



协作码垛工作站

Collaborative palletizing workstation

全球已进入工业4.0智能工厂时代，我国作为全球最大的工业机器人应用市场，其中码垛机器人产业高速发展。机器人、人、作业环境三者之间的有效结合与互动已经是未来趋势，将成为推动我国制造业发展的一大助力。

The world has entered the era of industrial 4.0 intelligent factory. As the largest industrial robot application market in the world, the palletizing robot industry develops rapidly. Effective combination and interaction among robots, human beings and working environment has become a trend in the future, and will be a great boost to the development of manufacturing industry in China.

协作码垛重新定义了易用性:

Collaborative palletization redefines the concept of "ease of use":

- >>> 2小时可完成安装调试。
Installation and re-adjustment can be completed within 2 hours.
- >>> 5分钟内可设置新的路径。
New path set-up within 5 minutes.
- >>> 每分钟可堆垛8-10个箱子。
8-10 boxes can be stacked per minute.
- >>> 最多可设置800个码垛路径。
Up to 800 stacking paths can be set.
- >>> 托盘尺寸最大能支持1300mmx1200mm。
Maximum tray size 1300mm x 1200mm
- >>> 可同时堆垛2种产品。
Two products can be stacked simultaneously.
- >>> 带有标签方向功能。
With label orientation function.



准备 → 码垛方式设置
A垛码放 → B垛码放 → 完成

Collaborative Robot 协作机器人

国际一流的大负载协作机器人，安全、高效、高性价比。
International first-class heavy-load cooperative robot, safe, efficient and cost-effective.

Frame Assembly 机架组件

便携移动式底座，应用更方便；
第七轴升降柱。
Portable mobile base for more convenient application;
7th axle lifting column.

End effector 末端执行器

轻便简约型设计，
大吸力防掉落，专利产品。
Lightweight and simple design,
large suction and anti-dropping, patented products.

Card Positioning System 卡板定位系统

机械式卡板定位系统，简便实用。
Mechanical card positioning system is simple and practical.



Operating system 操作系统

12.1寸高灵敏电容式触摸屏/7寸一体机
WSC协作码垛机器人系统V1.0
12.1 inch high sensitive capacitive touch screen/7-
inch integrated computer;
WSC collaborative palletizing robot system V1.0

Electric box control cabinet 电箱控制柜

自主研发，低能耗、高配置，集成电控柜。
Independent research and development in the
company, low energy consumption, high
configuration, integrated electric control cabinet.

协作码垛优势分析

Advantages of Collaborative Palletizer



简易编程 Simple programming

图形化编程、简单高效，无需精通编程语言即可轻松使用机器人。
半小时可掌握编程方式，1小时可完成简易编程。

Visual programming is simple and efficient, and ordinary employees can easily manipulate robots without having to master the programming language.
The programming mode can be learned in half an hour and simple programming can be completed in 1 hour.



安全稳定 Safety and stability

工业级力控传感器，具有高度的可靠性和安全性；
支持10级碰撞检测和传感器安全检测；
发生单一故障时不会丧失安全功能；

Industrial grade force-sensor with high reliability and safety;
Support 10-level collision detection and sensor safety detection;
without loss of safety function in case of single fault;



部署灵活 Flexible deployment

集成设计，轻便灵活，占地面积小；
工作站部署新任务设置简单快捷，效率高；

Integrated design, light and flexible, small footprint area;
Workstation deployment of new task setting is simple, quick and efficient;



应用广泛 Wide applications

广泛应用于食品、医药、3C、日化、印刷等行业领域；

Widely used in food, pharmaceuticals, 3C, daily chemistry, e-commerce and other industries;



柔性生产 Flexible Production

多种功能场景快速切换，可以采用人机协作，双机协作、多机协作等实现柔性化生产。

With fast switching of various functional scenarios, flexible production can be realized by human-machine cooperation, dual-computer cooperation and multi-computer cooperation.



经济实用 Economic and practical

平均6-12个月收回投资成本。

Average recovery of investment within 6-12 months;



WSC-MD12 系列



操作简单 Easy to operate

图形化编程、简单高效，无需精通编程语言即可轻松使用机器人。

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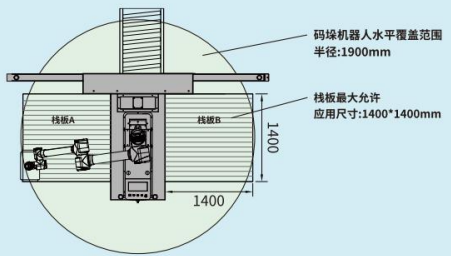
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>>> 产品参数

型 号 Model	WSC-MD12G	WSC-MD12S
负 载 Load	12kg	12kg
工作半径 Working radius	1900mm	1900mm
水平距离 (卡板规格) Horizontal distance (Specification of cardboard)		
垂直距离 Vertical distance	固定式H1=1700mm	升降式H2=2400mm
码垛速度 Stacking speed	≤ 8 pcs/min	≤ 8 pcs/min
重复定位精度 Repeated positioning accuracy	±0.04mm	±0.04mm
通讯方式 Communication mode	TCP/IP	TCP/IP
IP等级 Level up	Ip54	Ip54
温度范围 Temperature Range	0-55°C	0-55°C
最大功耗 Maximum Power Dissipation	2.5kw	3.3kw
电箱供电 Power supply from electric box	单相220v / 50HZ	单相220v / 50HZ
整机重量 Whole machine weight	≈ 260kg	≈ 300kg
占地面积 Floor area	1505*1716mm	1505*1716mm

码垛工作站拓展配置方案

进一步保障码垛工作站的安全性。

激光雷达传感器

- 无接触、灵活设置检测距离
- 靠近黄色区域报警减速
- 进入红色区域立即停机

光栅传感器

- 性能稳定，抗干扰能力强
- 感应灵敏度，快速反应
- 使用寿命长

安全围栏

- 物理防护，安全可靠



WSC-MD16 系列

wsc-md16 series



操作简单 Easy to operate

图形化编程、简单高效, 无需精通编程语言即可轻松使用机器人。

半小时可掌握编程方式, 1小时可完成简易编程。
Visual programming is simple and efficient, and ordinary employees can easily manipulate robots without having to master the programming language. The programming mode can be learned in half an hour and simple programming can be completed in 1 hour.



灵活部署 Flexible deployment

集成设计, 轻便灵活, 占地面积小;
工作站部署新任务设置简单快捷, 效率高;

Integrated design, light and flexible, small footprint area; Workstation deployment of new task setting is simple, quick and efficient.



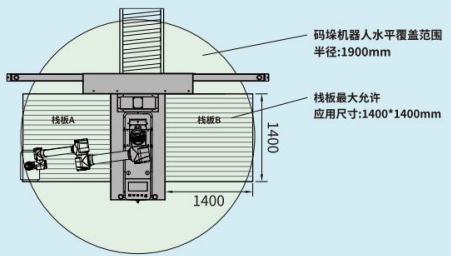
应用广泛 Wide Applications

广泛应用于食品、医药、3C、日化、印刷等行业领域。

Widely used in food, pharmaceuticals, 3C, daily chemistry, e-commerce and other industries.



>>> 产品参数

型号 Model	WSC-MD16G	WSC-MD16S
负载 Load	16kg	16kg
工作半径 Working radius	1900mm	1900mm
水平距离 (卡板规格) Horizontal distance (Specification of cardboard)		
垂直距离 Vertical distance	固定式H1=1700mm	升降式H2=2400mm
码垛速度 Stacking speed	≤ 8 pcs/min	≤ 8 pcs/min
重复定位精度 Repeated positioning accuracy	±0.04mm	±0.04mm
通讯方式 Communication mode	TCP/IP	TCP/IP
IP等级 Level up	Ip54	Ip54
温度范围 Temperature Range	0-55°C	0-55°C
最大功耗 Maximum Power Dissipation	2.5kw	3.3kw
电箱供电 Power supply from electric box	单相220v / 50HZ	单相220v / 50HZ
整机重量 Whole machine weight	≈ 260kg	≈ 300kg
占地面积 Floor area	1505*1716mm	1505*1716mm

码垛工作站拓展配置方案

进一步保障码垛工作站的安全性。

激光雷达传感器

- 无接触、灵活设置检测距离
- 靠近黄色区域报警减速
- 进入红色区域立即停机

光栅传感器

- 性能稳定, 抗干扰能力强
- 感应灵敏度, 快速反应
- 使用寿命长

安全围栏

- 物理防护, 安全可靠



WSC-MD20 系列

wsc-md20 series



操作简单 Easy to operate

图形化编程、简单高效, 无需精通编程语言即可轻松使用机器人。

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灵活部署 Flexible deployment

集成设计, 轻便灵活, 占地面积小;
工作站部署新任务设置简单快捷, 效率高;

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Workstation deployment of new task setting is simple, quick and efficient.



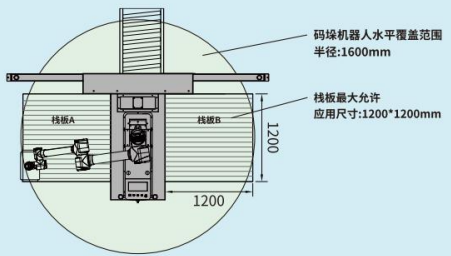
应用广泛 Wide Applications

广泛应用于食品、医药、3C、日化、印刷等行业领域。

Widely used in food, pharmaceuticals, 3C, daily chemistry, e-commerce and other industries.



>>> 产品参数

型 号 Model	WSC-MD20G	WSC-MD20S
负 载 Load	20kg	20kg
工作半径 Working radius	1600mm	1600mm
水平距离 (卡板规格) Horizontal distance (Specification of cardboard)		
垂直距离 Vertical distance	固定式H1=1600mm	升降式H2=2100mm
码垛速度 Stacking speed	≤ 8 pcs/min	≤ 8 pcs/min
重复定位精度 Repeated positioning accuracy	±0.04mm	±0.04mm
通讯方式 Communication mode	TCP/IP	TCP/IP
IP等级 Level up	Ip54	Ip54
温度范围 Temperature Range	0-55°C	0-55°C
最大功耗 Maximum Power Dissipation	2.5kw	3.3kw
电箱供电 Power supply from electric box	单相220v / 50HZ	单相220v / 50HZ
整机重量 Whole machine weight	≈ 260kg	≈ 300kg
占地面积 Floor area	1505*1716mm	1505*1716mm

码垛工作站拓展配置方案

进一步保障码垛工作站的安全性。

激光雷达传感器

- 无接触、灵活设置检测距离
- 靠近黄色区域报警减速
- 进入红色区域立即停机

光栅传感器

- 性能稳定, 抗干扰能力强
- 感应灵敏度高, 快速反应
- 使用寿命长

安全围栏

- 物理防护, 安全可靠



WSC-MD25 系列

wsc-md25 series



操作简单 Easy to operate

图形化编程、简单高效，无需精通编程语言即可轻松使用机器人。

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灵活部署 Flexible deployment

集成设计，轻便灵活，占地面积小；

工作站部署新任务设置简单快捷，效率高；

Integrated design, light and flexible, small footprint area; Workstation deployment of new task setting is simple, quick and efficient.



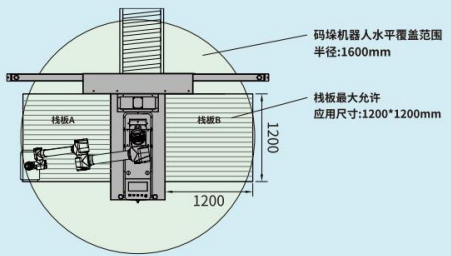
应用广泛 Wide Applications

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>>> 产品参数

型 号 Model	WSC-MD25G	WSC-MD25S
负 载 Load	25kg	25kg
工作半径 Working radius	1600mm	1600mm
水平距离 (卡板规格) Horizontal distance (Specification of cardboard)		
垂直距离 Vertical distance	固定式H1=1600mm	升降式H2=2100mm
码垛速度 Stacking speed	≤ 6 pcs/min	≤ 6 pcs/min
重复定位精度 Repeated positioning accuracy	±0.04mm	±0.04mm
通讯方式 Communication mode	TCP/IP	TCP/IP
IP等级 Level up	Ip54	Ip54
温度范围 Temperature Range	0-55°C	0-55°C
最大功耗 Maximum Power Dissipation	3.3kw	4.2kw
电箱供电 Power supply from electric box	单相220v / 50HZ	单相220v / 50HZ
整机重量 Whole machine weight	≈ 260kg	≈ 300kg
占地面积 Floor area	1505*1716mm	1505*1716mm

码垛工作站拓展配置方案

进一步保障码垛工作站的安全性。

激光雷达传感器

- 无接触、灵活设置检测距离
- 靠近黄色区域报警减速
- 进入红色区域立即停机

光栅传感器

- 性能稳定，抗干扰能力强
- 感应灵敏度，快速反应
- 使用寿命长

安全围栏

- 物理防护，安全可靠



WSC-MD30 系列

wsc-md30 series



操作简单 Easy to operate

图形化编程、简单高效, 无需精通编程语言即可轻松使用机器人。

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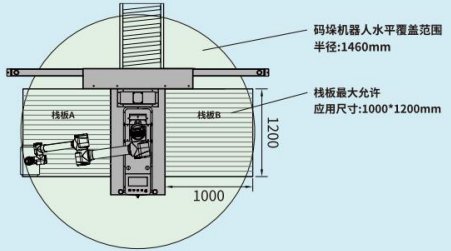
应用广泛 Wide Applications

广泛应用于食品、医药、3C、日化、印刷等行业领域。

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>>> 产品参数

型号 Model	WSC-MD30G	WSC-MD30S
负载 Load	30kg	30kg
工作半径 Working radius	1460mm	1460mm
水平距离 (卡板规格) Horizontal distance (Specification of cardboard)		
垂直距离 Vertical distance	固定式H1=1600mm	升降式H2=2100mm
码垛速度 Stacking speed	≤ 6 pcs/min	≤ 6 pcs/min
重复定位精度 Repeated positioning accuracy	±0.04mm	±0.04mm
通讯方式 Communication mode	TCP/IP	TCP/IP
IP等级 Level Ip	Ip54	Ip54
温度范围 Temperature Range	0-55°C	0-55°C
最大功耗 Maximum Power Dissipation	3.3kw	4.2kw
电箱供电 Power supply from electric box	单相220v / 50HZ	单相220v / 50HZ
整机重量 Whole machine weight	≈ 260kg	≈ 300kg
占地面积 Floor area	1505*1716mm	1505*1716mm

码垛工作站拓展配置方案

进一步保障码垛工作站的安全性。

激光雷达传感器

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- 靠近黄色区域报警减速
- 进入红色区域立即停机

光栅传感器

- 性能稳定, 抗干扰能力强
- 感应灵敏度, 快速反应
- 使用寿命长

安全围栏

- 物理防护, 安全可靠



WSC-MD40 系列

wsc-md40 series



操作简单 Easy to operate

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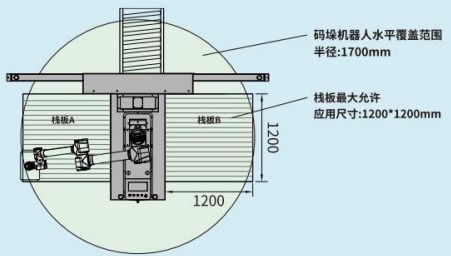
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>>> 产品参数

型 号 Model	WSC-MD40G	WSC-MD40S
负 载 Load	40kg	40kg
工作半径 Working radius	1700mm	1700mm
水平距离 (卡板规格) Horizontal distance (Specification of cardboard)		
垂直距离 Vertical distance	固定式H1=1600mm	升降式H2=2100mm
码垛速度 Stacking speed	≤ 6 pcs/min	≤ 6 pcs/min
重复定位精度 Repeated positioning accuracy	±0.04mm	±0.04mm
通讯方式 Communication mode	TCP/IP	TCP/IP
IP等级 Level up	Ip54	Ip54
温度范围 Temperature Range	0-55°C	0-55°C
最大功耗 Maximum Power Dissipation	4kw	4.8kw
电箱供电 Power supply from electric box	单相220v / 50HZ	单相220v / 50HZ
整机重量 Whole machine weight	≈ 360kg	≈ 420kg
占地面积 Floor area	1505*1716mm	1505*1716mm

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安全围栏

- 物理防护, 安全可靠



协作码垛案例展示

Collaborative stacking case presentation



Abletec

合作伙伴

Cooperating partners



>>> 您也可以像他们一样信赖我们

服务全国及海外超过70个城市4000+企业

You could trust us as much as our customers do
We serve 4000+ enterprises in more than 70 cities in China and in the world