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深圳市和田古德自动化设备有限公司



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Global Professional Provider of SMT Equipment

全球专业SMT设备供应商

Auto Solder Paste Printer/SMT Stencil Printer

全自动锡膏印刷机/SMT钢网印刷机

Laser Solder Ball Jet Welding Machine

激光喷球焊机

High Speed Glue Dispenser

高速点胶机

Three-anti Coating Machine

三防涂覆机

Wave Soldering Machine

波峰焊

Pick&Placer/Chip Moulder

贴片机

Reflow Oven

回流焊

Laser Marker

激光打标机

AOI/SPI Machine

X-ray

SMT Full Line Provider

SMT 整线提供商



www.htgdsmt.com

Convection Soldering

without fail to the right quality

Reflow Soldering with Convection Diversity with the CM 多样化 CM 回流焊接系统

Whether laptop, smartphone or in-car control systems-almost every technical end product contains sensitive electronics. The contacting of the electrical components on the circuit board using high-quality soldering is crucial when it comes to guaranteeing smooth function.

Systematically applied technology and superb construction are the features of our convection reflow soldering systems. In the CM-Series the soldering process is performed on the basis of convection - that is, the transfer of heat via a flow of gases. Our systems are available in air or nitrogen versions. As an inert, protective gas, nitrogen is the ideal heat transfer medium and prevents disturbing oxidation during the soldering process. The modular system configuration of the CM also offers a high level of flexibility for your production facility.

无论是笔记本，智能手机还是车载控制系统，几乎每一项科技产品都离不开敏感电子元器件，而通过高质量焊接制程保证电路板上元器件的良好接触性对确保科技产品正常工作至关重要。

CM 回流焊系统技术成熟、做工一流，采用对流式设计，通过气流传导热量-空气或氮气两种类型可选。作为一种惰性保护气体，氮气是最理想的热传导介质，还能够在焊接过程中防止发生氧化。模块化设计可以为您的生产线提供最高应用灵活性。

CM As individual as your production 满足个性化生产需求

Does your production environment need a soldering system which can be adapted optimally to your requirements? Do you process sensitive electronic components which need to correspond to certain temperature conditions? We have a diverse range of products!

您是否需要可精确匹配您个性化生产需求的焊接系统？您是否需要在特定温度下处理敏感电子元器件？我们可以满足您的所有需求，为您提供多种个性化系统解决方案。

New high nitrogen lead-free reflow soldering system 全新高端氮气无铅回流焊系统



- Minimal downtime
最小化停线保养时间
- Integrated residue management
集成式残渣处理系统
- User-friendly software tools for process monitoring
用户友好型制程检测软件

High-end lead-free reflow soldering system 高端无铅回流焊系统



- Modular system concept
模块化系统设计
- Efficient heat transfer
高效的热传导
- Stable process for lead-free applications
稳定的无铅制程



Equipped with active cooling system of heat exchanger / 配备热交换器的主动水冷系统



Equipped with top air cooling system actively / 配备顶部主动风冷系统



Equipped with industrial cold water machine / 配备工业冷水机



Equipped with nitrogen gas flowmeter and oxygen analyzer / 配备氮气流量计和氧气分析仪



Equipped with top rosin recovery system / 配备顶部松香回收系统



Automatic refueling system and compatible with the SMEMA interface / 自动加油系统及兼容SMEMA接口

The right system for every application

Innovative Solutions

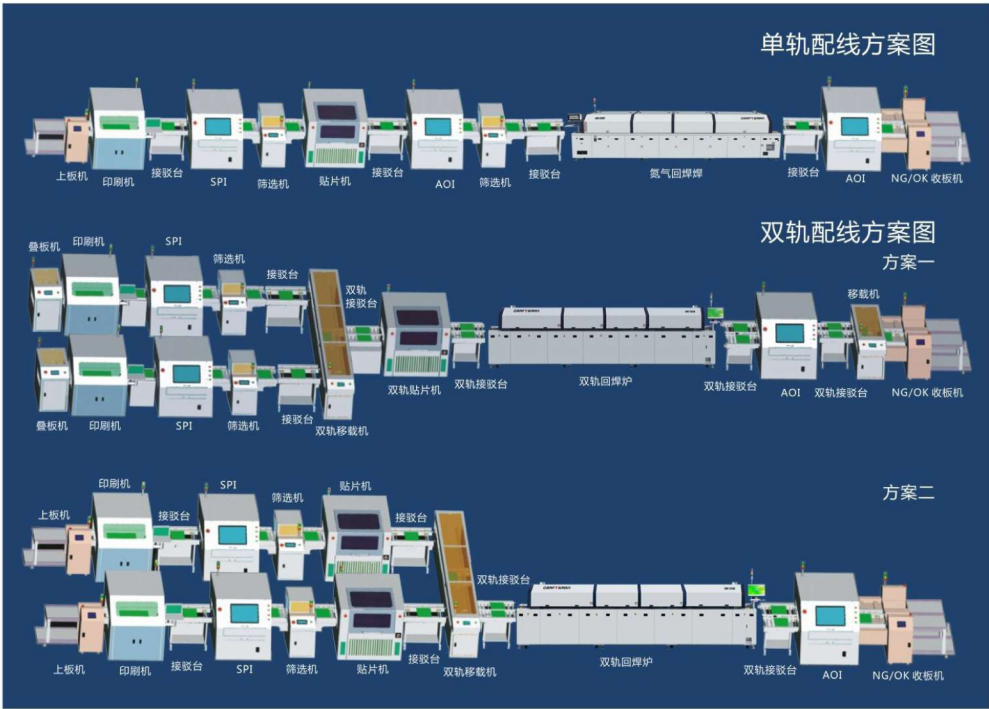
创新解决方案 适用于多种制程应用

Your production department can meet any requirement using manufacturing equipment

With the CM we offer different systems for optimum soldering processes in the most diverse of manufacturing environments. Different process zone lengths are available depending on the type of system. The pre-heating, peak and cooling zones have the same pitch and therefore are constructed in a modular design.

满足您的所有应用需求！

CM 可以针对不同生产环境和生产条件提供最佳解决方案，实现最佳焊接制程。根据系统类型，您可以选择不同长度的制程区。此外，预热区、高温区和冷却区拥有相同的节距，支持模块化配置和部署。



- Modular, flexible system concept
模块化灵活系统
- Energy efficient system with lowest CO₂ emission
节能高效，最低二氧化碳排放
- Highest process stability even with lead-free soldering
稳定的无铅焊接制程
- Minimum downtime and lowest maintenance effort
最低停机时间和维护需求
- Excellent traceability due to smart software tools
智能软件工具，提供最高可追溯性
- Lowest "Total Cost of Ownership"
最低“总拥有成本”

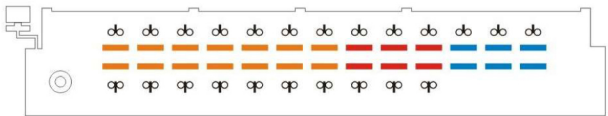
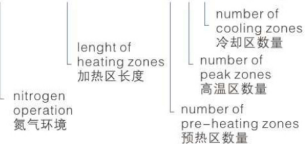
System varieties

using the example of CM-733N nitro:

系统类型

以CM-733N氮气炉为例

CM nitro 4240(Typ 7 3 3)



TYPE	Process zone	Throughput*
623	3400mm	140/h
733	4240mm	180/h
843	5080mm	215/h

Pre-heating zones Peak zones Cooling zones

*approximated values of a PCB length of 300mm and a distance of 100mm
以PCB长度300mm,间距100mm估算

Large batch sizes-frequent product changes?

We will find the best system for you!

批量大--产品更换频繁？我们为您提供最佳方案

Requirements in the field of reflow soldering are as varied as the products produced on an SMT production line. That is why we provide you with intensive guidance before the purchase decision as to which system is the most efficient for the applications you require.

We take all relevant parameters into consideration in the process of this. Take for example the throughput rate, this is one of the most important parameters for determining the optimum process zone length. If frequent product changes and multi-shift operation are added to the equation, additional options will be required that need also be taken into account. After clarifying all the process-relevant parameters, you can rest assured that you will have a reflow soldering system adapted to all your needs, one with which you can manufacture reliably and efficiently. The diverse range of options within the CM means that we have the right system for every manufacturing environment.

SMT生产线在生产不同产品时，对回流焊制程的要求也各不相同，因此我们将为您提供选型指导，帮助您选择最符合您需求的高效系统，做出最明智的决策。

进行系统选型时，我们会考虑与应用相关的所有参数，例如产能，这是确定最佳制程区域长度的一项重要参数。如果涉及到频繁换线和轮班运营，就需要选择额外选项。确定所有制程参数后，您就可以放心选择一套最合适您的回流焊系统，实现可靠、高效的生产运营。CM回流焊系统提供了广泛选项可供选择，确保始终为您提供最佳生产解决方案。

Reliable from A to B With Flexible Transport Systems 灵活可靠的传输系统

Your component will run through various sections of the system during the soldering process: from the preheating zone, through the peak zone to the cooling zone. Secure transportation is a key entity when it comes to continuous processes. RuiFu offers flexible systems for this.

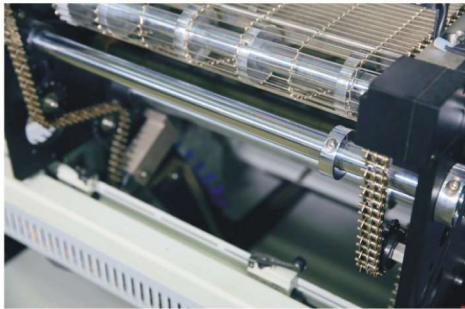
Our transport systems provide the perfect fit for your components regardless of the circuit board geometry. Transport lanes and speeds are variably adjustable and enable parallel soldering processes with synchronous/asynchronous in one reflow system. Depending on the product requirement, you can choose from various transport models such as individual and double track transport, even the mesh-belt transport.

The optional centre support enables even the processing of large circuit boards or boards with a flexible base material with ease and prevents any sagging during the reflow soldering, thus guaranteeing a maximum degree of process stability.

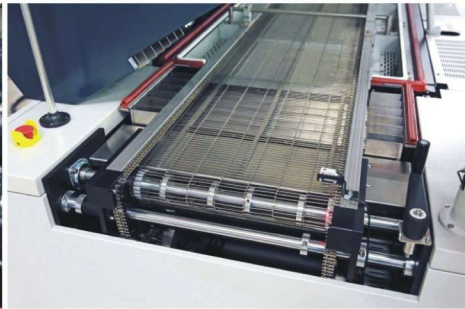
在焊接过程中，电子元器件将依次通过系统的各个区域：从预热区经过高温区再到冷却区。对连续制程而言，安全的组件传输尤为重要。因此，我们为您提供了套高度灵活的传输系统。

我们的传输系统可不受电路板任何形状的影响，完美匹配您的组件。此外，传输轨道和传输速度都可灵活可调，可以在一个回流焊系统中实现并行双轨焊接（同步/异步）。根据具体需求，您可以选择不同的传输模式，例如单轨和双轨传输、以及网带传输。

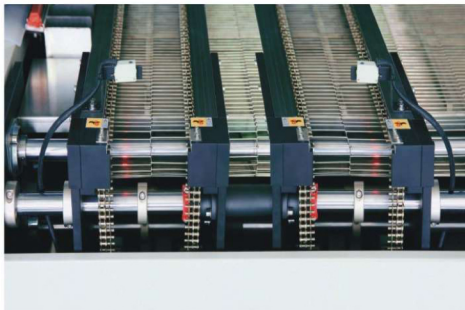
在焊接大型电路板或柔性基材时，中央支撑系统选项可防止组件发生变形，确保最高制程稳定性。



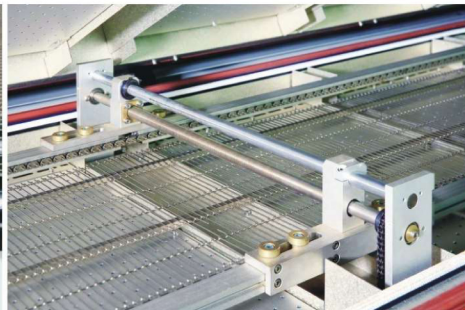
Monorail chain transmission and automatic tensioning device / 单轨传输及链条自动张紧装置



Monorail transition device transmission and switching / 单轨传输及接驳过渡装置



Dual-track transmission system / 双轨传输系统



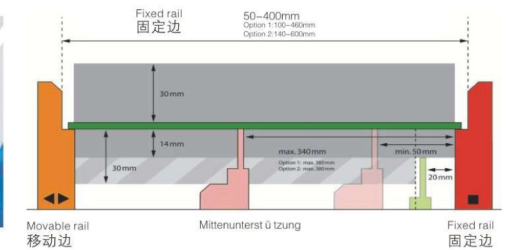
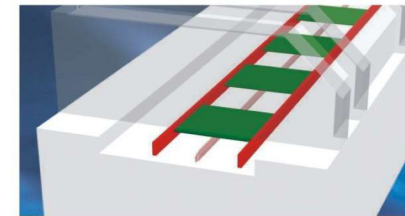
Guide to prevent deformation mechanism / 导轨预防变形机构

单轨道传输系统

Single lane

50-400mm(Standard)
50-600mm(Optional)

(50-400mm without CBS*)
(50-600mm without CBS*)



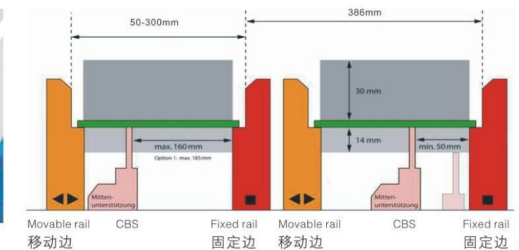
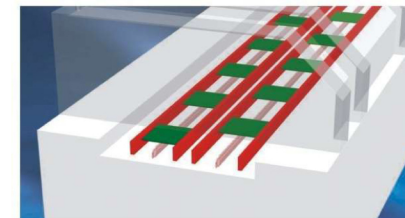
Single lane

双轨道传输系统

Dual lane (双轨)

50-300mm

(50-300mm without CBS)



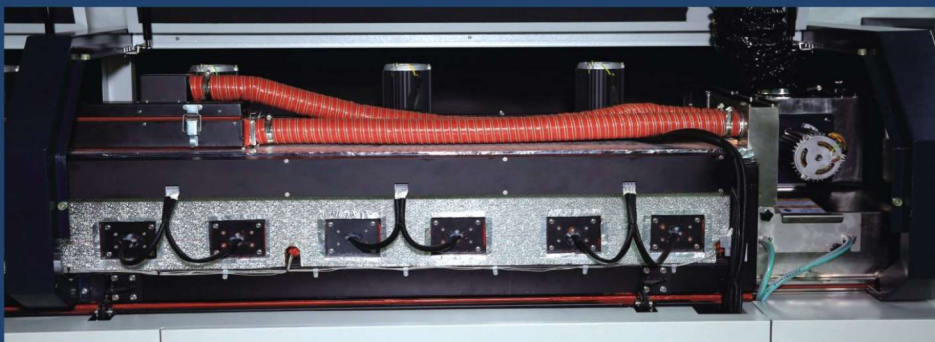
Dual lane

- symmetric width adjustment
- synchronous/asynchronous conveyor speed



Liquid residue in the cooling area in condensing unit filter first, then expelled, filter unit is easy to clean / 液体残留物首先在冷却单元内冷凝过滤，然后被排出，过滤单元易于清洁

Equipped with gateway rosin recovery system / 配备出入口松香回收系统



Through three rosin filtration system, significantly improve the system efficiency of cleaning, keep clean, dry chamber of a stove or furnace, at the same time minimizing maintenance requirements and downtime. / 通过三级松香过滤系统，显著提升系统清洁效率，保持炉膛清洁、干燥，同时最大限度降低维护需求和停机时间。

A Clean Machine: Effective Residue Management 清洁型解决方案：高效的残渣管理

As is the case with all industrial processes, substances are generated during SMT production which have to be removed from the process cycle because they contaminate the system. Our highly effective residue management function purifies the process gas safely and reliably, and keeps your system clean and dry.

The residue management function included in the CM combines depending on the system type two different modes of action: pyrolysis in the heat zone and cold condensation in the cooling tract's filter units. Liquid and crystalline residues are effectively removed by means of this combination.

In order to make your manufacturing system even more efficient, your system's cleaning efficiency is significantly increased. For the process gas and the system chambers will keep clean and dry with very little maintenance and minimal downtime.

和所有工业制程一样，SMT生产线同样也会产生可能污染系统的残渣，必须及时从制程循环中去除。高效残渣管理系统可以安全、可靠地净化制程气体，保持炉膛内洁净、干燥。

根据系统类型，CM回流焊系统的残渣管理结合了两套不同的机制，分别是加热区热解和冷却区过滤单元冷凝，确保有效去除液体和晶体焊渣。

为实现更高生产效率，显著提升系统清洁效率，保持炉膛清洁、干燥，同时最大限度降低维护需求和停机时间。

Stress-free to below 50°C with powerful cooling systems 无应力冷却至50°C以下 性能强劲的冷却系统

It is important to have a high-performance cooling tract in order to guarantee optimum soldering results and ensure that modules are cooled gently.

Thermal Systems offers a wide range of cooling tract variants for reflow convection soldering with CM, which can be precisely fine-tuned to suit any production process. The water-cooled standard solution with heat exchanger and adjustable ventilation system works as an effective "closed Loop" system, realize the high efficiency cooling.

为获得最佳焊接结果以及组件得到平缓冷却，需配备高性能冷却系统。

CM提供了多种冷却系统，并支持精确微调以适应个性化生产制程。带热交换器和可调通风系统的标准水冷解决方案可作为“闭环”系统，实现高效冷却。

- Stress-free cooling using individually adjustable ventilators in the classic cooling zones
利用冷却区中多个可单独调节的风机实现无应力冷却
- Flexible combination possibilities through a range of different options
多种冷却选项，支持灵活配置



From Zero to 240 °C

due to optimized heat transfer

均匀的热传导性能

Each product has its own requirements in the manufacturing process.Optimized heat transfer over the entire soldering process is the basis for best possible results.

The CM offers flexibly controllable preheating zones within which your PCB is preheated and prepared for the actual soldering process.The individual zones can be controlled independently of each other via fan frequency, and assure best possible processes.

The CM is equipped with special nozzle sheets for optimized heat transfer by means of uniform air flow over the PCBs.Flow speeds in the upper and lower heat zones can be separately controlled, assuring that your PCB is heated up through and through-completely and uniformly. This prevents stressing of the material which can disturb the soldering process. In addition, smaller components are not overheated and bigger ones are still heated through enough.

To ensure that the heat flow in the system runs stably and the outward heat radiation is as low as possible,our CM systems have optimum insulation between the process chamber and the exterior wall.

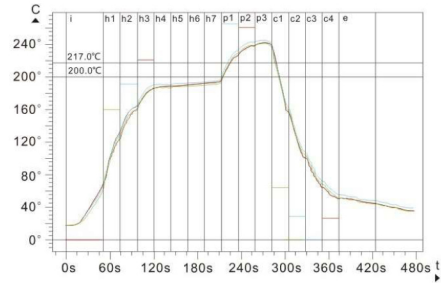
Using precise profiling we can generate precision-reproducible temperature profiles which are tailored to component size,material or process parameters.

尽管不同产品具有不同的制程需求，但是，最佳热传导是所有产品实现出色焊接效果的基础。CM系列回流焊系统配备了可灵活调节的预热区，用于对PCB板进行预加热，使其达到实际焊接所需温度。此外，系统的各个区域可通过调节风机频率进行独立控制，确保达到最佳效果。

CM 配备了特殊的整流板，可确保气流均匀地通过PCB板，实现最佳热传导。另外，您还可以分别调节顶部和底部加热区的气体流速，使组件完整均匀地受热，防止材料应力对焊接制程产生干扰，同时确保小型部件不会过热，大型部件得到足够彻底的加热。

为使系统中气流稳定，最大限度降低向外的热辐射，CM 在炉膛和外壁之间采取了最佳隔热措施。

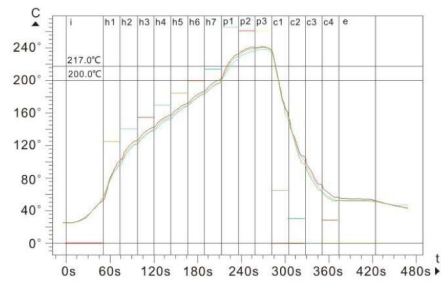
通过制定精确、可重现的温度曲线，我们的系统可完美契合您的制程要求，匹配您的组件尺寸、材质和其它制程参数。



Saddle profile

The component is brought to a temperature of at least 240°C for soldering.Using a saddle profile the board is gradually heated in line with pre-defined, individual temperature ranges.Even components with differing thermal masses are heated homogeneously and temperature differences minimised.

组件被加热至240°C，然后进行焊接。在马鞍温度曲线下，PCB板将逐渐加热到预定义温度范围。即使拥有不同热质量的组件也能得到均匀加热，最大限度降低温差。



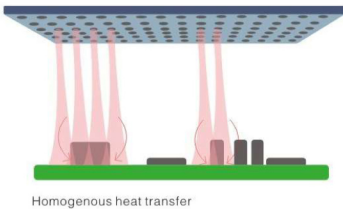
Linear profile / 直线型温度曲线

With a linear profile,the component is not heated in a stepped manner during soldering,in fact it is heated along an identical linear temperature gradient.Linear profiles can reduce cycle times and can help to reduce soldering errors such as tombstoning.

使用直线型加热曲线时，组件不是以阶梯式加热，而是沿几乎完全相同的温度斜率加热。直线型温度曲线可以缩短循环时间，消除元件立碑等焊接错误。

Convection / 对流

The centrepiece of our CM is the stainless steel process chamber with its outstanding heat transfer owing to advanced hole nozzle geometry as well as monitored adjustable overpressure in the heating module,guaranteeing homogeneous and gapless heat transfer to the circuit board.The inert process atmosphere can be assured throughout the entire soldering process and beyond because the closed system ensures that no external air finds its way into the process chamber.The heat flow within the system takes place by means of circulation,i.e. the process gas of the preheating,peak and cooling zones is extracted,cleaned and reinserted into the process at the sides.



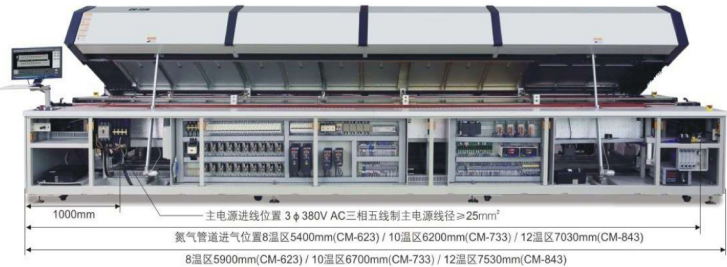
CM 系列回流焊系统的核心是不锈钢炉膛和先进孔型喷嘴带来的出色热传导性，同时加热模块中受控的可调过压保护也可以确保电路板得到均匀、无间隙的热传递。另外，高密封性炉膛使整个惰性气体焊接制程中无外部空气进入。热气流在系统内循环，预热区、高温区和冷却区的制程气体被抽出、清洁，然后在两侧重新注入炉膛。

- Separately adjustable heating zones
单独可调的加热区
- Reproducible temperature profile
高重复精度的温度曲线
- Outstanding process stability with the smallest possible ΔT
出色的制程稳定性，最小 ΔT
- Homogenous heat input over the entire PCB thanks to specially designed nozzles
采用特殊设计的喷嘴，对整个PCB板均匀加热
- LOW maintenance effort
低维护需求

Specifications / 规格

(S—标准/Standard, O—选配/Optional)

Model No / 型号	CM-623A (400)	CM-623N (400)	CM-623A (700)	CM-623N (700)	CM-733A (400)	CM-733N (400)	CM-733A (700)	CM-733N (700)	CM-843A (400)	CM-843N (400)	CM-843A (700)	CM-843N (700)
Size: L*W*H (mm) / 尺寸	5900X1300X1500	5900X1300X1500	5900X1600X1500	5900X1600X1500	6700X1300X1500	6700X1300X1500	6700X1600X1500	6700X1600X1500	7530 × 1300 × 1500	7530 × 1300 × 1500	7530X1600X1500	7530X1600X1500
Weight (kg) / 重量	Approx: 2200kg	Approx: 2400kg	Approx: 2500kg	Approx: 2800kg	Approx: 2300kg	Approx: 2500kg	Approx: 2700kg	Approx: 3000kg	Approx: 2400kg	Approx: 2600kg	Approx: 2900kg	Approx: 3200kg
color / 颜色	煤炭+浅灰 coal grey+light grey	煤炭+浅灰 coal grey+light grey	煤炭+浅灰 coal grey+light grey	煤炭+浅灰 coal grey+light grey	煤炭+浅灰 coal grey+light grey	煤炭+浅灰 coal grey+light grey	煤炭+浅灰 coal grey+light grey	煤炭+浅灰 coal grey+light grey	煤炭+浅灰 coal grey+light grey	煤炭+浅灰 coal grey+light grey	煤炭+浅灰 coal grey+light grey	煤炭+浅灰 coal grey+light grey
Heating area number / 加热区数目	上8下8 top 8 + bottom 8	上8下8 top 8 + bottom 8	上8下8 top 8 + bottom 8	上8下8 top 8 + bottom 8	上10下10 top 10+bottom 10	上10下10 top 10+bottom 10	上10下10 top 10+bottom 10	上10下10 top 10+bottom 10	上12下12 top 12 + bottom 12	上12下12 top 12 + bottom 12	上12下12 top 12 + bottom 12	上12下12 top 12 + bottom 12
Effective length of heating / 有效加热长度	3400mm	3400mm	3400mm	3400mm	4240mm	4240mm	4240mm	4240mm	5080mm	5080mm	5080mm	5080mm
Number of cooling zone / 冷却区数目	3	3	3	3	3	3	3	3	3	3	3	3
The effective length of cooling zone / 有效冷却区长度	1014mm	1014mm	1014mm	1014mm	1014mm	1014mm	1014mm	1014mm	1014mm	1014mm	1014mm	1014mm
Cooling way / 冷却方式	风冷 air cooling	水冷 water cooling	风冷 air cooling	水冷 water cooling	风冷 air cooling	水冷 water cooling	风冷 air cooling	水冷 water cooling	风冷 air cooling	水冷 water cooling	风冷 air cooling	水冷 water cooling
The power supply / 电源	三相五线380V3 phase 5 wires	三相五线380V3 phase 5 wires	三相五线380V3 phase 5 wires	三相五线380V3 phase 5 wires	三相五线380V3 phase 5 wires	三相五线380V3 phase 5 wires	三相五线380V 3 phase 5 wires	三相五线380V 3 phase 5 wires	三相五线380V 3 phase 5 wires	三相五线380V 3 phase 5 wires	三相五线380V 3 phase 5 wires	三相五线380V 3 phase 5 wires
Start the power / 启动功率	36kw	40kw	36kw	42kw	36kw	57kw	36kw	42kw	40kw	45kw	40KW	46kw
Normal operation of the power / 正常运行功率	8~10KW	10~12KW	9~11KW	11~13KW	9~11KW	11~13KW	11~13KW	12~14KW	10~12KW	12~14KW	11~13KW	13~15KW
The startup time / 启动时间	approx:20~25min	approx:20~25min	approx:25~30min	approx:25~30min	approx:20~25min	approx:15~20min	approx:25~30min	approx:25~30min	approx:20~25min	approx:20~25min	approx:25~30min	approx:25~30min
Components on the PCB surface height / PCB上表面元件高度	30mm	30mm	30mm	30mm	30mm	30mm	30mm	30mm	30mm	30mm	30mm	30mm
Under the PCB surface element level / PCB下表面元件高度	25mm	25mm	25mm	25mm	25mm	25mm	25mm	25mm	25mm	25mm	25mm	25mm
PCB width (mm) / PCB宽度范围 (mm)	50~400	50~400	(50~250) × 2PCS	(50~250) × 2PCS	50~400	50~400	(50~250) × 2PCS	(50~250) × 2PCS	50~400	50~400mm	(50~250) × 2PCS	(50~250) × 2PCS
Transfer speed range (mm/min) / 传送速度范围 (mm/min)	200~2000	200~2000	200~2000	200~2000	200~2000	200~2000	200~2000	200~2000	200~2000	200~2000	200~2000	200~2000
Track number / 轨道数量	单轨道 single lane	单轨道 single lane	单轨道/双轨道 single/double lane	单轨道/双轨道 single/double lane	单轨道 single lane	单轨道 single lane	单轨道/双轨道 single/double lane	单轨道/双轨道 single/double lane	单轨道 single lane	单轨道 single lane	单轨道/双轨道 single/double lane	单轨道/双轨道 single/double lane
The chain transmission / 链条传送	销长5mm双排链条	销长5mm双排链条	销长5mm双排链条	销长5mm双排链条	销长5mm双排链条	销长5mm双排链条	销长5mm双排链条	销长5mm双排链条	销长5mm双排链条	销长5mm双排链条	销长5mm双排链条	销长5mm双排链条
Guide rail structure / 导轨结构	"工" 字型分段式	"工" 字型分段式	"工" 字型分段式	"工" 字型分段式	"工" 字型分段式	"工" 字型分段式	"工" 字型分段式	"工" 字型分段式	"工" 字型分段式	"工" 字型分段式	"工" 字型分段式	"工" 字型分段式
Send highly / 传送速度	900 ± 20mm	900 ± 20mm	900 ± 20mm	900 ± 20mm	900 ± 20mm	900 ± 20mm	900 ± 20mm	900 ± 20mm	900 ± 20mm	900 ± 20mm	900 ± 20mm	900 ± 20mm
Guide rail fixed way / 导轨固定方式	前端固定/后端固定	前端固定/后端固定	前端固定/后端固定	前端固定/后端固定	前端固定/后端固定	前端固定/后端固定	前端固定/后端固定	前端固定/后端固定	前端固定/后端固定	前端固定/后端固定	前端固定/后端固定	前端固定/后端固定
Mesh belt transmission / 网带传送	O	O	O	O	O	O	O	O	O	O	O	O
PCB transmission direction / PCB 传送方向	L-R/R-L	L-R/R-L	L-R/R-L	L-R/R-L	L-R/R-L	L-R/R-L	L-R/R-L	L-R/R-L	L-R/R-L	L-R/R-L	L-R/R-L	L-R/R-L
Conveyor width adjustment way / 导轨宽度调整方式	手动+电动 manual/motor	手动+电动 manual/motor	手动+电动 manual/motor	手动+电动 manual/motor	手动+电动 manual/motor	手动+电动 manual/motor	手动+电动 manual/motor	手动+电动 manual/motor	手动+电动 manual/motor	手动+电动 manual/motor	手动+电动 manual/motor	手动+电动 manual/motor
The central support / 中央支撑	O	O	O	O	O	O	O	O	O	O	O	O
The chain lubrication / 链条润滑	主动供油 auto refueling	主动供油 auto refueling	主动供油 auto refueling	主动供油 auto refueling	主动供油 auto refueling	主动供油 auto refueling	主动供油 auto refueling	主动供油 auto refueling	主动供油 auto refueling	主动供油 auto refueling	主动供油 auto refueling	主动供油 auto refueling
Can set temperature range / 可设定温度范围	室温~300℃	室温~300℃	室温~300℃	室温~300℃	室温~300℃	室温~300℃	室温~300℃	室温~300℃	室温~300℃	室温~300℃	室温~300℃	室温~300℃
Preheat area and welding area between maximum differential temperature setting value / 预热区和焊接区之间最大温度设定差值	80℃	80℃	80℃	80℃	80℃	80℃	80℃	80℃	80℃	80℃	80℃	80℃
Preheating zone and preheating zone between maximum differential temperature setting value / 预热区和预热区之间最大温度设定差值	40℃	40℃	40℃	40℃	40℃	40℃	40℃	40℃	40℃	40℃	40℃	40℃
Welding area and welding area between maximum differential temperature setting value / 焊接区和焊接区之间最大温度设定差值	40℃	40℃	40℃	40℃	40℃	40℃	40℃	40℃	40℃	40℃	40℃	40℃
The temperature control precision / 温度控制精度	±1℃	±1℃	±1℃	±1℃	±1℃	±1℃	±1℃	±1℃	±1℃	±1℃	±1℃	±1℃
PCB board face distribution deviation / PCB板面分布偏差	±1.5℃	±1.5℃	±1.5℃	±1.5℃	±1.5℃	±1.5℃	±1.5℃	±1.5℃	±1.5℃	±1.5℃	±1.5℃	±1.5℃
Set temperature control precision / 设定温度控制精度	±1℃	±1℃	±1℃	±1℃	±1℃	±1℃	±1℃	±1℃	±1℃	±1℃	±1℃	±1℃
Inspection instrument overtemperature protection / 巡检仪超温保护	S	S	S	S	S	S	S	S	S	S	S	S
Parameters of the stored / 参数存储	所有工艺参数	所有工艺参数	所有工艺参数	所有工艺参数	所有工艺参数	所有工艺参数	所有工艺参数	所有工艺参数	所有工艺参数	所有工艺参数	所有工艺参数	所有工艺参数
Abnormal alarm / 异常警报	声光警报方式	声光警报方式	声光警报方式	声光警报方式	声光警报方式	声光警报方式	声光警报方式	声光警报方式	声光警报方式	声光警报方式	声光警报方式	声光警报方式
Hot wind speed adjusting range / 热风风速调整范围	1680~2800RMP	1680~2800RMP	1680~2800RMP	1680~2800RMP	1680~2800RMP	1680~2800RMP	1680~2800RMP	1680~2800RMP	1680~2800RMP	1680~2800RMP	1680~2800RMP	1680~2800RMP
The exhaust emission / 排气管排气量	10~12m³/min x 2pcs	10~12m³/min x 2pcs	10~12m³/min x 2pcs	10~12m³/min x 2pcs	10~12m³/min x 2pcs	10~12m³/min x 2pcs	10~12m³/min x 2pcs	10~12m³/min x 2pcs	10~12m³/min x 2pcs	10~12m³/min x 2pcs	10~12m³/min x 2pcs	10~12m³/min x 2pcs
Heating and cooling zone nitrogen charging device / 加热、冷却区充氮装置	N/A	S	N/A	S	N/A	S	N/A	S	N/A	S	N/A	S
Nitrogen protection device for export / 出口氮气保护装置	N/A	N/A	N/A	S	N/A	S	N/A	S	N/A	S	N/A	S
Oxygen analyzer / 氧气分析仪	N/A	S	N/A	S	N/A	S	N/A	S	N/A	S	N/A	S
Nitrogen PID automatic adjustment / 氮气PID自动调节	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O
Nitrogen consumption standard / 氮气消耗标准	N/A	~1500PPM 18M³/H	N/A	~1500PPM 25M³/H	N/A	~1500PPM 18M³/H	N/A	~1500PPM 25M³/H	N/A	~1500PPM 18M³/H	N/A	~1500PPM 25M³/H
Automatic stop function / 自动停机功能	S	S	S	S	S	S	S	S	S	S	S	S
The operating system / 操作系统	WINDOWS 7	WINDOWS 7	WINDOWS 7	WINDOWS 7	WINDOWS 7	WINDOWS 7	WINDOWS 7	WINDOWS 7	WINDOWS 7	WINDOWS 7	WINDOWS 7	WINDOWS 7
PLC control / PLC 控制	SIEMENS	SIEMENS	SIEMENS	SIEMENS	SIEMENS	SIEMENS	SIEMENS	SIEMENS	SIEMENS	SIEMENS	SIEMENS	SIEMENS
Control computer / 控制电脑	DELL	DELL	DELL	DELL	DELL	DELL	DELL	DELL	DELL	DELL	DELL	DELL
UPS TYPE	ON LINE	ON LINE	ON LINE	ON LINE	ON LINE	ON LINE	ON LINE	ON LINE	ON LINE	ON LINE	ON LINE	ON LINE
PCB counting function / PCB计数功能	S	S	S	S	S	S	S	S	S	S	S	S
Real-time monitoring temperature / speed / PCB location / 实时监控温度/速度/PCB位置	S	S	S	S	S	S	S	S	S	S	S	S
Mode of operation: manual + fully automatic / 操作方式: 手动 + 全自动	S	S	S	S	S	S	S	S	S	S	S	S
Online editing features / 在线编辑功能	S	S	S	S	S	S	S	S	S	S	S	S
The chamber open means / 炉膛开启方式	电动自锁 + 安全支撑	电动自锁 + 安全支撑	电动自锁 + 安全支撑	电动自锁 + 安全支撑	电动自锁 + 安全支撑	电动自锁 + 安全支撑	电动自锁 + 安全支撑	电动自锁 + 安全支撑	电动自锁 + 安全支撑	电动自锁 + 安全支撑	电动自锁 + 安全支撑	电动自锁 + 安全支撑
District heating flux recovery system / 加热区助焊剂回收系统	S	S	S	S	S	S	S	S	S	S	S	S
Cooling area flux recovery system / 冷却区助焊剂回收系统	N/A	S	N/A	S	N/A	S	N/A	S	N/A	S	N/A	S
Equipment maintenance tips and warning / 设备保养提示、警报	S	S	S	S	S	S	S	S	S	S	S	S
Cold water machine / 冷水机	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O	N/A	O



技术要求:
1.客户加装调节阀来控制出入口排风量
2.出入口孔口的排风量控制在10~12m³/min左右。