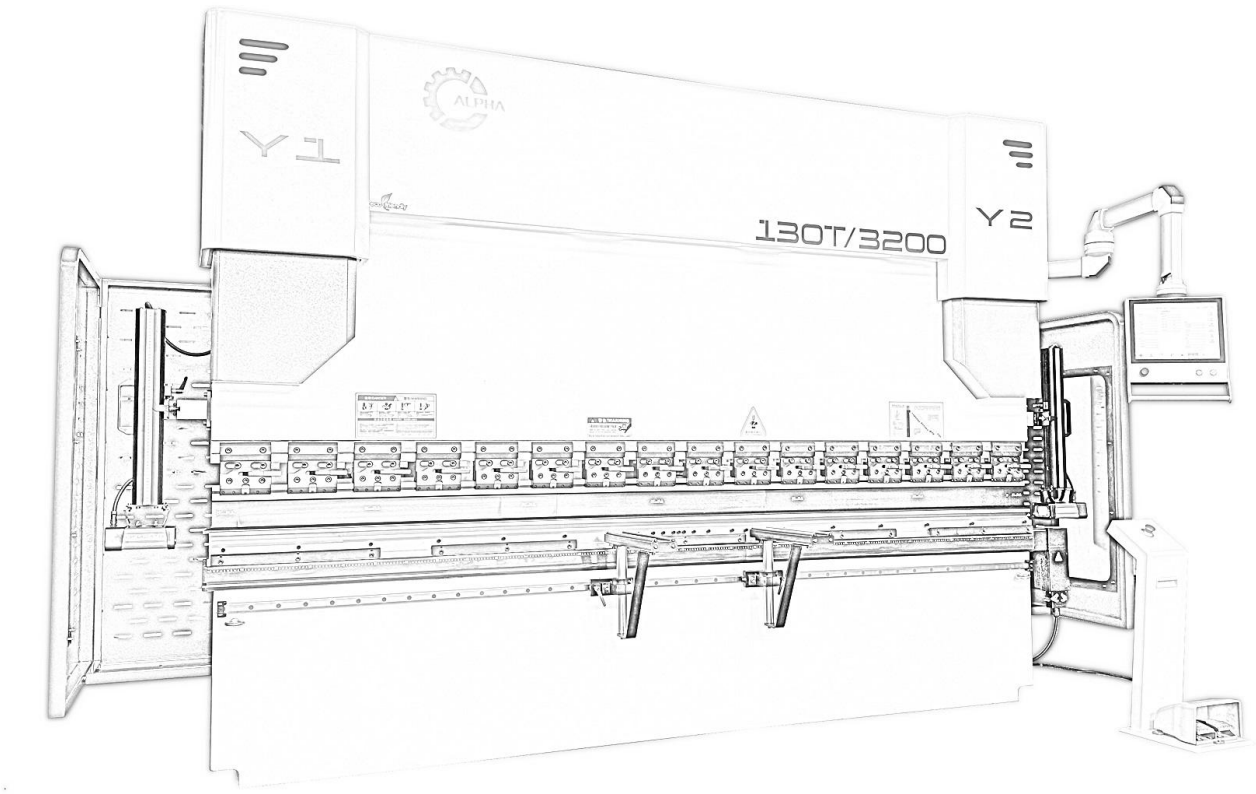
Alpha CNC Group Pty Ltd
21/2-4 Picrite Close, Pemulwuy NSW 2145
Phone: 02 9683 6117
Web: www.alphacnc.com.au
Email: info@alphacnc.com.au



SPB series CNC Press Brake

40-1000T

One-stop Supplier of Sheetmetal Machinery

Metal Mastery in Every Machine, Precision in Every Piece

Product Overview



Key Features

Heavy-Duty Frame Construction
The machine frame is manufactured using a full steel plate welded structure and undergoes stress-relief heat treatment. This process eliminates internal stress and deformation, ensuring long-term accuracy and structural stability.

High-Precision Servo Control System
Equipped with internationally recognized electro-hydraulic servo valves and linear scale feedback systems, the machine achieves precise closed-loop control for superior bending accuracy.

Excellent Synchronization & Positioning Accuracy
The ram (slider) features high-resolution position feedback, delivering smooth operation, excellent synchronization, and repeat positioning accuracy for consistent results.

Advanced Back Gauge System (4+1 Axis)
The multifunctional rear gauge system provides flexible positioning and improved efficiency, supporting complex bending operations with high repeatability.

Integrated Hydraulic System
The optimized hydraulic design reduces pipeline complexity, minimizes oil leakage risks, and enhances overall machine reliability while maintaining a clean and compact appearance.

Automatic Crowning Compensation
The built-in mechanical compensation system automatically adjusts for deflection during bending, ensuring uniform bending angles and improved workpiece quality.

Professional CNC Control System
Fitted with a high-performance CNC controller (HACO or equivalent), specifically designed for press brake operations, offering user-friendly operation and advanced programming capabilities.

HACO 60 controller:





CNC Control System Features

- Intuitive shortcut key navigation for faster operation
- Large 15” high-resolution touchscreen interface
- Supports up to 8-axis control (Y1, Y2 + 6 auxiliary axes)
- Integrated deflection compensation control for improved bending accuracy
- User-friendly 2D graphical programming with automatic bending sequence calculation, enabling quick learning for new operators
- Built-in tooling and material libraries for efficient setup and operation
- Supports both servo communication and analog control modes
- Advanced Y-axis control algorithm for enhanced precision and synchronization
- USB connectivity for easy data transfer and system updates

Other optional controller:

DA-53T



- "Hot-key" touch navigation
- 10.1" high resolution colour TFT
- Up to 4 axes (Y1, Y2 + 2 aux axes)
- Crowning control
- Tool / material / product library
- Servo and frequency inverter control
- Advanced Y-axis control algorithms for closed-loop as well as open-loop valves
- TandemLink (optional)
- USB memory stick interfacing
- Profile-T offline software

DA-58T



- 2D touch graphical programming
- 15" high resolution TFT true colour display
- Bending process calculation
- Deflection compensation control
- Servo and drive control modes
- Advanced Y-axis control algorithm, you can control the closed loop valve can also control the open-loop valve
- USB interface

DA-66T



- 2D Touch graphical programming
- 3D Product graphical simulation display
- 17" High-resolution TFT Color Display
- Full Windows application package
- Compatible DELEM modular structure
- USB, Peripheral interface
- User program applications under multi-tasking environment
- Angle detecting sensor interface

DA-69T



- 3D and 2D graphical touch screen programming mode
- 3D visualisation in simulation and production
- 17" high resolution colour TFT
- Full Windows application suite
- Delem Modulars compatibility (module scalability and adaptivity)
- USB peripheral interfacing
- Open system architecture
- Sensor bending & correction interface

CT12



- 12" color LCD display, touch screen, icon recognition function;
- The "EasyBend" page is processed with easy single bending;
- The fully efficient bending programming can meet the needs of mass production and processing;
- Automatically calculate bending angle, main pressure and deflection compensation;
- Automatic calculation of bending data;
- Automatic calculation of pressure and deflection compensation; automatic calculation of upper die depth;
- Angle, rear gear correction, 2D graphics programming;
- Automatically simulate the bending sequence and provide the best bending scheme (option).

CT15



- 15" modern streamlined glass mirror touch screen, which can be used with gloves;
- User-friendly man-machine interface, intuitive programming and easy to set navigation function (automatic optimization of machine parameters);
- 2D finger drawing programming (touch file) and accurate 2D program creation;
- Automatic bending step calculation;
- Easybend page to facilitate single part bending;
- Larger storage capacity;
- Internal backup and storage functions;
- Wireless communication function for diagnosis and upgrade (using laptop).

Back Gauge



Standard 4+1 axis package

CNC X axis – R axis







CNC X-axis and R-axis precise positioning

X axis is driven by double linear guide rail, ball screw and servo motor to ensure the accurate positioning of X axis.

R-axis adopts helical rack and pinion, high-power servo motor and reducer to form a high-torque power combination.

R-axis precision synchronization structure

Adopted high hard solid steel rod as the power transmission, helical gear assisted synchronous positioning, high strength screws strong connection parts, it with the characteristics of accurate synchronization, fast response, low failure rate, easy maintenance and low internal stress.

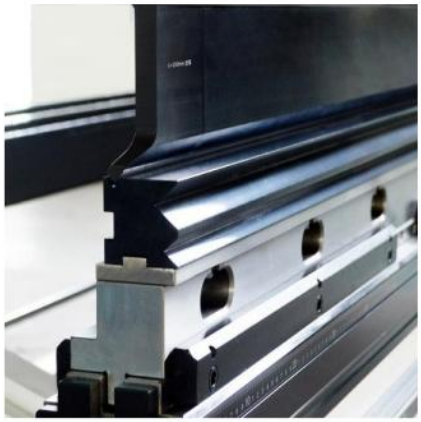
X-axis servo motor

Industrial grade brushless servo motor drives the X-axis, equipped with the silent synchronization belt, it has the special point of accurate synchronization.

Fast Clamp Tooling and Crowning



Mechanical Crowning table



CNC Dual V / Multi-V Die

Users can freely select **dual V dies or multi-V dies** based on application requirements, with full customization available.
Made of **42CrMo forged steel**, overall heat-treated for superior strength and durability.
Hardness up to **HRC 46–48**, with precision surface grinding for a high-quality finish.
Achieves high accuracy of up to **±0.02 mm**, ensuring consistent bending performance.



Mechanical Crowning System(V-Axis)

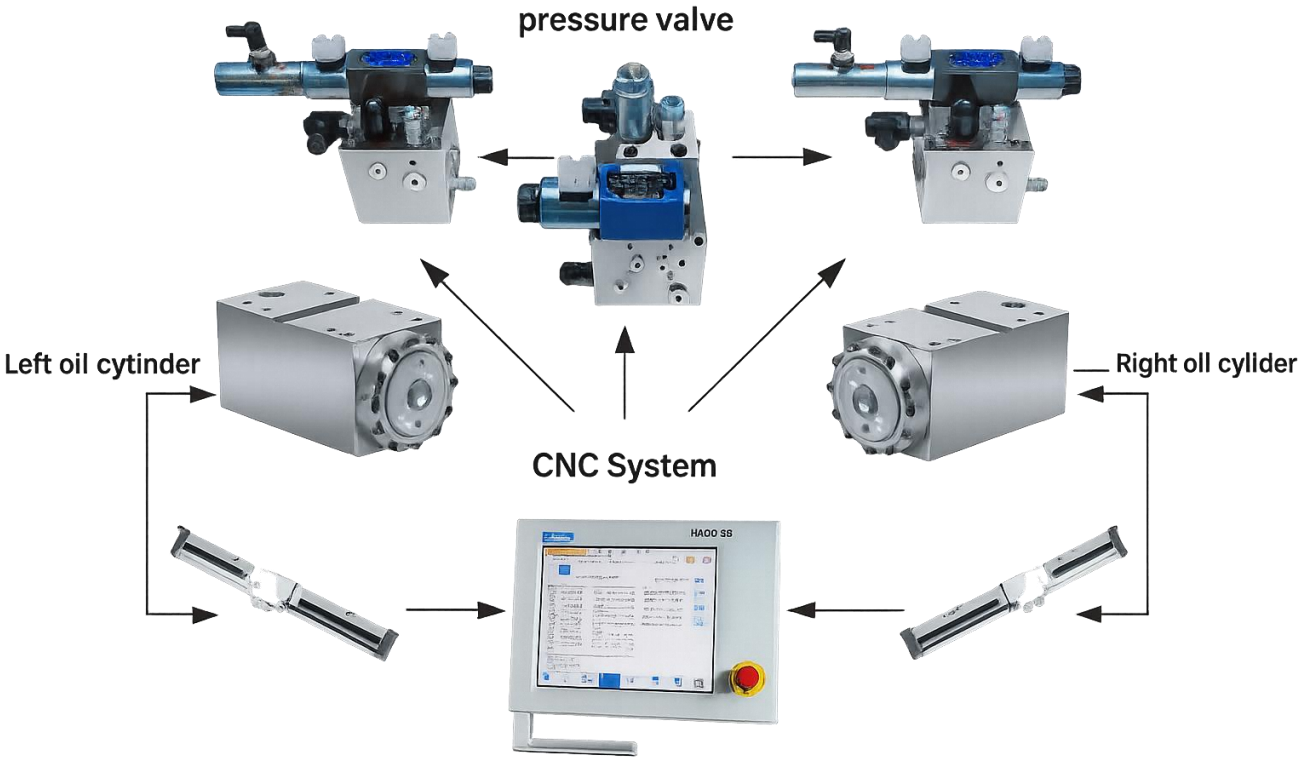
Equipped with a **high-precision CNC mechanical deflection compensation system**.
Multiple compensation points enable **true linear compensation** during bending.
Effectively improves bending accuracy and consistency across the entire workpiece.
Maintenance-free design, offering long-term stability and reliability.



Front Sheet Support

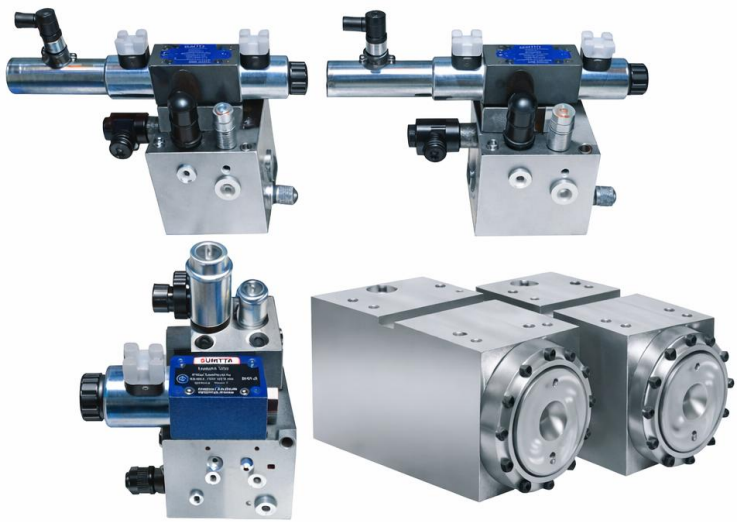
Features an **adjustable height support system** for improved ergonomics and usability.
Built with **thick chrome-plated guide rods** for enhanced strength and durability.
Dual chrome-plated support rods provide **smooth sheet movement and easy positioning**.
Main support rod can rotate **180° for flexible adjustment**, making operation easier and more efficient.

Precision Hydraulic Synchronization



High precision hydraulic servo synchronous control system





High Precision Linear Scale

High-precision linear scales are used as displacement sensors and are installed on the C-frame to detect cylinder position.
With feedback accuracy up to **0.01 mm**, the system ensures precise synchronization and highly accurate bending angle control.

Hydraulic System (Y1/Y2 Axis)

Hengli (Optional Rexroth)hydraulic system has been adopted to improve machine stability.
Combined with the linear scale, it forms a **closed-loop precision control system** with:

- Fast response
- Accurate flow control
- Low heat generation
- High durability

Cylinders are manufactured by professional suppliers, equipped with:

- **SKF seals (Sweden)**
- **EMB pipe fittings (Germany)**

Specifications

Model	Bending Length mm	Bending Capacity KN	Distance between side frames mm	Throat Depth mm	Max Opening mm	Stroke mm	Table Height mm	Table Width mm	Fast Speed mm/s	Max. Bending Speed mm/s	Return Speed mm/s	Motor Power kw	Length +/- mm	Width +/- mm	Height +/- mm	Weight +/-kg	Back gauge stroke mm
SPB 1650	1600	500	1300	250	350	150	870	80	200	10	160	4	2150	1350	2180	4200	600
SPB 1563	1500	630	1100	250	350	150	870	80	200	10	160	5.5	1825	1650	2600	4600	600
SPB 2563	2500	630	2060	300	350	150	870	80	200	10	160	5.5	2825	1650	2430	5600	600
SPB 32110	3200	1100	2700	400	430	200	940	100	200	10	160	7.5	4200	1800	2630	6500	600
SPB 40110	4000	1100	3300	400	430	200	940	100	200	10	160	7.5	4800	1800	2700	7500	600
SPB 32130	3200	1300	2700	400	430	200	940	100	200	10	160	11	4200	1800	2660	7000	600
SPB 40130	4000	1300	3300	400	430	200	940	100	200	10	160	11	4800	1900	2700	8500	600
SPB 32170	3200	1700	2700	400	430	200	940	100	180	10	140	11	4200	1900	2700	9000	600
SPB 40170	4000	1700	3300	400	430	200	940	100	180	10	140	11	4500	1900	2750	10000	600
SPB 32220	3200	2200	2600	400	480	200	950	140	180	10	140	18.5	4200	1800	2900	13000	600
SPB 40220	4000	2200	3200	400	480	200	1050	140	180	10	140	18.5	5000	1800	3000	15000	600
SPB 32250	3200	2500	2600	400	540	250	1080	180	160	10	140	22	4300	2000	3180	16000	600
SPB 40250	4000	2500	3200	400	540	250	1080	180	160	10	140	22	4900	1730	3180	18000	600
SPB 32300	3200	3000	2600	450	570	250	1160	180	120	8	85	22	4300	2150	3360	20000	600
SPB 40300	4000	3000	3200	450	570	250	1160	180	120	8	85	22	4900	2150	3360	20000	600
SPB 50300	5000	3000	4000	450	570	250	1160	180	120	8	85	22	5300	2250	3320	22000	600
SPB60300	6000	3000	4800	450	570	250	1160	180	120	8	85	22	6400	2250	3320	26000	600
SPB 40400	4000	4000	3200	450	570	320	880	200	120	8	80	30	4300	2250	3580	27000	600
SPB 50400	5000	4000	4000	450	570	320	880	200	100	8	80	30	5300	2250	3600	32000	600
SPB 60400	6000	4000	4800	450	400	320	880	200	100	8	80	30	6400	2300	3670	38000	600
SPB 60500	6000	5000	4800	450	610	320	990	300	100	8	75	37	6500	2700	5000	55000	600
SPB 60600	6000	6000	4800	450	650	320	990	300	80	8	80	40	6500	2700	5000	65000	600

Alpha CNC Group Pty Ltd
21/2-4 Picrite Close, Pemulwuy NSW 2145
Phone: 02 9683 6117
Web: www.alphacnc.com.au
Email: info@alphacnc.com.au

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