MingD®

广东铭雕数控

Product

Configuration

Details

设备名称：直排换刀加工中心　　设备型号：ATC-2131-X6
Equipment name: AUTOMAITC CNC ROUTER　　Equipment model: ATC-2131-X6
设备品牌：广东铭雕数控　　设备产地：中国、广东、佛山
Equipment brand: MingD　　Equipment origin: China, Guangdong, Foshan

一、设备主要技术参数(PARAMETER)

设备型号	设备型号	ATC-2131-X6
外形尺寸	External Dimensions	12000*3300*2155mm
应预留场地面积	Appropriate site area shall be reserved.	16000*5000mm
加工行程	Processing Range	3100*2100*45mm
最大运行速度	Max. Empty Running Speed	80 米/分钟（ m/min）
最大加工速度	Max. Process Speed	25 米/分钟（ m/min）
最大进料高度	Maximum Feed Height	＜ 150mm
软件运行环境	Software Operating Environment	MINXP、 7
传动方式	Transmission Mode	X/Y 精密斜齿条， Z 丝杆（X/Y precision rack, Z screw）
主轴功率	Spindle Power	9KW* 1
主轴转速	Spindle Speed	0-24000r/min
工作电压	Working Voltage	380V 50HZ 3PH
可用刀具柄径	Available Tool Shank Diameter	Ø3/Ø4/Ø6/ Ø12.7 etc.
刀库数量	Number Of Knife Sets	12pcs
运行模式	Operating Mode	伺服驱动（ Servo-drive）
真空吸附装置	Vacuum Adsorption Device	7.5KW*1 水循环真空泵 (7.5KW*1 water circulation vacuum)
支持文件格式	Support File Formats	*.g； *.nc； *.ug;*.demo;*.iso;*.eng;*.cut
自动上料装置	AUTO LOAD DEVCIE	EQUIPPED SUCTION CUP FOR LOADING
自动定位气缸	AUTO POSITIONING CYLINDER	EQUIPPED BACK AND SIDE CYLINDER TO AUTO POSITIONING
自动下料装置	AUOT UNLOAD DEVICE	EQUIPPED UNLOAD CYLINDER CAN AUTO PUSH MATERIAL TO UNLOAD TABLE
标签系统	laber system	Industrial-grade printer from Honeywell, a benchmark model with stable performance.

二、设备功能（FUNCTIONS）

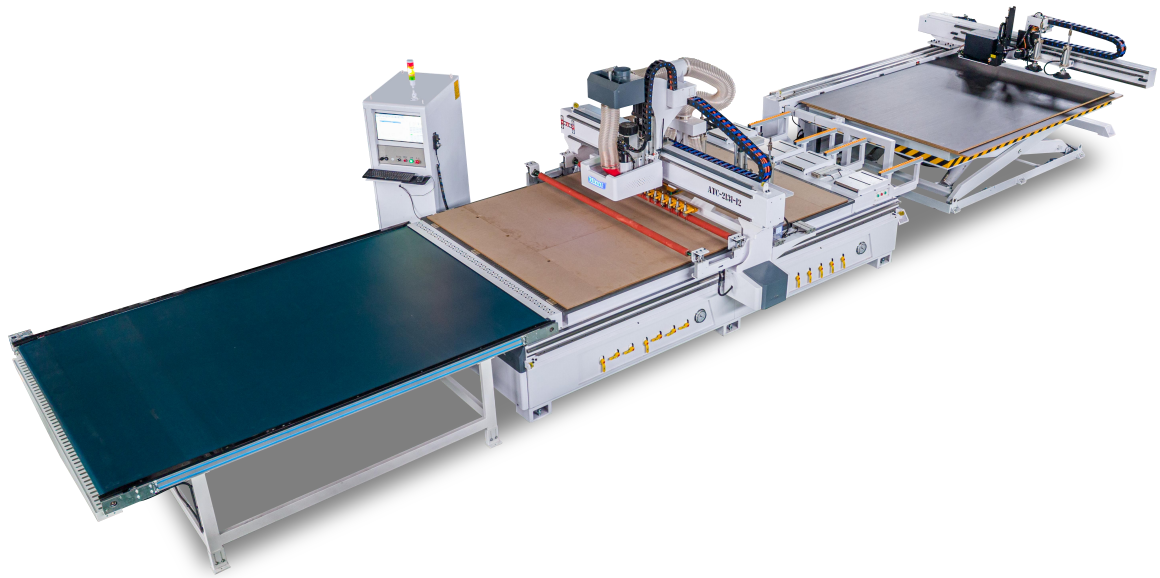
1.省人力，操作简单，经过 3-6 天的现场实操培训，您就能掌握自动排版，自动排版。（Save the labor cost, simple operation mode, after 3-6 days of on-site practical operation training, you can master the automatic drawing, automatic typesetting.）

2.安全可靠的操作；独特的 X、Y、Z 三轴限位安全保护系统避免了设备加工过程中因图纸错误而产生的龙门架限位等安全隐患，使您的操作更安全、更可靠。（Safe and reliable operation; The unique X, Y, Z three-axis limit safety protection system avoids safety issues such as gantry limit caused by drawing errors during equipment processing, making your operation safer and more reliable.）

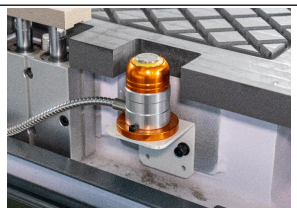
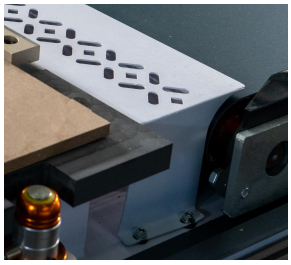
3.优秀的真空吸尘装置；先进的真空罩密封系统，有良好的真空吸力效果和强大的动力，让您消除车间现场粉尘飞溅的现象。（Excellent vacuum cleaning device; Advanced vacuum hood sealing system, with good vacuum suction effect and powerful power, allows you to eliminate the phenomenon of dust flying all over the workshop site.）

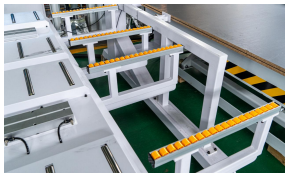
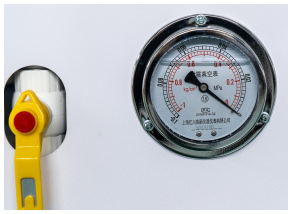
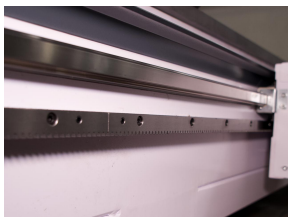
4.自动定位钣金；机器配有气缸定位功能，确保每块板的放置位置相同，不会重复定位工件原点，操作简单。（Automatic positioning of sheet metal; The machine is equipped with a cylinder positioning function to ensure that the placement position of each board is the same, and there will be no repeated positioning of the workpiece origin, making the operation simple.）

三：设备图片(EQUIPMENT SHOT)



四：功能单元介绍(INTRODUCTION OF FUNCTIONS)

功能单元 FUNCTION	图片 PICTURE	备注	NOTED
Z 轴拖链 Z-axis drag chain		保证 Z 轴器官电缆线上下运动时顺畅不刮蹭	Ensure the Z-axis organ cable line Smooth and non scraping during downward movement.
自动对刀仪 Automatic tool sette		无需人工对刀 ， 操作简单方便。	No need for manual knife alignment, simple and convenient operation
润滑系统 lubricating system		记忆式电子油泵+容积式定量油排 ，确保每个轴承位置都能有效润滑。	Memory electronic oil pump+volumetric quantitative oil discharge ensures effective lubrication at each bearing position
吸附 adsorption		区域布局合理 ， 每个区域可实现单独控制并拥有单独标签 ， 简单明了。阀门链接直径加大 ， 不易滑牙。	The regional layout is reasonable, and each area can be individually controlled and labeled, which is simple and clear. The diameter of the valve connection has been increased, making it less prone to slipping teeth.
出料口 Outlet		内圆弧设计 ， 完美对接动力式出料台	Internal arc design, perfectly connected to the power type discharge platform

辅助上料 Auxiliary feeding		有效减少劳动力。 全系标配外部开关，可以直接在机台后部控制设备 ， 无需行走至操作电柜 。	Effectively reducing labor force. The entire series comes standard with an external switch, which allows for direct control of equipment from the rear of the machine without the need to walk to the operating cabinet.
减震真空压力表 Shock absorption vacuum pressure gauge		有效监测机台实时压力	Effectively monitor real-time pressure of the machine
钢带导轨 iron belt rail		采用钢带齿条导轨 ， 保证导轨内部的纯净度，防止灰尘进入， 同时保持美观	Using steel strip rack guide rail, ensure the purity of the guide rail inside, prevent dust from entering, and maintain the beauty
定位插销 Positioning pin		全系精密齿条在打表精度测验完成后均需要安装定位插销，杜绝齿条外力影响精度。	After the precision measurement of the whole series of precision rack, the positioning pin is required to be installed to eliminate the influence of external force on the precision of the rack.
自动上料单元 Auto load unit		装载用配备吸盘	EQUIPPED SUCTION CUP FOR LOADING
自动下料单元 Auto unload unit		配备卸载气缸的罐体可自动将物料推送至卸载台	EQUIPPED UNLOAD CYLINDER CAN AUTO PUSH MATERIAL TO UNLOAD TABLE
自动定位气缸 AUTO POSITION CYLINDER	 	配备自动定位的后置及侧置气缸	EQUIPPED BACK AND SIDE CYLINDER TO AUTO POSITIONING

下料台 UNLOAD TABLE		自动传输，省心省力，不易刮伤板材	Automatic transfer system: hassle-free and effortless operation; reduces the risk of scratches on the panels.
升降机 LIFT FORK		采用红外线感应装置，检测板材高度自动上升同一高度	Utilizes an infrared sensing device to detect the height of the plate and automatically raise it to the same height.
贴标系统 laber system		霍尼韦尔工业级打印机，一款性能稳定、经过严格测试的基准型号	Industrial-grade printer from Honeywell, a benchmark model with stable performance.

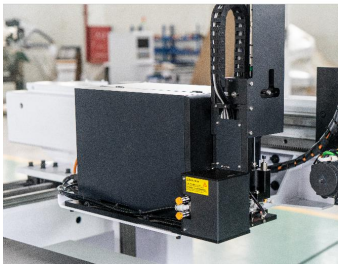
五、品牌部件配置

部件名称 PART NAME	图片 PICTURE	国家地区 COUNTRY	品牌 BRAND	备注	NOTED
主轴 Spindle		中国 CHINA	杰斯特电器 杰斯特 JST	产品优势：1.可选配进口陶瓷球轴承，使用寿命更长 2.连续工作转速最高可达24000RPM 3.采用优质传感器和独立风扇，故障率低 4.采用高规格硅钢片，能效高，过载能力强。	Product advantages: 1. Optional imported ceramic ball bearing, longer service life 2. Continuous working speed up to 24000RPM 3. Use of high quality sensors and independent fans, low failure rate 4. High specification silicon steel sheet, high energy efficiency, overload capacity.
变频器 INVERTER		中国深圳 CHINA SHENZHEN	Simphoenix 四方电气 四方	通过改变电机工作电源频率方式来控制交流电动机的电力控制设备。	An electric control device that controls an AC motor by changing the frequency of the power supply to the motor.

伺服 SERVO		中国 CHINA	DVS MECHATRONICS 迪维迅	采用 EtherCAT 总线通讯接口，基于 EtherCAT 从站技术，100Mb/s 的传输速率实现伺服系统的实时控制与实时数据传输。该驱动器具有丰富的输入输出接口，支持 CSP、CSV、CST、PP 、PV、PT、HM 运行模式。	The system employs the EtherCAT bus communication interface and EtherCAT slave technology to achieve real-time control and data transmission of the servo system with a transmission rate of 100Mb/s. The driver features abundant input/output interfaces and supports various operating modes including CSP, CSV, CST, PP, PV, PT, and HM.
驱动电机 DRIVE MOTOR		中国 CHINA	DVS MECHATRONICS 迪维迅	经济型单圈绝对值 21 位编码器 应用领域：横织机、绣花机、印刷机械、数控机床、自动化、木工雕刻等领域。	Economical single coil absolute value 21-bit encoder Application fields: cross knitting machine, embroidery machine, printing machinery, CNC machine tools, automation, woodworking carving and other fields.
控制系统 CONTROL SYSTEM		台湾 TAIWAN	LNC 寶元數控 LNC Technology Co., Ltd. 宝元 LNC	台湾宝元控制系统，系统控制界面人性化；其强化耐久和高散热的无风扇设计，可有效对抗外部恶劣环境。提供高速高精插补功能，可满足高要求板材的加工需求	Taiwan Baoyuan control system, the system control interface is user-friendly; its enhanced durability and high heat dissipation fanless design can effectively combat the external harsh environment. Provide high speed and high precision interpolation

					function, can meet the processing needs of high requirements for the plate.
导轨 RAIL		德国 GERMANY	ROUST WORLD ROSTER 罗斯特	采用德国 ROUST 导轨滑块外部加装刮屑装置，不锈钢钢带防尘保护，30MM 导轨： 1、运动时轻便平稳，工作时轻便省力、速度均匀，低速时无爬行现象； 2、具有良好的耐磨性，长期使用保证精度 3 、高刚性使导轨在运动时足以承受外载	The German ROUST rail slider is equipped with an external chip removal device and stainless steel belt dust protection. The 30mm rail features: 1. Smooth and stable operation during movement, effortless operation with uniform speed, no crawling at low speeds; 2. Excellent wear resistance ensuring precision over long-term use; 3. High rigidity enabling the rail to withstand external loads during operation
减速机 REDUCER		日本 JAPAN	SHIMPO Transitions to Nidec 新宝	精密行星减速机具有高刚性、高精度、高传动效率、高的扭矩/体积比、终身免维护等特点	Precision planetary reducer has the characteristics of high rigidity, high precision, high transmission efficiency, high torque/volume ratio and lifetime maintenance free
Z 轴传动轴 Z AXIS DRIVE AXIS		台湾 TAIWAN	TBI TBIMOTION TBI	高精度、高效率、高刚性，耐用低噪，适配广。	High precision, high efficiency, high rigidity, durable and low noise, suitable for a wide range.
齿条 RACK		中国 CHINA	MingD 广东铭雕数控	XY 轴用高精研磨斜齿条，轴配 2.0 研磨齿条，螺母设	The XY axis is used for high precision grinding of the inclined rack, and the shaft is

				除尘，保精度寿命。	equipped with 2.0 grinding rack. The nut is provided with dust removal to ensure the precision and service life.
机架 FRAME		中国 CHINA	MingD 广东铭雕数控	整机退火，高强度龙门机架，久保双边精准，横梁耐高负荷切削。	The whole machine is annealed, the high strength gantry frame is precise, and the crossbeam can withstand high load cutting.
电器开关 ELECTRIC SWITCH		法国 FRANCE	Schneider Electric 施耐德电气 S 施耐德	所有电机加热控制，在电路中起着自动调节、安全保护、转换电路作用。	All motor heating control plays the role of automatic adjustment, safety protection and conversion circuit in the circuit.
自动润滑系统 AUTO OILING SYSTEM		中国 CHINA	MingD 广东铭雕数控	配微电脑控自动注油系统，定时输油，加注便捷及时。	Equipped with microcomputer controlled automatic oil filling system, the oil is delivered regularly and convenient and timely.
对刀仪 KNIFE INSTRUMENT		中国 CHINA	MingD 广东铭雕数控	对刀仪： 自动对刀，隐藏式无干扰设计标 配隐藏式无干扰设计高精度自动 对刀 装置，千分级精度表现	Knife alignment: Automatic knife alignment, hidden non-interference design standard configuration hidden non-interference design high precision

					automatic knife alignment device, thousand-grade precision performance
贴标机 laber printer		美国 USA	Honeywell 霍尼韦尔 霍尼韦尔	霍尼韦尔工业打印机为 7×24 小时重工况设计，全金属机身抗粉尘震动温差，打印快精度高，支持热敏、1D/2D 条码及 RFID 标签，广泛用于仓储物流制造等行业，稳定对接 ERP/WMS 系统。	Honeywell industrial printers are engineered for 24/7 heavy-duty use. All-metal, rugged design withstands dust, vibration, and temperature changes. Fast, high-resolution printing supports thermal, 1D/2D barcode, and RFID labels. Used in warehousing, logistics, manufacturing, automotive, and chemical industries, integrating with ERP/WMS systems.