



华鲁锻压 岱岳机床
HUALU DUANYA DAIYUE JICHUANG

泰安华鲁锻压机床有限公司

TAIAN HUALU METALFORMING MACHINE TOOL CO.,LTD.

Company Introduce

Taian Hualu Metalforming Machine Tool Co., Ltd. is established in 1968 which has 760 employees, and there are more than 460 sets of machining equipments. It is the key enterprise for producing the products such as the CNC plate bending machine, plate straightening machine, plate shearing machine, press brake, cut ot length lines. We have the right do the import and export business ourselves.

The company is the council member of CMTBA (China Machine Tool & Tool Builder' Association), State High and New Tech Enterprises, own the Provincial Enterprises Technology Center. We have the strong technology force and prominent innovation capacity. In recent years, our forcal pionts are the CNC, large-scale, energy-saving and environmental technology products. We devoted to the rolling of the shipyard-plate, the large plate taper workpiece rolling, and the high-intensity plate levelling, the explosion composite plate levelling and workpiece levelling research. We have achieved fruitful technological innovation achievements on the basis of the introduction, and absorption of Germany advanced technology. We have obtained more than 40 national patents, some of which have applied for the international patents; Our products has filled the national blank, reached the advanced international standards. They can completely replaced the imported products, and we have beared many national torch projects and key national project of new products; A variety of products have won the provincial "Science and Technology Advancement Prize", "Provincial Outstanding New Products Prize", etc. Relying on the independent intellectual property technology, the enterprise has promoted the core-competitiveness of products, products technology level and the domestic share of market are in the leading position, not only sold in domestic market, and many products are exported to Asia, Africa and European countries such as the Russia, India, and get high recognition in the international.

The company adhere to "quality first, customers first". The customer satisfaction is our target, creating the world famous brand as the goal, we have passed through the ISO9001 Quality System. Our "Daiyue" brand trademark is awarded "Shandong famous brand", the enterprise has been granted plural-honors for "2008 TOP Ten Shandong Machinery Industry brand of the independent innovation enterprise", "Provincial Respecting Contract and Obeying Reliability Enterprise".

The company continue the management concept of "Integrity, fairness, truth-seeking, innovative", warmly welcome new and old friends at home and abroad to visit!





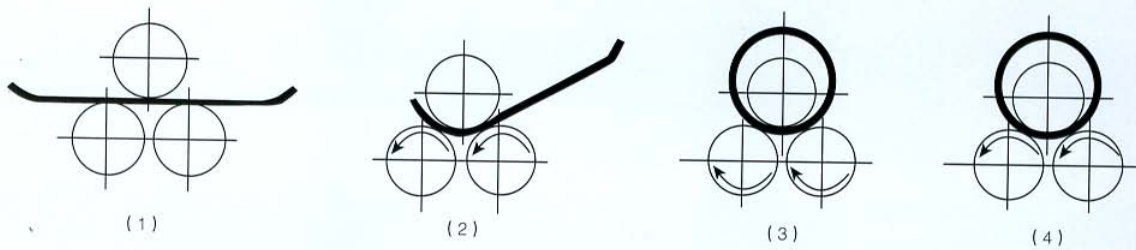
华鲁锻压 岱岳机床
HUALU DUANYA DAIYUE JICHUANG

WB11 系列

机械对称式三辊卷板机

WB11 series mechanical symmetric three-roll bending machine

WB11 series mechanical symmetric up three-roll bending machines is the common equipments specialized in the bending and forming of metal plates. The two lower rolls of the machine are active rolls. They are driven by motors and special reducers. The up roll is a passive roll, which could press plate by motor reducer, worm-gears and screw pair. The turn end is turned manually to take out the work-pieces. All operations of the machine are centrally controlled via electrics. It is easily to be operated and maintained.



Main technical parameters of WB11 series mechanical three-roll bending machine

产品规格 Production specification	最大板宽 (mm) Maximum plate width (mm)	最大板厚 (mm) Maximum plate thickness (mm)	最大板宽板厚时最小卷筒直径 (mm) Minimum roller diameter at maximum plate width and thickness (mm)	板材屈服极限 (MPa) Yield limit of plate (MPa)	上辊直径 (mm) Diameter of upper roller (mm)	下辊直径 (mm) Diameter of lower roller (mm)	下辊中心距 (mm) Lower roller central distance (mm)	卷板速度 (m/min) Plate rolling speed (m/ min)	主电机功率 (KW) Power of main motor (KW)
3 × 1500	1500	3	300	≤ 245	150	130	200	5.7	7.5
5 × 2000	2000	5	500	≤ 245	190	170	250	5.5	11
5 × 2500	2500	5	500	≤ 245	190	170	250	5.5	11
6 × 2000	2000	6	500	≤ 245	190	170	250	5.5	11
6 × 2500	2500	6	500	≤ 245	190	170	250	5.5	11
8 × 2000	2000	8	500	≤ 245	190	170	250	5.5	11
8 × 2500	2500	8	600	≤ 245	240	200	280	5	11
12 × 2000	2000	12	600	≤ 245	240	200	280	5	11
12 × 2500	2500	12	650	≤ 245	260	210	320	5	15
12 × 3200	3200	12	750	≤ 245	280	240	360	5	22
16 × 2000	2000	16	650	≤ 245	260	210	320	5	15
16 × 2500	2500	16	750	≤ 245	280	240	360	5	22
16 × 3200	3200	16	850	≤ 245	340	280	440	5	30
20 × 2000	2000	20	750	≤ 245	280	240	360	5	22
20 × 2500	2500	20	850	≤ 245	340	280	440	5	30
25 × 2000	2000	25	850	≤ 245	340	280	440	5	30
25 × 2500	2500	25	950	≤ 245	380	320	490	5	37



WB12 系列

液压四辊卷板机

WB12 series CNC four-roll rolling machine

WB12K(N) series CNC four-roll bending machine can complete the end pre-bending and shaping of plate without adjusting head, and the rest straight edge is least in all kinds of machines. For this series of machine, upper roll is the driving roll which is driven by driving force, the lower roll and side roll are all driven rolls which rotate by means of the friction between steel plate and each roll, the position of the upper roll is fixed, the lower roll and side rolls rise and fall by means of the driving of parallel connection oil cylinders at the two ends, the overturn and resetting of reverse head at the discharging end of upper roll are driven by oil cylinder. To raise the rigidity of lower roll, support roll is installed in the center of lower roll, which rises and falls by the driving of oil cylinder, this series machine has the following obvious characteristics:



控制柜 Control cabinet



液压泵站 Hydraulic pump station

1. The bearing of working roll adopts self-aligning rolling bearing for rolling mill, which has small friction, small power loss, long service life and low energy consumption.

2. Synchronous up-down all of two ends of lower roll and side roll, amount of inclination of taper rolling are all controlled by CNC system automatically; its control precision is high.

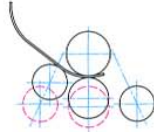
3. CNC system is developed by ourselves and keeps ahead at home, and has the function of screen display, rolling calculating, program control, process parameter storage, software protection, failure alarm, man-machine conversation and so on.



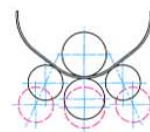
进料
Material feeding



预弯一端
Pre-bending of one end



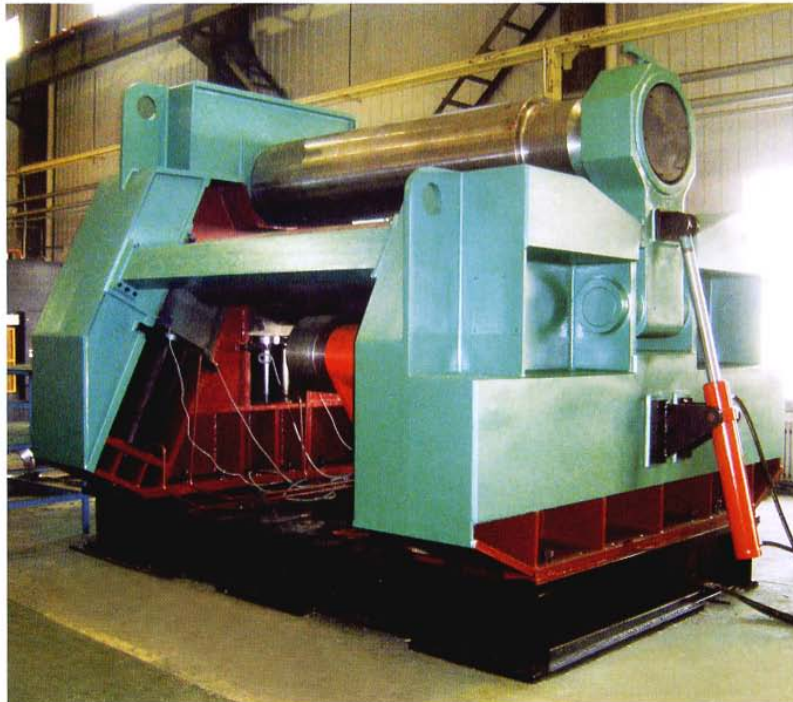
预弯另一端
Pre-bending of another end



初弯
Primary bending



终弯
Final bending



WB12N-70×2500 液压四辊卷板机用于长沙新沙锅炉厂
Hydraulic 4-roll bending machine used for Changsha Xinsha Boiler Factory.

Main technical parameters of WB12 series CNC four-roll bending machine

产品规格 Production specification	最大板宽 (mm) Maximum plate width (mm)	最大板厚 (mm) Maximum plate thickness (mm)	预弯板厚 (mm) Pre-rolling plate thickness (mm)	最大板宽板厚时最小卷筒直径 (mm) Minimum roller diameter at maximum plate width and thickness (mm)	板材屈服极限 (MPa) Yield limit of plate (MPa)	卷板速度 (m/min) Plate rolling speed (m/min)	主电机功率 (KW) Power of main motor (KW)
12 × 2500	2500	12	8	700	≤ 245	5	15
16 × 2500	2500	16	12	800	≤ 245	5	22
16 × 3200	3200	16	12	1000	≤ 245	5	30
20 × 2500	2500	20	16	1000	≤ 245	5	30
25 × 2000	2000	25	20	1000	≤ 245	5	30
25 × 2500	2500	25	20	1000	≤ 245	4.5	30
25 × 3200	3200	25	20	1200	≤ 245	4.5	37
32 × 2500	2500	32	25	1200	≤ 245	4.5	37
32 × 3200	3200	32	25	1600	≤ 245	4.5	45
36 × 2000	2000	36	28	1200	≤ 245	4.5	37
36 × 2500	2500	36	28	1600	≤ 245	4.5	45
40 × 2000	2000	40	35	1600	≤ 245	4.5	45
40 × 2500	2500	40	36	2000	≤ 245	4	55
50 × 2500	2500	50	45	2000	≤ 245	4	55
50 × 3200	3200	50	45	2000	≤ 245	4	55
60 × 2500	2500	60	50	2000	≤ 245	4	55
60 × 3500	3500	60	50	2000	≤ 245	3.5	75
70 × 2500	2500	70	60	2500	≤ 245	3.5	75
70 × 3000	3000	70	60	2500	≤ 245	3.5	75
80 × 3200	3200	80	70	2800	≤ 245	3.5	90
90 × 4000	4000	90	80	2800	≤ 245	3	90
100 × 3200	3200	100	90	3000	≤ 245	3	90
120 × 4000	4000	120	100	3000	≤ 245	3	110
140 × 3200	3200	140	120	3500	≤ 245	3	132
160 × 3000	3000	160	140	4000	≤ 245	3	132

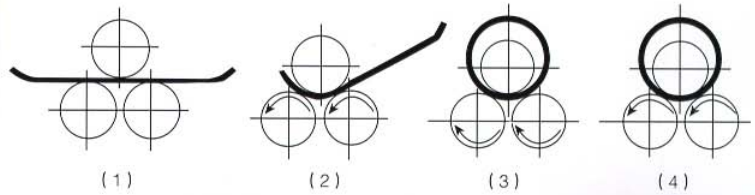


WD11 系列

节能环保型对称式三辊卷板机 WD11 series
energy-saving & environment protection three-roll bending machine

WD11 series energy-saving and environment protection three-roll machines is a new product with proprietary intellectual property right on the basis of absorption of European technologies. It has three national proprietary technologies: a kind of dual drive bending machine (ZL200610005692.4), lifter for bending & lapping machine (ZL2005100098888.8) and stander assembling bending machine (ZL200610006589.1). The series of machines has novel structure and superior performance. Features of the machine are as follows:

1. The two bottom rolls are driven via separate power system, eliminating the mechanical interfering. And, the bearings of the rolls are self-aligning mill-roll bearings, with low energy consumption. The required power from the main motor is small, energy saving and environmental protecting.
2. The worm & gear, screw & rod for up roll are all immersed in the lubricant oil with excellent lubrication, great bearing capacity and long life.
3. The stander is assembling type, which is convenient for installation and maintenance.
4. The turning of turn end is mechanical driven, convenient and reliable.
5. The single end of the up roll can be lifted separately for the bending of conicylinder via the clutch.



WD11 系列节能环保型对称式三辊卷板机主要技术参数 Main technical parameters of WD11 series energy-saving and environment protection three-roll bending machine

产品规格 Production specification	最大板宽 (mm) Maximum plate width (mm)	最大板厚 (mm) Maximum plate thickness (mm)	最大板宽板厚时最小卷筒直径 (mm) Minimum roller diameter at maximum plate width and thickness (mm)	板材屈服极限 (MPa) Yield limit of plate (MPa)	卷板速度 (m/min) Plate rolling speed (m/min)	主电机功率 (KW) Power of main motor (KW)
6 × 7200	7200	6	850	≤ 245	5.5	3.0 × 2
6 × 9200	9200	6	850	≤ 245	5.5	4 × 2
8 × 6000	6000	8	850	≤ 245	5.5	3.0 × 2
8 × 7200	7200	8	850	≤ 245	5.5	4 × 2
10 × 6000	6000	10	850	≤ 245	5.5	4 × 2
10 × 8000	8000	10	850	≤ 245	5.5	5 × 2
20 × 2000	2000	20	800	≤ 245	5.5	2.2 × 2
20 × 2500	2500	20	850	≤ 245	5	4 × 2
25 × 2000	2000	25	850	≤ 245	5	4 × 2
25 × 2500	2500	25	1000	≤ 245	5	5.5 × 2
25 × 3000	3000	25	1000	≤ 245	5	5.5 × 2
30 × 3000	3000	30	1500	≤ 245	5	7.5 × 2
32 × 2000	2000	32	1000	≤ 245	5	5.5 × 2
32 × 2500	2500	32	1500	≤ 245	5	5.5 × 2
36 × 2000	2000	36	1200	≤ 245	5	7.5 × 2
36 × 2500	2500	36	1500	≤ 245	5	7.5 × 2
40 × 2000	2000	40	1500	≤ 245	5	7.5 × 2
40 × 2500	2500	40	1600	≤ 245	5	11 × 2
40 × 3000	3000	40	2000	≤ 245	5	11 × 2
50 × 2500	2500	50	2000	≤ 245	5	11 × 2
50 × 3000	3000	50	2000	≤ 245	5	20 × 2
60 × 2500	2500	60	2000	≤ 245	5	20 × 2
60 × 3000	3000	60	2000	≤ 245	4.5	20 × 2
70 × 2500	2500	70	2200	≤ 245	4.5	22 × 2



WE11 系列 船用三辊卷板机

WE11 series of CNC shipyard plate bending machine

WE11K (N) series of CNC machines are designed and developed under the instruction of German experts. It owns several Chinese creations and its technical level is equal to the advanced international ones. It has the following three proprietary intellectual property rights: dual drive three-roll bending machine (ZL200420096162.1), a kind of siamesed hydro cylinder (ZL200510053247.8) and a kind of marine bending machine (ZL200520129155.1). The series of bending machines have novel structure and superior performance. Features of the machine are as follows:

1. The optimal model in China, manifesting the advanced European technology.
2. Adopting the proprietary technology that the two bottom rolls are driven via separate power system, eliminating the mechanical interfering. And, the bearings of the rolls are self-aligning mill-roll bearings, with low energy consumption. The required power of the main motor is small, energy saving and environmental protecting.
3. Adopt the proprietary technology that setting several groups of mechanic-height-adjusting backup rolls between the up-roll and the up-beam. It could reduce the deflection of up beam and the bed during the process of plate bending, which increase bending accuracy.
4. The synchro-lift of both ends of the up roll is controlled by CNC system with high control precision.
5. With relative moulds, plate bending & pressure forming can be processed to meet various demand of customers.



WE11N-35×13500 船用卷板机用于越南下龙船厂
Marine rolling machine is used in Vietnam
Halong Ship Building Enterprise



操作台
Operation station



WEF11K-35 × 21000 CNC shipyard plate bending machine for Jinhaiwan Shipyard Co., Ltd., zhongji Shipyard Co., Ltd.

WE11 系列船用三辊卷板机主要技术参数 Main technical parameters of WE11 series of CNC marine bending machine

产品规格 Production specification	最大板宽 (mm) Maximum plate width (mm)	最大板厚 (mm) Maximum plate thickness (mm)	板材屈服极限 (MPa) Yield limit of plate (MPa)	卷板速度 (m/min) Plate rolling speed (m/min)	主电机功率 (KW) Power of main motor (KW)
20 × 8500	8500	20	≤ 345	4	15 × 2
20 × 12500	12500	20	≤ 345	4	15 × 2
25 × 8500	8500	25	≤ 345	4	15 × 2
25 × 12500	12500	25	≤ 345	4	20 × 2
25 × 16000	16000	25	≤ 345	4	33 × 2
30 × 12500	12500	30	≤ 345	4	33 × 2
30 × 13500	13500	30	≤ 345	4	33 × 2
30 × 17000	17000	30	≤ 345	4	40 × 2
30 × 18000	18000	30	≤ 345	4	40 × 2
32 × 16500	16500	32	≤ 345	4	40 × 2
35 × 13500	13500	35	≤ 345	4	40 × 2
35 × 21000	21000	35	≤ 345	4	50 × 2



WS11 系列 液压水平下调式三辊卷板机 WS11 series of CNC bending machine with bottom rollers adjustment

WS11K (N) series of CNC machines is a kind of new product, which is designed and developed under the instruction of German experts. It owns novel structure, superior performance and its technical level is equal to the advanced international ones. The series of machines adopt several national patent technologies with absolute proprietary intellectual property rights. Beside the common characteristics, that is, one feeding of metal plate materials realizes the pre-bending & bending via the horizontal moving of the two bottom rolls, it also has following features:

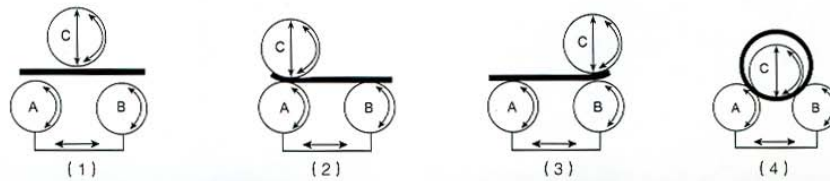
1. Adopt the proprietary technology of Dual Drive Three-roll rolling Machine (ZL200420096162.1). The two bottom rolls are driven via separate power system, eliminating the mechanical interfering, vibration and abrasion from the sliding frictions. And, the bearings of the rolls are self-aligning mill-roll bearings, with low energy consumption and noises. The required power from the main motor is small, energy saving and environmental protecting.

2. Adopt the proprietary technologies of Hydraulic Three-roll bending Machine (ZL200420001177.5), a kind of siamesed hydro cylinder (ZL200540053274.8) and a kind of cone rolling (ZL200520129154.7). The turn end is set beneath the bed, compacting the whole machine structure and reducing the volume of the turn end. It not only reduces the space requirement and power for the turning of the end, but also enables the bending of small cones and dish plats, expanding its applications.

3. Adopt the proprietary technology of horizontal moving (ZL200520007511.2). So the structure of the horizontal shift unit is compact and brings concise positioning & convenient maintenances.

4. The synchro-lift of both ends of the up roll, the amount of the gradient for the cone-shape and the horizontal moving are all automatically controlled via numerical control system with high control precision.

5. The CNC system is self-developed and advance in China. It has the functions of screen displaying, bending calculation, program controlling, parameter storing, software protection, default alarming and human-machine dialog, etc.



Main technical parameters of WS11 series of CNC three-roll bending machine

产品规格 Production specification	最大板宽 (mm) Maximum plate width (mm)	最大板厚 (mm) Maximum plate thickness (mm)	预弯板厚 (mm) Pre-rolling plate thickness (mm)	最大板宽板厚时最小卷筒 直径 (mm) Minimum roller diameter at maximum plate width and thickness (mm)	板材屈服极限 (MPa) Yield limit of plate (MPa)	卷板速度 (m/min) Plate rolling speed (m/min)	主电机功率 (KW) Power of main motor (KW)
12 × 2500	2500	12	6	700	≤ 245	4	3 × 2
16 × 2500	2500	16	8	700	≤ 245	4	4 × 2
16 × 3000	3000	16	8	700	≤ 245	4	4 × 2
16 × 6000	6000	16	12	800	≤ 245	4	7.5 × 2
20 × 2500	2500	20	12	800	≤ 245	4	4 × 2
25 × 2500	2500	25	15	800	≤ 245	4	5.5 × 2
25 × 3000	3000	25	15	800	≤ 245	4	5.5 × 2
30 × 2500	2500	30	20	1200	≤ 245	4	7.5 × 2
30 × 3000	3000	30	20	1200	≤ 245	4	7.5 × 2
30 × 4500	4500	30	20	1200	≤ 245	4	7.5 × 2
35 × 2500	2500	35	25	1400	≤ 245	4	11 × 2
35 × 3000	3000	35	25	1400	≤ 245	4	11 × 2
35 × 3500	3500	35	25	1400	≤ 245	4	11 × 2
40 × 2000	2000	40	30	1600	≤ 245	4	11 × 2
40 × 2500	2500	40	30	1600	≤ 245	4	11 × 2
40 × 3000	3000	40	30	1600	≤ 245	4	11 × 2
40 × 4000	4000	40	30	1800	≤ 245	4	15 × 2
50 × 2000	2000	50	40	1800	≤ 245	4	20 × 2
50 × 2500	2500	50	40	1800	≤ 245	4	20 × 2
50 × 3000	3000	50	40	1800	≤ 245	4	20 × 2
60 × 2500	2500	60	50	2000	≤ 245	4	20 × 2
60 × 3000	3000	60	50	2200	≤ 245	4	20 × 2
70 × 2000	2000	70	60	2000	≤ 245	4	20 × 2
70 × 2500	2500	70	60	2400	≤ 245	4	22 × 2
70 × 3000	3000	70	60	2400	≤ 245	4	22 × 2
80 × 2500	2500	80	70	2600	≤ 245	4	22 × 2
80 × 3000	3000	80	70	2600	≤ 245	4	33 × 2
90 × 2500	2500	90	80	3200	≤ 245	4	33 × 2
90 × 3000	3000	90	80	3200	≤ 245	4	33 × 2
100 × 2500	2500	100	90	3500	≤ 245	4	33 × 2
100 × 3000	3000	100	90	3500	≤ 245	4	40 × 2
100 × 4000	4000	100	90	3500	≤ 245	4	40 × 2
110 × 3000	3000	110	100	3800	≤ 245	4	40 × 2
120 × 3000	3000	120	105	3800	≤ 245	3.5	50 × 2
120 × 4000	4000	120	105	3800	≤ 245	3.5	50 × 2
140 × 3000	3000	140	125	3800	≤ 245	3.5	63 × 2
140 × 4000	4000	140	125	4000	≤ 245	3.5	63 × 2
150 × 3000	3000	150	135	4000	≤ 245	3.5	63 × 2
150 × 3800	3800	150	135	4000	≤ 245	3.5	75 × 2
160 × 4000	4000	160	145	4000	≤ 245	3.5	75 × 2
170 × 3200	3200	170	155	4500	≤ 245	3.5	75 × 2
180 × 3200	3200	180	165	4500	≤ 245	3.5	75 × 2
190 × 3200	3200	190	175	4500	≤ 245	3.5	100 × 2
200 × 4000	4000	200	185	5000	≤ 245	3.5	100 × 2



华鲁锻压 岱岳机床
HUALU DUANYA DAIYUE JICHUANG

QC12Y(K)

系列液压（数控）摆式剪板机

Series hydraulic swing type plate cutting machine



Features of QC12Y (K) series hydraulic swing type plate cutting machine

- All welded steel structure has enough strength and rigidity.
- Tool rest makes swing type movement and guide rail system doesn't need
- Advanced inserting type logic valve integration system is used, which has compact structure and flexible and reliable operation.
- Tool rest and pressing leg act in order, firstly press and then cut material, pressing force increases with cutting force and operation is safe.
- Has quick and accurate tool blade clearance adjustment device.
- Mobile back gauge device has quick adjustment, can be made fine adjustment manually and has digital display.
- Has light alignment device for the convenience of marking line and cutting.
- Has counting location function and travel adjustment function and has high production efficiency.
- Has multiple operation functions such as inching and single time and is convenient for adjustment, operation and maintenance.
- Equipped with the security defend bar.
- The CNC cutting machine controls back gauge X-axis, CNC system is DAC-310 or E-20.



刀片间隙调整装置

Tool blade clearance adjustment device

QC12Y (K) 系列液压 (数控) 摆式剪板机主要技术参数

Main technical parameters of QC12Y (K) series hydraulic (digital controlled) swing type plate cutting machine

产品规格 Production specification	剪切最大板厚 (mm) Maximum cutting plate thickness (mm)	剪切 最大板宽 (mm) Maximum cutting plate width (mm)	喉口深度 (mm) Throat depth (mm)	板材强度极限 (MPa) Plate strength limit (MPa)	剪切角 (度) Cutting angle (degree)	行程次数 (次/分) Travel times (times/minute)	后挡料最大距离 (mm) Back gauge maximum distance (mm)	主电机功率 (KW) Power of main motor (KW)
4 × 6000	4	6000	300	≤ 450	1.5	7	1000	11
6 × 4000	6	4000	100	≤ 450	1.5	15	1000	15
6 × 6000	6	6000	100	≤ 450	1.5	7	1000	15
8 × 3200	8	3200	300	≤ 450	1.5	15	600	15
8 × 4000	8	4000	300	≤ 450	1.5	12	1000	15
8 × 5000	8	5000	300	≤ 450	1.5	12	1000	15
10 × 2500	10	2500	300	≤ 450	1.5	15	700	15
10 × 6000	10	6000	100	≤ 450	1.5	4	1000	22
12 × 2500	12	2500	300	≤ 450	1.5	10	700	22
12 × 3200	12	3200	300	≤ 450	1.5	9	1000	22
12 × 4000	12	4000	300	≤ 450	1.5	9	1000	22
12 × 8000	12	8000	100	≤ 450	1.5	4	1000	30
16 × 2500	16	2500	300	≤ 450	2	8	750	22
16 × 3200	16	3200	300	≤ 450	2	8	1000	22
16 × 4000	16	4000	300	≤ 450	2	6	1000	22
16 × 8000	16	8000	100	≤ 450	2	4	1000	37
20 × 2500	20	2500	300	≤ 450	2.5	6	750	30
20 × 3200	20	3200	300	≤ 450	2.5	5	1000	30
20 × 4000	20	4000	300	≤ 450	2.5	4	1000	37
25 × 2500	25	2500	300	≤ 450	3	5	750	37
25 × 3200	25	3200	300	≤ 450	3	4	1000	45
30 × 2500	30	2500	无	≤ 450	3.5	4	1000	55
30 × 3200	30	3200	无	≤ 450	3.5	4	1000	55
40 × 2500	40	2500	无	≤ 450	3.5	3	1000	75
40 × 3200	40	3200	无	≤ 450	3.5	3	1000	2×55
50 × 2500	50	2500	无	≤ 450	4	3	1000	2×55



QC11Y(K)

系列液压（数控）闸式剪板机
Series hydraulic CNC guillotine machine



Features of QC11Y (K) series hydraulic CNC guillotion machine

- All welded steel structure has enough strength and rigidity.
- Series connection of oil cylinders has good synchronous performance, cutting angle can be adjusted and cutting quality is high.
- It uses rolling clamp of guide rail that not only can ensure stable operation of tool rest, but also can realize quick adjustment of tool blade clearance.
- Tool rest travel can be stepless adjustment so as to improve production efficiency.
- Back gauge moves quickly and locates accurately.
- The CNC plate-cutting machine can control back gauge X-axis, can also control X-axis and several auxiliary functions, CNC system is DAC-350, or DAC-310 E-20.



DELEM DAC-310 剪板机数控系统

LCD 显示, 128x64 像素

100 个程序行

DELEM DAC-310 plate cutting machine CNC system

LCD display with 128x64 pels

100 program lines



DELEM DAC-350 剪板机数控系统

LCD 显示, 240x64 像素

1000 个程序行

DELEM DAC-350 plate cutting machine CNC system

LCD display with 240x64 pels

1,000 program lines

Main technical parameters of QC11Y (K) series hydraulic CNC guillotine machine

产品规格 Production specification	剪切最大板厚 (mm) Maximum cutting plate thickness (mm)	剪切 最大板宽 (mm) Maximum cutting plate width (mm)	喉口深度 (mm) Throat depth (mm)	板材强度极限 (MPa) Plate strength limit (MPa)	剪切角 (度) Cutting angle (degree)	行程次数 (次/分) Travel times (times/minute)	后挡料最大距离 (mm) Back gauge maximum distance (mm)	主电机功率 (KW) Power of main motor (KW)
4 × 2000	4	2000	100	≤ 450	0.5-2	18	600	5.5
4 × 2500	4	2500	100	≤ 450	0.5-2	15	600	5.5
4 × 3200	4	3200	100	≤ 450	0.5-2	15	600	5.5
4 × 4000	4	4000	100	≤ 450	0.5-2	12	600	5.5
6 × 2500	6	2500	100	≤ 450	0.5-2	13	600	7.5
6 × 3200	6	3200	100	≤ 450	0.5-2	10	600	7.5
6 × 4000	6	4000	100	≤ 450	0.5-2	10	600	7.5
8 × 2500	8	2500	100	≤ 450	0.5-2	12	600	11
8 × 3200	8	3200	100	≤ 450	0.5-2	10	600	11
8 × 4000	8	4000	100	≤ 450	0.5-2	10	600	11
12 × 2500	12	2500	100	≤ 450	0.5-2	12	800	15
12 × 3200	12	3200	100	≤ 450	0.5-2	10	800	22
12 × 4000	12	4000	100	≤ 450	0.5-2	8	800	22
16 × 2500	16	2500	100	≤ 450	0.5-2.5	12	1000	22
16 × 4000	16	4000	100	≤ 450	0.5-2.5	8	1000	30
16 × 6000	16	6000	100	≤ 450	0.5-2.5	6	1000	30
20 × 2500	20	2500	100	≤ 450	0.5-3	10	1000	30
20 × 3200	20	3200	100	≤ 450	0.5-3	8	1000	30
20 × 4000	20	4000	100	≤ 450	0.5-3	6	1000	37
25 × 2500	25	2500	100	≤ 450	0.5-3.5	8	1000	37



QB11 系列剪板机 Series plate cutting machine



● The machine has simple structure, convenient operation and cheap price, and is widely used for cutting metal plate in various industries such as metallurgy, light industry, automobile, motor electric appliance, instrument and hardware.

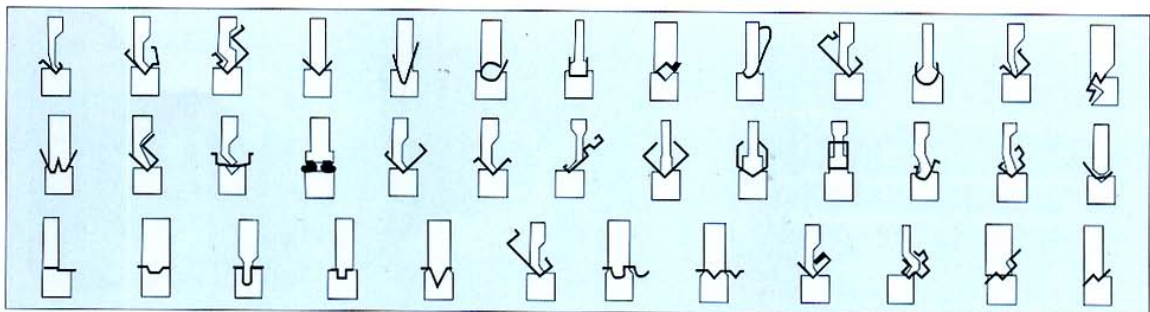
Main technical parameters of QB11 series mechanic plate cutting machine

产品规格 Production specification	剪切最大板厚 (mm) Maximum cutting plate thickness (mm)	剪切最大板宽 (mm) Maximum cutting plate width (mm)	板材强度极限 (MPa) Plate strength limit (MPa)	剪切角(度) Cutting angle (degree)	行程次数 (次/分) Travel times (times/minute)	满负荷剪切次数 (次/分) Number of stroke at full load (times/minute)	后挡料最大距离 (mm) Back gauge maximum distance (mm)	主电机功率 (KW) Power of main motor (KW)
3 × 1500	3	1500	≤ 450	2	57	20	350	3
4 × 2000	4	2000	≤ 450	1.5	50	18	500	4
4 × 2500	4	2500	≤ 450	1.5	50	18	500	4
6 × 2000	6	2000	≤ 450	1.5	50	28	500	7.5
6 × 2500	6	2500	≤ 450	2	50	22	500	11
8 × 2000	8	2000	≤ 450	2	50	28	500	11
8 × 2500	8	2500	≤ 450	2	50	18	500	11

Various mould figures

选型序号 Type election serial number	图形 Figure	选型序号 Type election serial number	图形 Figure	选型序号 Type election serial number	图形 Figure	选型序号 Type election serial number	图形 Figure	选型序号 Type election serial number	图形 Figure	选型序号 Type election serial number	图形 Figure
P1		P6		P11		P16		P21		P26	
P2		P7		P12		P17		P22		P27	
P3		P8		P13		P18		P23		P28	
P4		P9		P14		P19		P24		P29	
P5		P10		P15		P20		P25		P30	
D1		D4		D7		D10		D13		D16	
D2		D5		D8		D11		D14		D17	
D3		D6		D9		D12		D15		D18	

Processing work piece figure



WC67Y(K) 系列折弯机 Series press brake



WC67Y series CNC hydraulic press brake characteristics

- All welded steel structure, sufficient strength and rigidity.
- The hydraulic drive type, which is forced synchronization by torsion shaft.
- Mobile back gauge can be rapidly adjusted, can be fine-tuned manually, digital displayed.
- The lower limit position of the slider can be mobile adjustment, can be fine-tuned manually, digital displayed.
- The upper die is equipped with tilted wedge-deflection compensation institution.
- Have the inching, single-operating functions, debugging, maintenance and use are convenient.

WC67K series CNC hydraulic press brake characteristics

- Equipped with DA-41 or E-20 CNC system
- CNC 2 axis, slider stroke Y axis and back gauge X axis.
- Other is the same WC67Y series press brake features.

Main technical parameters of WC67Y (K) series hydraulic (CNC) plate press brake

型号 Type	公称力 (KN) Nominal force(KN)	工作台长度 (mm) Workbench length (mm)	立柱间距 (mm) Distance between columns (mm)	喉口深度 (mm) Throat depth (mm)	滑块行程 (mm) Sliding block travel (mm)	行程调节量 (mm) Travel adjustment quantity (mm)	最大开 启高度 (mm) Maximum opening height (mm)	速度 (mm/s) Speed (mm/s)			主电机功 率 (KW) Power of main motor (KW)
								快下 Quick drop	工进 Feed	回程 Return	
30/1500	300	1500	1380	170	80	40	165	80	8	70	3
45/2500	450	2500	2050	200	100	50	300	80	8	70	5.5
63/2500	630	2500	2100	250	100	80	360	80	8	70	5.5
100/2500	1000	2500	2100	320	150	120	400	70	8	70	7.5
100/3200	1000	3200	2600	320	150	120	400	70	8	70	7.5
100/4000	1000	4000	3300	320	150	120	400	70	8	70	7.5
160/3200	1600	3200	2600	320	200	150	475	70	8	70	11
160/4000	1600	4000	3300	320	200	150	475	70	8	70	11
160/5000	1600	5000	4100	320	200	150	475	70	8	70	11
160/6000	1600	6000	5100	320	200	150	475	70	8	70	11



WD67X(K) 系列折弯机
Series press brake



WD67X series CNC hydraulic press brake characteristics

- All welded steel structure has enough strength and rigidity.
- The hydraulic drive structure is forced synchronization by torsion shaft.
- Two oil cylinders are installed on left and right wallboards and have rational stress, the location of the lower dead point of the upper slider is by oil cylinder internal block which has compact structure.
- Lower limit position of upper slider journey and back gauge journey location are digital displayed, easy to operate, accurate to locate.
- Tilting wedge flexibility compensation mechanism is equipped with on the upper die.
- It has multiple operation functions such as inching and single time and is convenient for adjustment, operation and maintenance.

WD67K series CNC hydraulic press brake characteristics

- Equipped with DA-41 or E-20 CNC system.
- CNC 2 axes: slide stroke Y axis and back gauge X axis.
- Other is same as WD67X series press brake features.

Main technical parameters of WD67X (K) series digital display (CNC) hydraulic plate press brake

型号 Type	公称力 (KN) Nominal force (KN)	工作台长度 (mm) Workbench length (mm)	立柱间距离 (mm) Distance between columns (mm)	喉口深度 (mm) Throat depth (mm)	滑块行程 (mm) Sliding block travel (mm)	行程调节量 (mm) Travel adjustment quantity	最大开启高度 (mm) Maximum opening height (mm)	速度 (mm/s) Speed (mm/s)			主电机功率 (KW) Power of main motor (KW)
								快下 Quick drop	工进 Feed	回程 Return	
45/2500	450	2500	2050	200	100	50	300	80	8	70	5.5
63/2500	630	2500	2100	320	100	60	360	80	8	70	5.5
100/2500	1000	2500	2100	320	150	120	400	70	8	70	7.5
100/3200	1000	3200	2600	320	150	120	400	70	8	70	7.5
100/4000	1000	4000	3300	320	150	120	400	70	8	70	7.5
160/3200	1600	3200	2600	320	200	150	475	80	8	70	11
160/4000	1600	4000	3300	320	200	150	475	80	8	70	11
160/5000	1600	5000	4100	320	200	150	475	80	8	70	11
160/6000	1600	6000	5100	320	200	150	475	80	8	70	11
200/3200	2000	3200	2600	320	200	150	475	70	8	70	15
200/4000	2000	4000	3300	320	200	150	475	70	8	70	15
200/5000	2000	5000	4100	320	200	150	475	70	8	70	15
200/6000	2000	6000	5100	320	200	150	475	70	8	70	15
250/3200	2500	3200	2600	400	250	200	520	60	8	70	15
250/4000	2500	4000	3300	400	250	200	520	60	8	70	15
250/5000	2500	5000	4100	400	250	200	520	60	8	70	15
250/6000	2500	6000	5100	400	250	200	520	60	8	70	15
300/3200	3000	3200	2600	400	250	200	520	60	8	60	22
300/4000	3000	4000	3300	400	250	200	520	60	8	60	22
300/5000	3000	5000	4100	400	250	200	520	60	8	60	22
300/6000	3000	6000	5100	400	250	200	520	60	8	60	22

WS67K 系列数控折弯机 Series CNC press brake

The machine is advanced and beautiful, two oil cylinders are fixed on the left-right walls which is reasonable in stress, high in rigidity. Adopt the electro-hydraulic servo synchronization type to ensure good synchronous of cylinders. It is strong in anti-deflection-load capacity, easier in debugging. Two oil-cylinders journey Y1 and Y2 are single controlled, the slider displacement is checked with the grating ruler to ensure high synchronous precision.

CNC system is DA Series CNC system of Netherlands Delem company (DA-65W, DA-56, DA-53).

The worktable deflection compensation (V axis) is the hydraulic cylinder automatic compensation or tilted wedge deflection automatic compensation, the CNC system controls the cylinders pressure or tilted wedge moving distance to realize that the middle table-board protruding to compensate the deflection. The compensation is accurate.

The hydraulic valve block is BOSCH-REXROTH dedicated valve block matched with the CNC, the cylinders sealing elements are the imported products, grating ruler is Germany HEIDENHAIN products, main electrical components are imported components.

The back gauge standard match is the X axis, driven by AC servo motor, the transmission components are ball screw pairs and linear guide pair.



荷兰 DELEM DA-65W 数控系统 10.4" 真彩显示
Holland DELEM DA-65W CNC system 10.4" true colorful display



荷兰 DELEM DA-56 数控系统 10.4" 真彩显示
Holland DELEM DA-56 CNC system 10.4" true colorful display



Main technical parameters of WS67K series CNC hydraulic press brake

型号 Type	公称力 (KN) Nominal force (KN)	工作台长度 (mm) Workbench length (mm)	立柱间距 (mm) Distance between columns (mm)	喉口深度 (mm) Throat depth (mm)	滑块行程 (mm) Sliding block travel (mm)	最大开启 高度(mm) Maximum opening height (mm)	速度 (mm/s) Speed (mm/s)			主电机功率 (KW) Power of main motor (KW)
							快下 Quick drop	工进 Feed	回程 Return	
100/2500	1000	2500	2100	320	150	400	70	8	70	7.5
100/3200	1000	3200	2600	320	150	400	70	8	70	7.5
100/4000	1000	4000	3300	320	150	400	70	8	70	7.5
160/3200	1600	3200	2600	360	200	475	70	8	70	11
160/4000	1600	4000	3300	360	200	475	70	8	70	11
200/3200	2000	3200	2600	360	200	475	70	8	70	15
200/4000	2000	4000	3300	360	200	475	70	8	70	15
200/6000	2000	6000	5100	360	200	475	70	8	70	15
250/3200	2500	3200	2600	400	250	520	70	8	70	15
250/4000	2500	4000	3300	400	250	520	70	8	70	15
250/6000	2500	6000	5100	400	250	520	70	8	70	15
300/3200	3000	3200	2600	400	250	520	70	8	70	22
300/4000	3000	4000	3300	400	250	520	70	8	70	22
300/6000	3000	6000	5100	400	250	520	70	8	70	22
400/4000	4000	4000	3300	400	300	560	70	8	70	30
400/6000	4000	6000	5100	400	300	560	70	8	70	30
500/4000	5000	4000	3300	400	300	600	70	7	70	37
500/6000	5000	6000	5100	400	300	600	70	7	70	37
600/6000	6000	6000	5000	400	320	640	70	7	70	45
600/8000	6000	8000	6200	400	320	640	70	7	70	45
800/6000	8000	6000	5000	500	400	800	70	7	70	2×37
800/8000	8000	8000	6200	500	400	800	70	7	70	2×37
1000/8000	10000	8000	6200	600	400	860	70	7	60	2×45
1000/10000	10000	10000	7800	600	400	860	70	7	60	2×45
1200/8000	12000	8000	6000	600	400	920	70	7	60	2×45



华鲁锻压 岱岳机床
HUALU DUANYA DAIYUE JICHUANG

WD43 系列

矫平机

WD43 series plate straightening machine



WD43M-40×2000 ($\delta \leq 690\text{MPa}$) 矫平机用于中煤北京煤矿机械有限公司
Plate straightening machine for China Coal Beijing Coal Mining Machinery Co., Ltd.

With the cooperation of Germany experts, WD43 series plate straightening machine has been designed and developed specially to handle the levelling difficulty and low levelling quality of high strength steel plate, explosive clad plate, parts and components. Currently, it is the best machine type. It consists of many single beams which the up rolls are installed separately on them and every single beam has a transfer device and digital display device, and the relative position of every single beam can be adjusted freely, so, in addition to paralleling and inclining functions, the top rolls of this machine can form V shape arrangement which is convenient for high strength steel plate levelling, especially for those large scale high strength steel plate levelling. It can meet the requirement of high precision and steady performance of ordinary steel plate and high strength steel plate, and it can solve the problem that ordinary machine can not flatten high strength steel plate.

This series machine has adopted five national patents: ZL200510085799, ZL200420001176.0, ZL200420001178.X, ZL200520007514.6 and ZL200520019234.7.



WD43M-60×3000 ($\delta \leq 345\text{MPa}$) 矫平机用于浙江盈都网架钢构有限公司
Plate straightening machine for Zhejiang Yingdu Group Co., Ltd.





操作台
Operation station

Main technical parameters of WD43 series plate straightening machine

产品规格 Production specification	最大矫平板宽 (mm) Maximum levelling plate width (mm)	最大矫平板厚 (mm) Maximum levelling plate thickness (mm)	最小矫平板厚 (mm) Minimum levelling plate thickness (mm)	板材屈服极限 (MPa) Yield limit of plate (MPa)	工作辊辊数(n) Quantity of working roller (n)	矫平速度 (m/min) Levelling speed (m/min)	主电机功率 (kW) Power of main motor (kW)
16×2000	2000	16	6	≤ 1500	9	7	2×55
20×2000	2000	20	6	≤ 700	9	7	2×33
20×2500	2500	20	5	≤ 245	7	9	2×15
25×2000	2000	25	6	≤ 245	7	9	2×15
25×2500	2500	25	6	≤ 245	7	9	2×15
30×1800	1800	30	8	≤ 360	9	7	2×22
30×2500	2500	30	8	≤ 360	7	6.5	2×26
40×2000	2000	40	12	≤ 690	7	6.5	2×40
40×2500	2500	40	12	≤ 360	7	6.5	2×40
40×3000	3000	40	12	≤ 245	7	7	2×40
40×4000	4000	40	12	≤ 345	9	7	2×75
50×2500	2500	50	12	≤ 1100	7	7	2×90
50×3500	3500	50	12	≤ 360	7	7	2×52
60×3000	3000	60	12	≤ 345	7	7	2×52
80×2200	2200	80	30	≤ 245	7	7	2×30
100×3000	3000	100	30	≤ 245	7	7	2×75



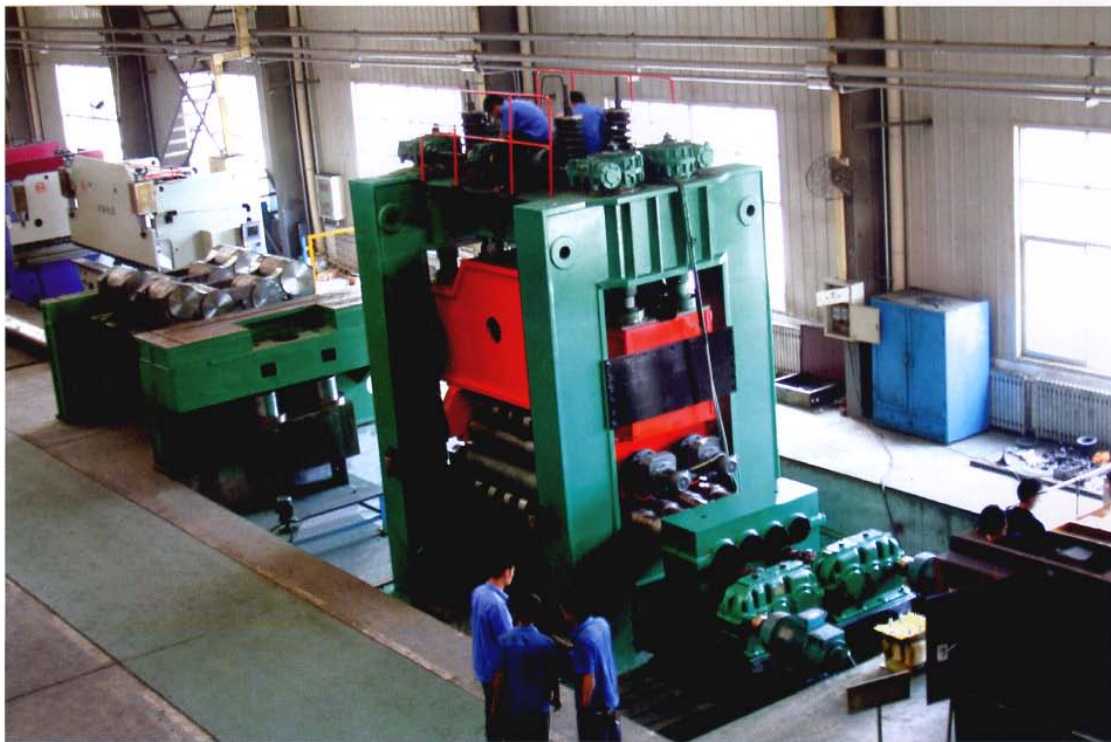
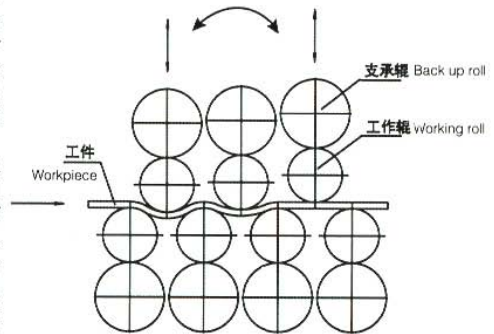
WC43 系列

矫平机

WC43 series plate straightening machine

WC43 series machine is integral lifting of top rolls. All top rolls are fixed on the movable crossbeam, and are lifted along with the movable crossbeam which is driven by two lifting mechanisms; each mechanism includes a motor, two worm reduction gears and screw nut pairs. The two mechanisms can work at the same time, or separately, that is to say the feeding opening and discharge opening of the working roll can be equal or unequal to make it easy for traveling and levelling of opening sheet metal; the opening height at the feeding and discharge ends of the top roll are displayed accurately through two displacement sensors on the display screen.

The characteristic of this machine is that it has adopted two national patent technologies: group driving plate levelling machine ZL200420001176.0 and axial decelerating motor leveler ZL200520007514.6. Each top roll is driven by a set of decelerating motor, and every two lower rolls are driven by a set of dynamic system, so that the line speed of each roll is consistent with sheet metal speed of the contacting part, so it solved the problems existing in traditional transmission system, such as friction between sheet metal and roll surface, and mechanical interference problem in the system. And, the working roll adopts self-aligning roller bearings which have little friction resistance, so this series has such advantages as high levelling quality, little noise, low energy consumption and environmental protection compared with traditional levelers.



WC43M-40 × 2500 (δ ≤ 345MPa) 矫平机用于江西新余新钢有限责任公司
Straightening machine used for Jiangxi Xinyu New Steel Co., Ltd.



WC43-32 × 1300 ($\delta \leq 360\text{MPa}$) 矫平机出口俄罗斯
Plate straightening machine exported to Russia

Main technical parameters of WC43 series plate straightening machine

产品规格 Production specification	最大矫平板宽 (mm) Maximum levelling plate width (mm)	最大矫平板厚 (mm) Maximum levelling plate thickness (mm)	最小矫平板厚 (mm) Minimum levelling plate thickness (mm)	板材屈服极限 (MPa) Yield limit of plate (MPa)	工作辊辊数 (n) Quantity of working roller (n)	矫平速度 (m/min) Leveling speed (m/min)	主电机功率 (kW) Power of main motor (kW)
20 × 1200	1200	20	5	≤ 245	11	8.5	2 × 15
20 × 2000	2000	20	5	≤ 245	9	10	2 × 26
20 × 2500	2500	20	5	≤ 245	9	10	2 × 26
32 × 1300	1300	32	6	≤ 360	7	9	2 × 15
30 × 3000	3000	30	6	≤ 345	7	6	2 × 26
40 × 2500	2500	40	10	≤ 345	7	6	2 × 26
40 × 3000	3000	40	10	≤ 345	7	6	2 × 26
50 × 3000	3000	50	12	≤ 345	7	6	2 × 52
60 × 2500	2500	60	12	≤ 345	7	6	2 × 52



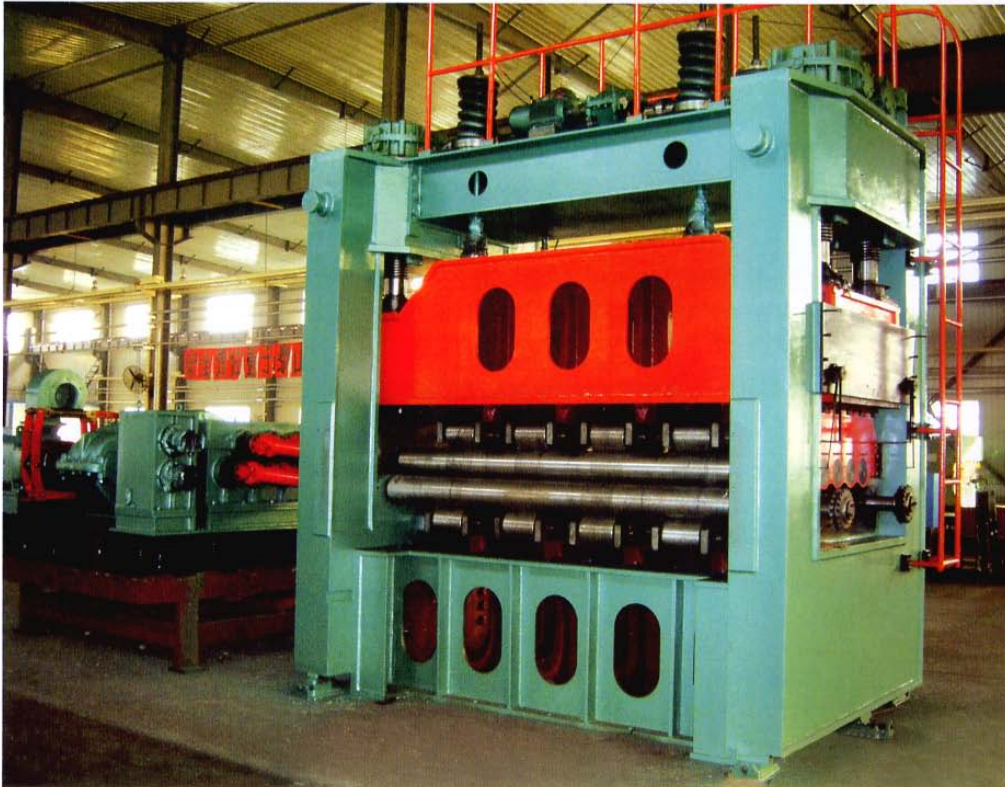
华鲁锻压 岱岳机床
HUALU DUANYA DAIYUE JICHUANG

WB43 系列

矫平机

WB43 series plate straightening machine

WB43 series plate straightening machine is made of rack, working roll, movable crossbeam, screw down mechanism, catch wheel device, main gearing, lubrication system, and electrical control system, etc. It is used for levelling of thin sheet.



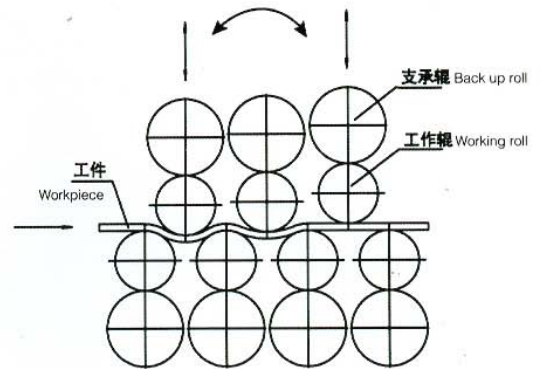
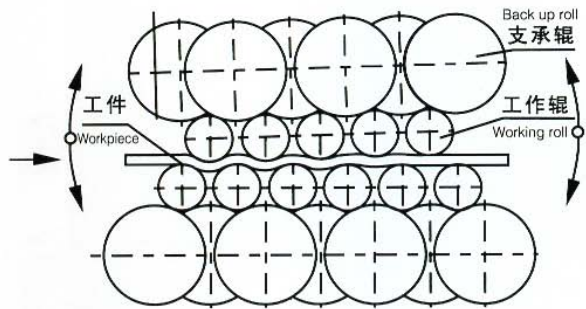
WB43M-12 × 2600 ($\delta \leq 360\text{MPa}$) 矫平机用于沈阳透平机械股份有限公司
Plate straightening machine is used for Shenyang Turbo Machinery Co., Ltd.



WB43M-3×800($\delta \leq 600\text{MPa}$) 钨钼板矫平机用于株洲硬质合金集团有限公司
Tungsten-molybdenum plate straightening machine used for Zhuzhou Cemented Carbide Group Corp. Ltd.



WB43M-10×2000($\delta \leq 450\text{MPa}$) 矫平机用于青岛造船厂
Plate straightening machine used for Qingdao Ship Building Factory.



WB43 系列板料矫平机主要技术参数 Main technical parameters of WB43 series plate straightening machine

产品规格 Production specification	最大矫平板宽 (mm) Maximum levelling plate width (mm)	最大矫平板厚 (mm) Maximum levelling plate thickness (mm)	最小矫平板厚 (mm) Minimum levelling plate thickness (mm)	板材屈服极限 (MPa) Yield limit of plate (MPa)	工作辊辊数 (n) Quantity of working roller (n)	矫平速度 (m/min) Levelling speed (m/min)	主电机功率 (kW) Power of main motor (kW)
2×1600	1600	2	0.5	≤ 245	17	25	30
3×1600	1600	3	0.6	≤ 245	15	45	45
6×2000	2000	6	1.5	≤ 245	13	15	45
8×2000	2000	8	2.5	≤ 245	11	10	37
10×2000	2000	10	3	≤ 450	11	10	45
10×2500	2500	10	3	≤ 580	13	9	2×37
12×2600	2600	12	3	≤ 360	13	9	2×37
16×2500	2500	16	4	≤ 245	9	9	75