtain wall decoration, household appliances, elevators, fire doors, kitchen equipment, heavy machinery, and ship building industries, etc.

The company has an independent R&D department, which promotes the development of the industry through technological innovation. The thunder-speed pre-sale and after-sale service mechanism is another factor of sound reputation. The products are sold well globally, such as Europe, North America, South America, Southeast Asia, South Asia, Central Asia, Africa, the Middle East, and Russia.

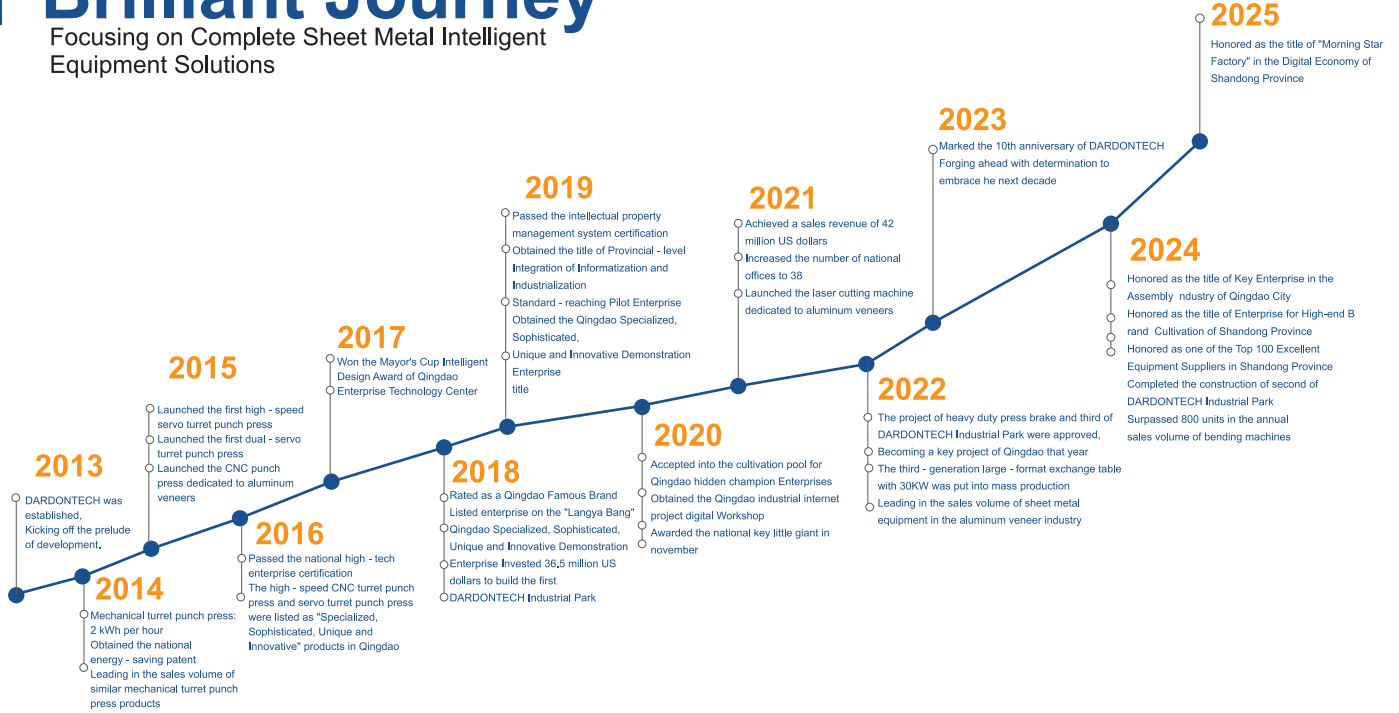
During this period, the company has established industry-university-research cooperation agreements with institutions such as Nanjing University of Science and Technology and Qingdao Military-Civilian Integration College.



MILESTONE

Brilliant Journey

Focusing on Complete Sheet Metal Intelligent Equipment Solutions



PRODUCTIONS

CNC TURRET PUNCH PRESS WORKSHOP



CNC PRESS BRAKE WORKSHOP



PRODUCTIONS

LASER CUTTING MACHINE WORKSHOP



PANEL BENDER WORKSHOP



MACHINING STRENGTH

5-Axis Machining Center



MODEL: VORTEX I-630V/6S
Process Range: 1425x1050x1050

5m Gantry Machining Center



MODEL: ML-532Z4
Process Range: 5060x3200x1400

6m Gantry Machining Center



MODEL: ML-640Z4
Process Range: 6000x3500x1800

Vertical CNC Turning Machine



MODEL: VL2500
Process Range: 2500x2000

Sandblasting



Purpose: Sandblasting
Process Range: 2500x6000x2500

Painting



MODEL: VL2500
Process Range: 2500x2000

MACHINING STRENGTH



**Bed Tempering:
Stress Relief**



**KEYENCE Coordinate
Measuring Machine (CMM):
Inspecting Geometric
Tolerance Accuracy**

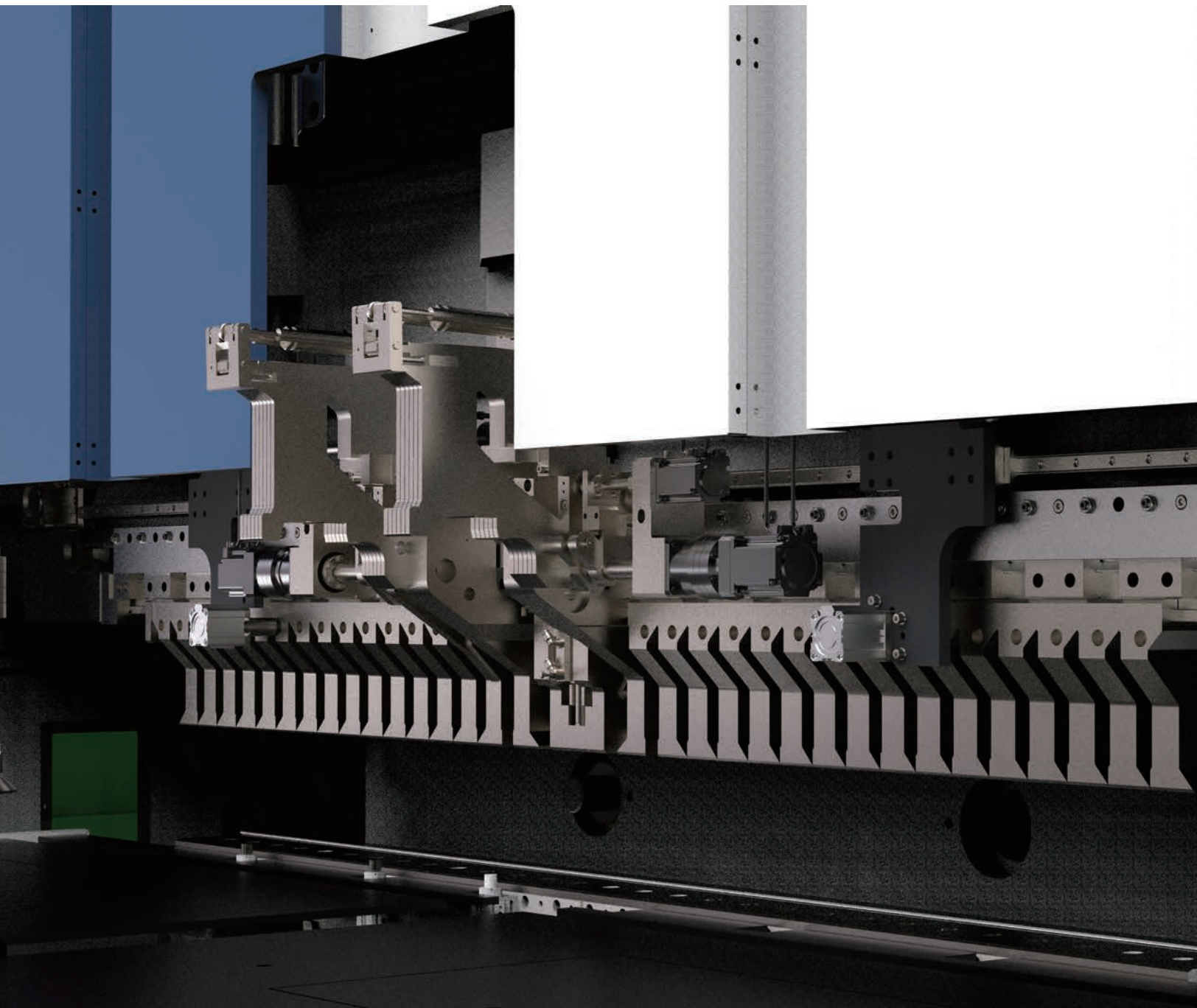


**RENISHAW
Laser Interferometer:
Precision Inspection and
Automatic Compensation**



**RENISHAW Ballbar:
Inspecting the circular
motion trajectory of
machine tools**





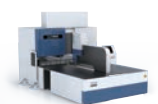
PBE Standard Series

PBEH Heavy-Duty series

PBEH Automatic Tooling Change Series

FPBE Flexible Solutions

PANEL BENDER



PBE series panel bender is a new generation of automatic multi-sided bending solution, is the benchmark product for the sheet metal manufacturing industry to enter the automation production. The product not only greatly saves manpower, but also achieves 0.2S/ time bending speed three times that of CNC bending machine.

Characteristic :

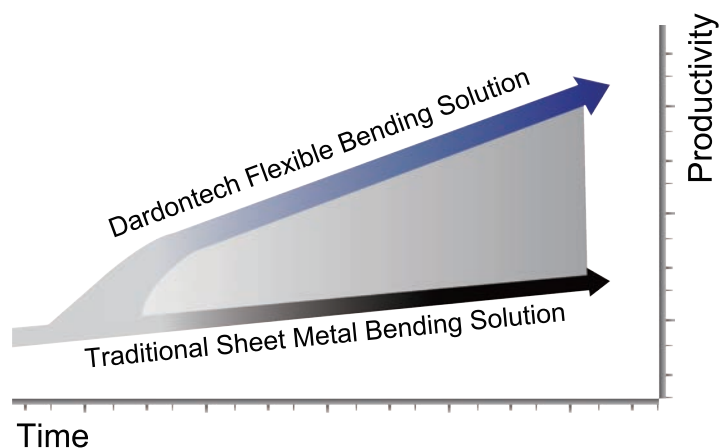
- The multi-edge bending center does not need to change the tooling, the working stroke is short and the feed is fast
- The comprehensive efficiency is more than three times that of manual bending machine
- According to the bending process, automatic positive bend and negative bend can be performed to achieve arc, hemming edge, and various angles of combined bending
- Highly intelligent operation control system, can efficiently bend different workpieces
- Save energy and reduce consumption, reduce labor and mold costs

Superiority :

- ☑ The flexible panel bender can operate independently and efficiently produce various specifications of components. The universal tooling requires no adjustment time, automatically adjusting according to the dimensions set by the program, ensuring operator safety and product quality.
- ☑ Different positioning benchmarks can be selected according to the shape of the workpiece to ensure high production flexibility
- ☑ The positioning process is only completed once at the beginning of the entire bending process. From the beginning to the completion of the processing, the bent plate and the rotating structure remain unchanged, so that the shear error of the plate is controlled on the first bending edge to ensure the accuracy of the formed size

Industries

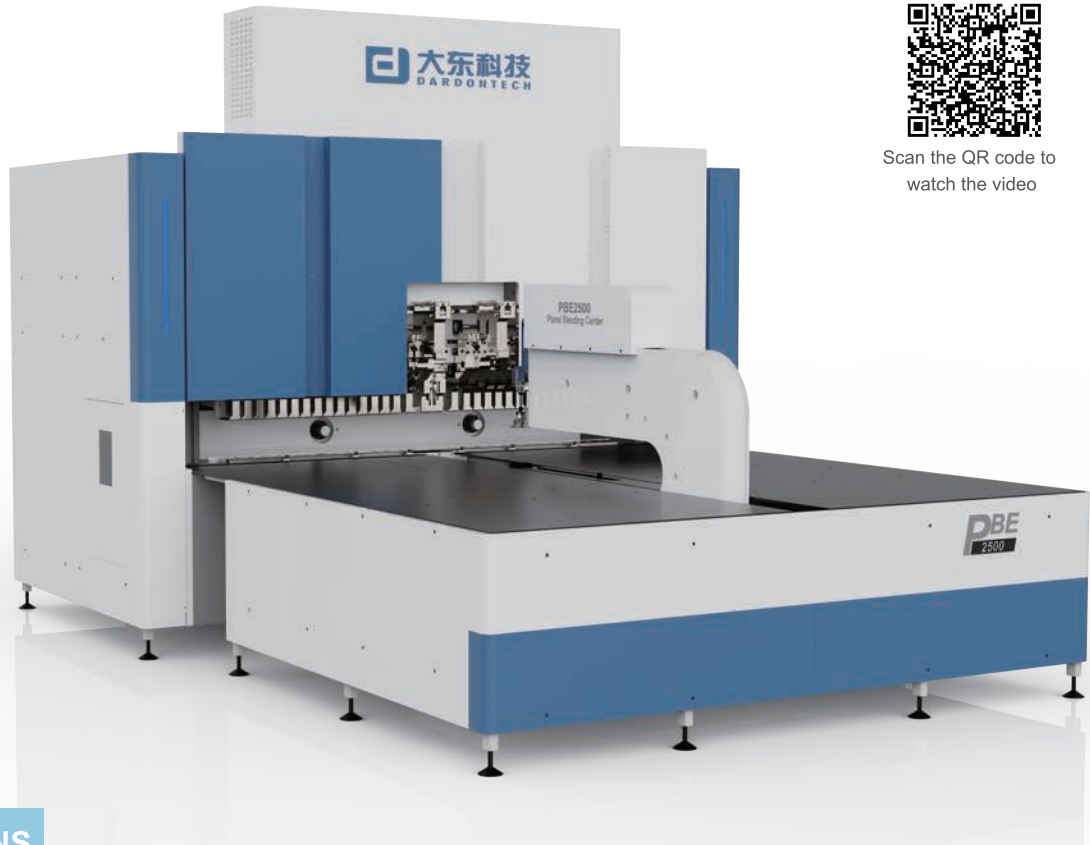
- √ Fire door
- √ Computer cases and cabinets
- √ Integrated kitchen
- √ Lift
- √ Electricity
- √ Storage rack
- √ Ceiling
- √ Furniture
- √ Commercial cold chain
- √ Air-conditioning
- √ Purifier
- √ Lighting



The PBE series of multilateral panel can greatly improve production efficiency compared with the traditional bending scheme.



SPECIFICATIONS



Scan the QR code to watch the video

SPECIFICATIONS

Name	Unit	PBE-3000	PBE-2500	PBE-2000	PBE-1400	PBE-1000	Remark					
Max. bend length	mm	3000	2500	2000	1400	1000	Customizable					
Max. bending width	mm	1250	1250	1250	1400	1000	Customizable					
Max. bending height	mm	170	170	170	170	170	Min. 110, t<1mm for customization					
Four-sided Min. size	mm	200	200	200	200	110	Min. 100, t<1mm for customization					
Single-sided Min. size	mm	170	170	170	170	100	130-180, Hemming					
Bend angle	°	± 0-180	± 0-180	± 0-180	± 0-180	± 0-180						
Type		Standard	Heavy	Standard	Heavy	Standard	Heavy					
Max. holding force	T	115	155	80	115	38	53	28	38	20		
Thickness	mm	SS	1.2	1.5	1.2	1.5	1.2	1.5	1.2	1.5	1.2	
		AL	2	3	2	3	2	3	2	3	2	
		MS	1.5	2	1.5	2	1.5	2	1.5	2	1.5	
Min. thickness	mm	0.35										
Power Source		380V 50/60HZ	380V 50/60HZ	380V 50/60HZ	380V 50/60HZ	380V 50/60HZ	Transformer can be added					



Standard Configuration

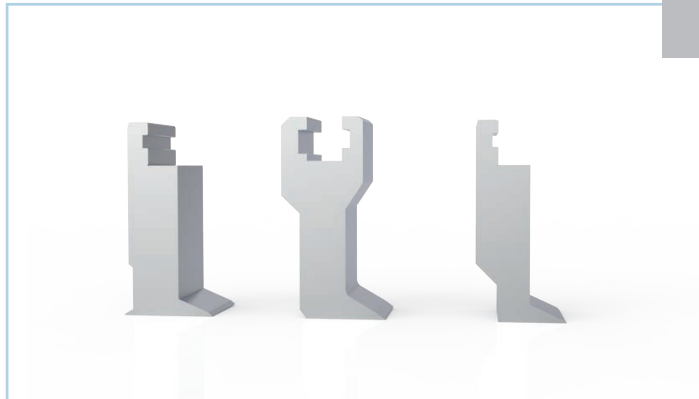
Blade Frame

The main body is welded by high-strength plates, and through ANSYS force analysis, the structure is optimized. While ensuring rigidity, the load weight is reduced, and the dynamic response performance of the transmission is optimized.



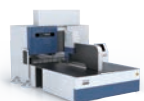
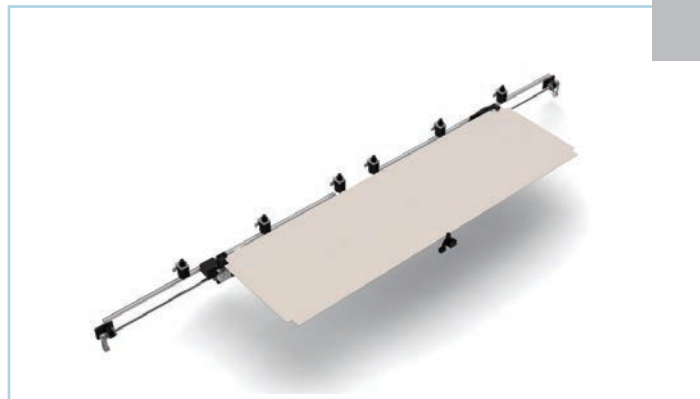
Blank Holder

After the whole tooling is quenched, it is then subjected to grinding processing on a high-precision special grinding machine, ensuring the service life and the consistency of various precisions.



Positioning Mechanism

The fully automatic multi-direction customized device is simple to operate, can quickly realize the positioning of plates, and improve the processing efficiency.



Standard Configuration

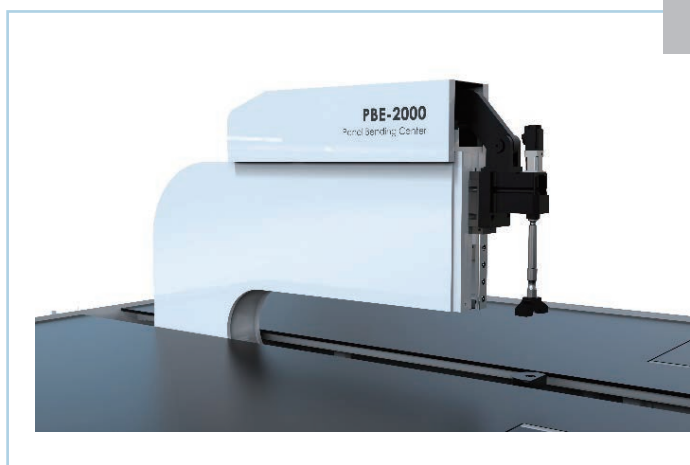
■ Blade frame transmission mechanism

Servo motors are adopted with high precision helical gear planetary reducers. With the cooperation of the heavy-load and high-precision grinding ball screw drive, the toolings are realized to run according to the path set by the program. The structure is reasonable, the operation is stable, and the maintenance is convenient.



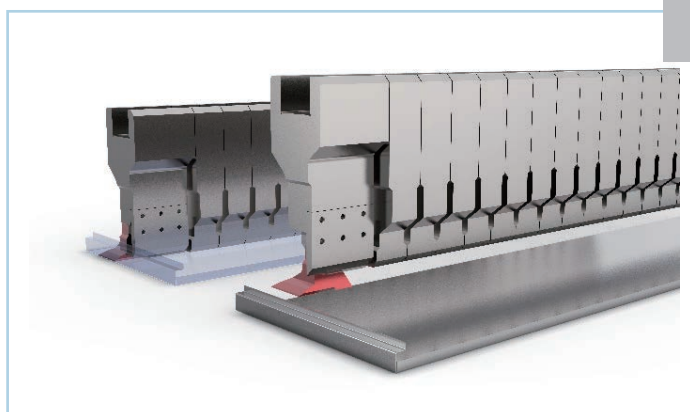
■ Feeding mechanism

The full servo closed-loop control system can realize the rotation of the workpiece at any angle, and the feeding and rotating linkage can reduce the time of the workpiece rotation, feeding and positioning, and improve the production efficiency.

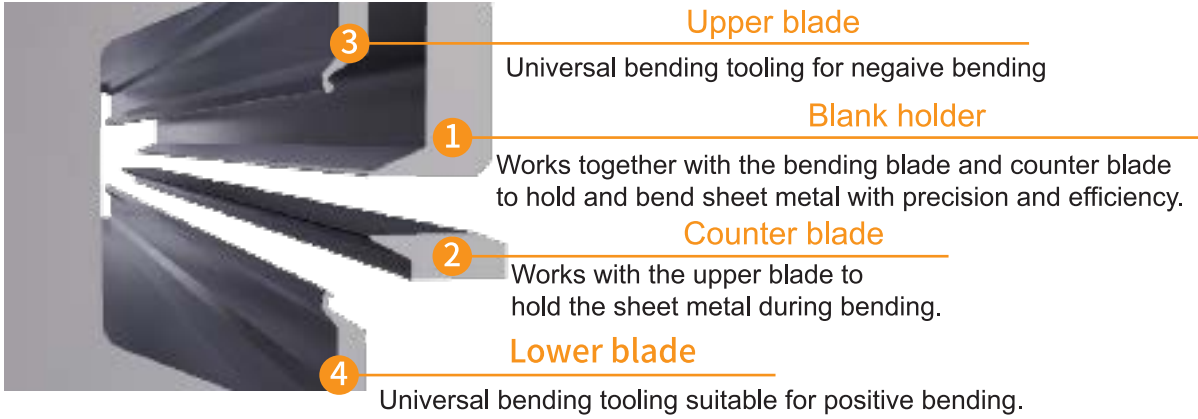


■ Horn

It can meet the processing requirements for special shapes such as the in-groove process. When cooperating with the fixed blank holder, it improves the function of the equipment.



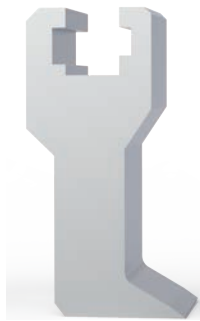
Tooling Structure



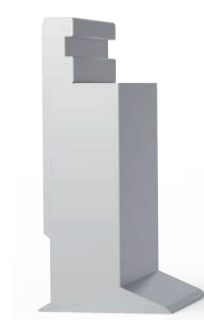
Blankholder Type



Standard

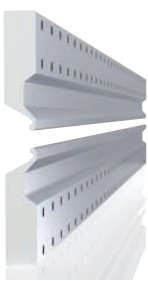


Reinforced



Rear Hemming

Bending Blade Option



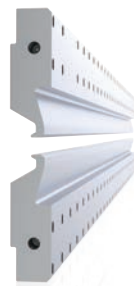
Blade Tip R3/4



Blade Tip R3/4

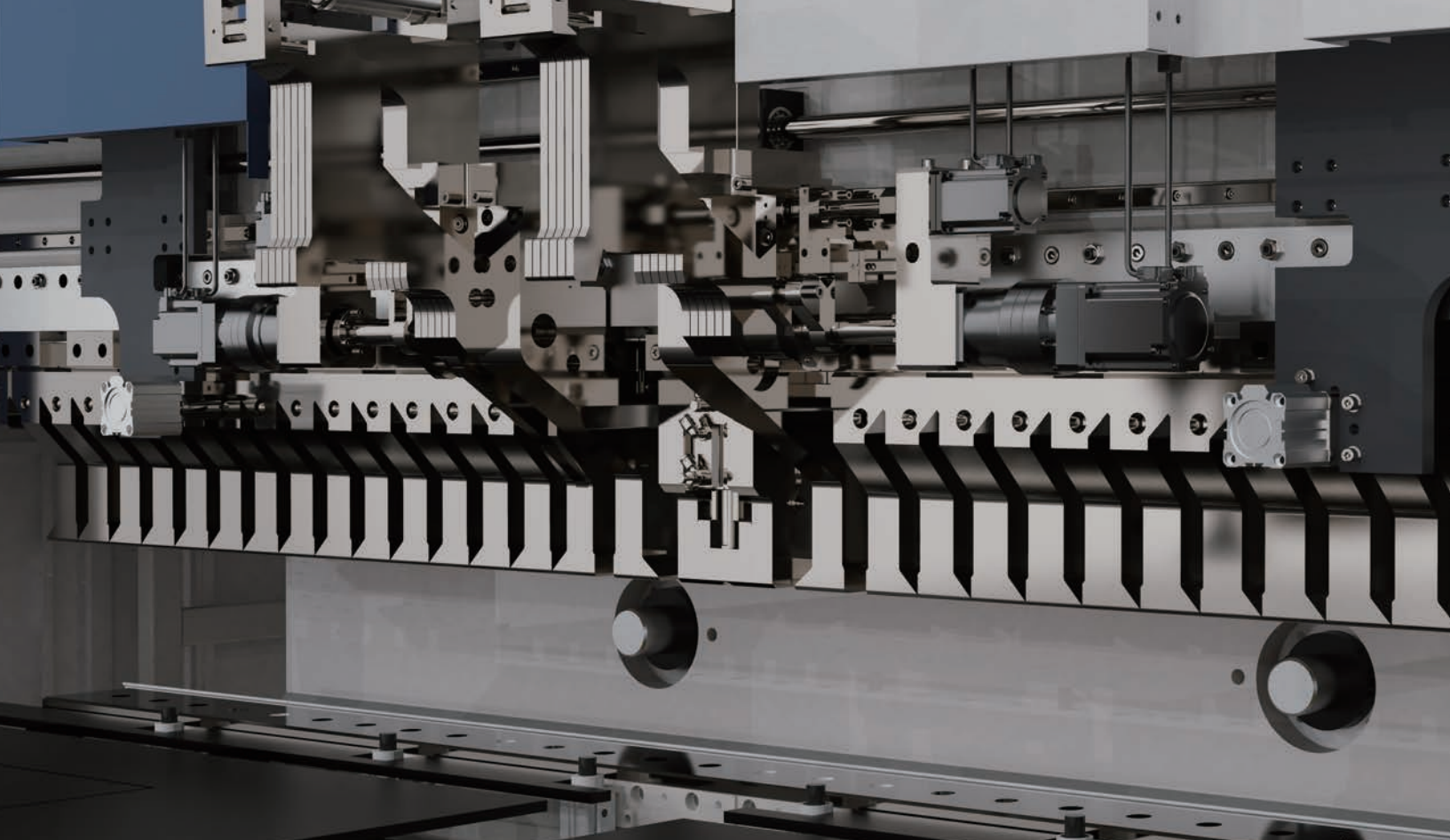


Blade Tip R2



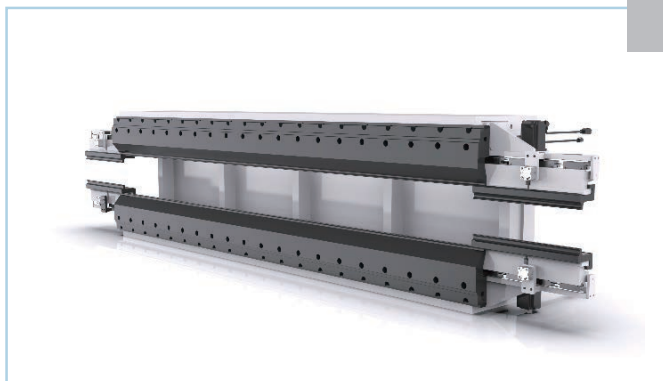
Blade Tip R2





Automatic Tooling Change

Controlled by the cylinder in cooperation with servo control, it enables fully automatic mold length adjustment, being fast and intelligent. It can realize the combined actions of various molds, and has a flanging and avoiding function, achieving flexible processing of plates.



■ Auxiliary Short Blade

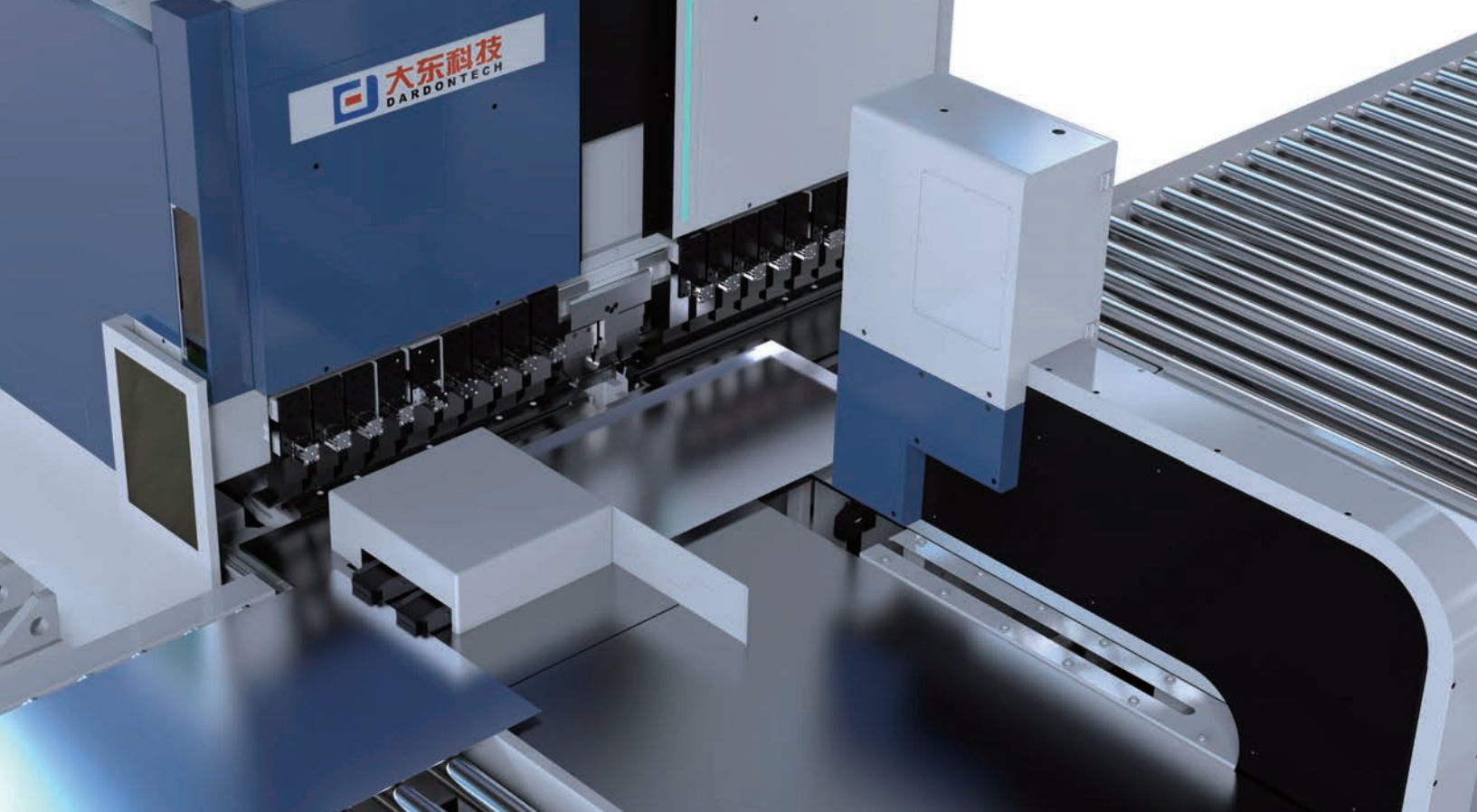
It can enhance the processing capability of the panel bender enabling it to perform local, interfered, or internal bending, as well as bending with different bending lines on the same side and extremely narrow bending that cannot be completed by standard toolings. Driven by a conveyor belt/motor, two independent tool holders ensure asymmetric, fast, and precise movement. It can provide blades of various shapes and lengths to achieve maximum flexibility.



■ Negative Bending Discharge

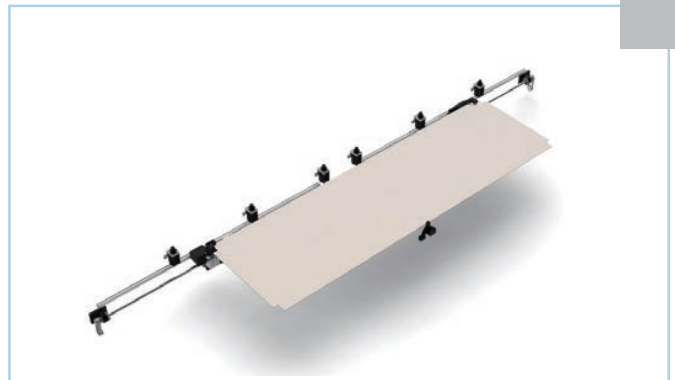
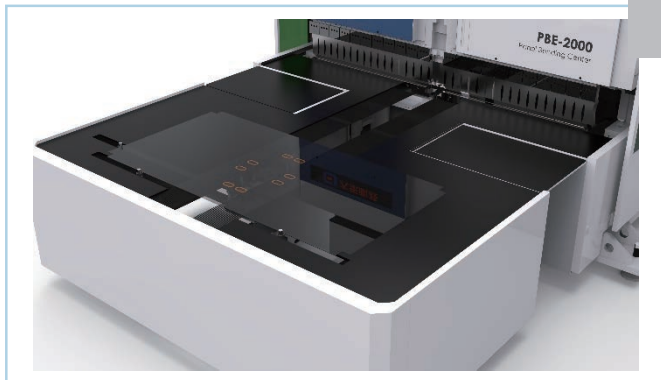
Under the working condition of negative - angle bending of the tail edge, it automatically controls the lifting, moving, and taking out of materials, saving labor, and being efficient and convenient.





■ Intelligent flying clamp

Different from the structure of traditional automated gantry and manipulator, it can load and unload materials simultaneously. It is compact and flexible, with a faster speed, reducing costs and increasing efficiency.

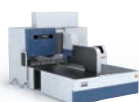


■ Suction Cup Feeding

Equipped with a high - power negative pressure pump and a suction cup module, it is suitable for feeding plates with a flat surface, no stamping, and no holes. Loading is convenient and fast, and the feeding speed is high! It is especially suitable for the automated loading and unloading of smaller - sized plates.

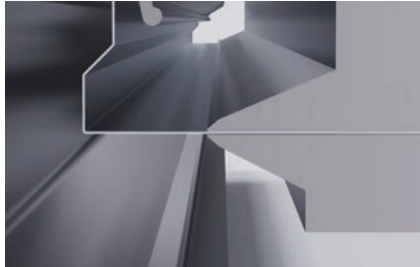
■ Positioning Method

According to the automation requirements, right - angle positioning and four - side positioning can be optionally configured.

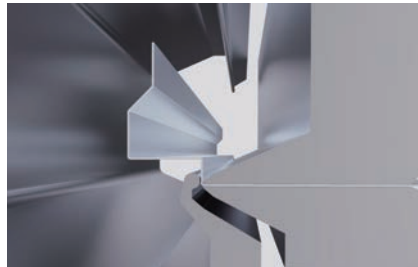
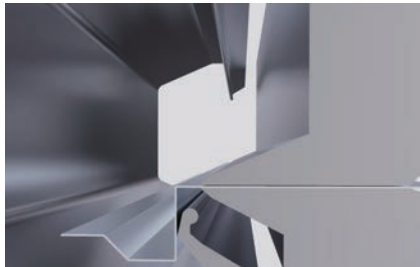


Bending Process

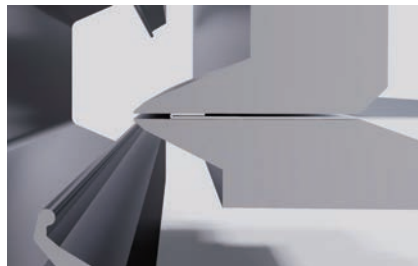
Efficient 6-axis interpolation motion control allows multiple bending operations to be performed using a single set of toolings.



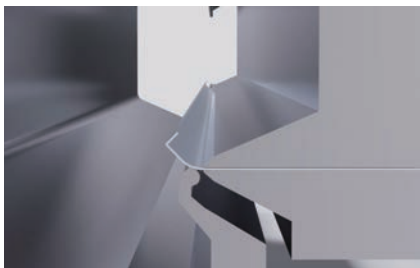
Down Bend
NEGATIVE



Up Bend
POSITIVE



Flattened Bend
HEM



Big Radius Bend
UP/DOWN ARC 45/90°



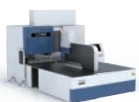
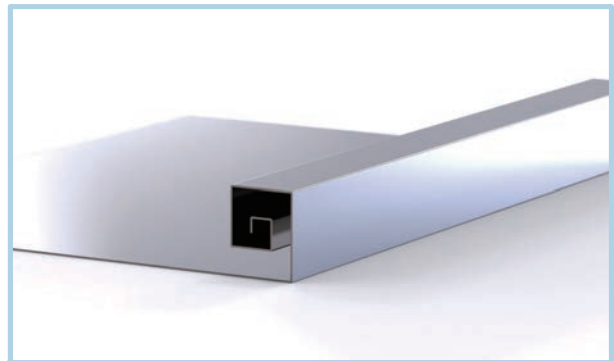
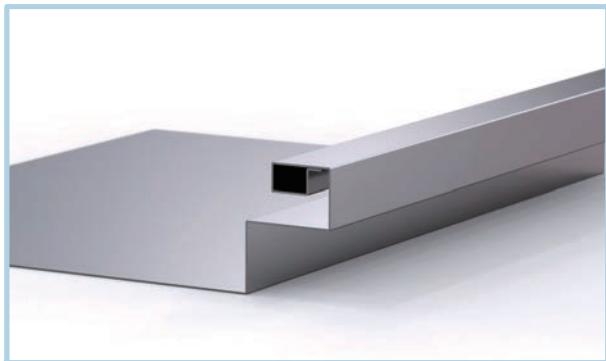
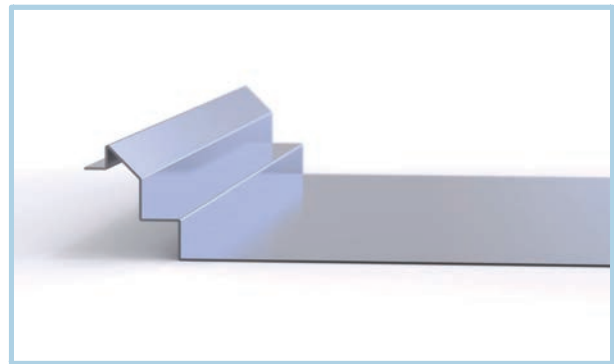
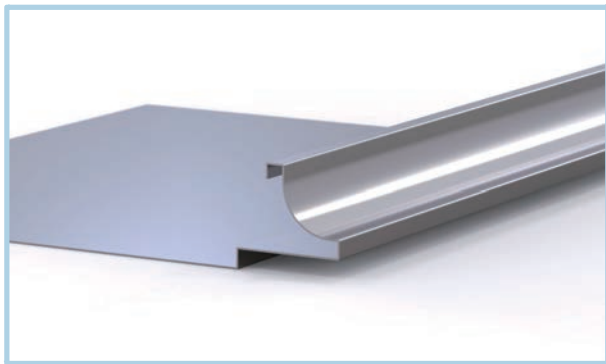
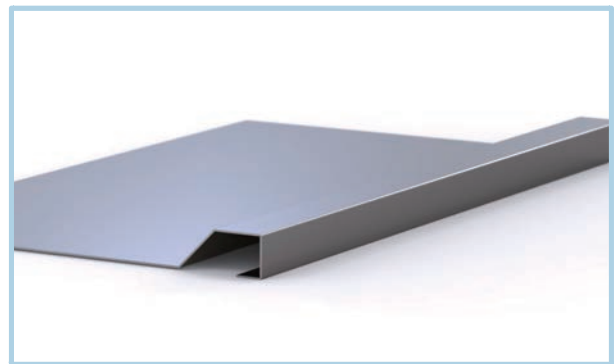
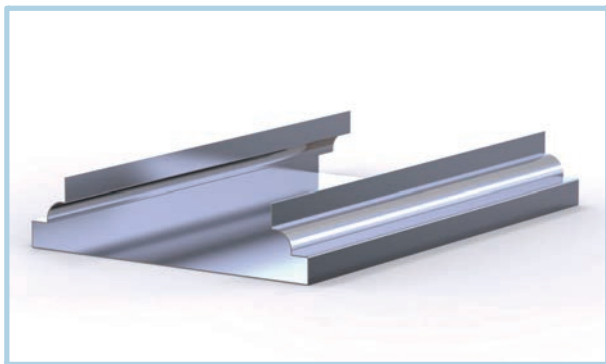
Big Radius Bend
UP/DOWN ARC 135/180°



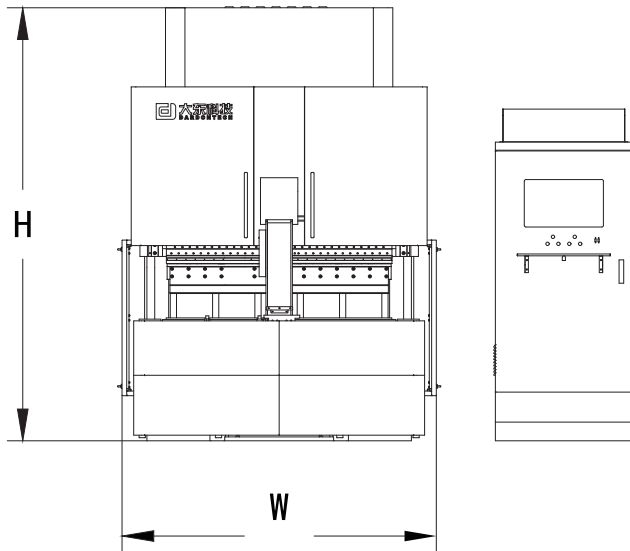
The Flexible Panel Bender bends the sheet metal with one universal tooling, able to bend various complex shapes.

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 metalforming field of different industries and different workpieces

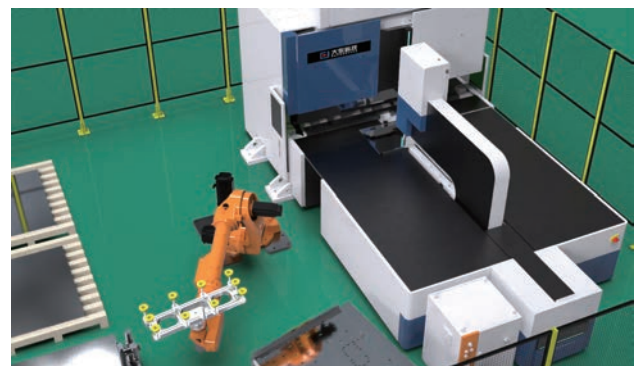
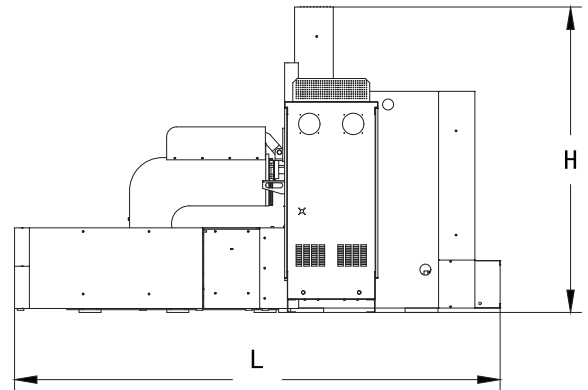
Here listed some typical applications:



Size & Layout

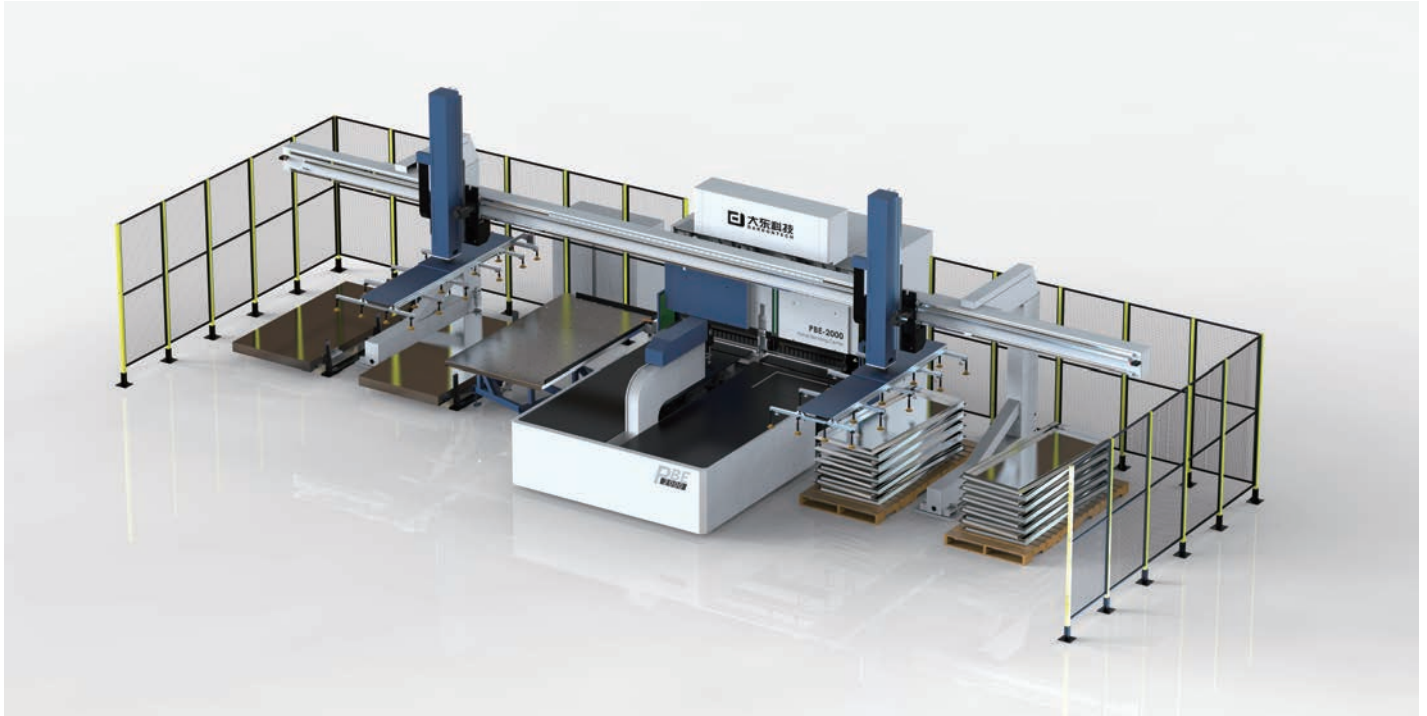


	W	L	H
PBE-1000	1900	4200	2800
PBE-1400	2400	4400	2800
PBE-2000	2900	5000	2800
PBE-2500	3100	5200	3100
PBE-3000	3500	5800	3500

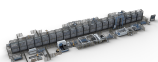


AUTOMATION SOLUTION

Automated Panel Bender Production



Punching & Laser Combi + Automated Panel Bender Production Line





DARDONTECH

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Tel: 0086 0532 88138811

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<http://www.chinadadong.com>.

E-mail: info@chinadadong.com.

Note: Due to continuous product improvement, this product is subject to change without prior notice. Edition 2025-09

 Hotline 0086 18669843788