WAD-110-800T/3200-AU

CNC Servo-Hydraulic Press brake



Tonnage: 110T to 800T

Axes: 6+1 Axes or 8+1 Axes

Press Length: 3200mm

(4000/5000/6000/8000mm available)

Controller: Delem DA66T/DA69T

"Our NEW 3200mm Brake Press comes in various Tonnage options, from 110T all the way up to 800T 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."

Techn	ical Parameters	UNIT	Specification									
Bending Force		kN	110T- 1100kN, 135T- 1350kN, 170T-1700kN, 220T-2200kN, 250T-2500kN,									
			300T-3000kN, 400T-4000kN, 600T-6000kN, 800T-8000kN									
Max.	Bending Length	mm	3200									
Throa	t depth	mm	450									
Stroke		mm	200									
Openi	ng height	mm	480									
Fast Speed		mm/s	160									
Working Speed		mm	11.5									
Return Speed		mm	135									
>	Slider Repeat Accuracy	mm	≤±0.03									
rac	Slider Positioning Accuracy	mm	≤±0.03									
2	Repeat position accuracy of back	mm	≤±0.05									
Machine tool Accuracy	gauge											
	Workpiece Straightness error	mm/m	0.5									
	Bend angle error	0	<±0.5									
	Grating ruler Resolution	mm	0.005									
Hydraulic Oil Standard			#46/68 Anti-wear hydraulic oil									
Oil Tank		L	260									
Main Motor		kW	11(110-135T), 15(170T), 18.5(220T), 22(250-300T), 30(400T), 45(600T), 60(800T)									
Total Machine Power		kW	From 15.1kW (110T 6+1axes) to 59.1kW (800T 8+1axes)									
Weight		Ton	12-14									
Dimensions		LxWxH mm	110T - 3400*1800*2350, 135T - 3400*1800*2450, 170T - 3400*2000*2540									
			220T - 3400*2200*2540, 250T - 3400*2000*2700, 300T - 3400*2300*3100									
Powe	r supply		3-phase 415V, 50Hz, 20-60Amp connection									
			(12.7-51Amp consumption depending on model)									

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

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

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.

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	
53	0.5	40	30																							
	0.6	60	40	30	30										This chart is calculated according to the plate of tensile strength											
	0.8		70	50	40	30																				
	1		110	80	70	60									ob=450N/mm² and length L=1m. The											
	1.2			120	100	80	70	60							force can be got according to the proportion while different kind of plate and different length to be bent.											
	1.5	8	2 5	1 3	150	120	110	90	80																	
	2					220	190	170	150	130	110															
	2.5							250	220	200	170	150	130			1		1 81			(2				8 1	
	3								330	290	250	210	180	160												
	3.5									400	330	290	250	220	200	180		9 16	L						2 3	
	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																	2-2				810	720	650		
	12																							950	780	
	14															(,)								1300	1100	

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

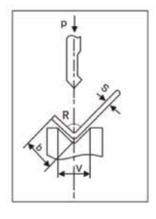
To calculate the press brake tonnage by using formula:

Example 1: Plate length=3000mm, plate thickness=5mm, P= $650\times5^{2}\times3/(5\times9)=1083$ KN=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: $P = \frac{650S^2L}{V}$ ($\delta b = 450N/mm^2$)





Press Brake Sketch Map