KREXON®

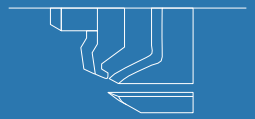


HOW TO SELECT YOUR PRESS BRAKE

www.krexon.com

Provide Global Customers with Metal Forming Automation Solutions

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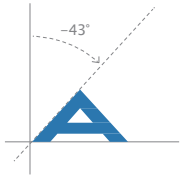
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About Bending

It is well-known that bending is indispensable to metal forming because it can press metal sheets into spare parts in various shapes as needed. The quality of bending technique exerts a direct impact on the size and shape of final products, and a profound influence on its whole work process.

Our business division has self-developed numerous core technologies and a large number of machines like flexible panel benders, fully automatic bending units and press brake. Featured by high efficiency, precision stability and mass production, it has accepted the customization of metal forming solutions from all customers at home and abroad.

Press Brake

BDE Series Press Brake, with rich but different models, is launched on the basis of our R&D innovation, cutting-edge bending technology and experience. Individual customization is also made possible.

Aimed at the increase of bending efficiency and precision, BDE is outfitted with high-strength machine tool, deflection compensation system, back gauge and CNC operating system as well as other modules to make your precision, stability, efficiency and security high. This powerful machine is regarded as an ideal helper to boost capacity and enable mass production.



Further optimization of finite element analysis
Well-distributed stress on frame

Electro-hydraulic servo synchronization
Take accurate control of slide blocks' precision

Mechanical deflection compensation
Maintain consistency in bending precision

High-precision back gauge system
Servo motor drive for high reliability

Model	BDE10032 Series		
Metal plate Bending thickness	Stainless steel 2.5mm	Carbon steel/galvanized sheet 3.5mm	AL sheet 5mm
Bending force	1000kN		
Main motor power	7.5kW		
Bending length	3200mm		
Throat depth	400mm (Custom-made)		
Machine weight	7800kg		

Notes: Bending thickness and length are closely related to the tonnage of press brake. The actual configurations shall prevail.

Specific Models (Electro-hydraulic Synchronization)

Mode	Bending force (kN)	Bending length (mm)	Width between columns (mm)	Throat depth (mm)	Oil cylinder stroke (mm)	Open height (mm)	Main motor power (kW)	Speed (mm/s)			Overall dimensions (mm)			Machine weight (kg)
								Approach	Bend	Return	Length	Width	Height	
BDE5016	500	1600	1200	250	160	460	5.5	180	0-10	160	2100	1770	2395	3400
BDE7025	700	2500	2100	350	160	460	7.5	180	0-10	160	3000	1765	2450	5500
BDE7032	700	3200	2600	350	160	460	7.5	180	0-10	160	3700	1765	2450	6000
BDE10025	1000	2500	2100	400	200	480	7.5	180	0-10	160	3000	1930	2630	6300
BDE10032	1000	3200	2600	400	200	480	7.5	180	0-10	160	3700	1930	2630	7800
BDE10042	1000	4200	3600	400	200	480	7.5	180	0-10	160	4700	1930	2630	8500
BDE13025	1300	2500	2100	400	200	480	11	180	0-10	160	3000	1930	2630	6400
BDE13032	1300	3200	2600	400	200	480	11	180	0-10	160	3700	1930	2630	8120
BDE13042	1300	4200	3600	400	200	480	11	180	0-10	160	4700	1930	2630	8800
BDE17025	1700	2500	2100	400	200	480	11	160	0-10	130	3000	2070	2680	7800
BDE17032	1700	3200	2600	400	200	480	11	160	0-10	130	3700	2070	2680	9300
BDE17042	1700	4200	3600	400	200	480	11	160	0-10	130	4700	2070	2730	9800
BDE17050	1700	5000	4200	400	200	480	11	160	0-10	130	5500	2120	2990	14800
BDE17060	1700	6000	5000	400	200	480	15	150	0-10	130	6500	2120	3050	18000
BDE20032	2000	3200	2600	400	200	480	15	140	0-10	120	3700	2120	2725	9350
BDE20042	2000	4200	3400	400	200	480	15	140	0-10	120	4700	2120	2760	11500
BDE20050	2000	5000	4200	400	200	480	15	140	0-10	110	5500	2150	3080	16500
BDE20060	2000	6000	5000	400	200	480	18.5	140	0-8	110	6500	2150	3290	18500

Specific Models (Electro-hydraulic Synchronization)

Mode	Bending force (kN)	Bending length (mm)	Width between columns (mm)	Throat depth (mm)	Oil cylinder stroke (mm)	Open height (mm)	Main motor power (kW)	Speed (mm/s)			Overall dimensions (mm)			Machine weight (kg)
								Approach	Bend	Return	Length	Width	Height	
BDE25032	2500	3200	2600	400	250	500	18.5	130	0-8	120	3700	2120	2800	10300
BDE25042	2500	4200	3400	400	250	500	18.5	130	0-8	120	4700	2120	2820	12500
BDE25050	2500	5000	4200	400	250	500	18.5	100	0-8	100	5500	2190	3350	17800
BDE25060	2500	6000	5000	400	250	500	22	100	0-8	100	6500	2190	3520	20500
BDE32032	3200	3200	2600	500	250	530	22	110	0-8	100	3700	2480	3200	14800
BDE32042	3200	4200	3400	500	250	530	22	110	0-8	100	4700	2480	3200	18000
BDE32050	3200	5000	4200	500	250	530	22	100	0-8	100	5500	2480	3525	21500
BDE32060	3200	6000	4800	500	250	530	22	100	0-8	100	6500	2535	3620	26500
BDE40032	4000	3200	2600	500	300	600	30	100	0-8	100	3700	2520	3300	18000
BDE40042	4000	4200	3400	500	300	600	30	100	0-8	100	4700	2520	3400	22000
BDE40050	4000	5000	4200	500	300	600	30	90	0-8	90	5200	2620	3800	31000
BDE40060	4000	6000	4800	500	300	600	30	90	0-7	90	6200	2640	3950	35000
BDE50042	5000	4200	3400	500	300	600	37	90	0-7	90	4400	2520	4050	32000
BDE50050	5000	5000	4200	500	300	600	37	90	0-7	90	5200	2520	4150	38000
BDE50060	5000	6000	4800	500	300	600	37	90	0-7	90	6200	2520	4250	43000
BDE60042	6000	4200	3400	600	300	670	45	90	0-7	90	4400	2700	4550	41000
BDE60050	6000	5000	4200	600	300	670	45	90	0-7	90	5200	2700	4650	45000
BDE60060	6000	6000	4800	600	300	670	45	90	0-7	90	6200	2700	4750	52000

Key Configurations

Name	Manufacturer	Notes
CNC system	DELEM	Netherlands
Hydraulic control system	REXROTH (Germany)	Electro-hydraulic servo-hydraulic valve bank Synchronous control assembly Hydraulic control assembly
Oil pump Main motor Magnetic railing rule	HYTEK INOVANCE SENTEK	China China Turkey
Drive parts	HIWIN (Taiwan, China)	Linear guideway Ball screw
Cylinder seal elements Electrical parts Sleeve-type tubing connector Deflection compensation system	SKF SCHNEIDER EMB HuangShi	Sweden France Germany China

Notes: These configurations have been verified as the best. If you want something to change, please note that irreversible influence may happen.

Core Components

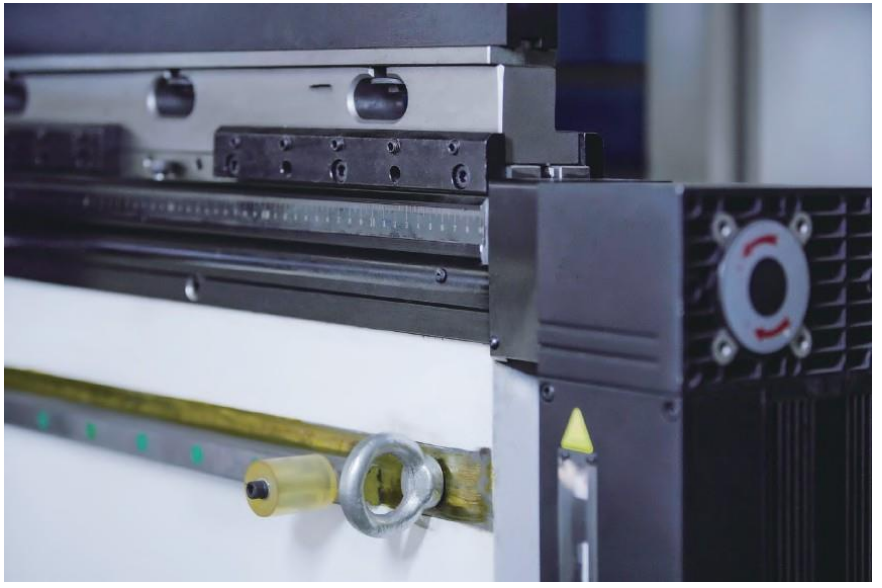
High-precision Servo Motor (Optional)

Servo motor, as primary power source of hydraulic pump, can help to save 40% energy, get efficiency gains of slide blocks by 70%, and reduce oil temperature by roughly 10-20℃.



High-precision Mechanical Compensation Device

High-precision wedging compensation device is used for fine compensation and bending effects under the control of CNC system.



Core Components

High-precision Back Gauge System

To ensure high positioning accuracy and long service life, X axis is driven by ball screw and linear guideway. Custom-made fingers have been further lengthened and widened. As for finger support frames installed on dual linear guideway, there are 4+1, 6+1 and 8+1 axis back gauges that can support your diversified demands.









4+1

4+1 Axis CNC Back Gauge

Adjust at will, high degree of automation. It can adapt to fingers' different demands on sheet bending position, depth, height and width.

6+1

6+1 Axis CNC Back Gauge

Based on actual workpiece, it will move fingers to right place automatically. With such precise positioning, the workpiece is ensured to satisfy your standards.

8+1

8+1 Axis CNC Back Gauge

One gauge positioning mechanism driven by servo motor will be added in horizontal, vertical and fore-and-aft direction respectively of current back gauge system. As thus, the workpiece can be well positioned rapidly by press brake when it is bent in multiple angles.

Electric Servo-driven Press Brake

Its main motor power is almost equal to load power. The mechanical transmission rate has reached up to 95%, minimizing total electric consumption when slide blocks return in no-load way. Requiring no hydraulic oil, the resulting pollution caused by oil and liquid wastes will be effectively avoided.

Both bending speed and bottom dead center are controlled by servo motor and lead screw. With quick response, its work efficiency has been nearly doubled. For hydraulic press brake, the rise of oil temperature is likely to lower repositioning accuracy, however, it will not happen to electric press brake because their slide blocks move up & down and are positioned by servo motor and lead screw. In view of no high heat effect, they will work at high precision for a long term.



Further optimization of finite element analysis
Well-distributed stress on frame

No hydraulic oil for eco-friendly effect
Fast response and high efficiency gains

Mechanical deflection compensation
Maintain consistency in bending precision

High-precision back gauge system
Servo motor drive for high reliability

Model	**BDE6020 Series**		
Machine precision	Running speed Bending/return speed: 200mm/s	Bending angle ±30′	Bending precision ±0.15mm
Bending force Bending length	600kN 2000mm		

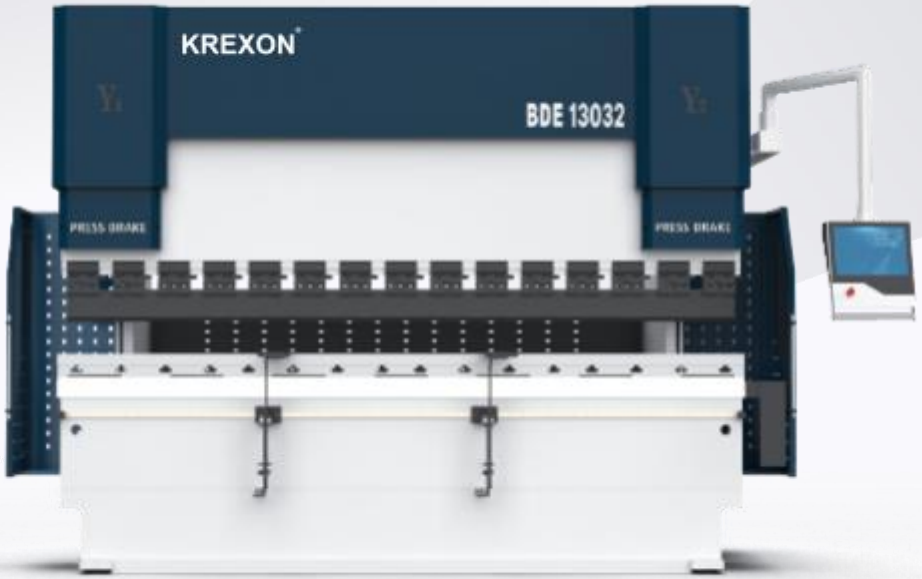
Notes: Bending thickness and length are closely related to the tonnage of press brake. The actual configurations shall prevail.

Specific Models (Servo-driven)

Model	Bending force (kN)	Bending length (mm)	Width between columns (mm)	Throat depth (mm)	Stroke (mm)	Open height (mm)	Main motor power (kW)	Speed (mm/s)			Overall dimensions (mm)			Machine weight (kg)
								Approach	Bend	Return	Length	Width	Height	
BDE2510	250	1000	800	250	180	430	15	200	0-30	200	1500	1450	2370	2000
BDE3512	350	1200	900	250	180	430	27	200	0-30	200	1700	1450	2370	2800
BDE4016	400	1600	1200	250	200	470	2*13	200	0-30	200	2100	1760	2380	3700
BDE6016	600	1600	1200	300	200	470	2*16	180	0-30	180	2100	1960	2560	3900
BDE6020	600	2000	1600	300	200	470	2*16	180	0-30	180	2500	1960	2560	4800
BDE8016	800	1600	1200	350	200	470	2*16	180	0-30	180	2100	1960	2560	4100
BDE8025	800	2500	2100	350	200	470	2*16	180	0-20	180	3000	1960	2560	5800
BDE10025	1000	2500	2100	400	200	490	2*27	160	0-20	160	3000	1980	2660	6500
BDE10032	1000	3200	2600	400	200	490	2*27	160	0-20	160	3700	1980	2660	8200
BDE13032	1300	3200	2600	400	200	480	2*37	200	0-30	200	3900	1980	2660	8600

Dual Servo Pump Press Brake

In addition to high-precision bending, this machine is also superior in energy conservation and low-noise operation. With meticulous design that aims to reduce hydraulic oil consumption, it is advantageous for bending at large stroke and super-high speed. Keeping oil temperature always stable, this press brake will protect its hydraulic system from damage, so as to extend its overall service life and realize non-stop bending around the clock.



Further optimization of finite element analysis
Well-distributed stress on frame

Electro-hydraulic servo synchronization
Take accurate control of slide blocks' precision

Mechanical deflection compensation
Maintain consistency in bending precision

High-precision back gauge system
Servo motor drive for high reliability

Model	BDE13032 Series		
Metal plate Bending thickness	Stainless steel 3mm	Carbon steel/galvanized sheet 4.5mm	AL sheet 7mm
Bending force Main motor power Bending length Throat depth	1300kN 7.5kW*2 3200mm 400mm (Custom-made)		

Notes: Bending thickness and length are closely related to the tonnage of press brake. The actual configurations shall prevail.

Tandem Press Brake

(Electric/Electro-hydraulic Synchronization)

Two or more dual-cylinder press brake of same specifications are combined together, which is outfitted with tandem or multi-machine synchronization device; Fitting to bend extra-long workpiece, this model has been widely applied in urban construction, street lamp post on the highway, electric pole and automotive frame. This tandem machine also allows independent work at a higher efficiency.



Further optimization of finite element analysis
Well-distributed stress on frame

Electro-hydraulic servo synchronization
Take accurate control of slide blocks' precision

Mechanical deflection compensation
Maintain consistency in bending precision

High-precision back gauge system
Servo motor drive for high reliability

Model	BDE60060-BDE60060 Series		
Metal plate Bending thickness	Stainless steel 7.5mm	Carbon steel/galvanized sheet 12mm	AL sheet 18mm
Bending force Main motor power Bending length Throat depth	12000kN 45kW 12000mm 600mm (Custom-made)		

Notes: Bending thickness and length are closely related to the tonnage of press brake. The actual configurations shall prevail.

Fully Automatic Bending Unit

Through PLC control system and software, Press brake can work with bending robots to grab, center, follow up and stack up sheets automatically. Thanks to its much less dependence on human labor, finished products will be highly consistent with each other at high efficiency. All customers may apply for custom-made solutions according to their actual demands. In this way, bending automation will come true to the great extent.



- Need much less labor force
- Minimize potential safety hazards
- Work around the clock
- High consistency among workpieces

Model	BDE10032ES Series	
Parameters	Unit	Concrete value
Robot axis	Number of axis	6+1
Robot load	kg	80/130/220/500
Max size of workpiece	mm	2500*1250/3000*1500/4000*1500/6000*1500
Min thickness of sheet	mm	0.8
Max weight of workpiece	kg	130
Max loading height of sheet	mm	400
Max stack-up height of finished products	mm	900

Notes: Bending thickness and length are closely related to the tonnage of press brake. The actual configurations shall prevail.

Heavy-tonnage Press Brake (BDE40060)

Krexon adopts high-rigidity structure, intelligent CNC system and customized solutions to help customers reduce costs and increase benefits while bending large workpieces, so as to seize high-end markets. It has been widely used in large equipment manufacturing such as shipbuilding, aerospace, heavy machinery, steel structure and energy equipment.



Further optimization of finite element analysis
Well-distributed stress on frame

Electro-hydraulic servo synchronization
Take accurate control of slide blocks' precision

Mechanical deflection compensation
Maintain consistency in bending precision

High-precision back gauge system
Servo motor drive for high reliability

Model	BDE40060 Series		
Metal plate Bending thickness	Stainless steel 5mm	Carbon steel/galvanized sheet 8mm	AL sheet 12mm
Bending force Main motor power Bending length Throat depth Machine weight	4000kN 30kW 6000mm 500mm (Custom-made) 35000kg		

Notes: Bending thickness and length are closely related to the tonnage of press brake. The actual configurations shall prevail.

Heavy-tonnage Press Brake (BDE60060)

Compared to small-tonnage press brakes, this large-tonnage machine is featured by high-strength body and high-rigidity welded frame, offering high resistance to deformation and keeping itself stable even under heavy loads. In addition, it is also superior to others in bending ability and precision, and of great importance to heavy industries.



Further optimization of finite element analysis
Well-distributed stress on frame

Electro-hydraulic servo synchronization
Take accurate control of slide blocks' precision

Mechanical deflection compensation
Maintain consistency in bending precision

High-precision back gauge system
Servo motor drive for high reliability

Model	BDE60060 Series		
Metal plate Bending thickness	Stainless steel 7.5mm	Carbon steel/galvanized sheet 12mm	AL sheet 18mm
Bending force Main motor power Bending length Throat depth Machine weight	6000kN 45kW 6000mm 600mm (Custom-made) 52000kg		

Notes: Bending thickness and length are closely related to the tonnage of press brake. The actual configurations shall prevail.

Heavy-tonnage Press Brake (BDE140080)

The press brake, with extreme bending ability, intelligent control technology, and industry-customized design, is ideally fit to bend ultra-large or super-thick parts, such as, heavy structural parts in shipbuilding and bridge. Users will achieve great breakthroughs in bending quality, speed and total costs.



Further optimization of finite element analysis
Well-distributed stress on frame

Electro-hydraulic servo synchronization
Take accurate control of slide blocks' precision

Mechanical deflection compensation
Maintain consistency in bending precision

High-precision back gauge system
Servo motor drive for high reliability

Model	BDE140080 Series		
Metal plate	Stainless steel	Carbon steel/galvanized sheet	AL sheet
Bending thickness	16mm	26mm	38mm
Bending force	14000kN		
Main motor power	55kW*2		
Bending length	8000mm		
Throat depth	1000mm (Custom-made)		
Machine weight	145000kg		

Notes: Bending thickness and length are closely related to the tonnage of press brake. The actual configurations shall prevail.

Torsion Bar Press Brake(BDE10032NC)

1. Strong Anti-Eccentric Load Capacity: The mechanical torsion bar can withstand significant unbalanced loads.

2. Low Maintenance Cost: Simple structure, mature repair technology, and relatively inexpensive spare parts.

3. High Stability and Reliability: Rugged mechanical design with strong anti-interference capability.Not sensitive to voltage fluctuations or oil cleanliness.



Standard CNC System: E21

- Axis Configuration: 2 axes (Y, X)
- Optional: Manual crowning axis (V)

Optional CNC System:TP10S, E310P

- Axis Configuration: 2 or 3 axes
- Optional: Motorized crowning axis (V)

Model	BDE10032NC Series		
Metal plate Bending thickness	Stainless steel 2.5mm	Carbon steel 3mm	Aluminum alloy 5mm
Bending force Main motor power Bending length Throat depth Machine weight	1000kN 7.5kW 3200mm 400mm (customized version) 6500kg		

Notes: Bending thickness and length are closely related to the tonnage of press brake. The actual configurations shall prevail.

Guillotine Shearing Machine(QC11Y-8x3200)



1. Shearing Angle Adjustment: Automatically or manually adjusted according to plate width and thickness to reduce distortion and deformation.

2. Automatic Blade Gap Adjustment: Automatically calculates and sets the optimal clearance based on plate thickness, ensuring high-quality shearing surfaces and extending blade life.

3. Ease of Operation: Four usable edges on the blade; once one edge is worn, simply rotate the blade to reuse, maximizing utilization.

4. High Shearing Precision: Vertical blade movement with guided rails ensures uniform clearance and constant shearing angle throughout the process.

Standard CNC System: E21S

Optional Configurations:

- Automatic front feeding table
- Pneumatic rear support device
- Automatic discharge system

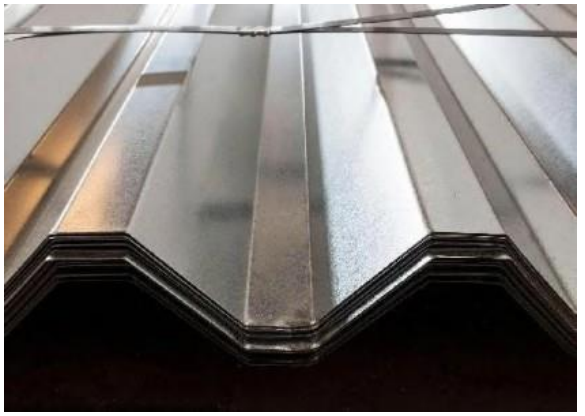
Model	**QC11Y-8x3200 Series**
Metal plate	Carbon steel
Shearing Thickness	8mm
Shearing Width	3200mm
Backgauge Stroke	800mm (customizable)
Shearing Angle	0.5°–1.5°
Throat Depth	100mm
Main Motor Power	7.5kW
Weight	6000kg

Bending Materials

Our Press Brake can bend stainless steel, carbon steel, galvanized sheet, fluoraluminum zinc sheet, copper and AL. (For actual bending effects, please see below)



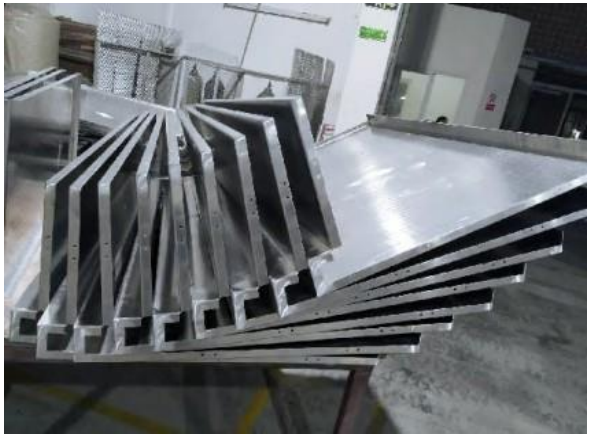
Metal cabinet



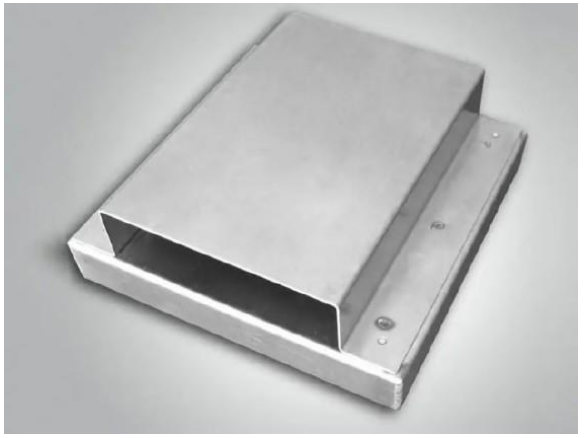
Stainless steel plate



Cold plate



Fluorine aluminum zinc sheet



AL sheet



Copper sheet

Special Treatment of Machine Tool



6m CNC floor-type milling & boring machine produced by Qiqihar No. 2 Machine Tool Co., Ltd.



Automatic robot-assisted welding



NEWAY 8m gantry CNC machining center



NEWAY 3m gantry CNC machining center



Large-sized shot blasting machine

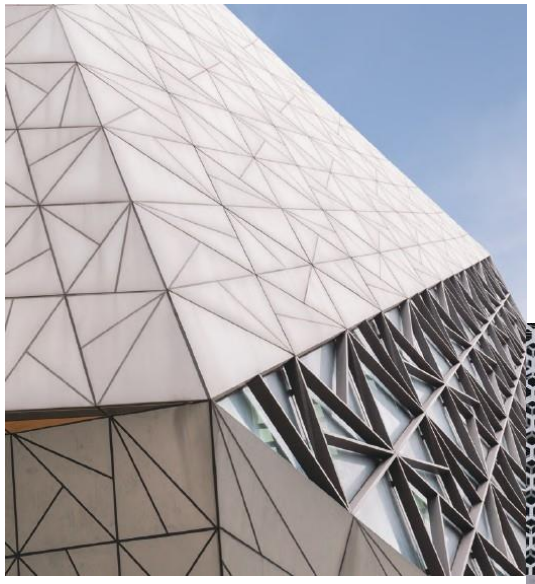


Gas truck style thermal treatment furnace



Small-sized vertical machining center

Applicable Industries



Decorative curtain wall

Kitchenware and sanitary ware



Chassis cabinet



AL product fabrication





Safety door



Medical instrument





Ventilating device

Automobile parts

Uphold the Spirit of Craftsmanship to

Make Our Future Smarter

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www.krexon.com

Note: The pictures and parameters in the album are for reference only, and the actual product shall prevail.