版本 Version：2026

空调换热器生产设备专业制造商

Heat Exchanger Produce Machinery Professional Manufacturer

制造基地

苏迈特智能科技（江苏）有限公司

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Manufacture II

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视频号

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苏迈特智能科技（江苏）有限公司

SMAC intelligent Technology Co., Ltd

企业简介
COMPANY PROFILE


质量管理体系认证证书

兹证明

苏迈特智能科技(江苏)有限公司

建立的质量管理体系符合标准：

GB/T19001-2016/ISO9001:2015


环境管理体系认证证书

兹证明

苏迈特智能科技(江苏)有限公司

建立的环境管理体系符合标准：

GB/T24001-2016/ISO14001:2015


职业健康安全管理体系认证证书

兹证明

苏迈特智能科技(江苏)有限公司

建立的职业健康安全管理体系符合标准：

GB/T45001-2020/ISO45001:2018

专精特新"小巨人"企业

国家级专精特新小巨人

国家级高新技术企业

中江机电科技江苏有限公司 成立于 2010 年，坐落于美丽的滨江沿海开发城市江苏国家级海安经济开发区，是专业从事换热器成套加工设备研发、制造与服务的高新技术企业。

公司主营产品：开式、闭式高速翅片冲压生产线，盘管校直切制机，半自动、全自动长 U 弯管机，立式、卧式胀管机，换热器折弯机及各类管端成型机等整套换热器生产的加工设备。主导产品通过 CE 认证，公司通过各年度 IS09001-2008 质量管理体系、IS014001 环境管理体系和 GB/T28001 职业健康安全三位一体管理体系认证。

2017 年 9 月成立**苏迈特智能科技 (江苏) 有限公司**，坐落于南通市经济技术开发区林荫路 52 号，占地 37483 平方米，项目总投资 2.5 亿元，注册资金 1 亿元。公司专业致力于两器无人化工厂的自动化设备的研发和制造，是家用空调、汽车空调、商用空调以及冷冻冷链行业第一家以 2025 工业 4.0 为目标的智能设备制造企业，我们将为行业解决人力、节能、提效、环保的痛点问题，为行业大变革做出贡献。

公司新建 21000m^2 厂房，4000m^2 恒温车间，800 展厅，400 检测中心，400m^2 的研究院太阳能绿色能源系统，全套智能制造系统包括 OA、CRM、ERP、PLM、PDM、MES、KPL 以及 400 世的智能制造控制中心，我们的客户可以通过手机端 APP 了解他的订单状态 (如生产计划、装配过程、检测过程等)，我们的智能设备和自动化生产线可以通过企业云来收集在客户使用过程中的设备运行各类数据 (如生产状态，运行状态，保养和维修状态等)，也可以与客户的智能制造系统相连接，真正实现各类生产设备间的物联以及与各类软件的互联。未来企业是数据化的企业，我们将继续以“自动化、无人化”为研发为核心，以“智能制造系统”为工具，制造出真正的智能设备来服务于制冷行业。


QUALITY MANAGEMENT SYSTEM CERTIFICATE

Hereby Certify

SMAC INTELLIGENT TECHNOLOGY CO.,LTD.

QMS conforms to:

GB/T19001-2016/ISO9001:2015


ENVIRONMENT MANAGEMENT SYSTEM CERTIFICATE

Hereby Certify

SMAC INTELLIGENT TECHNOLOGY CO.,LTD.

EMS conforms to:

GB/T24001-2016/ISO14001:2015


OCCUPATION HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATE

Hereby Certify

SMAC INTELLIGENT TECHNOLOGY CO.,LTD.

OHSMS conforms to:

GB/T45001-2020/ISO45001:2018

ZJMECH Technology Co., Ltd founded in 2010,It is located in Jiangsu national hai'anji Development Zone,Haian City.Specialized in manufacturing , research , development and service of Heat exchanger machinery.Main products of the company: Complete heat exchanger machinery , C type,H type High speed fin press line, Coil tubecut to length line, Semi-auto, Full auto Hairpin bender, Vertical , Horizontal Expander, Heat exchanger bending machine andvarious kind of tube forming machines,ect, Main Product with CE Certificate, ISO9001-2008 Quality certificate, ISO4001Environmental management Certificate and GB/T28001 Occupational health and safety, Trinity management system certification.

SMAC intelligent Technology Co., Ltd was established in September 2017, Located in #52,Linyin Road, Nantong Economic Development Zone,covers an area of 37483 m^2.

The total investment of the project is 250 million RMB and the registered capital is 100 million RMB. The company isspecialized in the R & D and manufacturing of automation machinery in the Condenser and evaporator unmanned plant. tis the first intelligent equipment manufacturing enterprise of the household air conditioning, automotive air conditioning commercial air conditioning and refrigeration cold chain industry with the goal of 2025 industry 4.0. We will solve the painpoints of manpower, energy saving, efficiency improvement and environmental protection for the industry, and make contributions to the great transformation of the industry.

Meanwhile,Company will newly build workshop of 21000m^2,4000m^2 constant temperature workshop, 800m' exhibitionhall, 400m^2 Inspection Center, 400m^2 Research Institute,Solar green energy system,The whole intelligent manufacturingsystem includes OA,CRM,ERP, PLM,PDM, MES,KPl and 400m?intelligent manufacturing control center, Our customeiwould follow his order status (such as production planning, assembly process, inspection process, etc,) by APP through the phone, Our intelligent equipment and automatic production line can be collected by the enterprise cloud in the process of customer use equipment running all kinds of data (such as production status, running status, maintenance and maintenance status, etc.), also can be connected with the customer's intelligent manufacturing system, realize between all kinds of production equipment and connected with all kinds of software. In the future, enterprises are data enterprises, we will continue to take "automation, unmanned" as the research and development as the core, with "intelligent manufacturing system" as a tool, to create real intelligent equipment to serve the refrigeration industry.

空调换热器生产设备专业制造商

Heat Exchanger Produce Machinery Professional Manufacturer





厂区面貌 FACTORY AREA





















生 产 车 间
WORKSHOP



MAC TECHNOLOGY

苏迈特智能科技（江苏）有限公司

SMAC intelligent Technology Co., Ltd

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管路加工设备系列

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- 冲孔拔孔机系列 P29–30
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Tube forming series

- CNC Tube Bender P24–25
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- P35–38

1-01 / 闭式冲床 H type Fin Press Line

产品特点

1. 组成：铝箔开卷机构、过油装置、初始送料装置（选件）、闭式冲床、吸料装置、集料装置、快速换模装置、拉料机构；
2. 具有滑块液压提升功能，方便模具调试；
3. 主机调速及真空吸盘采用变频控制；
4. 具有无料检测，无油报警等保护系统；
5. 主机具有液压过载保护功能；
6. 配备快速换模装置，让换模更方便快捷；
7. 采用人机界面及 PLC 的电气控制系统确保自动生产线各种功能的可靠执行。

FEATURES

Machine Standard Components:
fin decoiler, lubrication system, quick die changing system, fin press machine, fin feed system, fin suction units, fin stacker, fin scarp collector.

Features
Hydraulic Slider Lifting Function facilitates fin die setup and adjustment.
Variable-Frequency Control for press machine's speed and for the vacuum suction system ensures smooth and stable operation.
Equipped with automatic monitoring such as material detection, low-oil alarms, and other protection functions for reliable operation.
Equipped with Hydraulic Overload Protection to protect the machine and die from excessive loads.
Quick Die Change System enables faster and more convenient die replacement.
The PLC and HMI control system ensures reliable and automated operation of the complete fin press line.

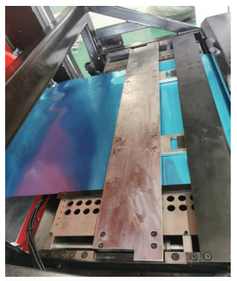


闭式翅片冲压生产线
H type high speed fin press line

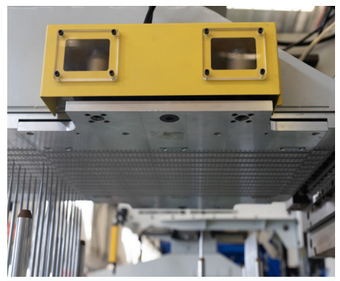
闭式翅片冲压生产线
H type high speed fin press line



配 置 Configuration



初始送料机构
Inch feeding



拍料板
Fin Tap Down Sheet



吸料装置
Fin Suction Unit

产品用途

翅片冲压线主要用于生产翅片，翅片是换热器的元件之一，通常被广泛应用在制冷、空调、锅炉等行业中。翅片冲压线能够高效、准确地完成翅片的冲压加工，包括翅片的成型、切割、打孔等工艺步骤。

APPLICATION AREA

Fin press line is mainly used for the production of fins, fin is one of the components of heat exchanger, is usually widely used in refrigeration, air conditioning, boiler and other industries. The fin press line can efficiently and accurately complete the stamping processing of the fins, including the fin forming, cutting, punching and other process steps.

项 目 Item		规 格 Specification						
型 号 Model		HFPL-48A-125	HFPL-36A-100	HFPL-36-80	HFPL-24A-63			HFPL-45
公称力 Capacity	KN	1250	1000	800	630			450
滑块行程 Slide-strokes	mm	40	40	40	40	50	60	40
冲压次数 (空载)Stroke per minute	SPM	150-300	150-300	150-300	150-300	150-260	160-230	150-300
装模高度 Die height	mm	280-330	280-330	280-330	260-310			260-310
最小装模高度提升量 Min.slide lifting height	mm	130	120	100	80			80
滑块底面尺寸 Bottom size of slide (LR XFB)	mm	1300*1350	1300*1190	1055*1190	1100*890			720*740
工作台板尺寸 Table size(LR X FB)	mm	2000*1360	1800*1200	1600*1200	1600*900			1300*770
主电机功率 Main motor	KW	22	18.5	15	11			7.5
卷料内径 Coil ID	mm	Φ150	Φ150	Φ150	Φ150			Φ150
卷料外径 Coil OD	mm	Φ1200	Φ1200	Φ1200	Φ1000			Φ1000
卷料最大宽度 Width of material	mm	1080	820	820	550			400
最大集料高度 Max height of collecting material	mm	普通 720/ 升降 900						
吸料长度 Stack length	mm	900	900/1200/1500	900/1200/1500	1000/1200/1500			1000/1200/1500
外形尺寸 (长 X 宽 X 高) Overall size (L x WxH)	mm	10000x4500x3800	10000X4000X3500	10000X4000X3500	10000X4000X3000			7500X3500X3200
总重量 Weight	kg	26000	20000	18000	14000			9000
设备结构		四柱双点，曲轴纵向		四柱双点，曲轴纵向				四柱单点

配 置 Configuration

翅片润滑 Lubrication



油浴式润滑
Oil Dip Tank



定量供油
Presicion Lubrication System

放料架 Decoiler



放料架单卷
Single Decoiler



放料架双卷
Double Decoiler

废料收集 Scrap Collection

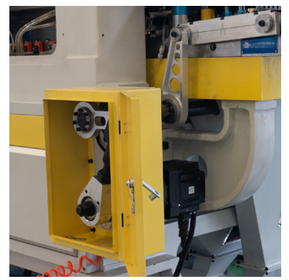


吹废料装置
Blowing Scrap Removing System



废料小车
Fin Scrap Collection Trolley

拉料机构 Feeding

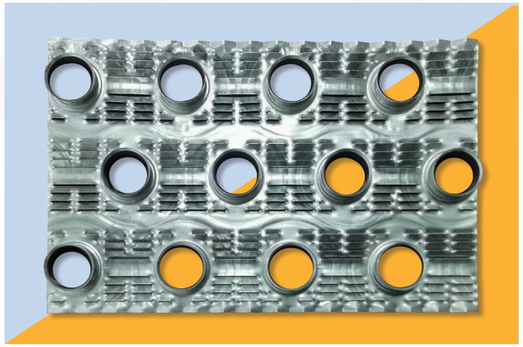
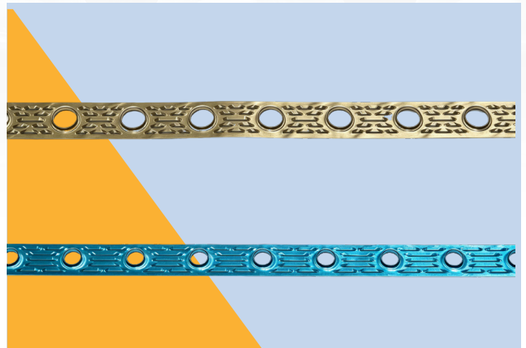


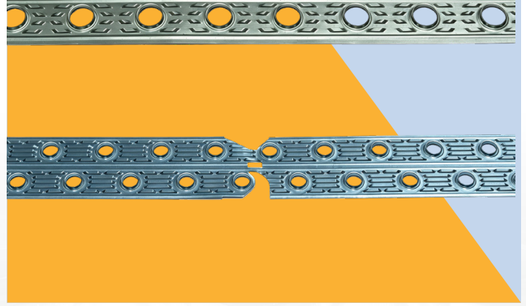
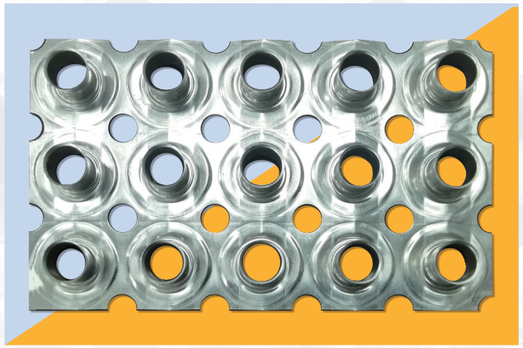
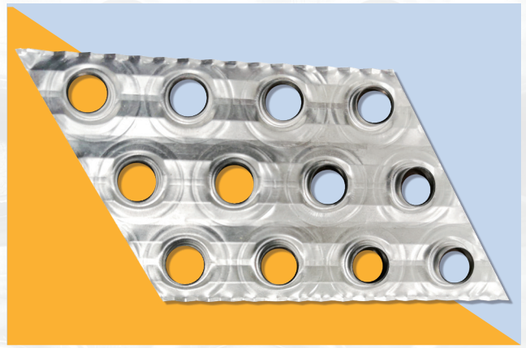
伺服拉料
Servo Feeding



机械拉料
Mechanical Feeding

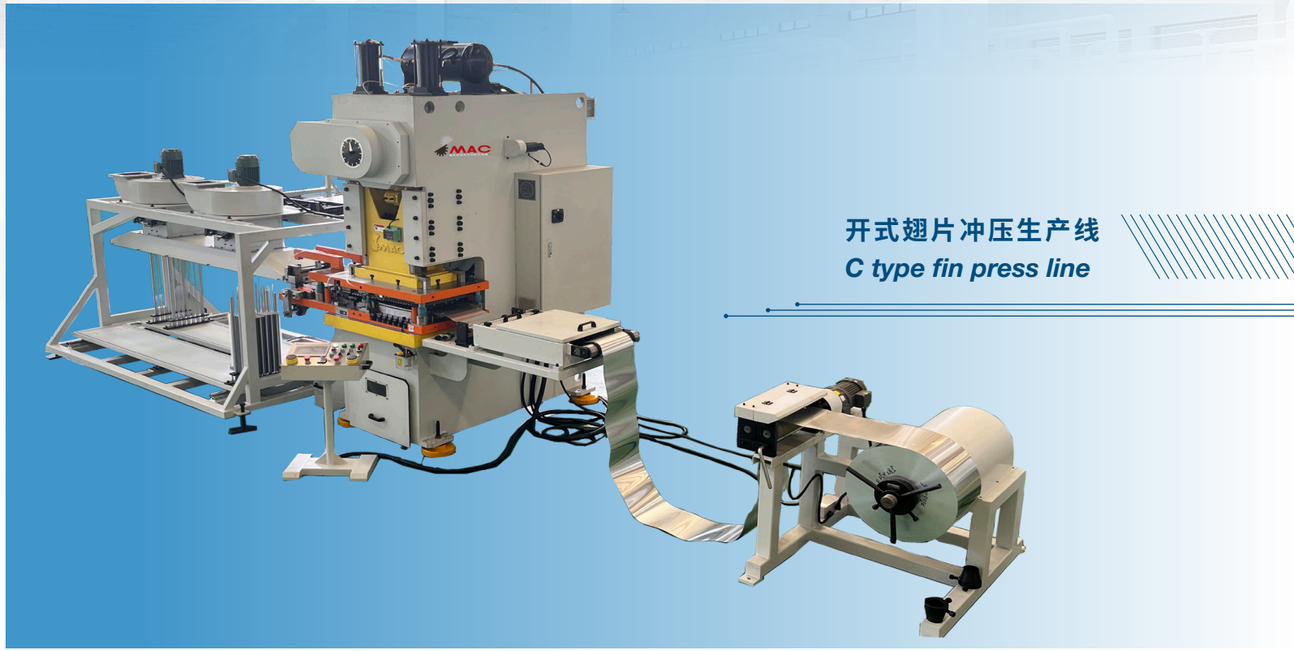
闭式翅片冲压线			
机型 Type	翅片列数 Fin row	功能 Function	吨位 Capacity
HFPL：闭式产品冲压线 H type fin press line	48	无：单曲轴单点 Single cranks single point	125
	36	A: 单曲轴双点 Single cranks,double point	100
	24	B: 双曲轴四点 Double cranks four point	80
	18	H：超高速 Ultra high speed	63
			45

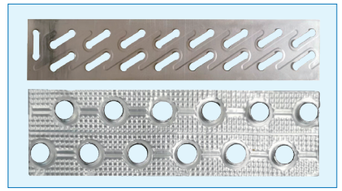
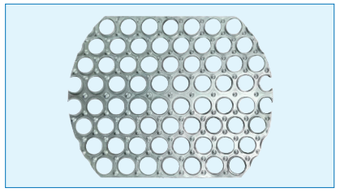
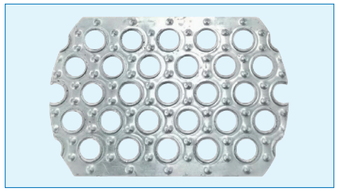
产品图片

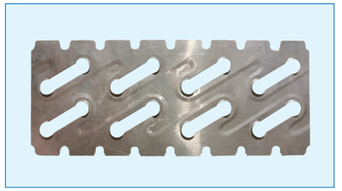
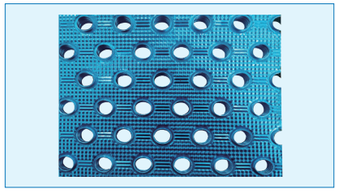
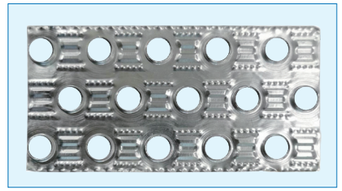
1-02 / 开式冲床 C type Fin Press Line

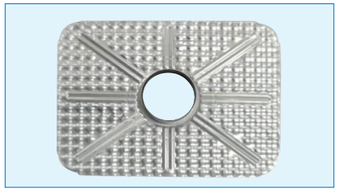


开式翅片冲压生产线
C type fin press line

开式翅片冲压线		
机型 Type	吨位 Capacity	功能 Function
CFPL：开式产品冲压线 C type fin press line	45	C：滚针 Roller bearing
	63	B：铜瓦 Bronze bush
	80	



两 器 无 人 化 工 厂 自 动 化 设 备 研 发 和 制 造 供 应 商



产品特点

机身结构：机身呈 C 形，占用的操作空间较小，装卸冲压模具和冲压操作都比较方便。

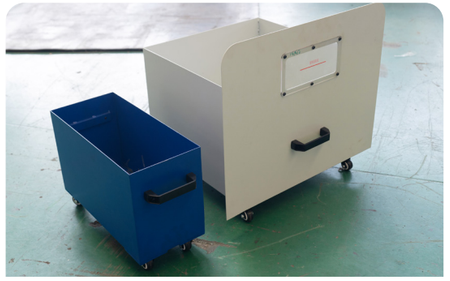
适用场景：适合于冲制成形深度较浅、尺寸相对较小的零件。

成本与效率：开式冲床的成本相对较低，适用于大批量低价制品的生产。而且结构简单，操作方便，系统无噪音，可节省车间消耗，降低生产成本。

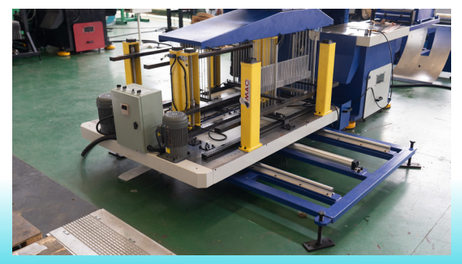
安全性：开式冲床配备了冲压安全器、自动卸料安全器等安全装置，提高了生产的安全性。

灵活性与可调性：开式冲床的高度、速度、压力和冲压时间等参数可根据不同的产品和模具进行调整，这使得它具有一定的灵活性和可调性。

选配功能



废料小车
Fin Scrap Collection Trolley



平移升降集料架
Lifting Shuttle Stacker

FEATURES

Compact C-Frame Design

The C-shaped frame features a compact footprint and provides easier access for fin die loading and unloading. Compared with an H-type press, it also offers a more convenient working area for operators.

Application

Ideal for small-sized workpieces and applications requiring relatively shallow forming depths.

Cost & Efficiency

The C-type fin press offers a cost-effective solution for high-volume production. Low-noise operation helps create a better working environment. Its efficient operation helps reduce energy consumption and overall production costs.

Safety

Equipped with multiple safety features, including stamping protection and automatic unloading protection, to enhance operational safety.

Flexibility

Key parameters, including press height, speed, pressure, and stamping time, can be adjusted to accommodate different products and fin dies.

项 目 Item		规 格 Specification						
型 号 Model		CFPL-45C	CFPL-63C	CFPL-45B	CFPL-63B			CFPL-80B
公称力 Capacity	KN	450	630	450	630			800
滑块行程 Stroke of Slide	mm	40	40	40	60	50	40	60
行程次数 Stroke	S.P.M	150~250	150~250	100~200	100~160	100~180	100~200	90~150
装模高度 Die Height	mm	200~270	210~290	200~270	210~290			220~300
滑块底面尺寸（长 × 宽） Bottom Size of Slide(H×W)	mm	500×300	600×350	500×300	600×350			600×350
工作台板尺寸（长 × 宽） Size of TableH×W×T	mm	800×580×100	850×580×110	800×580×80	850×580×90			900×600×100
材料宽度 Width of Material	mm	330	330	330	330			330
吸料长度 Sucking Length	mm	1200/1500	1200/1500	1200/1500	1200/1500			1200/1500
集料高度 Collecting Height of Material	mm	600	600	600	600			600
卷料内径 Inner Diameter of Material Rolling	mm	ϕ75	ϕ75	ϕ75	ϕ75			ϕ75
卷料外径 Outer Diameter of Material Rolling	mm	850	850	850	850			850
主电动机功率 Main Motor Power	KW	5.5	7.5	5.5	7.5			11
外形尺寸（长 × 宽 × 高） Overall Dimensions(L×W×H)	mm	6500×2500×2330	6500×2500×2500	6500×2500×2500	6500×2500×2800			6600×2500×2800
主机重量 Machine Weight	kg	6000	7500	6000	7500			8500
合模调整 Die Height Adjustment		电动调整 /Motorised		电动调整 /Motorised				
过载保护 Overload Protect Type		液压过载保护 /Hydraulic Over load		液压过载保护 /Hydraulic Over load				
速度调节 Speed Adjustment		变频调速 /VFD						
发讯装置 Signal Output		编码器发讯 /Rotary Encoder						
角度显示 Angle Display		指针和数字显示 /Point pin and Digital Mode						
滑块轴承 Slider Bearing Type		圆柱滚子轴承 /Roller Bearing		铜瓦 /Bronze Bush				





圆柱滚子轴承
Roller Bearing



铜瓦
Bronze Bush

1-03 / 立式胀管机 Vertical Tube Expander



产品特点

结构形式：采用立式布置，手工 / 门式上下料。在一次自动循环中，可以完成胀管、扩口、翻边等多个工艺过程，无需二次扩口，从而提高工作效率。

控制系统：通过伺服电机及丝杆同步升降，实现下支承对工件二端板距离的控制，同时气动锁紧。此外，PLC 的终端机可以显示工件长度的变化，为操作提供便利。

安全保护：胀杆快速固定部分采用气缸锁紧，确保胀杆的稳定性和操作的便捷性。同时，设备还配备了胀杆保护装置，在胀管遇到意外情况导致胀杆弯曲时，保护装置会自动停止设备下行，从而避免胀杆的损坏。



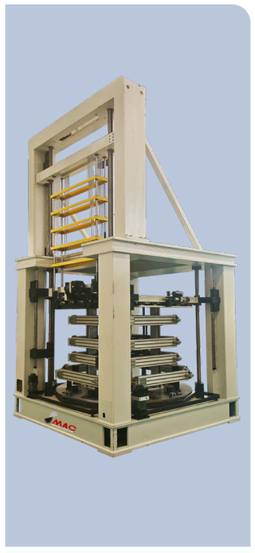
立式液压胀管机
Vertical Hydraulic Tube Expander



立式翻转门胀管机
Vertical Tube Expander with Turnover door



立式双工位胀管机
Vertical Double Station Tube Expander



立式四工位胀管机
Vertical Four Station Tube Expander

立式胀管机				
机型 Type	动力 Power	胀程 Max length	胀管方式 Expand type	上料方式 Loading way
VTE：立式胀管机 Vertical tube expander	M：伺服 servo	800	无：有收缩 Shrink	无：标准型 Standard type
	H：液压 Hydraulic	1000	S：无收缩 Shrinkless	T：翻转门 Turnover Door
		1200		R2：旋转双工位 Rotate 2 station （≤ 1600mm）
		1600		R4：旋转四工位 Rotate 4 station
		2000		
		2500		

FEATURES

Vertical Design

The machine features a vertical design with manual or turnover door loading and unloading. Tube expanding, flaring, and other forming processes can be completed in a single automatic cycle without secondary flaring, improving overall production efficiency.

Control System

Servo motors and lead screws provide synchronized lifting and precise adjustment of the lower support according to the distance between the two end plates of the coil, with pneumatic locking for secure positioning. The PLC interface displays changes in workpiece length for convenient operation and process monitoring.

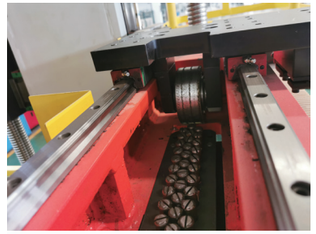
Safety Protection

The expander rods are quickly secured by pneumatic cylinders for stable positioning and easy operation. A dedicated rod protection system is also provided. If an abnormal condition causes a rod to bend during tube expansion, the system automatically stops the downward movement to help prevent damage to the expander rods.

选配功能



扫描扩口
Scan flaring



滚压扩口
Rolling flaring



分体式扩口
Split flaring

两 器 无 人 化 工 厂 自 动 化 设 备 研 发 和 制 造 供 应 商



产品用途

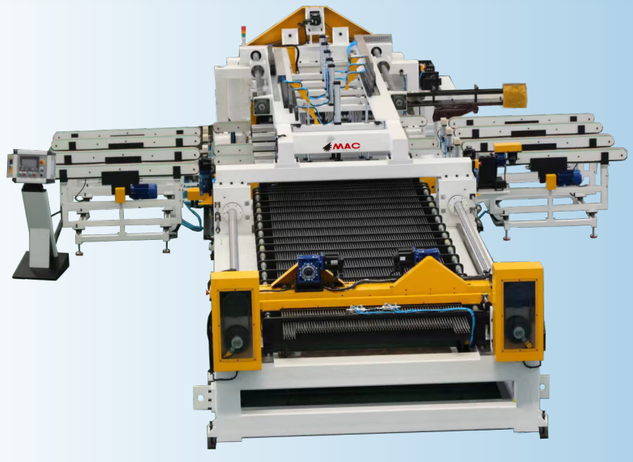
立式胀管机是一种专用的换热器胀接设备，主要用于换热器、冷凝器等换热器制造中，管子与翅片的胀紧连接。其工作原理是通过电机 / 液压传动将胀杆和胀头插入换热器铜管内，强制将铜管撑大，使铜管发生塑性变形，从而使铜管与翅片或管板紧密接触。这样不仅可以增强换热器的热交换率，还可以提高设备制造的质量。

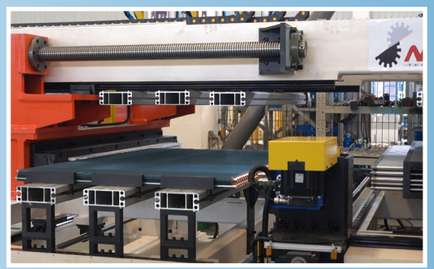
FUNCTION

The Vertical Tube Expander is specially designed for expanding tubes in heat exchangers, condensers, and other coil products, creating a tight and uniform contact between the tubes and fins or tube sheets.

During the expanding process, the expander rods and expansion heads are driven into the tubes by a servo or hydraulic system, expanding the tubes through controlled plastic deformation. This ensures reliable tube-to-fin contact, improves heat transfer efficiency, and enhances the overall quality and consistency of the finished heat exchanger.

1-04 / 卧式伺服胀管机 Horizontal Tube Expander





卧式伺服胀管机
Horizontal Tube Expander

卧式胀管机				
机型 Type	动力 Power	胀程 Max length	胀管方式 Expand type	上料方式 Loading way
HTE：卧式胀管机 Horizontal tube expander	M：伺服 servo	2200	无：有收缩 Shrink	无：标准型 Standard type
	H：液压 Hydraulic	2500	S：无收缩 Shrinkless	T：平移工作台 Level move table
		3000		C: 皮带输送线 Conveyor belt
		3500		
		4000		



产品特点

结构形式：采用卧式布置，手工 / 工作台上下料。行程相较于立式胀管机更大。

FEATURES

Horizontal Design

The hozirontal tube expander features a horizontal configuration with manual or worktable-assisted loading and unloading. Compared with a vertical tube expander, it offers a longer expansion stroke, making it suitable for longer heat exchanger coils.



直管 U 管混用
Straight & Hairpin Mix

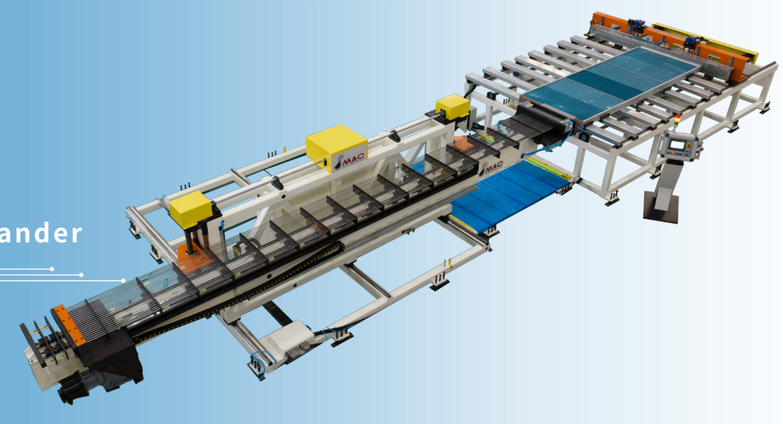
选配功能

1-05 / 组合式胀管机 Flexible Tube Expander



拉胀胀球
Expansion Bullet of Pull Type Expander

组合式胀管机
Flexible Tube Expander



组合式胀管机			
机型 Type	胀程 Max length	胀管方式 Expand type	上料方式 Loading way
FTE：组合式胀管机 Flexible tube expander	2000 / 2500	无：有收缩 Shrink	无：标准型 Standard type
	3000 / 3500	S：无收缩 Shrinkless	T2/4：2/4 工位尾座 2/4station Tailstock
	4000 / 4500	P：拉胀 Pull Type	
	5000 / 5500		
	6000 / 7000		



产品特点

灵活应用：胀管器可定制 2~24 管，2–3 种管型，多工位尾座，因此可以灵活应用于任何换热器。

操作简便：整机由触摸屏、PLC 和伺服电机控制升降平移，全自动移动完成整个工件。

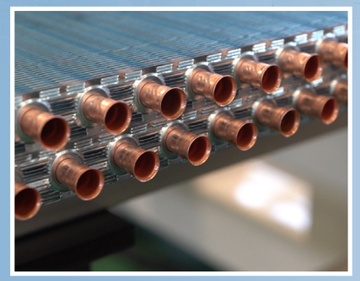
FEATURES

Flexible Configuration

The flexible tube expander can be customized for 2–24 tubes and 2–3 tube sizes, with a multi-position tailstock design to accommodate a wide range of heat exchanger specifications.

Easy Operation

The flexible tube expander is controlled by an integrated touchscreen and PLC system. Servo-driven lifting and horizontal movement enable automatic positioning and processing of the workpiece, making operation simple and efficient.

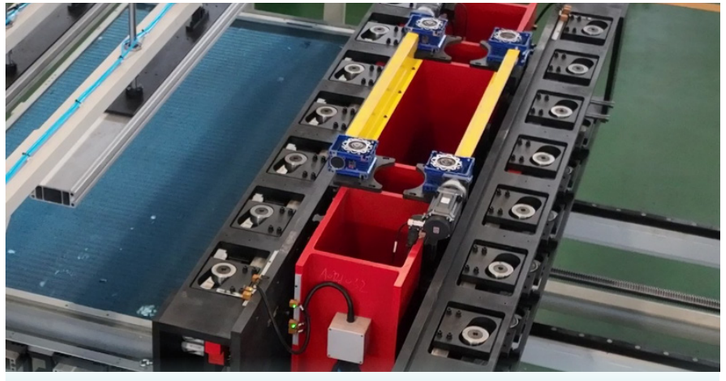




移动式胀管机
Mobile Tube Expander

移动式胀管机		
机型 Type	管数 Tubes per time	胀程 Max length
MTE：移动式胀管机 Mobile tube expander	4	2000 / 2500
	6	3000 / 3500
	8	4000 / 4500
	12	5000 / 5500
	16	6000 / 7000





多工位尾座
Multi-tailstock

选配功能

1-06 / 手提胀 Portable Tube Expander



液压加强型手提胀
Hydraulic Heavy-Duty Type
Portable Tube Expander



液压标准型手提胀
Hydraulic Standard Type
Portable Tube Expander



伺服手提胀
Servo Portable Tube Expander







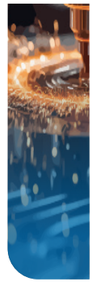




多管设计
Multi-Tube Design

手提式胀管机
Portable Tube Expander

手提胀			
机型 Type	动力 Power	管数 Tubes per time	功能 Function
PTE：手提式胀管机 Portable tube expander	M：伺服 servo	2/4/6/8/2+2/3+3/4+4	无：标准型 Standard type
	H：液压 Hydraulic	2/4	S: 加强型 Strengthened type



产品特点

采用龙门架和平衡器，操作简便易上手，适用于各种换热器胀管。

FEATURES

Using gantry and balancer, simple and easy to operate, suitable for all kinds of heat exchanger expansion pipe.

1-07 / 长 U 弯管机 Hairpin bender





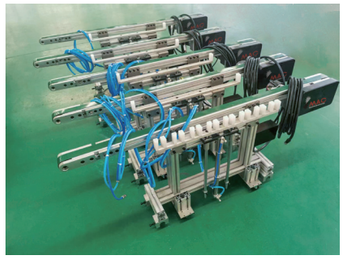
全自动长 U 弯管机
Auto Hairpin Bender



双模
Double mould



快速换模
Tool quikly exchange



皮带接料
Belt collector



铜管放料架
Tube decoiler
（详见辅机－铜管放料架部分）

半自动长 U 弯管机
Semi-auto Hairpin Bender



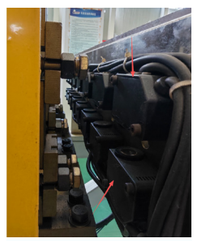
铜管
Copper Pipe



不锈钢管
Stainless Steel Pipe



铝管
Aluminum Pipe



黑斑检测
Black tube sensor



定量供油
Precision Lubrication System

全自动长 U 弯管机					
机型 Type	最大管数 Max Capacity	加工长度 Max Length	中心距个数 Num. of mould	放料架 Decoiler type	接料方式 Collector
AHB：全自动长 U 弯管机 Automatic hairpin bender	6	1300/1700	M1：单模 Single mould	E：电动 Motorized	无：气动摆臂 Pneumatic swing arm
	8	2200/2500	M2：双模 Double mould	Q：内抽 Eye to sky	A1：皮带输送 Belt Conveyer
	10	2700/3200		F：反抽 Reverse Eye to sky	
	8+8	3800/4000			
	16	4500			

半自动长 U 弯管机		
机型 Type	最大管数 Max Capacity	加工长度 Max Length
SHB：半自动长 U 弯管机 Semi-auto Hairpin bender	2	1300
	3	1700
	4	2500
	5	3000
	6	



产品特点

本机型是生产发夹型长 U 管的的专用弯管设备；

主要组成部分：铜管开料装置、校直部分、送料部分、切割部分、导料部分、弯曲部分、卸料部分、底座部分、接料部分、气动系统、液压系统、电气系统等部分组成；

伺服系统控制弯曲、卸料、定程部分，变频电机控制送料；

PLC 控制系统，人机界面操作方式；

Introduction

Designed for Hairpin Tube Production

This machine is specially designed for the automatic production of hairpin tubes used in heat exchanger manufacturing.

Machine components

The machine integrates tube decoiling, straightening, feeding, cutting, guiding, bending, unloading, and collection, together with pneumatic, hydraulic, and electrical systems.

Features

Servo-Controlled Operation

Servo systems precisely control the bending, unloading, and length positioning processes, while a variable-frequency motor controls tube feeding for stable and efficient production.

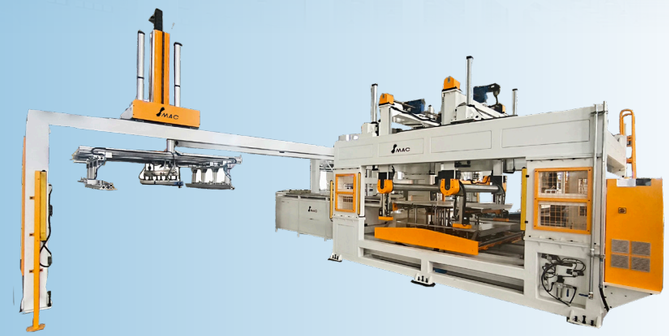
PLC + HMI Control

The machine is equipped with a PLC control system and an intuitive HMI touchscreen for easy operation and parameter adjustment.

1-08 / 换热器折弯机 Coil Bending Machine







双轴折弯机
Coil Bending Machine (Double Roll)



自动卸料悬臂折弯机
Coil Bending Machine with Auto unload



龙门式折弯机
L Shape Coil Bending Machine



悬臂式折弯机
G Shape Coil Bending Machine



O 型折弯机
O Shape Coil Bending Machine

产品用途

换热器折弯机用于将空调室外机冷凝器折弯成定角度，呈“G”型或“U”型或“L”型或“O”型。

APPLICATION AREA

Coil bending machine is used to bend the air conditioning outdoor condenser into a fixed Angle, in "G" type or "U" type "or" L " type or"O" type, to optimize spatial layout and compatibility.



自动卸料工作台
Auto unload table

产品特点

伺服控制：采用伺服系统，定位准确，能够实现精确的控制，保证折弯精度和稳定性。灵活性：冷凝器折弯机可以适应不同规格和型号的冷凝器折弯需求，具有较强的适应性和灵活性。

自动化程度高：能够实现自动化生产，减少人工干预，降低劳动强度，提高生产效率。

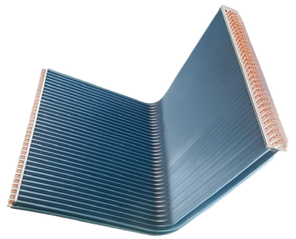
FEATURES

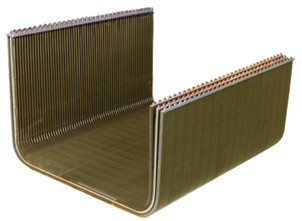
Servo control: using servo system, accurate positioning, can achieve accurate control, ensure the bending accuracy and stability.

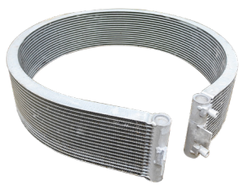
Flexibility: the condenser bending machine can adapt to different specifications and models of condenser bending requirements, with strong adaptability and flexibility.

High degree of automation: can achieve automatic production, reduce manual intervention, reduce labor intensity, improve production efficiency.









换热器折弯机			
机型 Type	最大宽度 Max width	折弯形式 Constructon	功能 Function
CFM：换热器折弯机 Coil bending machine	300	G: 悬臂 Cantilever type	无：标准型 Standard type
	800	L：龙门 Gantry type	A1: 自动卸料 Auto unload
	1200	D：双辊式 Double roll type	A2: 自动上下料 Auto load & unload
	1600	O: O 型折弯 O shape bender	

1-09 / 蒸发器切割机 Evaporator Cutting and bending machine



蒸发器切割折弯机
Evaporator cut and bending machine

蒸发器切割机			
机型 Type	工件长度 Max length	刀数 Max knife	折弯数 Bend number
EC：蒸发器切割机 Evaporator cutting machine	850:850mm	1	1
ECB：蒸发器切割折弯机 Evaporator cutting and bending machine	1200:1200mm	2	2



产品用途

蒸发器切割机用于将分体空调室内机蒸发器按要求切割。

APPLICATION AREA

Evaporator cutter is used to cut the evaporator of split air conditioner as required.

1-10 / 小 U 弯管机 Return Tube Bender

全自动小 U 机
Automatic return tube bender





S 型弯管机
S shape tube bender



S 型切割机
S shape tube cutting machine



手动小 U 机
Manual return bender

全自动小 U 机				
机型 Type	最大管数 Max Capacity	管径 Tube size	功能 Function	放料架 Decoiler type
ARB：全自动小 U 弯管机 Automatic Return tube bender	2	5	无：标准型 Standard type	E：电动 Motorized
MRB: 手动小 U 机 Manual Return bender	3	7	M：跨接弯管 Cross Return tube	Q1：内抽 Eye to sky
CTB-S:S 型弯管机 S Shape tube bender	5	7.94		
		9.52		
		12.7		
		15.88		



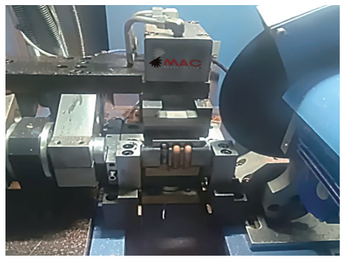
产品用途

小弯头成型机 (小 U 弯管机) 用于将盘型铜管开卷、校直、锯切、折弯成为 U 型小弯头管 ; 主要应用于空调两器热水器等行业的小 U 管的全自动生产。

APPLICATION AREA

Return tube bending machine (small U bending machine) is used to roll, straighten, cut and bend into U-shaped small elbow; it is mainly used in the automatic production of small U pipe in air-conditioning / water heater industry.





跨接管功能
Cross return bending

选 配 功 能



1-11 / 套环机 Ring Loading Machine



套环机
Ring loading machine



全自动套环机		
机型 Type	工位数 Station	管径 / 中心距 Tube size
RL：自动套环机 Ring loading machine	1	5/19.5
	4	7/21
	8	9.52/25.4
	12	



产品用途

小 U 套环机用于将小 U 管自动套上焊环，应用于空调两器、热水器等行业的小 U 管套环的全自动生产。

APPLICATION AREA

Ring loading machine is used to automatically insert the small U tube on the welding ring, which is applied to the automatic production of small U tube ring in air conditioning, water heater and other industries.

1-12 / 小 U 清洗机 Return Tube Cleaning

小 U 清洗机
Return tube cleaning machine





产品用途

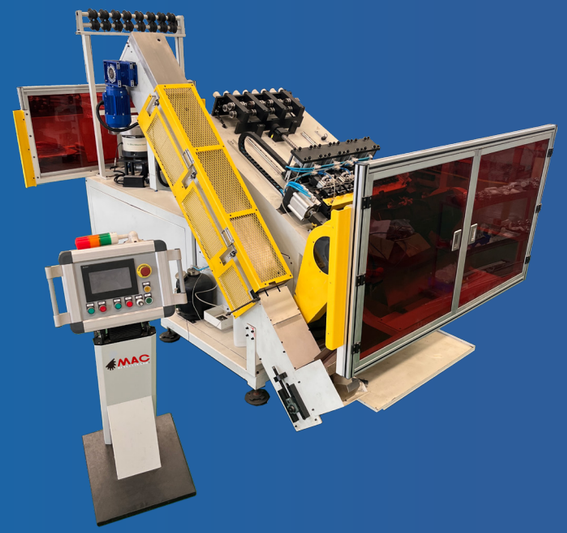
全自动小 U 清洗机用于各类锯切下料的小 U 管的去毛刺及清洗。

APPLICATION AREA

Automatic return tube cleaning machine is used for the deburring and cleaning of the small U tube.

1-13 / 全自动无屑小 U 套环一体机 Chipless Return tube bending and ring loading line

全自动无屑小 U 套环一体机
Chipless Return tube bending and ring loading line



产品特点

无屑切割技术：该设备采用了铜管无屑切割技术，这有助于减少材料浪费并提高生产效率。

弯制与整型功能：无屑小 U 套环一体机能够实现对小 U 弯头的弯制和整型，使得产品更加符合生产要求。

双工位全自动生产：集成了套环的工序，双工位全自动生产，简化了生产流程，可以实现无人化作业，从而降低了人工成本并提高了生产效率。

具有残次品检测 自动检测U环，剔除残次品，提高成品率。

FEATURES

Chipless Cutting Technology

The machine adopts chipless tube cutting technology, minimizing material waste while ensuring clean and efficient production.

Bending & Forming Function

The machine integrates bending and forming of small U-bends, ensuring consistent dimensions and reliable product quality.

Fully Automatic Dual-Station Production

The dual-station design integrates small u shaped return bend forming and ring assembly into one automated process, simplifying the production flow and enabling unmanned operation. This helps reduce labor costs and improve overall production efficiency.

Automatic Defect Detection

An integrated inspection system automatically detects defective U-bends and removes them from the production process, helping improve the final product pass rate.

2-01 / 数控弯管机 CNC Tube Bender



10 型数控弯管机
10 CNC tube bender



40-50 型数控弯管机
40 CNC tube bender



13-20 型数控弯管机
20 CNC tube bender



手动弯管机
Manual bender



数控冲孔弯管机
CNC tube bender with flute punch



产品用途

该设备用于弯制空间管道，主要应用于空调、热水器、飞机、汽车等管路的弯制。

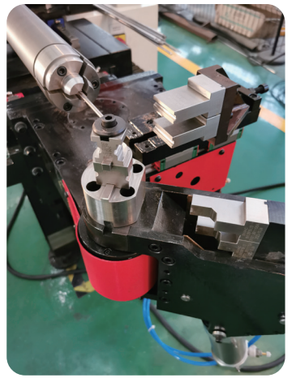
APPLICATION AREA

Designed for three-dimensional tube bending, this machine is ideal for producing complex tube shapes and spatial piping components. It is widely used in air conditioning, water heaters, aerospace, automotive, and other industries.

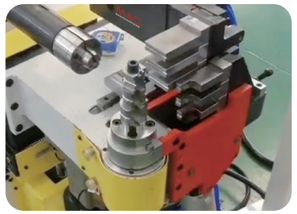




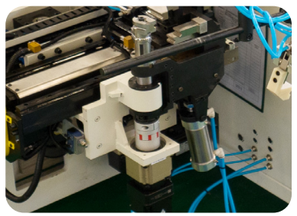
单模层
Single layer die



双模层
2 layer die



多模层 Muti-layer die



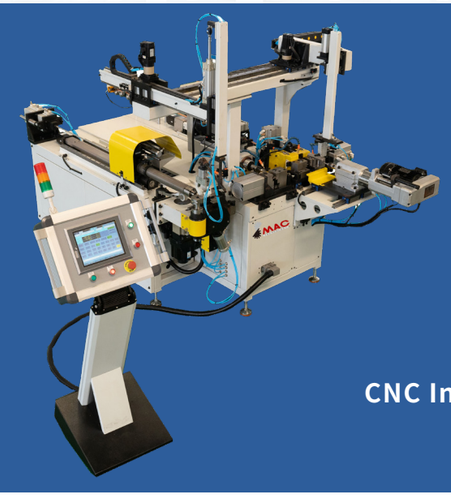
左右弯 Left & Right Bending

选配功能

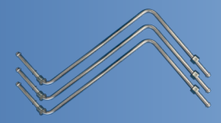
数控三维弯管机

机型 Type	最大管数 Max Capacity	折弯方式 Bending method	模数 Num of mould	功能 Function
CTB: 数控弯管机 CNC tube bender	13/20	R: 右弯 Right bend	1	无：标准型 Standard type
CTBP: 数控弯管冲孔机 CNC tube punch and bender	25/30	L：左弯 Left bend	2	J：经济型 economical type
	40/50	RL：左右复合弯 Right & Left Bend	n	A：自动上下料 Auto load & unload
	65/80			Z: 定制型 Customrized
	100/110			
	n: 定制 customize			

2-02 / 数控开料管端弯管一体机 CNC Integrated Tube Processing Machine







套螺母和垫片
Nuts & Washer Insertion

数控弯管一体机
CNC Integrated Tube Bending Machine

产品特点

数控开料弯管一体机，采用数控系统控制，伺服电机驱动，人机对话式的操作，设置输入简便，手动、自动任意选择并自动转换。用于盘管开卷校直，无屑切割，多种弯管半径可一次弯曲成型。整机性能稳定，弯管效率高，是管件加工行业中的理想设备。

FEATURES

CNC Integrated Tube Processing Machine integrates tube decoiling, straightening, chipless cutting, and multi-radius bending. Multiple bending radii can be formed in a single cycle.

The Machine features CNC control, servo drive, and a user-friendly HMI for easy parameter setting and switching between manual and automatic modes.

With stable performance and high bending efficiency, it is an ideal solution for tube processing applications.

数控下料管端弯管一体机

机型 Type	最大管数 Max Capacity	工位数 Station Qty	折弯方式 Bending method	模数 Num of mould	放料架 Decoiler type
CTBKE: 数控下料管端弯管一体机 CNC pipe cutting and end bending machine	13	1+1:1 切割 +1 弯管 1cut+1bend	R: 右弯 Right bend	1	E：电动 Motorized
CTBKEP: 数控下料管端弯管冲孔一体机 CNC pipe end bending and punching machine	20	1+2:1 切割 +2 弯管 1cut+2bend	L：左弯 Left bend	2	Q：内抽 Eye to sky
	25	2+2:2 切割 +2 弯管 2cut+2bend	RL：左右复合弯 Right & Left Bend	n	F：反抽 Reverse Eye to sky
	40				P: 平放式 Horizontal
					Z: 直管上料架 Straight tube loader

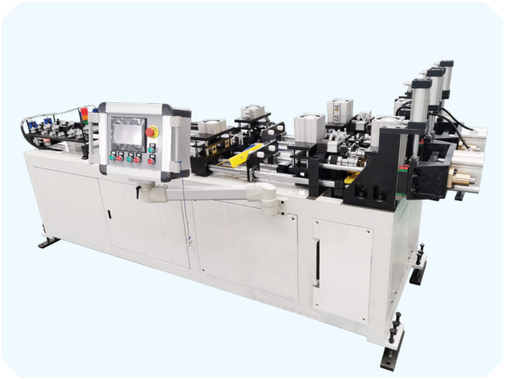
2-03 / 开料机 Tube Cutting Machine



盘管校直开料机
Tube Straightening and Cutting Machine



连续管开料机
Continues tube cut to length



开料冷冲管端机
Tube cutting with push end forming



毛细管下料绕圈一体机
Capillary tube cutting and winding machine

开料机					
机型 Type	最大管径 Max dia	加工数量 Capacity	一次送料行程 Length per feed	放料架 Decoiler type	功能 Function
TSC：开料机 Tube cutter	5：毛细管 Capillary tube	1/2/4/6	300：300mm	E：电动 Motorized	无：标准型 Standard type
TSCE1: 开料管端机（直冲式） Tube cutter with end forming(push type)	13/20/25	1+1/2+2	1200：1200mm	Q：内抽 Eye to sky	D: 打断功能 Snap function
TSCE2：开料管端机（旋冲式） Tube cutter with end forming(rotate type)	13/20/25	2+4/3+3	X: 连续送料 Continuous feeding	F：反抽 Reverse Eye to sky	
TC：直管开料机 Straight tube cutter	40: 大管	2+2+2		P: 平放式 Horizontal	
				Z: 直管上料架 Straight tube loader	

产品用途

数控无屑开料机（盘管校直开料机）用于将盘管开卷校直、无屑切断成为走尺直管：主要应用于空调、热水器、飞机、汽车等管路的下料要求。

FUNCTION

The CNC Chipless Tube Cutting Machine (Tube Straightening & Cutting Machine) is designed for decoiling, straightening, and chipless cutting of coiled tubes into straight tubes of preset lengths.

It is widely used for tube processing in air conditioning, water heaters, aerospace, automotive, and other industries.



铜管放料架
Tube decoiler
（详见辅机－铜管放料架部分）

两器无人化工厂自动化设备研发和制造供应商

选配功能



2-04 / 数控冲孔机和拔孔机 CNC Flute Tube Punch Machine and T drill



产品特点

数控冲孔机是对各种型号的铜管进行冲孔的一种自动化加工设备，广泛应用于空调制冷行业。

主要组成部分：本机采用伺服驱动器实现双轴（长度和角度）高精度定位，采用最新款的触摸屏作人机对话，能够保存多种加工程式．此设备具有高可靠性，高效率，高精度，操作简便等特点。控制系统具备自诊断和安全保护等功能，以确保操作人员的安全。



拔孔机
CNC T Drill Machine

该设备采用拔孔成型工艺，可在铜管上加工出等径孔、高强度翻边孔，有效避免开裂。
T drill machine adopts hole flanging process, producing hole equal-tube diameter, high-strength flanged holes without material cracking.

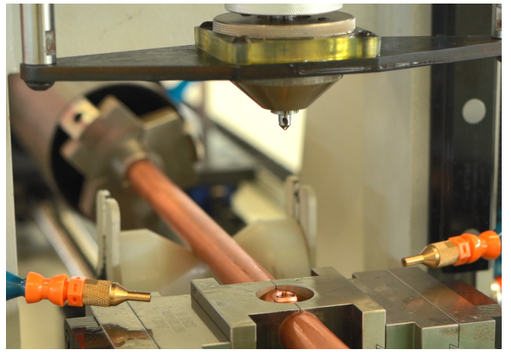
数控冲孔机 CNC flute tube punch machine

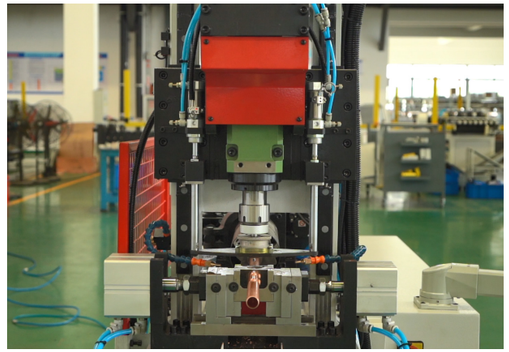
FEATURES

The CNC Flute Tube Punching Machine is designed for automatic hole punching of various copper tubes and is widely used in the HVAC&R industry.
The servo-driven dual-axis system provides high-precision positioning for both tube length and rotation angle. A user-friendly touchscreen HMI allows easy operation and storage of multiple processing programs.
The control system also includes self-diagnosis and safety protection functions to ensure safe operation.

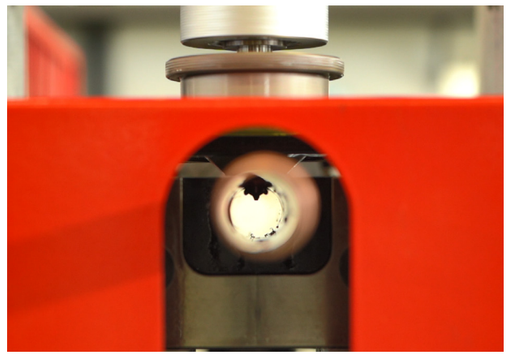
数控冲孔机			
机型 Type	最大管径 Max Diameter	加工长度 Max Length	功能 Function
CTP：冲孔机 CNC Flute Tube Punching Machine	20	1500：1500mm	B1：单轴型 Single Axis
CTD：拔孔机 CNC T Drilling Machine	50	2000：2000mm	B2：双轴型 Double Axis
CTZ：钻孔机 CNC Hole Drilling Machine	80	2500: 2500mm	
CTPD：冲拔孔机 CNC Hole Punching and T Drilling Machine	110	L：定制长度 Customerized length	
CTPZ：冲钻孔机 CNC Hole Punching and Hole Drilling Machine			











2-05 / 管端机 End Forming Machine



立式管端机
Vertical end forming



旋冲管端机
Rotate end forming



自动上下料管端机
End forming with auto load&unload

管端机						
机型 Type	成型面 Form Side	类型 Type	最大管径 Max Tube OD	工位数 Qty of station	成型方式 Form Method	功能 Function
TE：管端机 Tube End Forming M/C	1: 1 头 1 Side	K: 扩缩口 Swagging& Reducing	20/30	1: 1 工位 1 station	F: 直冲式 Push type	无：标准型 Null:Standard
	2: 2 头 2 Side	F: 封口机 End Closing	40/50	3: 3 工位 3 station	C: 旋冲式 Spinning type	A: 自动上下料 Auto Load&Unload
			60/80	6: 6 工位 6 station	XG: 旋沟 Grooving	
			100/110	N: N 工位 N station		
			N: 定制 Customized			

产品用途

管端成型机是一种将金属管材（如铜管，铝管，不锈钢管等）的管端加工成所需形状的专用设备。它能够加工出各种形状，如扩口， 缩口，墩筋，封口，旋槽，分歧，打点。主要用于空调和制冷行业、汽车行业、家电行业。以及换热器、冷凝器、高压加热器、金属管材进行连接。

APPLICATION AREA

The Tube End Forming Machine is designed to form the ends of metal tubes, such as copper, aluminium and stainless steel tubes, into various shapes, including tube flaring, reducing, beading, end closing, grooving, branching, dimpling.

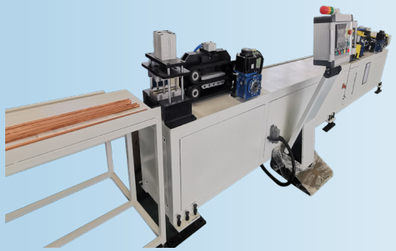
It is widely used in HVAC&R, automotive, and home appliance industries for tube connection applications in heat exchangers, condensers, high-pressure heaters, and other equipment.



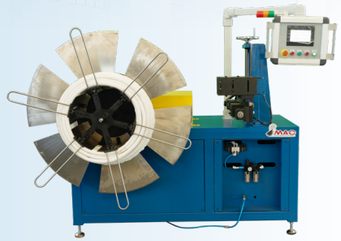
封口机
Tube End Closing Machine



2-06 / 联机管设备 Insulation pipe machine



保温管下料穿管机
Insulation Tube Cutting and Inserting Machine



50 米保温管盘管机
50m Insulation
Tube Coiling Machine



3 米保温管盘管机
3m Insulation
Tube Coiling Machine



产品用途

该产品用于空调领域，生产分体式空调的连接管，校直、切割、穿保温管、套螺母、扩口、盘管。自动化程度高，节省人工成本。

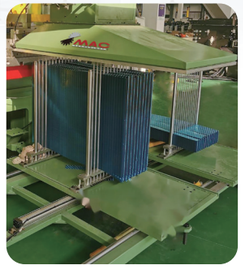
APPLICATION AREA

This product is used in the field of air conditioning, the production of split type air conditioning connection pipe, straight, cutting, wear insulation pipe, nut, expansion, coil. High degree of automation, save labor costs.

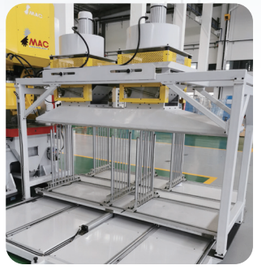
3-01 / 冲床集料架 Stacker of fin press line



旋转集料架
Rotary Stacker



平移集料架
Shuttle Stacker



分体平移集料架
Split-Type Shuttle Stacker



小车集料架
Cart Stacker



平移升降集料架
Lifting Shuttle Stacker



分体平移升降集料架
Split-Type Lifting Shuttle Stacker



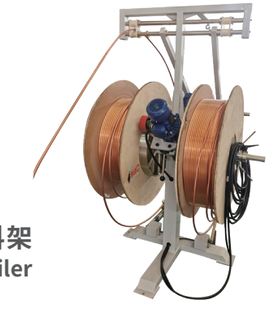
旋转升降集料架
Lifting Rotary Stacker

3-02 / 铜管放料架 Tube decoiler



E1 单面电动放料架
1-side motorized decoiler

E2 双面电动放料架
2-side motoried decoiler





F 反内抽料架
Reverse pulling eye to sky decoiler



P 平放料架
Horizontal decoiler

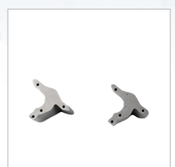


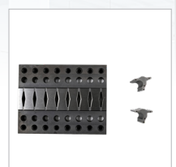
Q 正内抽料架
Eye to sky decoiler

4-01 / 翅片模具 Fin die


冲孔凹凸模
Pierce punch and die


异形切 凹凸模
Notching cutting punch and die


异形切 凹凸模
Notching cutting punch and die

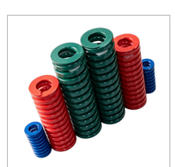

异形切 凹凸模
Notching cutting punch and die


横切刀 上下刀
Cut-Off Punch and die


纵切刀
Row Slit Blade


百叶窗模
Louver Punch


波纹刀
Ripple Cutter


弹簧
Spring

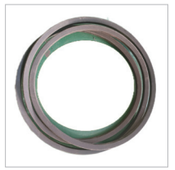

边切刀
Edge Trim punch

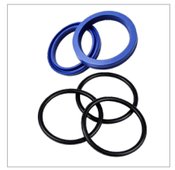

横切刀 上下刀
Cut-Off Punch and die


变薄拉伸凸模 套
Ironing Punch and bush

4-02 / 冲床 Fin press

集料针
Stacker pin


三角皮带
Trigular belt


密封圈
Seal ring


编码器
Encoder

4-03 / 胀管机 Expander


夹爪
Gripper


夹爪加长杆
Gripper extension


夹爪套筒
Gripper sleeve


夹爪扳手
Gripper wrench


接收器无收缩
Receiver(shrinkless)


接收器有收缩
Receiver(shrink)


扩口枪
Flaring gun


翻边枪
Flaring gun


内割刀
Inner Cutting Tool

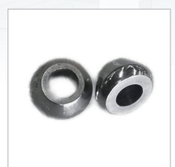

扩口器
Flaring tool 1


扩口器
Flaring tool 2


扩口器
Flaring tool 3

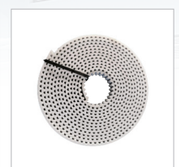
胀杆
Expand rod


胀杆接杆
Rod extension


胀球
Expand bullet


胀球螺丝
Bullet screw


模板
Mould plate


皮带
Belt


直管接收器
Straight tube receiver


手胀夹钳
PTE-Gripper

4-04 / 长 U 机 Hairpin bender


刀盘
Cutter


刀片
Blade


导料管
Guide pipe


导轮
Guide wheel

定心套
Center sleeve

定心套扳手
Center sleeve wrench

夹模
Clamp mould

进料导向管
Inlet pipe1

靠模
Guide mould

链条
Chain

密封圈
Seal

送料皮带
Feed belt

同步轮
Synchronous wheel

退料抱紧光轴
Sleeve clamp shaft

退料套
Withdrawsleeve

弯模
Bend mould

校圆轮
Rounding wheel

校直轮
Straighten wheel



芯杆固定接头
Rod fix fitting



芯轴
Mandrel

芯杆
Mandrel rod

4-05 / 小 U 机 Return bender



圆模
Bending tool



模座
Die holder



送料夹模 1
Feed tool 1



送料夹模 2
Feed tools



芯轴座
Mandrel base



锯片
Saw



导料管
Guide pipe



退料针
Unload pin

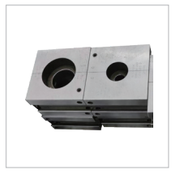


芯轴
Mandrel

4-06 / 冲孔机和拔孔机 Flute punch and T drill



冲刀冲套冲头
Punch tools



夹模
Clamp die



夹爪
Gripper



拔孔头
T drill Head

4-07 / 开料机 Tube Cutting



刀盘
Cutter



刀片
Blade



导料管
Guide pipe



导轮
Guide wheel



皮带
Belt



夹模
Clamp tool

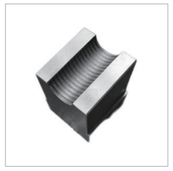


进料导管
Inlet pipe



轴承
Bearing

4-08 / 数控弯管机 CNC bender



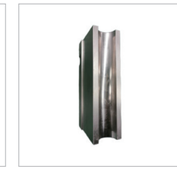
夹模
Clamp die



夹爪
Gripper



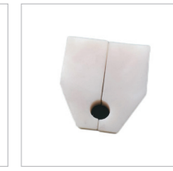
夹爪座
Gripper holder



靠模
Guide die



皮带
Belt



取料夹爪
Pick gripper



三爪（夹头）



芯杆
Mandrel rod



芯轴
Mandrel



圆模
Bending die



圆模座
Bending die holder

4-09 / 管端机 End forming



夹模
Clamp die



扩口模
Flaring tool



扩口模
Flairng tool2



缩口模
Necking tool



缩口模
Necking tool2

4-10 / 电气配件 Electrical parts

按钮
Button

传感器 1
Sensor 1

传感器 2
Sensor 2

继电器
Relay

开关
Switch