



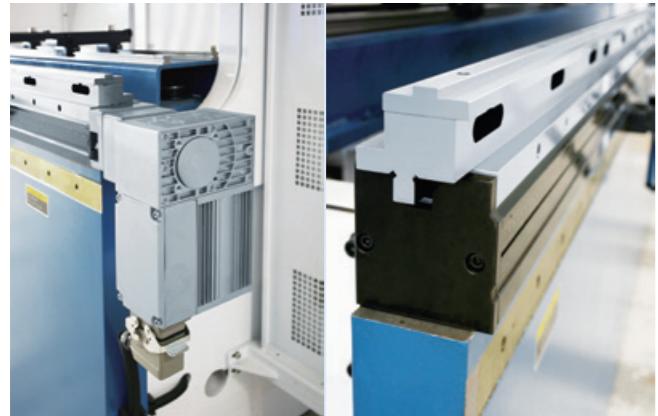
PBC Series

High Performance CNC Press Brake

- All new outlook design, friendly human-machine interface
- Automatic mechanical crowning table for high precision bending operations
- Optimized parameters and configurations, more functions while easier to operat
- High frequency response valve control technology, high dynamic response and high precision
- Load sensitive adjustment, more energy saving and more stable

Multiple Configurations Flexible Combinations

Crowning Compensation



Mechanical Crowning Device (Standard)

- Automatic adjustment of crowning compensation according to the instructions programmed by CNC

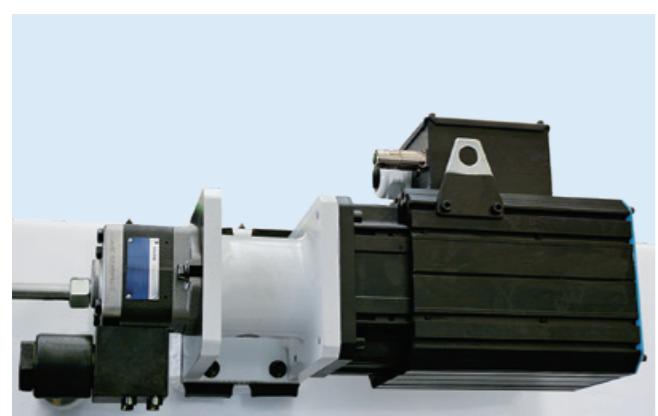
Control Technology



High Frequency Response Valve Control Technology (Standard)

- Thanks to the high frequency response proportional valve, the synchronization precision of Y1 and Y2 axis in high speed operation is largely improved for higher bending efficiency

Servo Motor



Servo Main Motor (Standard)

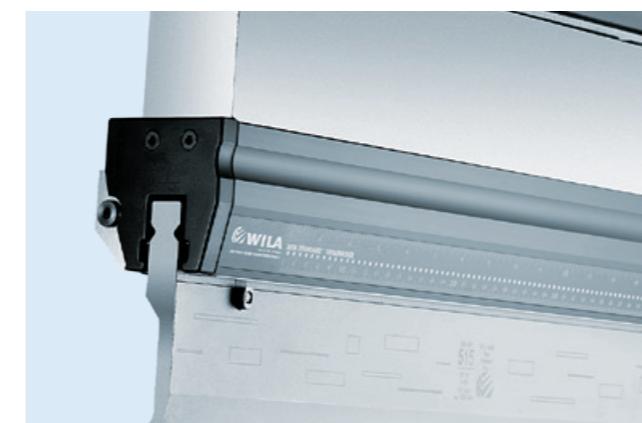
- Servo motor can save energy, reduce oil temperature, increase overall life time, and reduce maintenance cost

Upper Tool Clamping



Mechanical Fast Clamping (Standard)

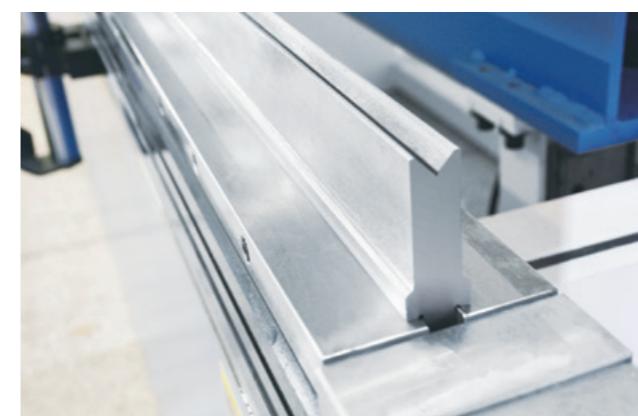
- Mechanical fast clamping enables a fast change of upper tool
- Can install upper tool from front side



Hydraulic Clamping (Option)

- Clamping and loosing actions are electrically controlled. Strong clamping force, easy and effective change of tool

Lower Die Clamping



1-V Clamping (Option)

- 1-V clamping is used for high precision 1-V lower die. Fast change of lower die. 1-V lower die is narrow in width, very suitable for complicated flanging bending

Multiple Configurations Flexible Combinations

Lower Die Clamping



1-V Automatic Hydraulic Clamping (Option)

- Clamping and loosing actions are electrically controlled, easy and effective change of lower die

Front Sheet Support



Front Sheet Support Moving Along Linear Guide (Standard)

- Front sheet support moving along linear guide



Front Sheet Support Moving Along Linear Guide (Option)

- Front sheet support moving along linear guide

NCY64 CNC Controller (standard)



Function Features

- Color LCD display, 15" widescreen TFT
- More than 2000 programs and tool storage space
- Data storage via USB
- One-page parameter quick programming
- Automatic calculation of worktable crowning compensation
- 2D programming, 3D/2D simulation
- Automatic calculation of bending pressure, mold safety area
- Online operation analysis tool
- Angle correction database (option)
- System diagnosis function
- Up to six axis control (Y1, Y2, four auxiliary axis)

DA58T CNC Controller (option)



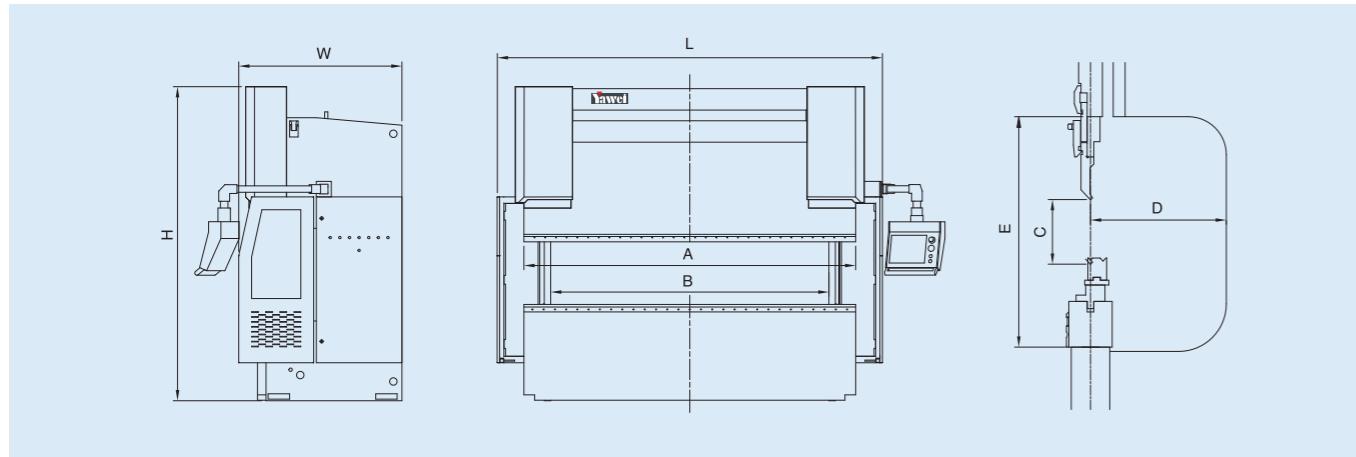
Function Features

- Color LCD display
- 15" widescreen TFT
- Full touch screen operation
- 1GB storage capacity
- 2D programming, 2D display
- Data storage via USB
- Automatic calculation of bending process
- Network dual machine linkage (option)
- Automatic calculation of worktable crowning compensation
- Internal integrated valve amplifier

Outstanding Parameters Extraordinary Performance

Calculation Chart of Force for Air Bending

Technical Parameters

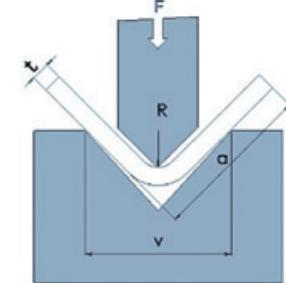


PBC Technical Parameters (Main Motor is Servo Motor)

Model	Bending force	Bending length A	Distance between uprights B	Throat depth D	Ram stroke C	Die setting height E	Ram speed			Main motor power	Oil tank volume	Overall dimension LxWxH			Weight
							mm/s	kW	L			mm	mm	kg	
PBC-30/1050	300	1050	950	90	120	450	200 18 200	3	40	1790	1235	2385	3000		
PBC-50/2050	500	2050	1750	350	175	495	200 18 190	6.2	150	2550	1450	2485	4500		
PBC-80/2550	800	2550	2150	350	175	495	200 18 200	9.8	200	3140	1540	2485	6000		
PBC-110/3100	1100	3100	2600	410	215	535	220 18 200 180	13	200	3610	1550	2785	8500		
PBC-110/4100		4100	3600						300	4610	1550	2835	9200		
PBC-160/3100	1600	3100	2600						300	3630	1600	2835	10000		
PBC-160/4100		4100	3600						400	4630	1600	2875	11900		
PBC-220/3100	2200	3100	2600						300	3650	1850	2845	12300		
PBC-220/4100		4100	3600						400	4650	1850	2945	14000		

Calculation Chart of Force for Air Bending

- The calculation results are based on 90°bending with bending length 1 meter. This chart can help you to easily calculate the bending force needed per meter on different workpieces. The bending force needed is up to the thickness of the sheet and the opening width of the lower die. The shortest edge length and inside radius are decided by the opening width of the lower die



V	6	8	10	12	16	20	24	32	36	40	50	60	63	80	100	120	130	140
a	4.5	5	7	8.5	12	15	17	23	25	28	35	43	45	57	71	85	92	100
r	1	1.2	1.6	2	2.5	3	3.5	5	5.5	6	8	9.5	10	12	15.5	19	21	23
0.5	2.5																	
0.8	7	4.8																
1	11	8	6															
1.2		12	9	7														
1.5			15	12	8													
2				23	16	20												
2.5					26	20	15											
3						30	24	16										
4							44	31	28									
5								47	43	31								
6									61	45	36							
8										69	65	47	36					
10											80	60	47	43				
12												90	71	65	58			

V	6	8	10	12	16	20	24	32	36	40	50	60	63	80	100	120	130	140
a	4.5	5	7	8.5	12	15	17	23	25	28	35	43	45	57	71	85	92	100
r	1	1.2	1.6	2	2.5	3	3.5	5	5.5	6	8	9.5	10	12	15.5	19	21	23
0.5	4																	
0.8	11	8																
1	18	13	10															
1.2		19	14	11														
1.5			24	19	13													
2				37	26													
2.5					42	32	24											
3						48	38	26										
4							70	50	45									
5								75	69	50								
6									98	72	58							
8										110	104	75	58					
10											128	96	75	69				
12												144	114	104	93			

F: Bending force T/m V: Opening Width of lower die mm a: Length of the shortest edge mm r: Inside radius mm

Best opening width of lower die