

CNC Press Brake MB8-80T1600

DELEM DA53T With 4-axis for Y1,Y2,X,R and Crowning



Main Features:

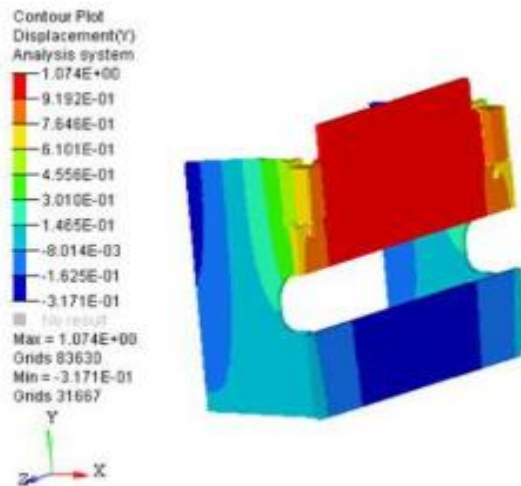
1. Brand-new industry design combined with modern aesthetic concept, high-quality production technology, simple appearance.
2. Latest high-frequency responding hydraulic control technology, faster, more efficient and accurate.
3. Heat treatment of the rack, rigidity optimization verification on entire machine and the application of hydraulic crowning structure jointly ensure the bending precision of MB8 series Press Brakes.
4. Optimal ratio of parameters and core configuration ensure stable performance, and easy operation.
5. DA53T controller is equipped with standard 4+1 axis (Y1, Y2, X, R axis and W axis crowning). . At the same time, suitable die can be selected to realize bending processing of various workpieces with complex shapes.
6. The Press Brake adopts full closed-loop electro-hydraulic servo synchronous control technology. The position signal of the slide block is fed back to the CNC controller by the grating ruler on both sides, and then CNC controller controls the opening size of the synchronous valve and adjusts the quantity of the oil cylinder, so as to control the slide block (Y1,Y2) to run at the same frequency and always keep the parallel state to the working table.
7. CNC controller will automatically control the deflection compensation of the worktable, in order to achieve uniform angle on full length of the workpiece according to machine process state.
8. Using hydraulic crowning method or mechanical crowning method, the workpiece with uniform precision over the whole length of the worktable can be obtained. The hydraulic crowning is composed of a group of oil cylinders in the lower working table, which can make the working table move relative to each other and form an ideal curve with convection to ensure the relation between the relative position of the sliding block and the bearing force remains unchanged. The compensation amount is determined by the CNC controller according to the thickness of the plate and the material characteristics.

MACHINE BLOCK:

LRA press brake features a rigid frame for min deflection under the load. The frame steels are German origin and designed using SOLIDWORKS 3D programming and made with quality steel Improved Q235 using the latest technology.

Feature:

- The machine welding is made by welding apparatus and welding robots.
- After the welding, we make stress relief process by vibration system.
- After the stress relief process machine frame goes to CNC 5 axes machining centers for accuracy.
- All reference surfaces and connection holes are machined.
- By all these processes machine frame sensitivity is protected for a long life time.

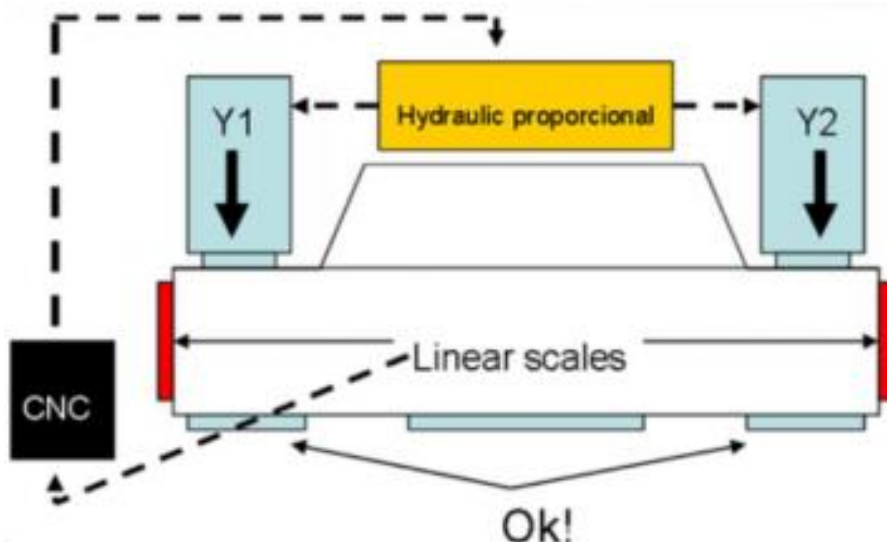


RAM POSITIONING SYSTEM-Y1, Y2:

In this system each cylinder operates independently. Linear encoders are mounted on a separate sub frame on each side of the machine.

These encoders combined with servo hydraulic valves and the CNC command center, provide a 0.001mm accuracy and the ability to program all ram position, speeds and ram tilt.

The decompression point is also programmable, this feature along with programmable speeds is very useful when bending large sheets.

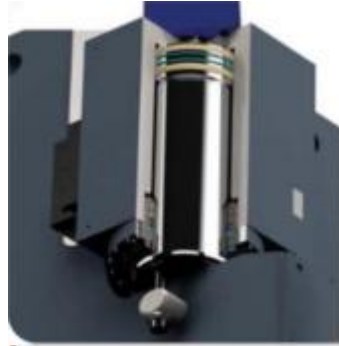


PRO S PRESS BRAKE CYLINDERS:

In order to allow tilting of the ram without damage, because we use spherical connections. This type of connection also allows peak forces to be absorbed gently.

Advantage:

- High-Speed Free Fall
- High Bending Speed
- High Return Speed
- Very low noise level.



- Free-fall bending & return speeds of EURO PRO S press brakes series makes it the best choice to meet demands in today's competitive markets.
- PRO S series offer twice as fast production capacity compared to conventional CNC press brakes.

SIDE LOOKING:

The engineers of LRA R&D did not forget to increase the stroke and opening (daylight) for an ever more versatile press brake. With these specs, deep bends can be achieved with longer tools, parts can be easily taken out from front of the machine.

Advantage:

- The machine throat depth is 410mm which provides you a big gap for your bendings.
- The machine is equipped with European style top tools & Dies
- Machine open height is 570mm which is an innovative solution for press brakes.



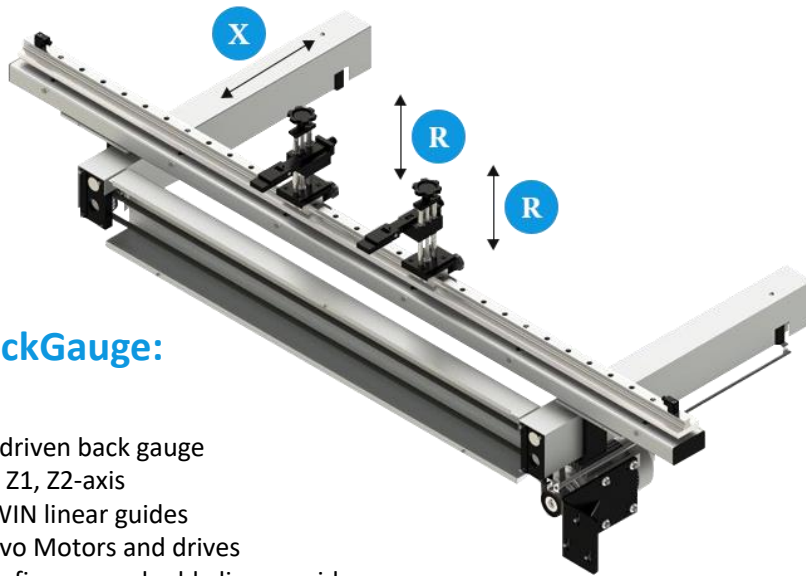
BGA SERIES MULTI-AXIS BACK GAUGE:

LRA press brake are provided are equipped with a backgauge constituted by a solid structure in order to assure the best repetitiveness and high precision in axes positioning.

•CNC controlled back gauge that automatically adjusts the X (depth) and R (height) axes to ensure your material is always positioned accurately, resulting in higher quality finished parts.

Advantage:

- High-Speed Free Fall
- High Bending Speed
- High Return Speed
- Very low noise level



2-Axis CNC BackGauge:

- X, R precision servo-driven back gauge
- Manually adjustable Z1, Z2-axis
- High-Speed with HIWIN linear guides
- Driven by DELTA Servo Motors and drives
- Complete Backgauge fingers on double linear guide
- X-axis speeds up to 800 mm/sec & accuracy to 0,01mm

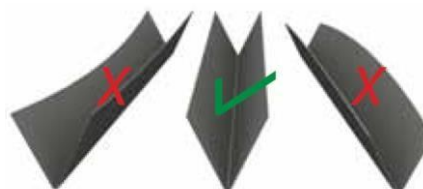
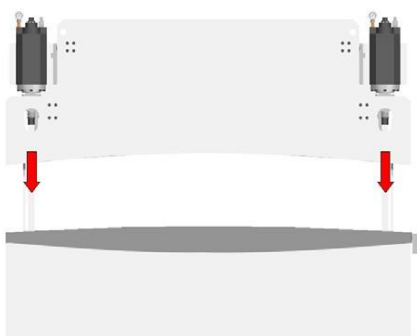
LRA PRO CNC CROWNING SYSTEM:

Pro family Crowning:

The LRA Pro CNC Crowning system enables the user to offset deformations of the beam while bending. thus, the angle iskeeping constant along the entire plate length.

Advantage:

- Easy reversibility of tools because of symmetrical adaption
- Quick clamping for the dies
- Suitable for 4-V dies & Single V Dies



SPEED GRIP SYSTEM:

The speed grip system reduces the time spent changing tools by 80% compared with traditional systems.

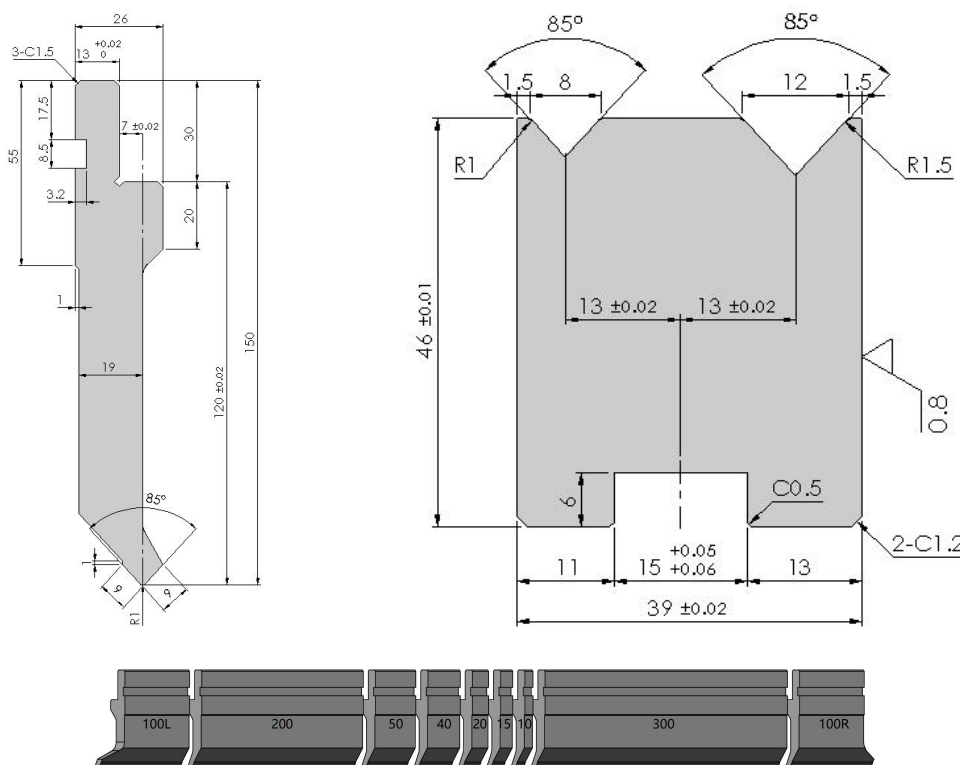
Advantage:

- Vertical tool exchange
- Safety guard
- including selectable intermediates



AMADA STANDARD TOOLING:

- Sectional top Punch
- AMADA Standard 2-V bottom tools.
- Hardened and ground HRC 55

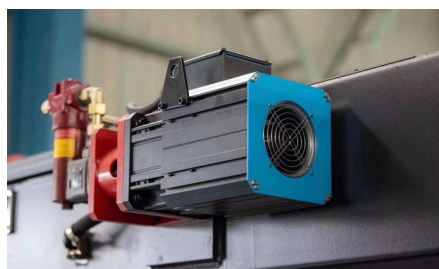


Energy-saving motor (OPTIONAL):

The main motor servo motor is used to drive the servo oil pump. This control method has very low energy loss, and the energy-saving effect is very prominent. It has the advantages of energy saving, noise reduction, high efficiency and low heat.

Advantage:

- Energy saving
- Environmental protection
- Bottom noise



CNC CONTROL SYSTEM:

The new compact DA-53T adds a state-of-the-art complete touch control solution for synchronized press brakes. Offering easiest CNC programming based on the Delem graphical touch screen user interface.

This panel based control, standard capable of controlling up to 4 axes, can be integrated in cabinets as well as used in an optional pendant arm housing.

Its 10.1" wide screen high resolution colour TFT, with industrial grade multi touch technology, gives access to the proven Delem user-interface. It enables direct "hot-key" touch navigation between product programming and actual production. Functions are located where needed, offering optimised ergonomics throughout the entire application.

Machine adjustment and test bends are reduced to a minimum with a quick and easy program-to-production work sequence.

Features:

- "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 (option)
- USB memory stick interfacing
- Profile-T offline software



PRESS BRAKE SAFETY SYSTEM(OPTIONAL):

LRA Press Brake with DSP generates a visible laser protection compliant to EN12622

regulation. The beam protects the press brake operator from the danger of being crushed between upper&lower tool.

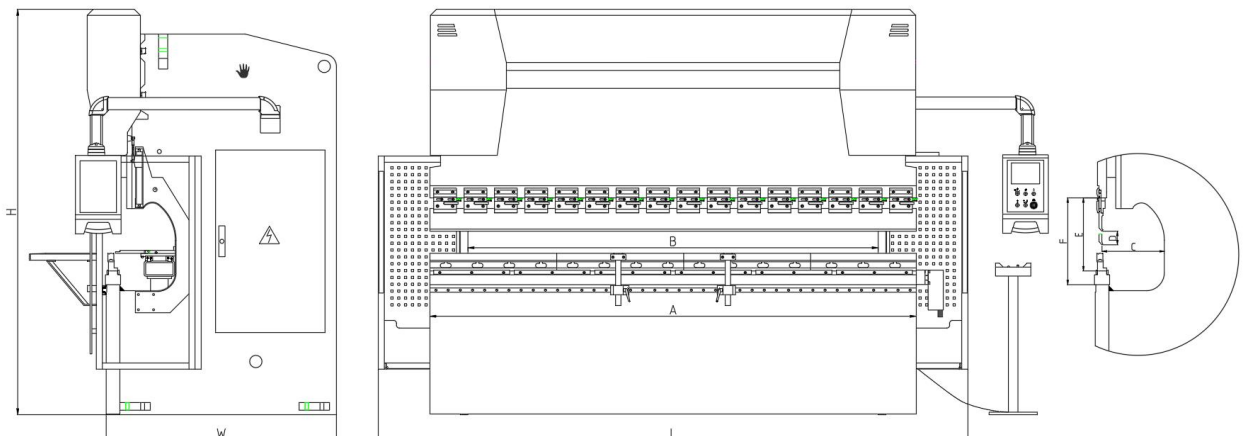
Advantage:

- The most advanced laser systems
- Box-shaped part bending feature
- Innovative tooling grid guarding pattern
- Completely foot peddle controlled operation
- Auto-blanking for automatic box and side wall detection
- UL approved
- CE certified
- Type 4 patented process control
- "Safe Release" supports are unhooked without damages in case of collision.



TECHNOLOGIES:

No.	Name	Unit	80T/1600
1	Bending Pressure	kn	800
2	Bending Length (A)	mm	1600
3	Column Distance (B)	mm	1250
4	Throat Depth(C)	mm	350
5	Slider Stroke	mm	170
6	Max. Opening Height(F)	mm	570
7	Y1,Y2-axis Down Speed	mm / sec	230
8	Y1,Y2-axis Back Stroke Speed	mm / sec	140
9	Y1,Y2-axis	Mm/m	0.01
10	X-axis Max. Distance	mm	600
11	Workpiece Linear Degree	Mm/m	≥ 0.15
12	Back Gauge Positioning Accuracy	Mm/m	0.05mm
13	Back Gauge Repeat Positioning Accuracy	Mm/m	0.01mm
14	Sliding Front Supporting Arms	pcs	2
15	Back stopper	pcs	2
16	V Axis Crowning	Mechanical Crowning	Mechanical Crowning
17	CNC Control Axes	-	Y1+Y2+X+R+W Crowning
18	Main Motor	kw	7.5
19	CNC System	-	DA53T
20	Length* Width* Height	mm	2020*1780*2050
21	Weight	T	4.6



Standard Configuration List:

No.	Name	Model/Manufacturer	Others
1-	CNC System	■ DA53T Controller - Holland DELEM	
2-	Electrics	Schneider - France	Travel switch & Limit Switch
3-	Main Motor	Siemens -Germany	
4-	Back Stopper, Timing Belt, Timing Pulley	Taiwan	Positioning Control
5-	Servo Motor	Estun	Positioning Control
6-	Servo Drive	Estun	Positioning Control
7-	Pedal Switch	KACON-Korea	
8-	Hydraulic System	Bosch Rexroth - Germany	
9-	Sealing Ring	MERKEL - Germany	
10-	Oil Tube Connector	EMB - Germany	
11-	Front Safeguard	Produced by LRA	
12-	Back Safeguard	Produced by LRA	
13-	Die	One Set of standard Dies	
14-	Backgauge	Ball Screw and Polished Rod, Linear Guide Rail-Taiwan, HIWIN	
15-	Clamp	Quick Clamp	
16-	Deflection Crowning	Mechanical Crowning	
17-	Grating Ruler	FAGOR - Spain	