WH67Y SERIES
NC PRESS BRAKE
系列数显板料折弯机

该系列数显板料折弯机是我公司开发的新一代优化型高端液压板料折弯机，具有创新的设计、优质的配置和时尚的外观，刚性好、精度高和效率高。

通过电气、液压系统联合驱动，可实现滑块的点动、单次、连续操作。有快速下行、工作驱近、中停和保压等工况。

WH67Y Series NC press brake is a newly developed high-end hydraulic press brake, with innovative design, advanced configuration and fashion appearance, with good rigidity, high precision and high efficiency .
By co-work of electrical and hydraulic system, it could achieve ram inch, single & continuous ram movement. The ram of machine can move down quickly, approach, stop at any position and keep pressure etc.



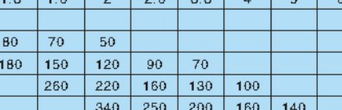
◆ 主要技术参数 MAIN SPECIFICATIONS

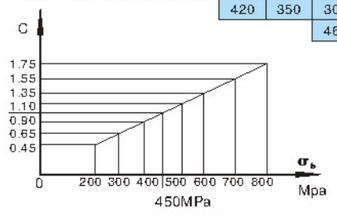
参数名称 Name / 规格型号 Type			WH67Y-63/2500 63/3200	WH67Y-100/3200 100/4000	WH67Y-160/3200 160/4000	WH67Y-200/3200 200/4000 200/5000	WH67Y-250/3200 250/4000 250/5000
公称力 Nominal pressure		(KN)	630	1000	1600	2000	2500
工作台长度 Length of table		(mm)	2500 3200	3200 4000	3200 4000	3200 4000 5000	3200 4000 5000
立柱间距 Distance between uprights		(mm)	2100 2700	2700 3300	2690 3300	2700 3300 4300	2700 3300 4300
喉口深度 Throat depth		(mm)	250	350	350	400	400
滑块行程 Ram stroke		(mm)	130	160	200	200	250
最大开启高度 Max. open height		(mm)	390	420	470	470	520
后挡料行程 Back gauge stroke		(mm)	500	600	600	600	600
驱近 Approaching speed		(mm/s)	100	100	100	100	100
工作 Working speed		(mm/s)	10	10	10	10	10
返程 Returning speed		(mm/s)	90	80	100	100	120
主电机功率 Main motor power		(KW)	5.5	7.5	11	18.5	18.5
外形尺寸 (L×W×H) (mm) Overall dimensions	长(L)	(mm)	2694 3264	3264 4064	3264 4064	3264 4064 5064	3264 4064 5064
	宽(W)	(mm)	1395	1920	2005	2380	2390
	高(H)	(mm)	2269	2500	2740	2780 2860 2980	3200
重量 Weight		(kg)	4900 6100	7600 8890	9900 11500	10500 12400 14300	15200 17150 19450

◆ 折弯压力换算表 PRESS FORCE TABLE

V：模具开口 Matrix opening width　B：最小弯边长度 Smallest leg length　R：内圆角半径 Inside radius　t：板料厚度 Sheet thickness　$\sigma_b \leq 450MPa$

t	6	8	10	12	16	20	25	30	35	40	45	50	60	70	80	100	125	160	200	V
	4	6	7	9	11	14	18	21	25	28	32	55	45	49	55	71	89	113	140	B
	1	1.3	1.6	2	2.6	3.3	4	5	6	6.5	7.5	8	10	12	13	16	21	27	33	R
0.5	2.7																			
1	100	80	70	50																
1.5		180	150	120	90	70														
2			260	220	160	130	100													
2.5				340	250	200	160	140												
3					370	290	230	200	170											
4							420	350	300	260	230									
5									460	410	360	330	270							
6										590	520	470	390	330						
8											920	830	690	590	520					
10												1300	1080	930	810	650				
12													1560	1340	1170	940	750			
15														2090	1830	1460	1170	910		
20															3250	2600	2080	1630	130	
25																4060	3250	2540	2030	
30																			2930	kN/m





WE67K SERIES SERIES ELECTRIC-HYDRAULIC PROPORTION PRESS BRAKE

系列电液比例数控板料折弯机

该系列机床为上动式结构，全液压数控控制，集机-电-液-数控技术为一体，采用国际上先进的电液比例同步控制系统。该机由安装在工作台上的光栅尺与数控系统、比例阀组成闭环控制系统，准确地控制滑块运行的速度与位置。

机床运行平稳，重复定位精度好，抗偏载能力强，制件精度高，维修方便。

The series machine is up driving structure, generally controlled by hydraulic and CNC , the machine is composed of mechanical, hydraulic as one unit, adopts advanced international electric-hydraulic proportional synchronous control system. The complete control system of machine is made up of encoder, CNC system and proportional valves, precisely controls ram speed and position.

The machine runs stably, repositioning performance, strong resistance of eccentric loading. high work-pieces-make precision and convenient maintain.



◆ 机床特点

- ◆ 采用整体焊接结构，主要部件经电退火炉消除内应力。
- ◆ 机架和滑块均用数控大型落地镗铣机床一次加工而成。
- ◆ 机床的开启高度和滑块速度高。
- ◆ 滑块具有快夹斜楔补偿装置，工作台具有自动液压挠度补偿机构。
- ◆ 配高档的铝合金整体后挡料，X轴、R轴、Z轴，具有高速，高精的特点。
- ◆ 产品的标配为DELEM DA56数控系统，，包含的轴数为3+1轴。
- ◆ 液压系统采用德国博世的电液比例系统。

◆ MACHINE FEATURES

◇ Machine adopt wholly welding structure, the main parts annealing treatment, releasing internal stress.

◇ The frame and ram are processed at one time completely by heavy duty boring and milling machine.

◇ Big daylight, high ram speed

◇ Ram with fast clamping for up tooling, hydraulic crowning device on working table

◇ Advanced aluminum alloy wholly back gauge, X axis, R axis, Z axis with high speed, high precision.

◇ Standard configuration DELEMDA56 from Holland.

◇ Hydraulic system adopts Germany BOSH electric- hydraulic proportional system.

◆ 有众多的选配件可供客户选择

- ◆ 数控随动前托料装置。
- ◆ 多数控轴选择，最多到16轴。
- ◆ 安全光幕保护装置。
- ◆ 折弯角度自动检测装置。
- ◆ 上模液压夹紧装置。
- ◆ 工作台机械挠度补偿装置。
- ◆ 特殊模具选择。

◆ OPTIONAL

◇ CNC controlling front supporter

◇ Multi-axises control, Max. 16 axises

◇ Laser safe protection

◇ Bending angle automatic detection

◇ Hydraulic clamp for upper tool

◇ Mechanical crowning on working table

◇ Special tools





◆ 数控系统选择 CHOOSING CNC SYSTEM

品牌\型号 Name\ Type	荷兰Delem DA-41	荷兰Delem DA-52	荷兰Delem DA-56	荷兰Delem DA-66T	瑞士CYBELEC DNC880S	意大利ESA/GV KV 530
用 途 Length oftable	折弯机(扭轴)	标配折弯机(电液)	标配折弯机(电液)	折弯机(电液)	折弯机(电液)	折弯机(电液)
控制轴数 axis	数显X、Y轴	数控Y1,Y2,X,V轴	数控Y1,Y2,X,R,V轴	数控Y1,Y2,X,R,Z,V轴	Y1,Y2,X,V 轴	Y1,Y2,X,R,V轴
系统参考图 system						

◆ 数控轴的功能

- Y（Y1、Y2）轴：滑块（挡块）同步控制轴，控制折弯深度和折弯角度。
- X（X1、X2）轴：后挡料梁前后行程控制轴，用来控制折弯翻边尺寸。
- R（R1、R2）轴：后挡料梁升降控制轴。
- Z（Z1、Z2）轴：后挡料爪左右移动控制轴。
- V轴：工作台自动液压挠度补偿。

◆ CNC AXIS FUNCTION

◇ Y（Y1、Y2）axis: ram synchronous control axis, controlling bending depth and angle control.
◇ X（X1、X2）axis: Control for back gauge front-back stroke, using controlling bending flange size
◇ R（R1、R2）axis: Control for back gauge beam up-down
◇ Z（Z1、Z2）axis: Controlled back gauge finger left-right movement.
◇ V axis: Working table auto-hydraulic crowning control

◆ 数控轴的组合 CONTROL AXIS

数控轴 Controlling axis	控制轴名称 Name	备 注
2+1轴 2+1 axis	Y1、Y2、V轴	杆塔专用折弯机
3+1轴 3+1 axis	Y1、Y2、X、V轴	基本配置（标准型）
4+1轴 4+1 axis	Y1、Y2、X、R、V轴	中档配置
6+1轴 6+1 axis	Y1、Y2、X、R、Z1、Z2、V轴	高档配置
8+1轴 8+1axis	Y1、Y2、X1、X2、R1、R2、Z1、Z2、V轴	顶极配置

◆ 机床精度 MACHINE PRECISION

数控轴 Controlling axis	定位精度（mm） Position precision	重复定位精度（mm） Repeat position precision	显示分辨率（mm） Display resolution	标配行程范围（mm） Standard stroke range
Y（Y1、Y2）	±0.03	±0.01	0.01	见折弯技术参数
X（X1、X2）	±0.025	±0.01	0.01	800
R（R1、R2）	±0.03	±0.02	0.01	100~150
Z（Z1、Z2）	±0.1	±0.05	0.01	1500（3200机床） 2000（4000机床）

◆ 机床后挡料速度

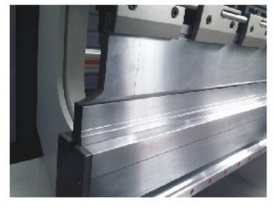
- X轴速度：150~200mm/min
- R轴速度：150~200mm/min
- Z轴速度：300~400mm/min(需配伺服电机)

◆ MACHINE SPEED

◇ X axis speed:150~200mm/min
◇ R axis speed:150~200mm/min
◇ Z axis speed:300~400mm/min(with servo motor)







◆ 主要技术参数 MAIN SPECIFICATIONS

参数名称 Name / 型号规格 Type	公称力 (KN) Nominal pressure	工作台长度 (mm) Length of table	立柱间距 (mm) Distance between uprights	喉口深度 (mm) Throat depth	滑块行程 (mm) Ram stroke	开启高度 (mm) Open height	工作台高度 (mm) working table height	工作台宽度 (mm) working table width	滑块速度 Ram speed 下行 Approaching (mm/s)	工作 Working (mm/s)	返回 Returning (mm/s)	电机功率 (KW) Main motor power	外形尺寸 (L×W×H) (cm) Overall dimensions	重量 (Kg) Weight
WE67K-40/2000	400	2000	1700	200	120	390	800	60/170	140	11	120	4	211×143×216	3020
WE67K-63/2500	630	2500	2100	250	150	420	820	60/180	130	10	110	5.5	256×167×231	4960
WE67K-100/3200	1000	3200	2700	400	200	470	900	60/205	120	10	100	7.5	328×209×262	8900
WE67K-100/4000	1000	4000	3300	400	200	470	900	60/205	120	10	100	7.5	406×209×262	9340
WE67K-160/3200	1600	3200	2700	400	200	470	900	245	120	9	95	11	330×221×266	10500
WE67K-160/4000	1600	4000	3300	400	200	470	900	245	120	9	95	11	406×221×266	12100
WE67K-200/3200	2000	3200	2700	400	200	470	950	270	110	9	95	15	336×221×274	12200
WE67K-200/4000	2000	4000	3300	400	200	470	950	270	110	9	95	15	408×221×274	14250
WE67K-250/3200	2500	3200	2700	400	250	520	1000	280	100	10	120	18.5	345×236×305	15660
WE67K-250/4000	2500	4000	3300	400	250	520	1000	280	100	10	120	18.5	425×236×311	17800
WE67K-250/5000	2500	5000	4100	400	250	520	1000	300	100	10	120	18.5	525×236×327	20800

WE67K SERIES CNC ELECTRIC-HYDRAULIC PROPORTION PRESS BRAKE

系列电液比例数控板料折弯机

该系列机床采用荷兰Delem公司DA系列或瑞士CYBELEC公司DNC系列数控折弯机专用系统与德国HOERBIGER公司或BOSCH公司电液比例伺服阀研制的高档次数控板料折弯机，系统运行稳定、制件精度高。

由数控系统、光栅尺、电液比例阀及阀用电子放大器组成的闭环式控制系统，精确的检测和控制了滑块与工作台的相对位置、同步精度，使滑块保持同步运行，保证了折弯深度和折弯角度。

The machine which features the stable run system and high working-pieces-make precision is the advanced press brake with DNC series of CYBELEC Co., Switzerland or DA series of Delem Co .,Holland and electric-hydraulic proportional servo valves of HOERBIGER or BOSCH from Germany.
The closed cycle type controlling system which is made up of CNC system, encoder electrical-hydraulic proportional for valves, electrical amplifier precisely measure and control the relative position of ram & working table and the synchronous precision. The system keeps the synchronous operation of ram, and guarantees the pressing depth & angle.



◆ 主要技术参数 MAIN SPECIFICATIONS

参数名称 Name / 型号规格 Type	公称力 (KN) Nominal pressure	工作台长度 (mm) Length of table	工作台宽度 (mm) Width of table	立柱间距(单机) (mm) Distance between uprights	喉口深度 (mm) Throat depth	滑块行程 (mm) Ram stroke	最大开启高度 (mm) Max. open height	滑块速度 Ram speed 驱近 (mm/s) Approaching	滑块速度 Ram speed 工作 (mm/s) Working	滑块速度 Ram speed 返程 (mm/s) Returning	主电机功率 (KW) Main motor power	主机外形尺寸 Overall dimensions 长 (mm) Length	主机外形尺寸 Overall dimensions 宽 (mm) Width	主机外形尺寸 Overall dimensions 地上高 (mm) Height	重量 (Kg) Weight
WE67K-300/3200	3000	3200	250	2600	400	250	520	60	7	55	22	3400	2150	3500	23000
WE67K-300/4000		4000		3200								4200			24000
WE67K-300/5000		5000		4000								5200			26000
WE67K-300/6000		6000		4800								6200			30000
WE67K-400/4000	4000	4000	250	3200	400	320	630	60	7	55	30	4400	2450	3655	30000
WE67K-400/5000		5000		4000								5400			35000
WE67K-400/6000		6000		4800								6400			40000
WE67K-400/7000		7000		5100								7400			45000
WE67K-500/4000	5000	4000	400	3200	400	350	630	60	7	55	37	4500	2700	4400	42000
WE67K-500/5000		5000		4000								5500			48000
WE67K-500/6000		6000		4800								6500			54000
WE67K-500/7000		7000		5100								7500			60000
WE67K-650/5000	6500	5000	400	4000	500	320	650	60	7	55	55	5500	3075	4500	57000
WE67K-650/6000		6000		4800								6500			63000
WE67K-650/7000		7000		5100								7500			69000
WE67K-650/8000		8000		6100								8500			75000
WE67K-800/6000	8000	6000	550	4800	600	400	920	80	8	80	55	6500	3400	5100	83000
WE67K-800/7000		7000		5100								7500			88000
WE67K-800/8000		8000		6100								8500			93000
WE67K-800/10000		10000		7800								10500			110000
WE67K-1000/6000	10000	6000	550	4800	600	400	920	70	8	80	2×37	6500	3500	6300	96000
WE67K-1000/7000		7000		5100								7500			105000
WE67K-1000/8000		8000		6100								8500			113000
WE67K-1000/10000		10000		7800								10500			133000
WE67K-1200/6000	12000	6000	550	4800	600	400	920	60	7	60	2×45	6500	3650	5550	113000
WE67K-1200/7000		7000		5100								7500			119000
WE67K-1200/8000		8000		6100								8500			127000
WE67K-1200/10000		10000		7800								10500			143000
WE67K-1600/7000	16000	7000	550	5100	800	400	1200	80	7	70	2×55	7500	4200	6150	156000
WE67K-1600/8000		8000		6100								8500			168000
WE67K-1600/10000		10000		7800								10500			181000
WE67K-1600/12000		12000		9100								12500			207000
WE67K-2000/8000	20000	8000	800	6200	800	400	1200	80	7	60	2×55	8500	4450	6400	200000
WE67K-2000/10000		10000		8000								10450			230000
WE67K-2500/13000	25000	13000	800	9500	1200	600	1900	70	6	55	2×75	13500	6500	7200	395000

2-WE67K SERIES CNC ELECTRIC-HYDRAULIC PROPORTION PRESS BRAKE IN TANDEM

系列电液比例双联动数控折弯机

该系列机床是用来对金属板料进行折弯的通用设备，配上不同的模具，可折制各种几何形状的工件。可广泛用于飞机、船舶、汽车、工程机械、电力灯杆和输送电等行业。机床为液压驱动、数控控制，可实现滑块快速下行、慢行下行、折弯保压、快速返程及中途停止，有点动、单次和连续三种操作方式，既可联机操作亦可由任意一台机床单独操作。

机架采用钢板焊接结构，刚性好、强度高。

机床采用数控（CNC）+电液比例同步阀+光栅尺组成了闭环伺服控制，所以，滑块运行平稳，重复定位精度高，抗偏载能力强，制件精度高，可实现自由折弯，折制不同角度的工件。

数控控制的工作台加凸装置，可获得精确的挠度补偿。

The series are universal machine used to press metal plate.With different dies, it could make various workpieces, which are widely used in aero-plane, ship-building, auto, engineering machinery, light pole, electricity pole, transformer and other relative fields.

The machine driven by hydraulically and controlled by CNC. It can move fast, slow down of ram, pressure steady while working, quick returning and intermediate stop functions. Also,it can be operated as inch,single &continuous ways. It could be operated either single or in tandem.

The frame is welded by steel plate with good rigidity and strength.The ram run smoothly.Reposition precision,anti-eccentric load,workpieces made precision are high because the use of circulation around servo control against CNC+electrical-hydraulic proportion valves+encoder.

The crowning device which is built into the table and controlled by CNC attain the precise deflection compensation.

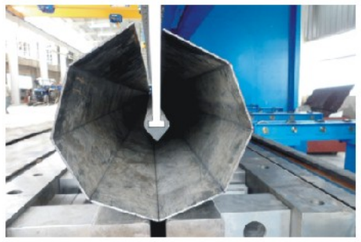


◆ 主要技术参数 MAIN SPECIFICATIONS

参数名称 Name / 规格型号 Type		2-WE67K-300/3200 300/4000 300/5000 300/6000	2-WE67K-400/4000 400/5000 400/6000 400/7000	2-WE67K-500/4000 500/5000 500/6000 500/7000	2-WE67K-650/5000 650/6000 650/7000 650/8000	2-WE67K-800/6000 800/7000 800/8000 800/10000	2-WE67K-1000/6000 1000/7000 1000/8000 1000/10000	2-WE67K-1200/6000 1200/7000 1200/8000 1200/10000	2-WE67K-1600/7000 1600/8000 1600/10000 1600/12000
公称力 Nominal pressure (KN)		2×3000	2×4000	2×5000	2×6500	2×8000	2×10000	2×12000	2×16000
工作台长度 Length of table (mm)		2×3200 2×4000 2×5000 2×6000	2×4000 2×5000 2×6000 2×7000	2×4000 2×5000 2×6000 2×7000	2×5000 2×6000 2×7000 2×8000	2×6000 2×7000 2×8000 2×10000	2×6000 2×7000 2×8000 2×10000	2×6000 2×7000 2×8000 2×10000	2×7000 2×8000 2×10000 2×12000
工作台宽度 Width of table (mm)		250	250	400	400	550	550	550	550
立柱间距(单机) Distance between uprights (mm)		2600 3200 4000 4800	3200 4000 4800 5100	3200 4000 4800 5100	4000 4800 5100 6100	4800 5100 6100 7800	4800 5100 6100 7800	4800 5100 6100 7800	5100 6100 7800 9100
喉口深度 Throat depth (mm)		350	400	1100	1100	1200	1600	1600	1600
滑块行程 Ram stroke (mm)		250	320	400	400	400	400	400	400
最大开启高度 Max.open height (mm)		520	630	1000	1000	1330	1330	1330	1330
滑块速度 Ram speed	驱近 (m/s) Approaching	60	60	60	60	60	60	60	60
	工作 (m/s) Working	7	7	7	7	7	6	6	6
	返程 (m/s) Returning	55	55	55	55	45	45	45	45
主电机功率 Main motor power (KW)		2×22	2×30	2×37	2×45	2×55	2×2×37	2×2×45	2×2×55
主机外形尺寸 Overall dimensions	长 (mm) Length	2×3400 2×4200 2×5200 2×6200	2×4400 2×5400 2×6400 2×7400	2×4500 2×5500 2×6500 2×7500	2×5500 2×6500 2×7500 2×8500	2×6500 2×7500 2×8500 2×10500	2×6500 2×7500 2×8500 2×10500	2×6500 2×7500 2×8500 2×10500	2×7500 2×8500 2×10500 2×12500
	宽 (mm) Width	2150	2450	3160	4000	4100	6000	6300	6400
	地上高 Height (mm)	3500	3655	4800	5000	5800	5780	6150	6350







TDY37K SERIES

PIPE FORMING PRESS
系列制管成形机

该系列机床由立柱、油缸、滑块、油箱、横梁、工作台、预凸装置、模具、液压比例伺服系统、电气数控系统组成。主机有3个数控轴，辅机有5个以上数控轴。辅机由纵向接料装置、侧挡料机、前后操作机、前后托料架、侧出料装置组成。数控系统采用荷兰或瑞士系统。工作台有预凸装置，能够较好地补偿工作台和滑块在不同作用力下的弹性变形总和，使工件无论在端部或中部都能保证折弯角度的一致性。

液压系统采用德国BOSCH公司的电液比例系统，同步精度高，抗偏载能力强，液压管路简洁，无渗漏。

主要用于将钢板逐步压折成钢管管坯的设备。

The machine consists of uprights, oil cylinder unit, ram, oil tank, beam, working table, crowning device, tools, hydraulic proportional servo system and electrical digital control system. The press has 3 axis for main machine and over 5 axis for auxiliary mechanism. The auxiliary mechanism includes longitudinal transporting device, side stopper, front and rear manipulators, front and rear supporters and side outlet. The CNC control is realized with Delem, Holland or Cybelec, Switzerland. The crowning device on working table can compensate the total elastic deformation of working table and ram under different forces to ensure the same bending angles both at ends or in the middle of workpiece.

The hydraulic system adopts electricalhydraulic proportional system of BOSCH, Germany, which has high accuracy in synchronism, and strong antieccentricloading capacity without leakage.

The main function of machine is forming open seam pipe.





TDY37K-2500/1120 ×13000



TDY37K-3600/1120 ×13000

◆ 主要技术参数 MAIN SPECIFICATIONS

参数名称 Name / 型号规格 Type		双 缸	双 缸	双 缸	五 缸	六 缸
		TDY37K-2500 1120×13000	TDY37K-3200 1120×13000	TDY37K-3600 1120×13000	TDY37K-5000 1730×14000	TDY37K-6600 1730×14000
公称压力	(KN)	25000	32000	36000	50000	66000
工作台长度	(mm)	13000	13000	13000	13000	13000
工作台宽度	(mm)	1300	1300	1300	1300	1300
侧喉口宽度	(mm)	1700	1700	1700	1700	1700
滑块行程	(mm)	600	600	600	600	600
最大开启高度	(mm)	2750	2750	2750	2750	2750
主油缸数量		2	2	2	5	6
驱近速度	(mm/s)	80	80	80	80	80
工作速度	(mm/s)	8	8	8	8	8
返程速度	(mm/s)	70	70	70	70	70
主电机功率	(kW)	300	360	360	600	720
外形尺寸	(mm)	14780×5100×(8290地上 +4190地下)	14774×5900×(8500地上 +5000地下)	16632×6200×(8475地上 +5400地下)	17000×15100×(9730地上 +4320地下)	17000×16100×(1080地上 +5200地下)
重 量	(kg)	480000	640000	680000	950000	1050000

WS67K-100/3200 SERVO PUMP CONTROLLED CNC PRESS BRAKE

伺服泵控数控折弯机

该机为新型节能环保型伺服泵控数控折弯机，结构新颖、外形美观，具有很好的刚性和强度，配有荷兰DELEM公司的DA66T数控系统，折弯机专用安全保护装置，高档铝合金型材后挡料，机械挠度补偿装置。由伺服电机控制油泵，整个系统高效稳定，节能环保，配有全自动机器人柔性加工单元。

The machine is newly developed model with environment-friendly servo pump controlling CNC press brake with tight structure, good appearance, good rigidity and strength. Installed Holland DELEM DA 66T CNC system, with laser safe protection, Installed advanced aluminum alloy wholly back gauge and the mechanical crowning mechanism.Oil pump is controlled by servo motor, the wholly system is high efficiency and stability, fuel saving environment, machine with manipulator.



CUSTOMIZED PRESS BRAKE

特殊用途折弯机

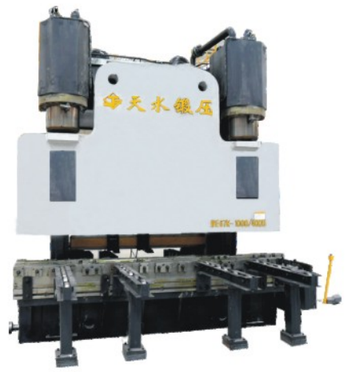
可根据用户需求设计制造加大喉口型、电力杆塔型、特殊模具型、汽车或工程机械吊臂型、特高比压型和多立柱型等折弯机。

According to customer special requirement, we can manufacture big throat depth type, light pole and electricity power pole, special toolings type, auto-industry or the beam engineering machinery type, higher loading capacity and multi-uprights type press brake.









* 产品改进,样本技术参数如有变动,不再另行通知。
Description and specification given in this catalogue are subject to modification without notice