

Innovative Bending Machine Technology



WM | HPB SERIES



WHALE MACHINERIES

A Unit of Whale Enterprise

A Versatile and extensive range

HYDRAULIC SERVO CNC PRESS BRAKE

The machine is in an overall welding and overall processing structure, and the main parts of machine are all analyzed by ANSYS finite element analysis software, which has ensured the reliability of machine and the precision of entire machine

The CNC control system adopts Netherland DELEM, Italian ESA, or Swiss CYBELEC products, which can achieve the functions of graphic programming for bending angle, compensation for angle amendment, automatic calculation also adjustment of bending pressure, automatic calculation of compensation for workbench distortion, extending length of workpieces, bending pressure for buttom bending, open distance, and automatic withdrawal of rear stopper, etc.

**Shown images are for representation purpose only*



Hydraulic Servo CNC Press Brake

TECHNICAL PARAMETER

WM - HPB Technical Parameter

Model	Nominal Pressure (kN)	Length of Table(mm)	Distance between columns (mm)	Throat Depth (mm)	Stroke (mm)	Open Height (mm)	Main Motor (kW)	Overall Dimensions LxWxH (mm)
40T/1300	400	1300	1120	250	150	460	5.5	2000*1500*2350
63T/1600	630	1600	1300	300	150	460	5.5	2300*1600*2500
63T/2500	630	2500	2050	300	150	460	5.5	3100*1600*2500
80T/2500	800	2500	2050	300	150	460	7.5	3100*1600*2600
100T/3200	1000	3200	2700	400	200	490	11	3800*1800*2600
100T/4000	1000	4000	3100	400	200	490	11	4600*1800*2600
125T/3200	1250	3200	2700	400	200	490	11	3800*1800*2700
125T/4000	1250	4000	3100	400	200	490	11	4600*1800*2700
160T/3200	1600	3200	2700	450	200	490	15	3800*2000*3100
160T/4000	1600	4000	3100	450	200	490	15	4600*2000*2800
220T/3200	2200	3200	2600	450	200	490	18.5	3800*2200*2850
220T/4000	2200	4000	3100	450	200	490	18.5	4600*2200*2850
250T/3200	2500	3200	2600	450	250	540	22	3800*2000*2900
250T/4000	2500	4000	3100	450	250	540	22	4600*2100*3100
250T/5000	2500	5000	3800	450	250	540	22	5600*2150*3150
250T/6000	2500	6000	4600	450	250	540	22	6600*2150*3150
300T/3200	3000	3200	2610	500	250	580	22	3800*2250*3200
300T/4000	3000	4000	2820	500	250	580	22	4600*2500*3400
300T/5000	3000	5000	3800	500	250	580	22	5600*2500*3400
300T/6000	3000	6000	4600	500	250	580	22	6600*2500*3400
400T/3200	4000	3200	2400	500	250	580	30	3800*2700*3500
400T/4000	4000	4000	3200	500	250	580	30	4600*2700*3500
400T/5000	4000	5000	3800	500	250	580	30	5600*2700*3500
400T/6000	4000	6000	4600	500	250	580	30	6600*2700*3500
500T/4000	5000	4000	3100	500	300	600	37	4600*2700*3500
500T/5000	5000	5000	3800	500	300	600	37	5600*2700*3500
500T/6000	5000	6000	5050	500	300	600	37	6600*2700*3600
600T/5000	6000	5000	3800	600	320	640	45	5600*3300*3900
600T/6000	6000	6000	5050	600	320	640	45	6600*3300*3900
600T/7000	6000	7000	5300	600	320	640	45	7600*3300*3900
700T/6000	7000	6000	4900	600	320	700	55	6600*3500*4000
800T/6000	8000	6000	4600	600	320	800	30*2	6600*3500*4000

Delem	DA-53T	DA-58T	DA-66T	DA-69T
Screen parameters	10.1" Multi-point Touch Screen	15" Multi-touch Screen	17 "Infrared Touch Screen	17 "Infrared Touch Screen
Programming mode	Manual programming	Manual Programming and 2D Graphic Programming	2D Graphic Programming and 3D Graphic Display	3D Graphics Programming and 3D Graphics Display
Fast clamping function of mould	Non support	Non support	Support	Support
Networking settings	No	Optional	Complete Windows Application Package	Complete Windows Application Package
Number of control axes	Up to 4+1 Axis Control	Up to 4+1 Axis Control	Controllable 8+1 axis and above	Controllable 8+1 axis and above
Angle detection	No	No	Sensor interface with angle detection	Sensor interface with angle detection
Compatibility	No	No	DELEM-compatible modular structure	DELEM-compatible modular structure
Panel personalization	Panel cannot be personalized	Panel cannot be personalized	OEM panels can be personalized	OEM panels can be personalized
Offline software	Support offline software, USB interface can use anyU disk and specified code	Support offline software, USB interface can use any U disk and specified code	Support offline software, USB interface needs to use randomly configured designated U disk	Support offline software, USB interface needs to use randomly configured designated U disk



DELEM DA53T control system



DELEM DA 58T 2D CNC Control Unit



DELEM DA 66T 2D
CNC Control Unit



DELEM DA 69T 3D
CNC Control Unit



CYBELEC CybTouch8 PS
CNC Control Unit



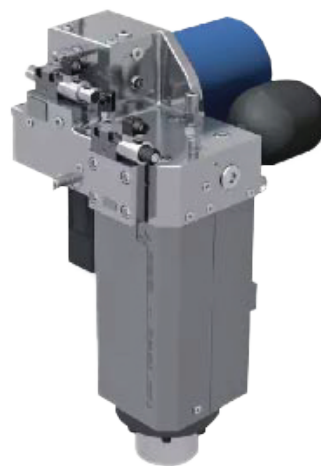
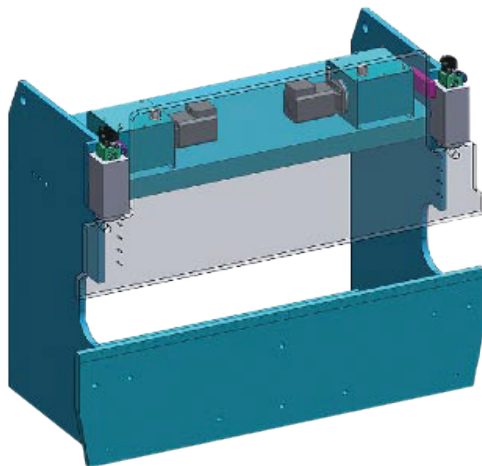
CYBELEC CybTouch12 PS 2D
CNC Control Unit



MF53S control system for CNC bending machine

Pump Control Servo CNC Brake

- The system consumes less energy with the servo motor.
- Oil distribution according to needs has no restriction loss to achieve the energy-saving indeed.
- Low temperature-rise reduces the risk of oil leakage, which has better stability and can increase the working life of hydraulic press system and oil cylinder.
- Gear pump reduces working noise and sensitivity of oil cleanliness, low maintenance.
- Precision of ram position or manufacture isn't lower than proportional valve control system, even higher. The ram repositioning precision is $+0.01\text{mm}$, highest precision will be $\pm 0.05\text{mm}$.
- The consumption of hydraulic oil reduce 70%.
- The simpler installation method can improve efficiency.
- Flexible installation meets populous needs.
- Better economic and higher performance-to-price ratio.



D-SVP

province. Save 60% of electricity consumption compared with traditional transmissions
high. Work efficiency can be increased by 30% (reduce cycle time)
quasi. The positioning accuracy is more accurate, up to $5\mu\text{m}$
Quiet. The noise is reduced and the machine tool works more quietly
less. The amount of hydraulic oil used is very small, only 30% of the traditional
easy. Machine tools are easier to manufacture, easier to maintain, and have a lower failure rate.

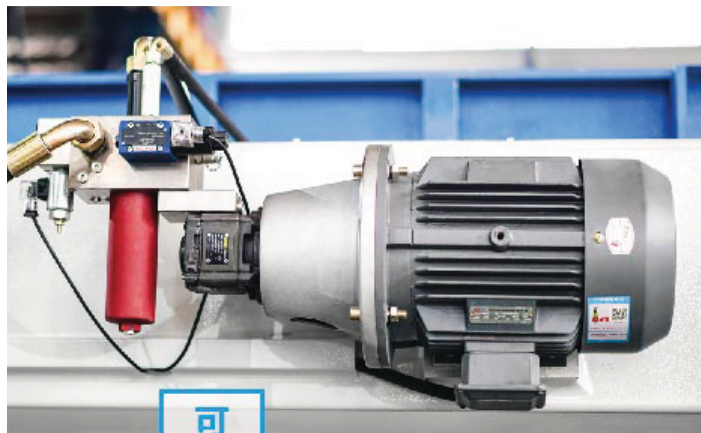
HOERBIGER ePrAX control

High efficiency and energy saving, oil tank capacity reduced by 70%.
Fast-performance and duty cycle reduction 10%.
Compared with the traditional system, energy efficiency 50% up.
The positioning accuracy of precision-up to 5m integrated servo pump.
Lower-noise at work integrated pressure filters ensures high stability and long service life.

CORE CONFIGURATION

Oil pump motor (Optional)

Uses three phase asynchronous motor and large flow pump as hydraulic active power source.

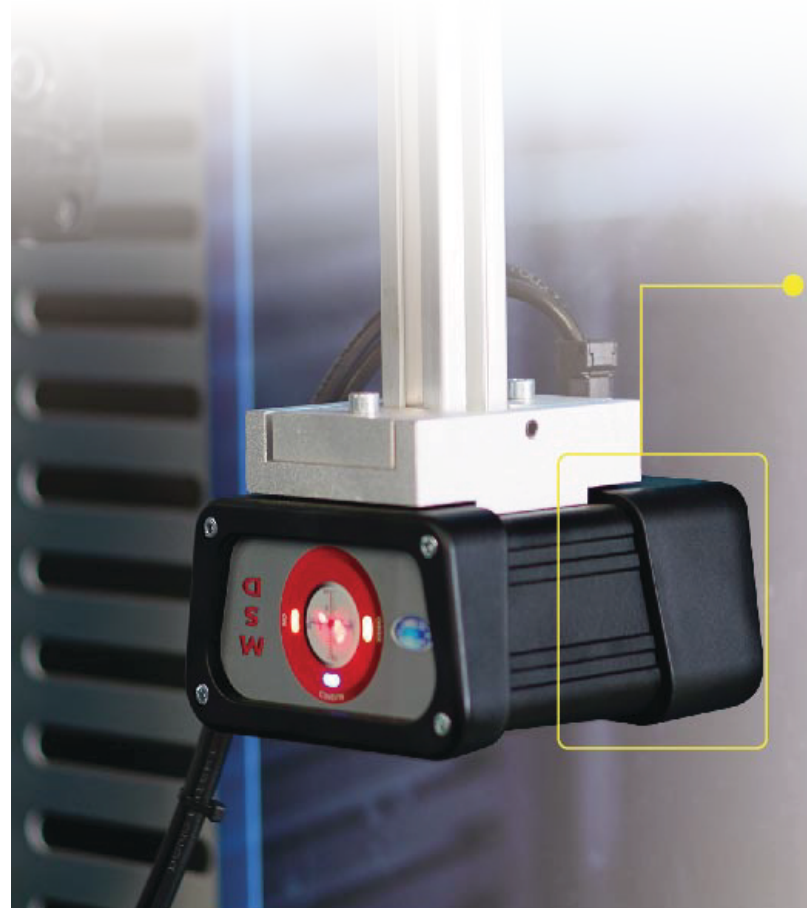
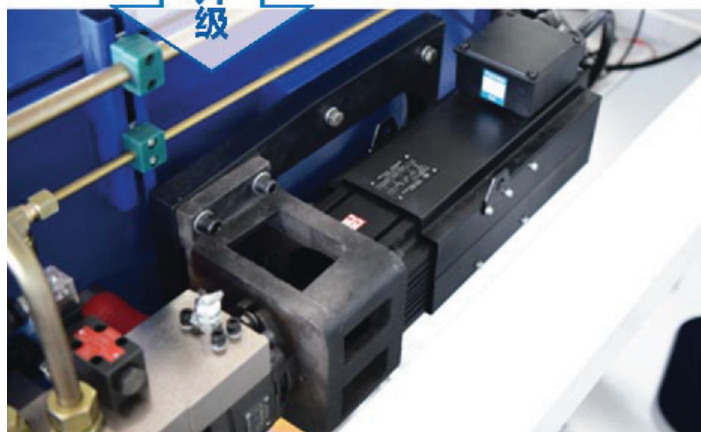


Servo motor (Optional)

Using servo motor as the main power source of hydraulic pump can save about 40% energy.

The overall efficiency of the slider increases by about 7-20%.

Oil temperature can be reduced by about 10-20 °C.



Safety system (Optional)

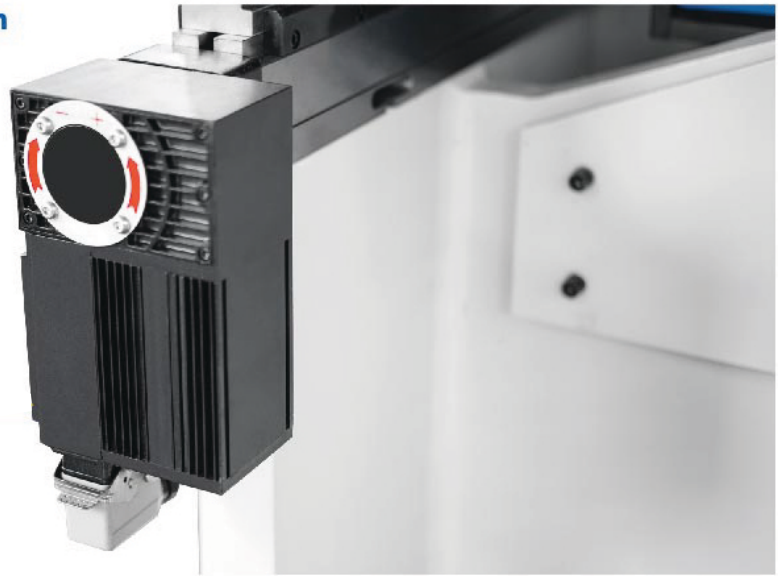
Provide comprehensive protection for the operator in the place close to the workpiece.

CORE CONFIGURATION

Mechanical compensation

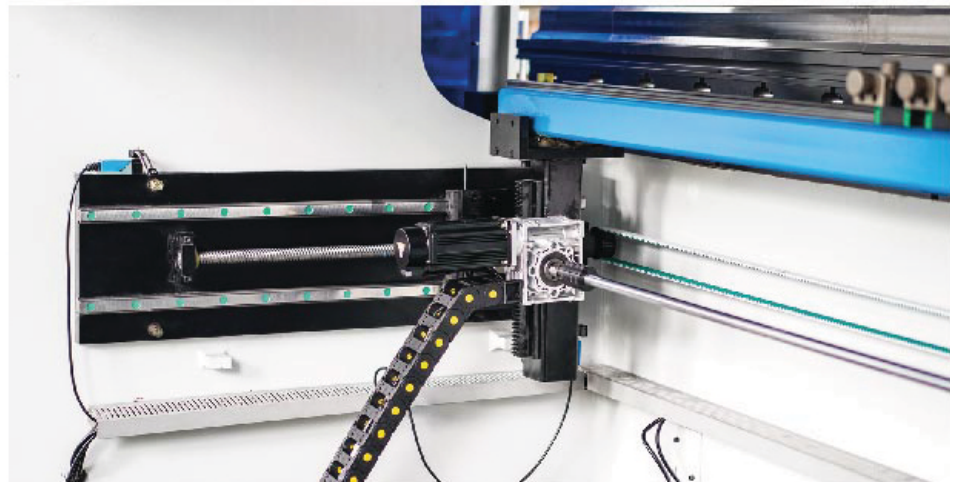
By CNC control system, precise compensation is obtained to ensure high quality bending accuracy.

on



Grating ruler

Exact measured distortion and feedback compensation, to ensure the precision of the bending, effectively prevent non-standard workpiece collision linear scales.



Precise back gauge system for faster and more accurate positioning

Steel structure welding, high rigidity, servo motor, ball screw, linear guide drive, ensure the accurate positioning of the workpiece.



THE COMPANY

Under the visionary leadership of our Managing Director, Mr. Mark Warmington, Whale Tankers aims to establish the "WHALE" brand on a global scale. Harnessing innovative technology, dedicated research and expertise, our vision has evolved into a mission, embarked on a remarkable journey with the creation of a new division "WHALE MACHINERIES"- Commitment to Excellence, aimed at serving global markets.

OUR STORY

Our journey began with the vision of creating a comprehensive range of tankers that meet the specific requirements of Indian applications. With over five decades of experience in Europe, we brought our expertise and philosophy to India, focusing on delivering long-term value to our customers.

TRAINING

Central to Whale's success is not only the training of its staff but also the provision of structured training for its product. This meets the changing needs of today's laser solutions. The company is also respected for its onsite commissioning of all new products.

QUALITY

Whale Machineries cares about quality across all aspects of its business. Indeed it is a word that characterises the company. Whale complies to ISO 9001 : 2015 accredited by TUV, Europe and all Whale products fully comply with all relevant legislation and regulations. It also has the benefit from being supported by its UK parent company Whale Tankers the largest manufacturer of vacuum tankers and jetting equipment in Europe.

Reliability, Service, Value ... for Life

WHALE MACHINERIES
A Unit of Whale Enterprise

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