



系列数控板料折边机 Series Panel Bender

FBA FBC FBE FBE-FMC

 **Yawei** 亚威

股票代码 002559

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亚威拥有四十多年的钣金机床制造经验，一直致力于高效、高精度、节能钣金加工设备的研发和制造，积累了大量的成功经验，服务于各类金属板材加工行业。

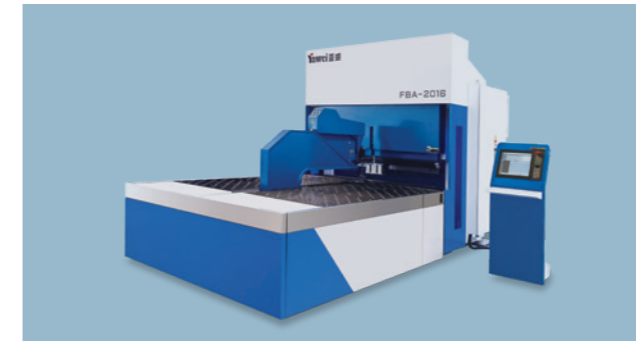
丰富的产品系列，覆盖全面的行业需求，为您提供最合适的钣金折边工艺解决方案。

Yawei has more than 40 years of experience in sheet metal machine tool manufacturing, and has been committed to the research and development and manufacturing of high-efficiency, high-precision, and energy-saving sheet metal processing equipment. It has accumulated a lot of successful experience and served various sheet metal processing industries.

A rich product series, covering a comprehensive range of industry needs, to provide you with the most suitable sheet metal folding process solutions.

优势 Advantages

- 全自动折边，高速高效，颠覆传统
 - 高刚性结构，承载力强，保证寿命
 - 高精度设计，一致性高，决定品质
 - 多工艺集成，丰富成熟，覆盖全面
 - 简化操作，快捷编程，自动补偿
- Fully automatic folding, high speed and high efficiency, subvert the tradition
 - High rigidity structure, strong bearing capacity, guaranteed life
 - High-precision design, high consistency, determine quality
 - Multi-process integration, rich and mature, comprehensive coverage
 - Simple operation, fast programming, automatic compensation



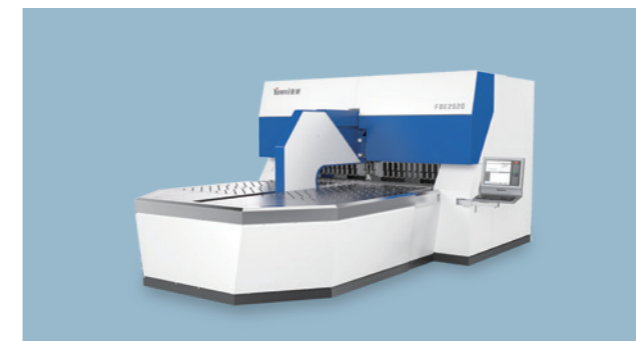
FBA系列通用型数控板料折边机 FBA Series universal panel bender

- 机械式压紧稳定可靠、板料自动定位，适应性强
 - 手动换模，自由组合,适合批量加工
 - 全电伺服控制，节能环保
- Mechanical pressing is stable and reliable, automatic positioning, high adaptability
 - Manual mold change, free combination, suitable for batch processing
 - Full electric servo control, energy saving and environmental protection



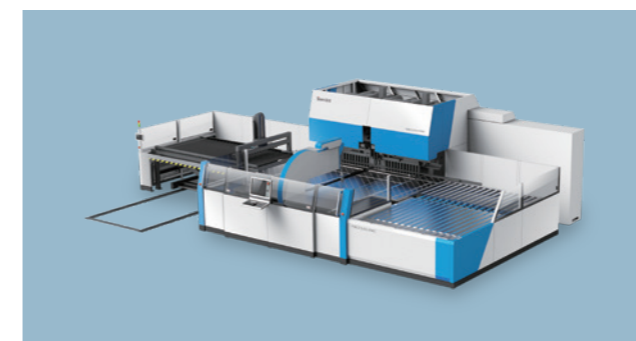
FBC系列柔性折边中心 FBC Series flexible panel bender

- 全自动换模，快速调整尺寸，过程中可换模具
 - 全电伺服控制，节能环保
 - 专用补偿机构实现高精度折边
- Fully automatic mold changing, quick size adjustment, and change mold during the process
 - All-electric servo control, energy saving and environmental protection
 - Partial compensation with high precision



FBE系列高性能数控板料折边中心 FBE Series high-performance panel bender

- 全自动换模功能，快速适应工件尺寸变化
 - 整机高刚性设计，多连杆传动，折边精度稳定可靠
 - 内嵌自动补偿系统，给客户id提供高品质的应用体验
- Fully automatic mold change function, quickly adapt to the change of workpiece size
 - The whole machine is designed with high rigidity and multi-link transmission, and the hemming accuracy is stable and reliable.
 - Built-in automatic compensation system to provide customers with high-quality application experience



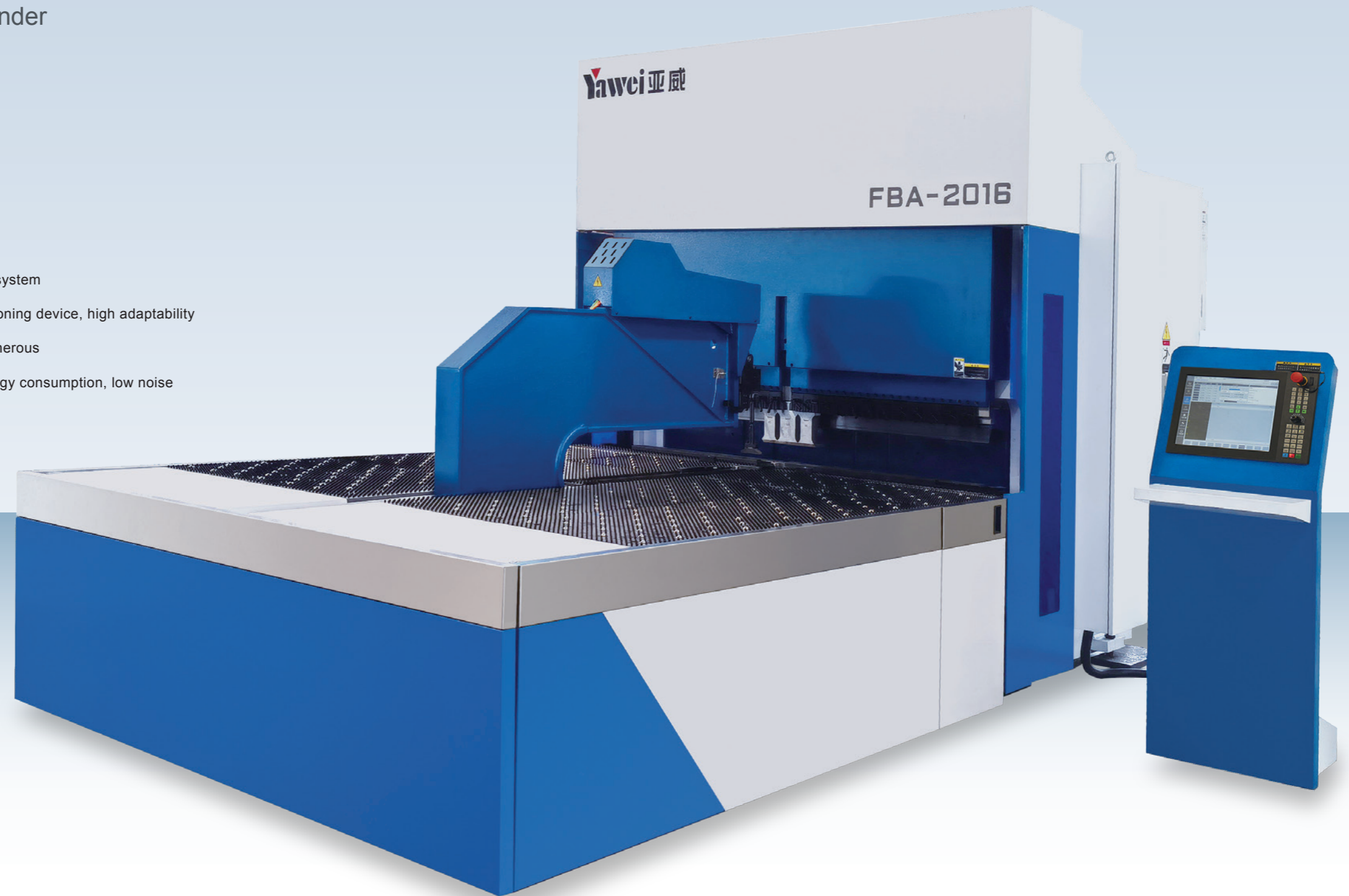
FBE-FMC系列高柔性数控板料折边单元 FBE-FMC Series highly flexible panel bender unit

- 柔性化自动上下料单元，大幅提升生产效率
 - 完善的过程监控系统确保机床长期稳定运行
 - 通过传动单元提供稳定可靠的加工质量
- Flexible automatic loading and unloading unit, greatly improving production efficiency
 - Complete process monitoring system to ensure long-term stable operation of the machine tool
 - Provide stable and reliable processing quality through the transmission unit

FBA系列 通用型数控板料折边机

FBA Series Universal Panel Bender

- 全触控人机操作界面，功能强大的数控系统
- 机械伺服可靠夹紧，柔性定位装置，适应性强
- 简约风格的外观设计，美观大方
- 节能环保、低能耗、低噪音
- Full touch man-machine interface, powerful CNC system
- Mechanical servo reliable clamping, flexible positioning device, high adaptability
- Simple style appearance design, beautiful and generous
- Energy saving, environmental protection, low energy consumption, low noise



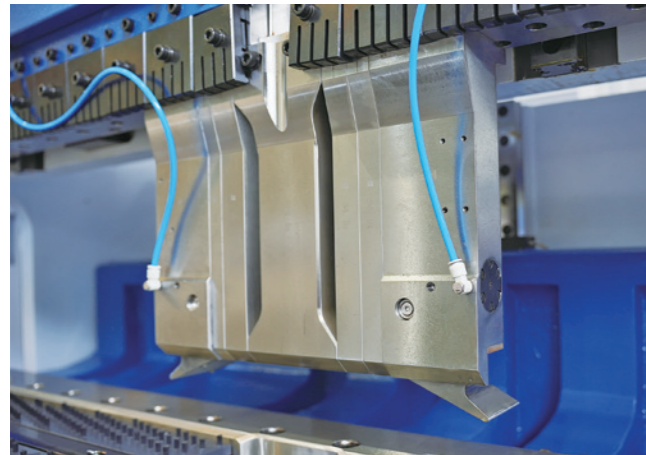
配置丰富 搭配灵活

Rich configuration Flexible collocation



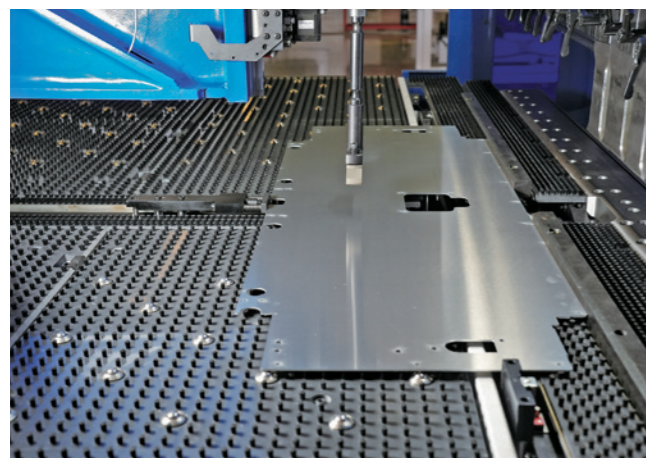
折边梁传动机构 / Folding beam transmission mechanism

- 采用伺服电机搭载低背隙行星减速机，配合重载高精研磨丝杆驱动折边模具，按照规划路径运行
- 折边梁采用高刚性材料整体铸造，通过动态仿真确保足够的结构刚性和耐用性，可实现设备长周期保持高精度稳定运行
- Servo motor equipped with low-backlash planetary reducer and heavy-duty high-precision grinding screw drive folding mold to run according to the planned path
- The main body is integrally cast with high-strength material, and the structure is optimized through finite element dynamic analysis, which reduces the transmission load weight and improves the transmission rigidity, which is more conducive to a high-dynamic and high-response transmission system



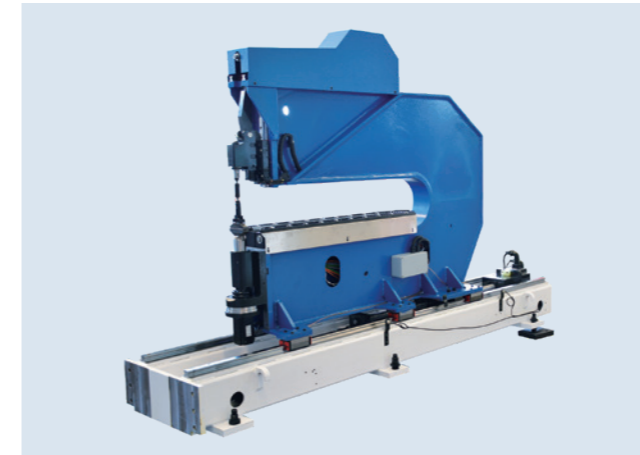
压紧模具 / Compression mold

- 模具基体整体淬火后通过高精度磨床加工，确保精度一致性和使用稳定性
- 合页模可适应复杂形状工件的加工，弥补固定压紧模具的缺点
- 气动合页按需避让成型侧边，避免模具与板面刮擦
- After quenching, the mold base is processed by a high-precision grinder to ensure accuracy consistency and stability in use
- Hinged mold It can be adapted to the processing of complex shaped workpieces and make up for the shortcomings of fixed compression molds



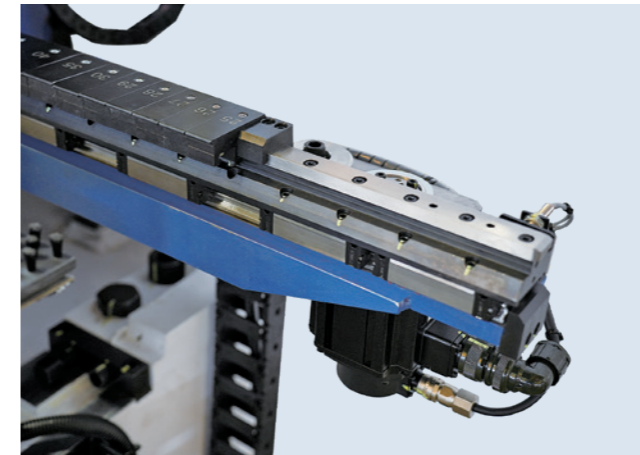
定位装置 / Positioning device

- 可实现切角定位、边部定位两种定位模式，适应性广
- 自动定位装置操作便捷，安全可靠
- Two positioning modes of chamfering positioning and edge positioning can be realized, with wide adaptability
- The automatic positioning device is easy to operate, safe and reliable



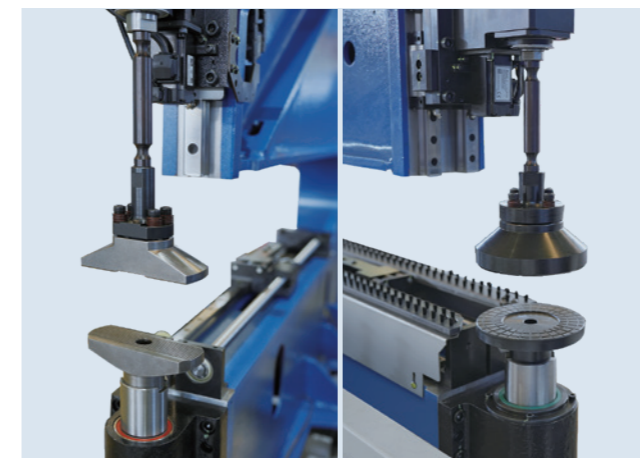
送料旋转装置 / Feeding rotary device

- 机械式压紧稳定可靠，可夹带孔板料，适应性强
- 根据客户不同材质、规格板料选择不同压脚形式
- 全伺服控制、直线导轨导向，高速、高精度，运行平稳可靠
- The mechanical pressing is stable and reliable, can entrain the hole sheet, and has strong adaptability
- Choose different presser foot forms according to different materials and specifications of customers
- Full servo control, linear guide, high speed, high precision, stable and reliable operation



短模装置 / Short mold device

- 实现局部短边折边或邻边避让折边，拓展成型工艺
- 单独上、下短刀，双向短模多种配置可选
- 独特的T型折边梁可配上、下短模
- Realize partial short edge folding or adjacent edge avoiding folding, and expand the molding process
- Separate upper and lower short molds, and multiple configurations of bidirectional short mold are optional
- Unique T-shaped folded edge beam can be equipped with upper and lower short molds



上下压脚 / Upper and lower press foot

- 针对不同材质、大小的板料，提供多种形式压脚
- 各类敏感工件，非金属材质压脚可选
- Develop various forms of press foot for different materials and sizes of sheet metal
- Non-metallic press foot can be selected for all kinds of sensitive workpieces

配置丰富 搭配灵活

Rich configuration Flexible collocation

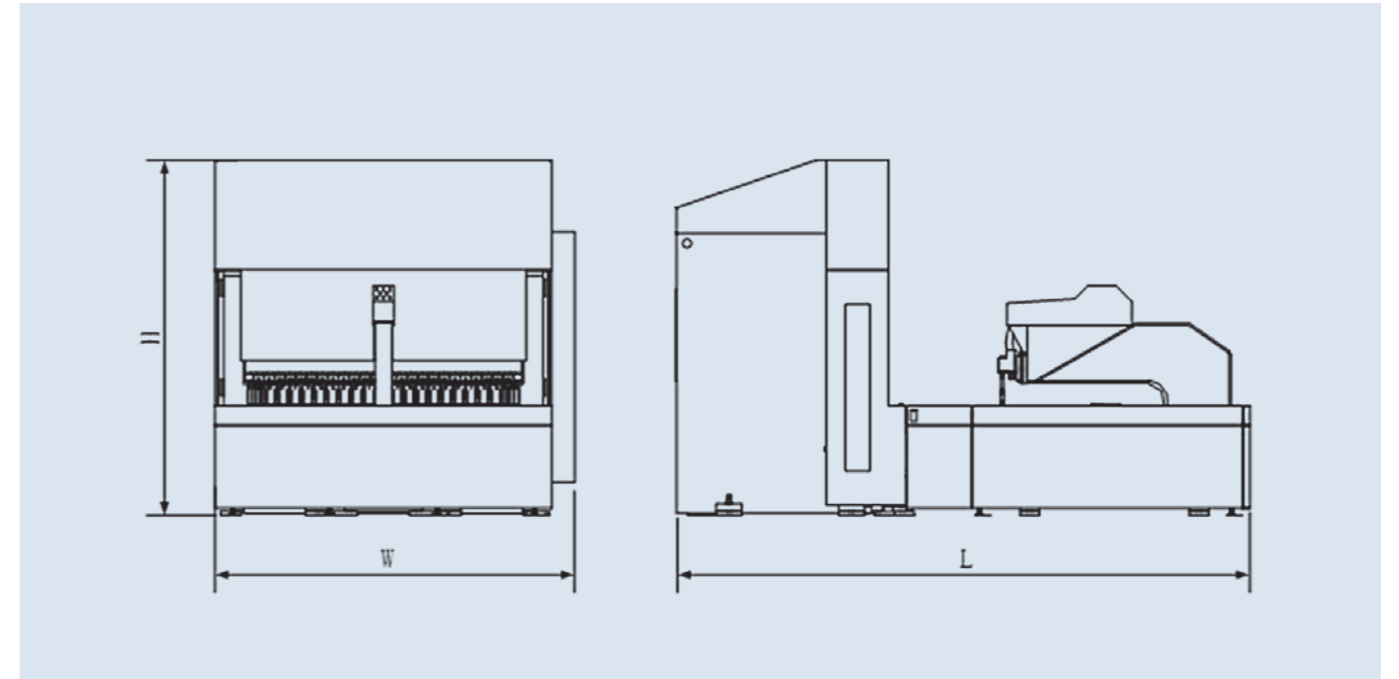


德国BECKHOFF数控系统

Germany BECKHOFF CNC system

- 17"彩色显示触摸屏
 - 超过20000个程序的存储空间
 - 通过USB进行数据存贮
 - 界面编程及2D成型模拟
 - 自动计算压紧力、折边压力及安全区域
 - 方便快捷的尺寸及角度校正
 - 自动化组线接口 (选配)
 - 系统诊断功能
- 17" color display touch screen
 - Storage space for more than 20,000 programs
 - Data storage via USB
 - Interface programming and 2D bending simulation
 - Automatic calculation of pressing force, folding pressure and safe area
 - Convenient and quick size and angle correction
 - Automated wiring interface (optional)
 - System diagnosis function

技术参数 TECHNICAL SPECIFICATIONS



型号 Model	最大对角线 Maximum diagonal length of sheet	最大折 弯长度 Max folding	最大折弯高度 Max folding height	最大板材厚度 Max sheet thickness			最小板厚 Min. sheet thickness	伺服轴数 Servo axis	外形尺寸 (长×宽×高) Dimensions LxWxH	机床重量 Machine weight
	mm	mm	mm	碳钢 Mild steel 410MPa	304不锈钢 ss 600MPa	铝板 Al Alloy 265MPa				
FBA1416	1900	1400	165	1.5	1.2	2	0.35	13	4.3×2.2×2.7	9500
FBA1420	1900	1400	200	2	1.5	3	0.35	13	4.3×2.2×2.7	10300
FBA2016L	2400	2000	165	1.5	1.2	2	0.35	13	4.5×2.7×2.8	13000
FBA2016	2400	2000	165	2	1.5	3	0.35	13	4.5×2.8×2.8	14000
FBA2030	2400	2000	300	2	1.5	3	0.35	13	4.6×2.8×3.2	15800
FBA2516	2800	2500	165	2	1.5	3	0.35	13	5.5×3.5×2.9	18800
FBA2530	2800	2500	300	2	1.5	3	0.35	13	5.5×3.5×3.3	22000
FBA3016	3400	3000	165	2	1.5	3	0.35	14	6.5×4.0×3.0	22500
FBA4016	4250	4000	165	2	1.2	3	0.5	16	7.5×5.2×3.1	29000

FBC系列 柔性折边中心

FBC Series Flexible Panel Bender

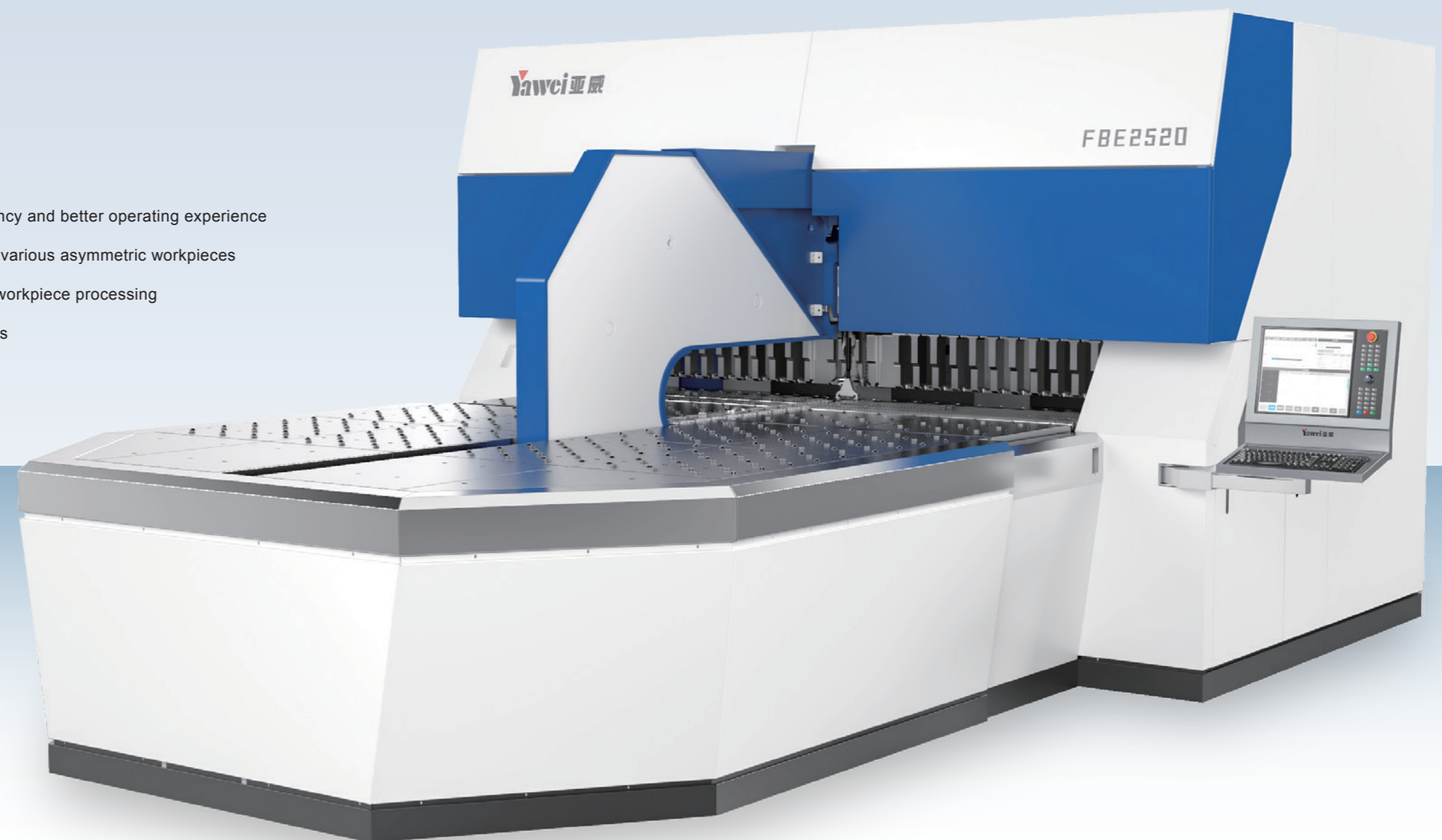
- 全自动换模，快速调整尺寸，过程中可换模具
- 全电伺服控制，节能环保
- 专用补偿机构实现高精度折边
- Fully automatic mold changing, quick size adjustment, and change mold during the process
- All-electric servo control, energy saving and environmental protection
- Partial compensation with high precision



FBE系列 高性能数控板料折边中心

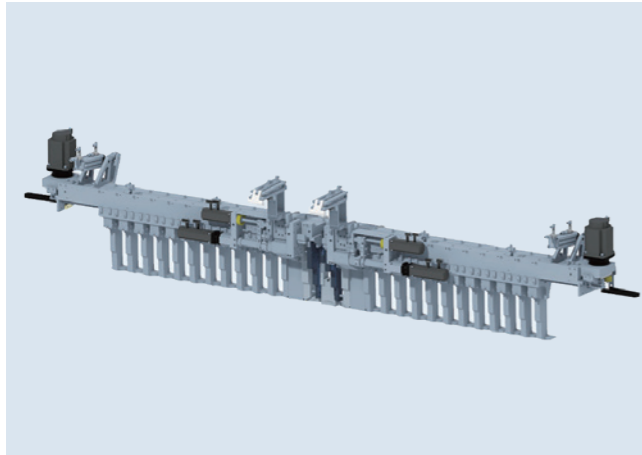
FBE Series High-Performance Panel Bender

- 全触控人机操作界面，功能强大的数控系统
- 自动换模技术，加工效率提升，操作体验更佳
- 高柔性定位装置，适应各类非对称工件的定位
- 内嵌式精度补偿方案，确保高品质的工件加工
- 全新的工业外观设计，美观大方
- Full touch man-machine interface, powerful CNC system
- Automatic mold change technology improves processing efficiency and better operating experience
- Highly flexible positioning device, suitable for the positioning of various asymmetric workpieces
- Built-in precision compensation scheme to ensure high-quality workpiece processing
- Brand new industrial appearance design, beautiful and generous



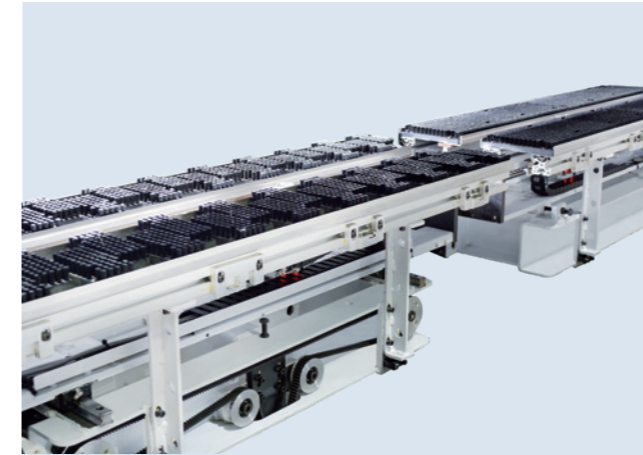
配置丰富 搭配灵活

Rich configuration Flexible collocation



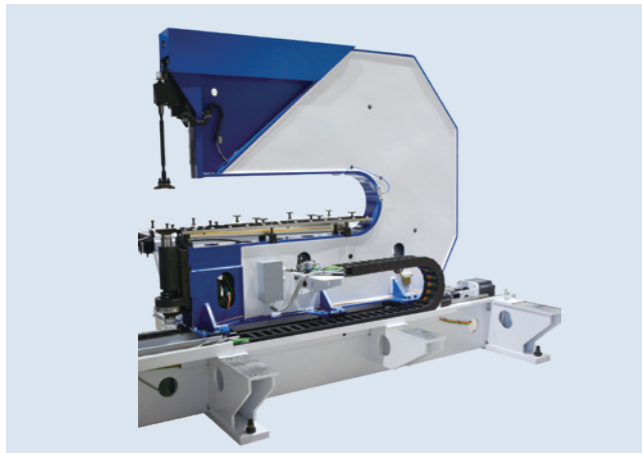
自动换模 / Automatic mold change

- 全伺服全自动模具长度调整，快捷智能
- 多种模具组合动作，具有翻边避让功能，实现板材柔性加工
- Full-servo automatic mold length adjustment, fast and intelligent
- Multiple mold combined actions, with flanging avoidance function, realizing flexible processing of plates



定位装置 / Positioning device

- 组合式定位装置，满足外角定位，内角定位以及错边定位等多种定位需要
- Combined positioning device to meet various positioning requirements such as external angle positioning, internal angle positioning and edge positioning



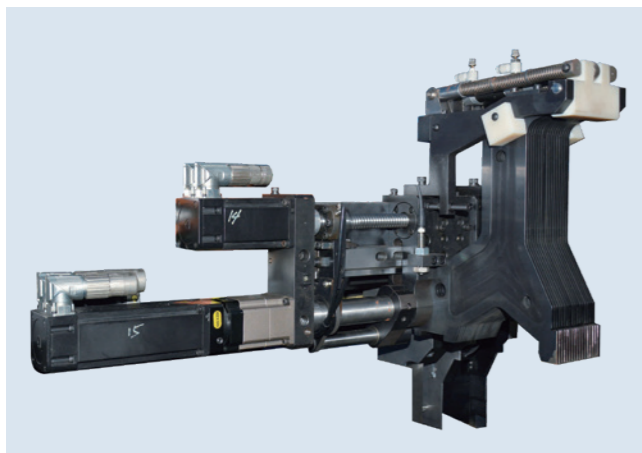
操作机结构 / Manipulator structure

- 具有全伺服闭环控制系统，实现高精度任意角度旋转定位
- 送料和旋转联动控制，实现快速旋转送料定位
- With a full servo closed-loop control system to achieve high-precision rotation positioning at any angle
- Feeding and rotating linkage control, realize fast rotating feeding positioning



中置避让模具 / Center avoidance mold

- 模具可快速避让，下压后自动展开压紧工件，实现柔性加工
- The mold can quickly evade, and after pressing down, it will automatically unfold and compress the workpiece to realize flexible processing.



插片模具调整装置 / Insert mold adjusting device

- 左右两套插片模具配置可实现非对称距离调节，适应复杂形状工件的加工
- 插片模具实现最小5mm的长度变化，保证任意长度调整
- The configuration of left and right insert molds can realize asymmetric distance adjustment and adapt to the processing of complex shape workpiece
- The insert mold realizes a minimum length change of 5mm, ensuring any length adjustment



短模装置 / Short mold device

- 实现局部短边折边或邻边避让折边，拓展成型工艺
- 单独上、下短刀，双向短刀多种配置可选
- Realize partial short edge folding or adjacent edge avoiding folding, and expand the molding process
- Separate upper and lower short molds, and multiple configurations of bidirectional short mold are optional

配置丰富 搭配灵活

Rich configuration Flexible collocation



德国BECKHOFF数控系统 (FBC)

Germany BECKHOFF CNC system

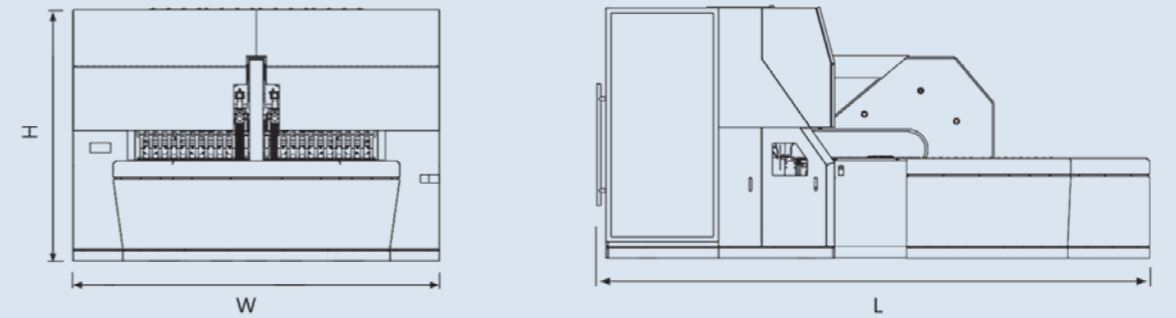
- 17"彩色显示触摸屏
- 17" color display touch screen
- 超过20000个程序的存储空间
- Storage space for more than 20,000 programs
- 通过USB进行数据存储
- Data storage via USB
- 界面编程及2D成型模拟
- Interface programming and 2D bending simulation
- 自动计算压紧力、折边压力及安全区域
- Automatic calculation of pressing force, folding pressure and safe area
- 方便快捷的尺寸及角度校正
- Convenient and quick size and angle correction
- 自动化组线接口 (选配)
- Automated wiring interface (optional)
- 系统诊断功能
- System diagnosis function

德国SIEMENS数控系统 (FBE)

Germany SIEMENS CNC system

- 17"彩色显示触摸屏
- 17" color display touch screen
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- Storage space for more than 20,000 programs
- 通过USB进行数据存储
- Data storage via USB
- 界面编程及2D成型模拟
- Interface programming and 2D molding simulation
- 2D/3D离线编程功能 (选配)
- 2D/3D offline programming function (optional)
- 自动计算压紧力、折边压力及安全区域
- Automatic calculation of pressing force, hemming pressure and safe area
- 系统诊断功能
- System diagnosis function
- 方便快捷的尺寸及角度校正
- Convenient and quick size and angle correction
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	mm	mm	mm	碳钢 Mild steel 410MPa	304不锈钢 ss 600MPa	铝板 Al Alloy 265MPa				
FBC2016	2400	2000	165	2	1.5	3	0.35	20	4.6×4.3×3.1	14300
FBC2516	2800	2500	165	2	1.5	3	0.35	20	5.5×4.9×3.2	20000
FBC3016	3400	3000	165	2	1.5	3	0.35	20	6.6×5.4×3.2	23400

型号 Model	最大对角线 Maximum diagonal length of sheet	最大折弯长度 Max folding	最大折弯高度 Max folding height	最大板材厚度 Max sheet thickness			最小厚度 Min. sheet thickness	伺服轴数 Servo axis	外形尺寸 Dimensions LxWxH	机床重量 Machine weight
	mm	mm	mm	普通碳钢 Mild steel 410MPa	304不锈钢 ss 600MPa	铝合金 Al Alloy 265MPa				
FBE2520	2800	2500	200	3	2	4	0.35	21	6×4×2.6	25500
FBE3220	3500	3200	200	3	2	4	0.35	21	7×5×2.65	30500

FBE - FMC 高柔性数控板料折边单元

FBE-FMC Series Highly Flexible Panel Bender Unit

- 全新的外观工业设计，提供了友好的人机交流环境
- 全自动上下料输送装置，智能适应板材，高效精准稳定
- 分区上料及翻面选配方案，满足小批量多品种连续加工
- 计划列表及MES集成，功能更强大，柔性更高

- The brand-new industrial appearance design provides a friendly environment for human-machine communication
- Fully automatic loading and unloading conveying device, intelligently adapt to the plate, high efficiency, precision and stability
- Partition feeding and turning options to meet the continuous processing of small batches and multiple varieties
- Job list and MES integration, more powerful and flexible



单机器人上下料折边单元

Single-robot loading and unloading bending unit



特点:

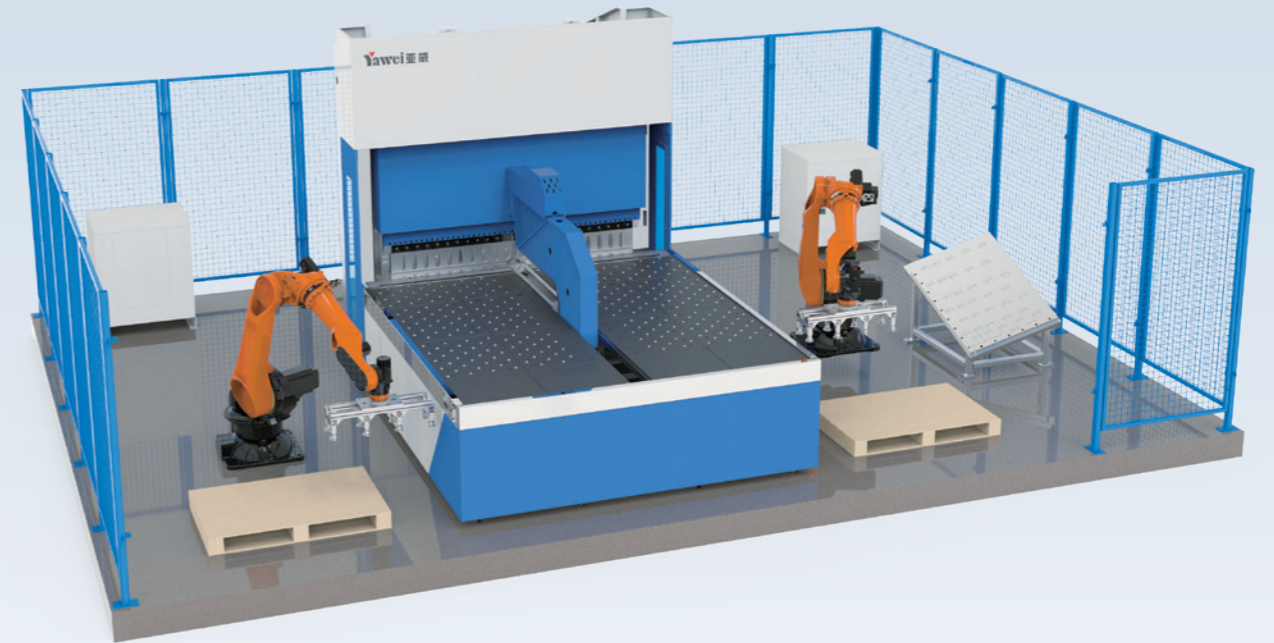
- 高精度机器人配上下料二合一抓手
- 单边上下料，布局紧凑占地面积小，经济可靠

Features:

- High-precision robot with two-in-one gripper for loading and unloading
- Unilateral loading and unloading, compact layout, small footprint, economical and reliable

双机器人上下料折边单元

Double robot loading and unloading bending unit



特点:

- 真空吸盘抓取板料，高精度机器人自动对中定位，高效智能下料码垛
- 并行动作，效率高

Features:

- Vacuum suction cup grabs the sheet material, high-precision robot automatic centering and positioning, efficient and intelligent blanking and palletizing
- Parallel action, high efficiency

典型工艺展示

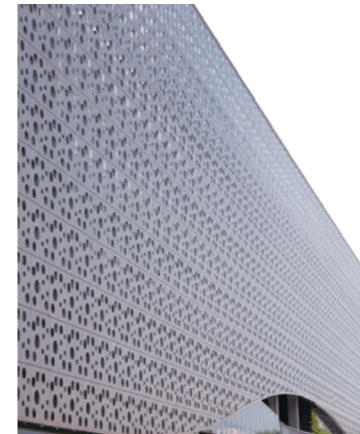
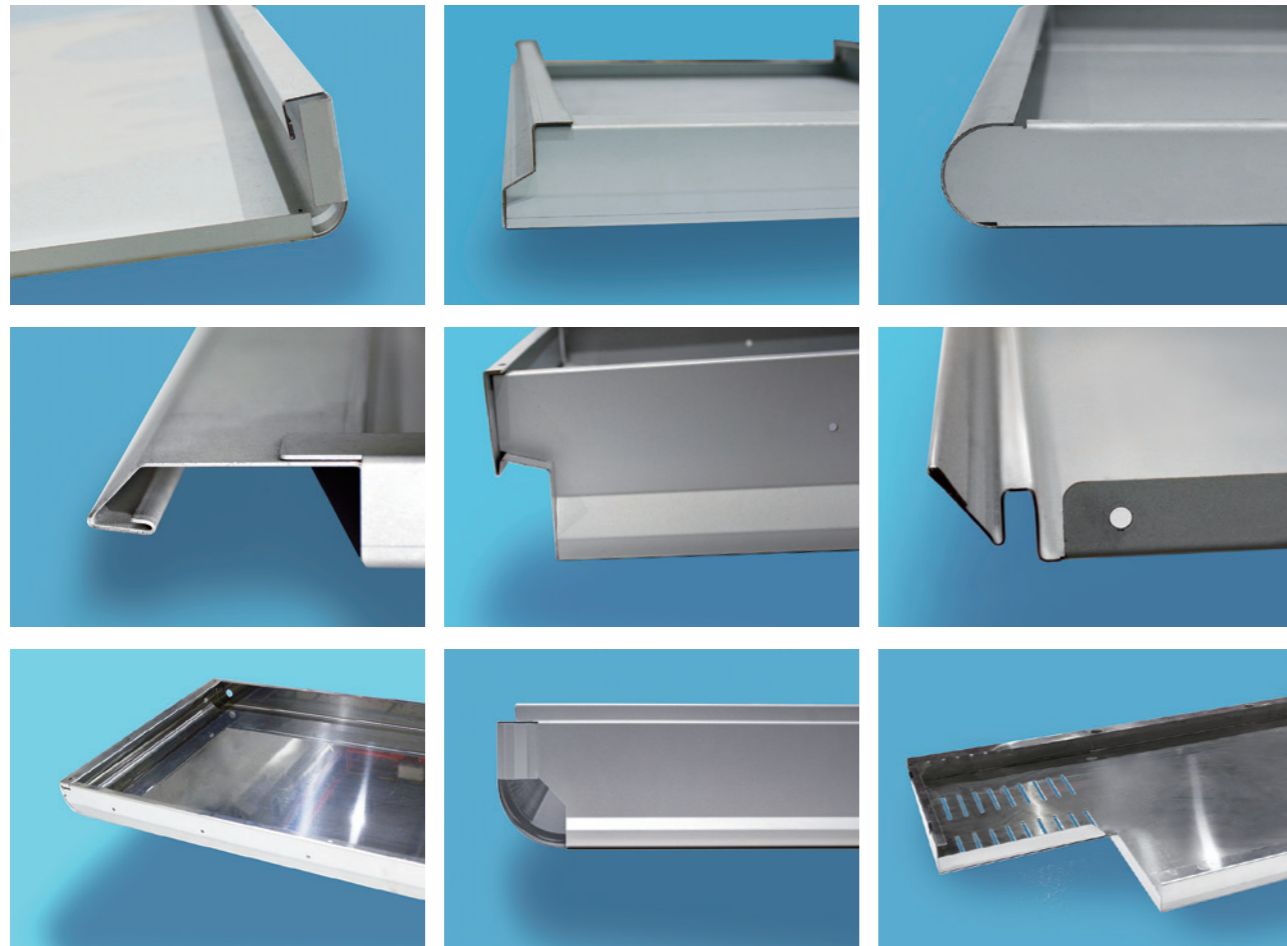
Typical folding craft display

行业应用

Industry Application

复杂截面工艺实现技术

Complex section process model library technology



幕墙行业
Curtain Wall Industry



工具柜行业
Tool cabinet industry



家电行业
Appliance industry



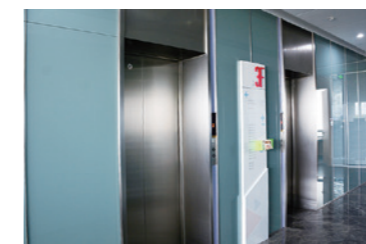
办公家具行业
Office furniture industry



钢制门行业
Steel door industry



餐厨行业
Kitchenware industry



电梯行业
Elevator industry



电气柜行业
Electrical cabinet industry



机箱机柜行业
Chassis cabinet industry

江苏亚威机床股份有限公司

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中国

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邮编: 225200

销售电话: 0514-86880518 86880528 86519118

售后服务: 0514-86880538 86519128 86519158

配件销售: 0514-86519148

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