

CUTTING **BENDING** WELDING CLEANING CLADDING MACHINING AUTOMATION

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**FEILKE** is an international metal forming automation company. As a subsidiary of the HEMSA Group, *Feilike (FLK Laser)* is designed to provide customers with highquality, fully automatic solutions globally. It has become a technology-driven innovation enterprise by independently developing many core technologies in the laser industry and combining laser cutting, bending, welding, cladding and automation into one product to greatly improve production efficiency for customers with multiple automatic equipment requirements.

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#### Alibaba.com Gold Plus Supplier Verified Assessment Report Presented to Shandong Leiming CNC Laser Equipment Co., Ltd. 山东镭鸣数控激光装备有限公司 SectionTect Wholly Owned Shapabol He tion 6333 North Lingeng Rost, Vacquing Street Office ment Zone, Sinse City Shard New ADD INCOME. ----Province, Chin Jase / Chini Costin 880 signir of Assessm laining 201 Supplet Hencer D. Shandong Lainning CNC Laser Equipment Co. List. Suppler Concelly N NS. Jingky NA of Dark 0048-15/65(2156) 0088-511-58/197625 sain@incr/state.com Imp Metrogener en albabil. cute Provided by 533 vortile: 19283153 P+1 SGS

#### +570 PATENT CERTIFICATIONS

We have obtained CE, ROHS, FDA, ETL, CSA certificates from TÜV, and our quality and safety standards have reached international certifications



## BENDING



## Bending

The bending process is an indispensable part of the metal forming process, as its function is to **press the sheet metal into different shapes of parts according to technological requirements and needs**. The bending process will directly affect the size and final appearance of the product and have a farreaching impact on the entire process of the final product.

The FEILIKE Bending Division has independently developed multiple bending technologies, with intelligent and flexible bending centers, automatic bending units and CNC bending machines as the product matrix. The products have a wide range of model numbers and configurations, and feature **higher bending efficiency, stable product precision and batch production**, providing customers with customized metal forming system solutions.



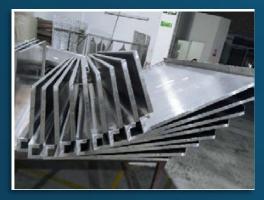
## **Bending Materials**

CNC bending machines can be used to bend stainless steel, carbon steel, galvanized sheets, zinc and fluorine plates, copper and aluminum.

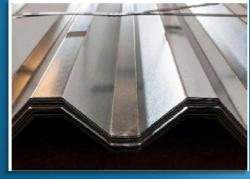
Examples:



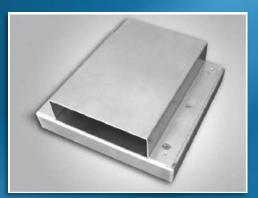
Bending of sheet metal cabinets



Zinc aluminum fluorine sheet



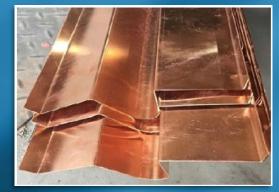
Stainless stee



Bending of aluminum plates



Cold sheet bending



Bending of brass plates

Our BDE series CNC bending machine has led the industry through innovation in research and development, combined with leading bending technology and years of bending experience of many products, which has enabled us to achieve high-level customization.

Focusing on improving bending efficiency and accuracy, equipped with heavy-duty machine tools, deflection compensation system, tailstock system, numerical control operating system and other modules, with high precision, high stability, high efficiency, high power and high safety performance advantages, it is the best choice to improve production capacity and achieve optimal batch processing.

#### **CNC press brake**



Model:	BDE-10032			Bending force: 1000KN
Sheet metal material:	Stainless steel	Mild steel/galvanized plate	Aluminum plate	Engine power: 7.5 KW Throat depth: 400mm (personalizable)
Bending thickness:	2mm	3.5mm	5mm	Equipment weight: 6600KG

FLK LA	<u>SER</u>													
									Speed (mm/s	5)	D	imensions (mm	)	
Model	Bending force (KN)	Max. bending thicknes s (mm)	Distance between studs (mm)	Throat depth (mm)	Cylinder stroke (mm)	Opening height	Main power	Approach speed	Working speed	Return speed	Length	Width	Height	Weight (kg)
BDE5016	500	1600	1200	250	160	460	5.5	180	0 -10	160	2060	1775	2395	3200
BDE6325	630	2500	2100	350	160	460	5.5	180	0 -10	160	3040	1785	2450	4300
BDE8025	800	2500	2100	350	160	465	7.5	180	0 -10	160	3040	1785	2450	5000
BDE8032	800	3200	1600	350	160	465	7.S	180	0 -10	160	3740	1785	2450	6000
BDE10025	1000	2500	2100	400	200	480	7.5	180	0 -10	160	3060	1920	2650	6300
BDE10032	1000	3200	2600	400	200	480	7.5	180	0 -10	160	3760	1920	2650	6500
BDE10042	1000	4200	3600	400	200	480	7.5	180	0 -10	160	4760	1920	2650	8300
BDE13032	1300	3200	2600	400	200	480	11	180	0 -10	160	3760	1920	2650	6800
BDE13042	1300	4200	3600	400	200	480	11	180	0 -10	160	4760	1920	2650	8500
BDE17025	1700	2500	2100	400	200	400	11	180	0 -10	160	2!300	1750	2730	7800
BDE17032	1700	3200	2600	400	200	400	11	180	0 -10	160	3760	2065	2730	8200
BDE17042	1700	4200	3600	400	200	480	11	180	0 -10	160	4760	2065	2730	9800
BDE17050	1700	5000	4000	400	200	400	11	180	0 -10	160	5600	2110	3060	13800
BDE17060	1700	6000	5000	400	200	480	15	180	0 -10	160	6630	2195	3350	17600
BDE20032	2000	3200	2600	400	200	480	15	180	0 -10	160	3760	2115	2870	9350
BDE20042	2000	4200	3400	400	200	480	15	180	0 -10	160	4760	1695	2870	11500
BDE20050	2000	5000	4000	400	200	480	15	180	0 -10	160	5£30	2145	3100	16000
BDE20060	2000	6000	5000	400	200	480	18.5	180	0 -10	160	6630	2145	3260	19500
BDE25032	2500	3200	2600	400	250	500	18.5	160	0 -8	120	4760	2095	2870	10300

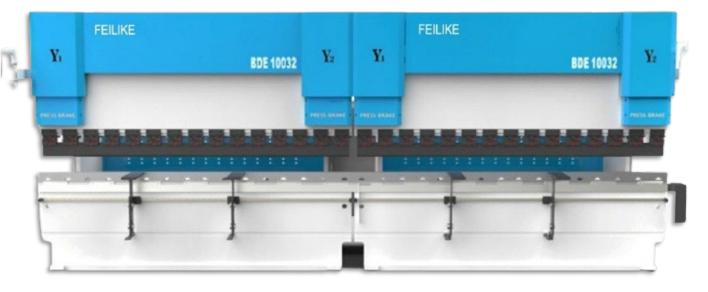
FLK LA	<u>SER</u>													
									Speed (mm/	's)	D	imensions (mm	)	
Model	Bending forc (KN)	Max. e bending thicknes s (mm)	Distance between studs (mm)	Throat depth (mm)	Cylinder stroke (mm)	Opening height	Main power	Approach speed	Working speed	Return speed	Length	Width	Height	Weight (kg)
BDE25042I	2500	4200	3400	400	250	500	185	160	0-8	120	4660	2005	3015	12300
BDE25050	2500	5000	4000	400	250	500	185	160	0-8	120	5650	2195	3125	17800
BDE25060	2500	6000	5000	400	250	500	22	160	0-8	120	6650	2295	3325	20500
BDE32032	3200	3200	2600	500	250	500	22	160	0-8	120	3780	2195	3375	14500
BDE32042	3200	4200	3400	500	250	500	22	160	0-8	120	4680	2195	3375	17200
BDE32050	3200	5000	4000	500	250	500	22	140	0-8	110	5830	2295	3690	23500
BDE32060	3200	6000	5000	500	250	500	22	140	0-8	110	6830	2295	3855	27800
BDE40032	4000	3200	2600	500	300	600	30	110	0-8	110	3460	2675	3600	25700
BDE40042	4000	4200	3400	500	300	600	30	110	0-8	110	4260	2675	3600	28500
BDE40050	4000	5000	4000	500	300	600	30	100	0-8	100	5260	2775	4700	34700
BDE40060	4000	6000	5000	500	300	600	30	100	0-8	100	6260	2775	5000	40000
BDE50032	5000	3200	2600	500	300	600	37	90	0-7	90	3480	2980	4600	33000
BDE50042	5000	4200	3400	500	300	600	37	90	0-7	90	4260	2980	4700	37000
BDE50050	5000	5000	4000	500	300	600	37	90	0-7	90	5260	2980	4900	42000
BDE50060	5000	6000	5000	500	300	600	37	90	0-7	90	6260	2980	5200	47000
BDE60042	6000	4200	3400	550	300	600	45	90	0-7	90	4260	3930	4950	46000
BDE60050	6000	5000	4000	550	300	600	45	90	0-7	90	5260	3930	5050	52000
BDE60060	6000	6000	5000	550	300	600	45	90	0-7	90	6260	3930	5200	59000

The machine can **simultaneously take control of two press brakes** of the same specifications **for synchronous operation**. Working in conjunction with a tandem or multi-machine synchronization device, it is suitable for bending long or ultra-long sheets, with an amazing 1+1>2 effect.

It has been applied to bend light poles, electric poles, urban construction automotive structures and highways.

These two machines can work together or independently as needed.

#### **CNC** tandem press brake for ultra long sheets



Bending force: 500-20000 KN

Bending length: 1500\*2-15000\*2 mm

#### Benefits:

- Fast bending
- Easy to bend ultra-long parts
- High bending precision
- Process and measurement automation

#### **Technical Parameters**

Parameters		Model						
Para	meters	BDE10032-10032 BDE10041-10041		BDE60060-60060				
Bending	force (kN)	1000	1000	6000				
Bending l	ength (mm)	3200*2	4100*2	6000*2				
Throat d	epth (mm)	400	400	600				
Width between columns (mm)		2600	3600	4800				
Opening	neight (mm)	480	480	670				
	Approach	180	180	90				
Sliding blocks speed (mm/s)	Bend	0-10	0-10	0-7				
( )-)	Return	160	160	90				
Overall Dimensi	ons (L*W*H, mm)	3700*1515*2630+3700*1515* 2630	4700*1930*2630+4700*1930* 2630	* 6200*2700*4750+6200*2700* 4750				
Machine	weight (kg)	7800*2	9100*2	52000*2				
Main engir	e power (kw)	7.5	7.5	45				

The **all-electric press brake** is a bending machine that uses a motor to drive the slide block on the workbench to move up and down, so as to bend metal sheets into the required shape. It features a compact structure, easy operation, high bending precision and efficiency.

This press is characterized by a **fast response**, **high transmission efficiency and bending precision** thanks to its screw drive.

#### Fully electric press brake



#### Bending force: 400 KN

Bending length: 1600 mm Max. bending speed: 30 mm/s Opening height: 480 mm

#### **Benefits:**

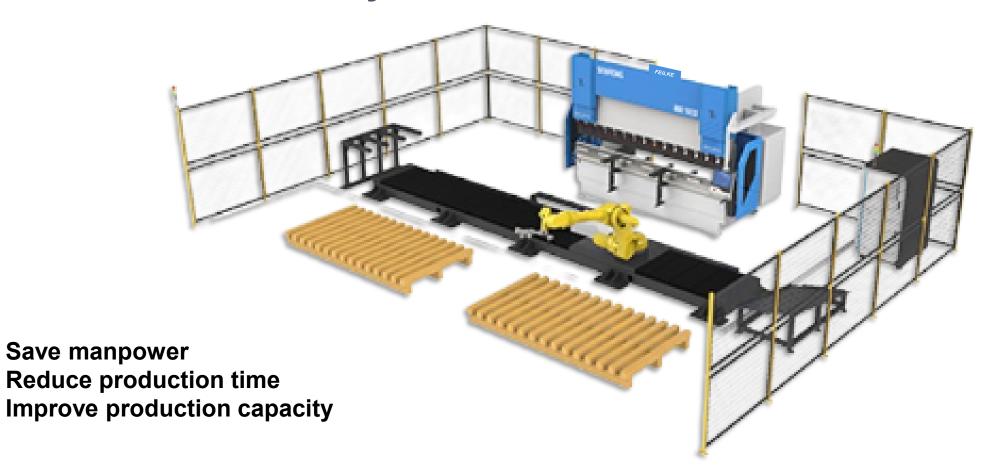
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- Fast folding and energy saving
- Low maintenance costs
- Eco-friendly and pollution-free
  - Easy to operate

X-axis achieving a max speed of **400mm/s** 



### Complete CNC bending system assisted by robot BDE 13032



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#### **Technical Parameters**

Davia		Model			
Paral	meters	BDE4016			
Bending	force (kN)	400			
Bending	ength (mm)	1600			
Throat d	epth (mm)	200			
Width betwee	n columns (mm)	1200			
Opening ł	neight (mm)	480			
	Approach	200			
Sliding blocks speed (mm/s)	Fold	0-30			
(, 3)	Return	200			
Overall Dimensi	ons (L*W*H <i>,</i> mm)	2100*2290*1730			
Machine	weight (kg)	4200			



## **Panel Bending Machines**



Panel bending machine with automatic tool changer

2500 [mm] Maximum bending length 1250 [mm] Maximum bending width 200 [mm] Maximum bending height 0.2 [S/bend] Maximum bending speed



Panel bending machine with pressure arm

3200 [mm] Maximum bending length 1250 [mm] Maximum bending width 200/300 [mm] Maximum bending height 0.2 [S/bend] Maximum bending speed



## CNC suction panel bending machine

1500 [mm] Max bending length1250 [mm] Max bending width170 [mm] Max bending height0.2 [S/bend] Max bending speed

## Automatic push-down loading and unloading panel bender BDC-2500



This machine offers automatic folding and requires virtually no manual intervention, as it bends at right, acute, and obtuse angles, and in complex shapes such as arches, dead edges, U-shapes, and closed edges. It also allows for vertical and horizontal bends, as well as level bends.



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## Applications

There are various industries that use bending technology. Some of the popular applications of CNC bending machines are for the following industries:

- Automotive: Manufacturing of body and chassis parts.
- Aerospace: Production of components for aircraft and satellites.
- **Construction**: Manufacturing of metal profiles and structures.
- **Energy**: Production of components for wind turbines, solar panels and construction of power towers.
- Electronics: Manufacturing of housings and components for electronic devices.
- **Decoration**: Manufacturing of furniture and ornamental metal elements.
- Machinery: Production of components for heavy machinery and industrial tools.













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