FROM $96,500+GST

WAD-50-70T/1600-AU

CNC Servo-Hydraulic Press brake

Tonnage: 50T or 70T
Axes : 6+1 Axes or 8+1 Axes
Press Length: 1600mm
Controller: Delem DA66T/DA69T

"Our NEW 1600mm Brake Press comes in two Tonnage options, WAD50T/1600-AU with 50T capacity and WAS70T/1600-AU, with 70T capacity. As standard our CNC press brakes are supplied with 6+1 axes control partnering perfectly with the advanced Delem 66T or Delem 69T controller.

The 66T Delem controller will allow you to import 2D dxf flat pattern drawings or draw the bend profile simply within the Delem software. Preview your work in 3D with automatic bend sequence recognition. Upgrade to the Delem 69T to allow importing of 3D CAD files, with feature and sequence recognition, as well as 3D design capability within the 69T software."

Technical Parameters		UNIT	Specification
Bending Force		kN	50T – 500kN 70T – 700kN
Max. Bending Length		mm	1600
Throat depth		mm	300
Stroke		mm	150
Opening height		mm	460
Fast Speed		mm/s	220
Working Speed		mm	15.5
Return Speed		mm	200
Machine tool Accuracy	Slider Repeat Accuracy	mm	≤±0.03
	Slider Positioning Accuracy	mm	≤±0.03
	Repeat position accuracy of back gauge	mm	≤±0.05
	Workpiece Straightness error	mm/m	0.5
	Bend angle error	◦	＜±0.5
	Grating ruler Resolution	mm	0.005
Hydraulic Oil Standard			#46/68 Anti-wear hydraulic oil
Oil Tank		L	130
Main Motor		kW	5.5
Total Machine Power		kW	9.5kW (6+1axes), 11.6kW (8+1axes)
Weight		Ton	5
Dimensions		LxWxH mm	50T - 1800x1500x2500mm 70T - 1800x1600x2500mm
Power supply			6+1 Axes machine = 3-phase 415V, 50Hz, 20Amp connection (8amp consumption) 8+1 Axes machine = 3-phase 415V, 50Hz, 20Amp connection (10amp consumption)

WAD-AU RANGE

CNC Servo-Hydraulic Press brake

Together with AHD machine tool, we have developed this range of CNC Hydraulic Press Brakes for the growing Australian Manufacturing market. These precision and easy to use Press Brakes will pair perfectly with our range of Fiber laser machines, bringing full production control back to your manufacturing floor, where the programming and skills can be maintained in the office.

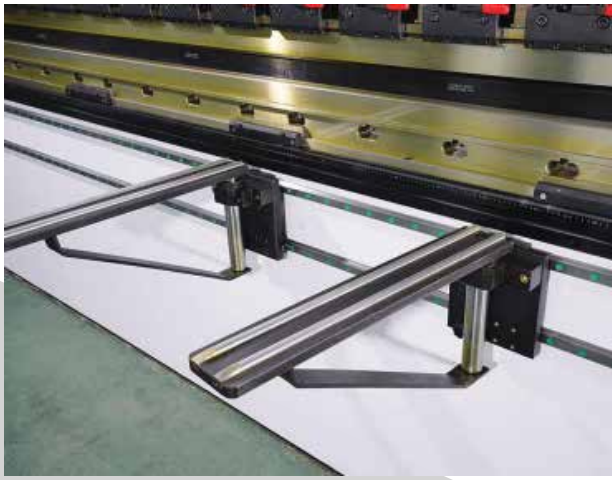
FEATURES:

- Independent Y1 and Y2 axis.
- Upper beam rails designed in a way that allows the bending load to be off-centre. The beam position is monitored by two independent linear encoders that provide feedback to the controller.
- Whole frame welded and tempered to eliminate any internal stress
- Three-dimensional machined manufactured in a single process, to ensures geometrical precision and therefore bending accuracy.
- Hydraulic pump driven by VSD, which
  - Reduces energy consumption by 60%.
  - Reduces noise, especially when sitting idle.
  - Reduces oil temperature fluctuations which translates in higher bending consistency/repeatability
- Main chassis components have been designed and tested with FEA
- Hydraulic Valve HAWE from Germany
- Hydraulic Gear Pump Rexroth from Germany
- Linear Encoder = Givi from Italy
- Main Motor Estun/Innovance from China
- Electrical Components Schneider from France
- Crowning Automatic Crowning servo from China
- Ball Screw and Linear Guide PMI/PYM from Taiwan

DA69T CONTROLLER

CHINA ESTUN SERVO MOTOR

ADH FAST CLAMPING SYSTEM



FRONT SUPPORTS WITH DUAL LINEAR GUIDE RAIL

WAD-AU RANGE

CNC Servo-Hydraulic Press brake

FRENCH SCHNEIDER ELECTRONICS

ADH CUSTOM DESIGN BACK-STOP FINGERS

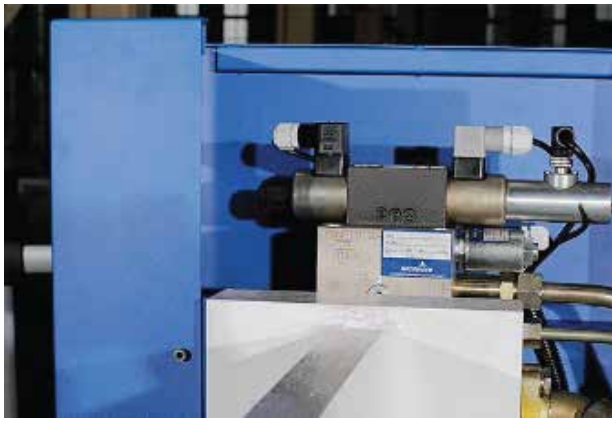
AUTOMATIC TABLE CROWNING

LHTECH LIGHT CURTAIN SAFETY

PRECISION GIVI GRATING RULER

MOVABLE PEDAL SWITCH STATION WITH EMERGENCY STOP BUTTON

DSP LASER PROTECTION SAFETY SYSTEM - OPTION



PRECISION GERMAN HAWE HAUDRAULIC VALVE

WAD-AU RANGE

Controller Options Explained

Delem DA66T

The new generation DA-Touch controller offers an even higher grade of efficiency in programming, operation, and control of today's press brakes. Ease of use combined with state-of-the-art technology go hand in hand, improving productivity.

The touch screen gives access to the proven Delem user-interface and enables direct navigation between programming and production. Functions are directly located where you need them, offering optimized ergonomics throughout the application.

The DA-66T offers 2D programming, including automatic bend sequence calculation and collision detection. Full 3D machine set-up with multiple tool stations giving true feedback on the product feasibility and handling.

Delem DA69T

The DA-69T offers 2D as well as 3D programming/file importing that includes automatic bend sequence calculation and collision detection. Full 3D machine set-up with multiple tool stations giving true feedback on the product feasibility and handling. Highly effective control algorithms optimise the machine cycle and minimise set-up time. This makes using press brakes easier, more efficient, and more versatile than ever.

The OEM-panel located above the screen, reserved for machine functions and OEM-application switches, is integrated in the design, and can be custom programmed depending on the required application. Highly effective control algorithms optimize the machine cycle and minimize set-up time. This makes using press brakes easier, more efficient, and more versatile than ever.

WAD-AU RANGE

Air Bending Table - Mild Steel CS

v		4	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50	55	60	65	70	80	90	100	120
b		2.8	4	5.5	7	8.5	10	11	12.5	14	17	20	22	25	28	31	35	38	42	46	49	56	63	70	85
r		0.7	1	1.3	1.6	2	2.3	2.6	3	3.3	3.8	4.5	5	6	6.5	7	8	9	10	10.5	11	13	14	16	19
s	0.5	40	30																						
	0.6	60	40	30	30																				
	0.8		70	50	40	30																			
	1		110	80	70	60																			
	1.2			120	100	80	70	60																	
	1.5				150	120	110	90	80																
	2					220	190	170	150	130	110														
	2.5							250	220	200	170	150	130												
	3								330	290	250	210	180	160											
	3.5									400	330	290	250	220	200	180									
	4										440	370	330	290	260	230	210								
	4.5											470	410	370	330	300	270	240							
	5												510	450	400	360	330	300	270	250					
	6															520	470	430	390	360	340	300			
	8																		700	640	600	520	460	420	
	10																					810	720	650	
	12																							950	780
	14																							1300	1100

This chart is calculated according to the plate of tensile strength σ^b=450N/mm^2 and length L=1m. The force can be got according to the proportion while different kind of plate and different length to be bent.

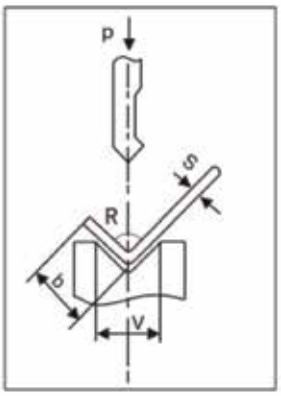
The approximate calculation coefficient of bending pressure is as follows:
Bronze (soft): 0.5
Stainless steel: 1.5
Aluminum (soft): 0.5
Chrome molybdenum steel: 2

To calculate the press brake tonnage by using formula:
Example 1: Plate length=3000mm, plate thickness=5mm, P=650×5^2×3/(5×9)=1083KN=108.3ton.

Force Calculation Formula for Press Brake:

- Calculation method of sheet bending force:
- P-bending force (KN)
- S-plate thickness (mm)
- L-plate width (m)
- V-lower die notch width (mm)

Calculation formula: $P=\frac{650S^2L}{V}$ (δb=450N/mm^2)



Press Brake Sketch Map