



## LZK CNC Hydraulic Press Brake WC67D series with SNC53 System



( The above pictures are for reference only )

### 1. Model and Axes:

WC67D-160T3200 ( SNC53 system )

4 +1 axis(Y1,Y2,X, R axis and crowning)

### 2. Working Principle and Features:

1. The frame is made of steel structural parts, the left and right vertical plates, the worktable and the pressureplate are welded into a whole structure, and the internal stress is eliminated by tempering after welding, so the overall steel property is good and the stability is high.
2. The body, slider and other important components are analyzed using ANSYS finite element analysis software to ensure the reliability of the machine.
3. Hydraulic transmission, stable and reliable.
4. Y1, Y2 cylinder mechanical block, servo control, can be adjusted separately, to solve the traditional torsionaxis machine inconsistent angles, artificial climb up and down the trouble. The torsion axis is synchronized and the precision is high.
5. The back gauge distance and the slider stroke are controlled by the numerical control system, which

inconvenient and quick.

6.The cylinder through forging, quenching and tempering, fine grinding, hard chrome plating and other processes, and with imported sealing ring, customer service oil leakage phenomenon.

7. The hydraulic system adopts oil-integrated hydraulic system to reduce pipeline installation and has a beautiful appearance.

8. Hydraulic components use brand-name products to ensure the reliability and safety of machine tools.

9. The machine is powered by a three-phase system power supply (415V). The control circuit voltage (240V) is provided by the control transformer. The DC power supply (+24V) required to execute the circuit solenoid valve is provided by the transformer and the silicon rectifier.

### 3. Basic Configuration:

No	Name	Model/Manufacture	Others
1	CNC System	SNC53 Controller	
2	Electrics	France Schneider Electrics	Travel switch&Limit Switch
3	Main Motor	BEIDE Siemens Motor	
4	Back stopper, Timing belt, Timing Pulley	Taiwan	Positioning Control Guaranteed precision
5	Servo Motor Y1Y2XR	Nanjing TUKE	Positioning control
			Guaranteed precision
6	Servo Drive Y1Y2XR	Nanjing TUKE	Positioning control
			Guaranteed precision
7	Pedal Switch	South Korea KACON	
8	Sealing Ring	German BAUSER and Busak+Shamban	
9	Hydraulic System	Germany Bosch Rexroth	
10	Oil pump	Germany ALLIDE high performance and low noise internal gear pump	
11	Oil Tube Connector	Germany EMB	
12	Front safeguard	China,LZK	
13	Back safeguard	China,LZK	
14	Die	One set of standard dies	
15	Backgauge	Taiwan HIWIN ball screw and linear guide rail	
16	Clamping	LZK Fast Clamp	
17	Deflection Compensation	Electric Mechanical Crowning ( optional )	



#### 4. Introduction of Main Components:

--The SNC-53 CNC system has the following professional control functions:

1. For the backing material (X) of the bending machine, the position of the block in the left and right cylinders (Y1 Y2), the lifting position of the rear block (R), the left and right gears (Z1, Z2), the pressure (P) and the deflection compensation (Hydraulic, mechanical) (V) for automatic positioning control.
2. The parameters can be set to unilateral and bilateral positioning. The unilateral positioning method can effectively eliminate the screw drive clearance.
3. The system has a software limit function.
4. Power-off position memory function.
5. The display scale factor can be set according to the screw pitch and the transmission ratio. The display scale factor can be automatically calculated by the numerical control system through the teaching operation function, and the operation is very simple.
- 6, single step insert mode, very practical and convenient.
- 7, multi-step programming function, can achieve multi-step automatic operation.
8. Retreat the escape function to avoid interference between the back gauge device and the workpiece to reduce wear.
- 9, integrated pump start and switch adjustment, single, continuous function in the system.
10. With password protection.
- 11, large arc programming function.
- 12, IO port flexible configuration and valve group configuration function.
13. The raster real-time feedback slider position.



#### --Main Motor

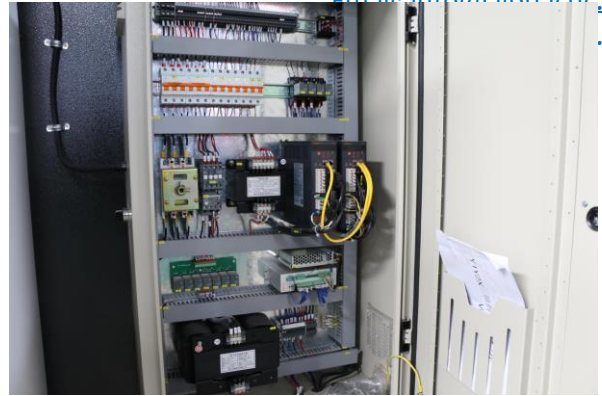
Germany Siemens





### --Electrics

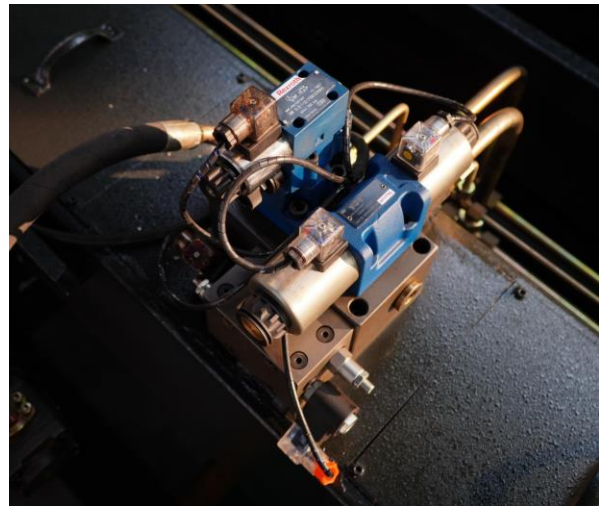
Electrical system is France Schneider  
Equipped with dustproof cabinet to  
guarantee the high quality electrical system



### --Hydraulic Components

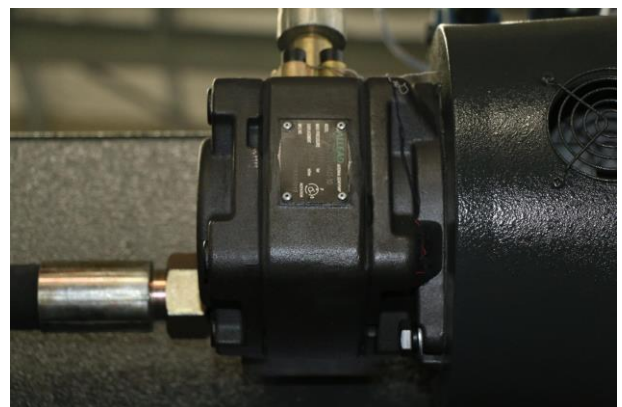
#### ● German Bosch-Rexroth Hydraulic Valve

Well-known brands, reliable quality  
Compact structure, beautiful appearance  
Convenient and quick maintenance



#### ● Germany ALLIDE Internal Gear Pump

Long service life, reliable performance High efficiency  
Low noise, small pressure fluctuation  
Good oil absorption ability, wide range of viscosity  
Compact structure, simple maintenance





●Germany EMB Tube Connector

Exquisite shape

Good tightness

Large flow, low pressure loss



●German BAUSER and Busak+Shamban Sealing Ring

Strong anti-extrusion ability to gap

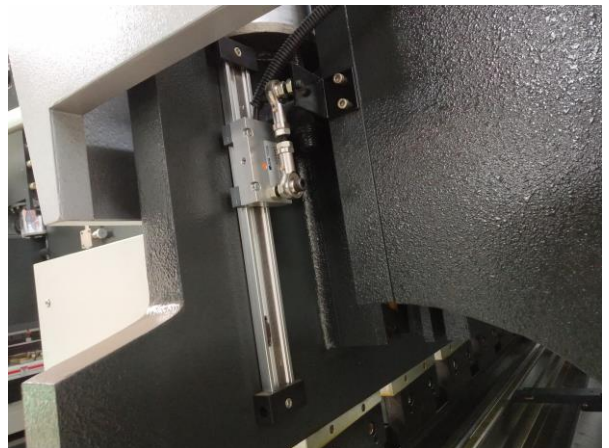
Elastic seals will not twist or flip

Good leakproof performance

Good wear resistance and easy assembly



--Germany ELGO Grating ruler



--Quick Clamping



### --Backgauge

- X axis
- Taiwan Ball Screw and Liner Guide
- Servo Motor for High Precision

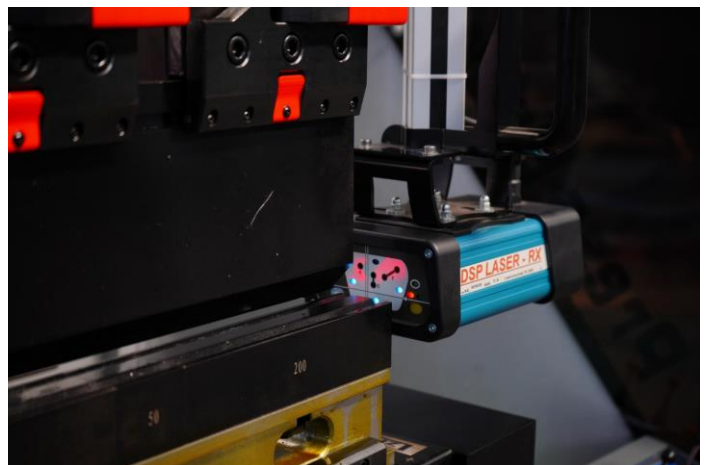


### ---Laser Protection Italy DSP

DSP laser safety protection device fully protects the safety of the bending machine operator and avoids the danger caused by the rapid movement of the slider on the machine tool. A block-like protection area is formed for the tip of the bending tool, which protects the front, middle and rear areas of the tip.

The protection area is fixed below the tool tip and moves synchronously with the mold, ensuring that any object in the downward direction of the mold at high speed must enter the protection area generated by DSP before

contacting the tool tip. Once a shield (such as a worker's finger) enters the DSP protection area, the DSP will immediately signal and interrupt the slider's downward movement.



### --Foot Pedal Switch

South KACON Foot Pedal



### --One Set of Standard Tool

Material: 42CrMo

double-V dies

Overall quenching process, high hardness and good wear resistance.

(the tool photos are only for **reference**, we can also do customization)

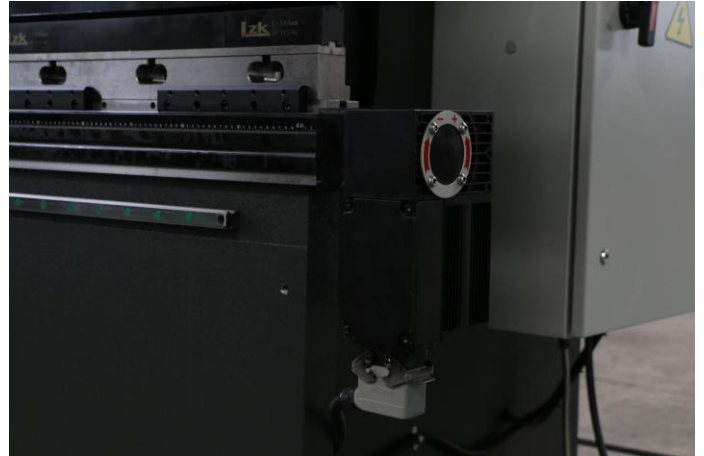


**--Electric Mechanical Crowning (OPTIONAL)** The local deflection compensation mechanism uses a mechanical interference table compensation structure.

- Each group consists of several groups of three-dimensional curved surfaces with different slopes. The compensation curve is closer to the deformation curve of the slide plate, which greatly improves the machining accuracy of the bending machine.

**-- 2 axes Backgauge (optional)**

- X ,R axis
- Taiwan Ball Screw and Liner Guide
- Servo Motor for High Precision



## 5. Basic Parameters:

No.	Name	Unit	160T3200
1-	Nominal force	Kn	1600
2-	Max.bending Length	mm	3200
3-	Between columns	mm	2600
4-	Throat depth	mm	320
5-	Slide Stroke((Y1,Y2-axis) NC-controlled stroke axes)	mm	120
6-	Max Opening Height	mm	380
7-	Y1,Y2-axis Down speed	mm / sec	100
8-	Y1,Y2-axis return speed	mm / sec	90
9-	Bending Angle Precision	°	0.5
10-	X-axis Back Gauge Stroke	mm	600
11-	Work piece straightness	mm/m	0.5
12-	Backgauge Accuracy	mm/m	0.05
13-	Sliding Front Arms	pcs	2
14-	Back gauge Finger Block	pcs	2
15-	Main Motor Power	kw	7.5
16-	CNC System	SNC53	
17-	Crowning	Electric Mechanical Crowning	
18-	Length x Width x Height	mm	3800x1800x2500
19-	Weight	kg	9500

- Opening Height: The distance between the force surface of the slide plate and the upper surface of the stand plate is the opening height of the bending machine.
- Throat Depth: The bending area by the maximum distance to the center of the mold force side vertical plate bending machine for throat depth (i.e. side plate bending area of the largest plate size)