

# PRODUCT MANUAL

压铸机周边配套机械专业供应商



# INCASA



## 公司简介 COMPANY PROFILE

伟拓压铸机械有限公司是一家专业生产压铸机周边机械的企业。公司引进国内外先进、科学的管理方法和制造技术，从事于压铸机周边自动化配套机械的生产，产品包括：给汤机、喷雾机、取出机、离型剂混合机、输送机、模温机、油压切边机、铝汤进料口之润滑颗粒机及颗粒润滑油，产品具备先进的技术水准，并于2008年通过ISO9001:2000质量体系认证。公司采用ERP企业资源规划系统，将公司的生产流程简单化，信息全面化，使公司在管理上得到提升，为公司发展奠定了强有力的基础。

在众多新老客户的支持下，公司销售网络不断扩大，目前已遍及全国各地，部分产品已多批出口到俄罗斯、日本、印度、马来西亚、土耳其、巴西等国家，并取得了显著的成绩和一致的好评，致力创建“国内专业生产压铸机周边机械的龙头企业”和江苏省高新技术企业，目前已取得多项专利证书，如“实用新型专利证书”等，公司本着“以质量求生存、以信誉求发展”、“以精立业，满足用户需要；以质取胜，制做可靠产品；以诚相待，提高优质服务”的创业精神，始终坚持“信誉第一、用户至上”的服务宗旨服务于社会，秉持着“互惠互利”的原则与您共创辉煌未来。



## 企业概况 COMPANY OVERVIEW

Kunshan Weituo Die Casting Machinery Co., Ltd. is a professional manufacturer of peripheral machinery for die casting machines. The company introduces advanced and scientific management methods and manufacturing technologies at home and abroad, and is engaged in the production of automatic supporting machinery around the die casting machine. The products include: soup machine, spray machine, take-out machine, release agent mixer, conveyor, mold temperature machine, hydraulic edge trimming machine, aluminum granule feed lubrication granule machine and granular lubricants, the products have advanced technical standards, and in 2008 passed the ISO9001: 2000 quality system certification. The company adopts ERP enterprise resource planning system, which simplifies the company's production process and comprehensive information, which enables the company to improve its management and lay a strong foundation for the company's development...



## COMPANY STRENGTH

企业实力



## 国际认证

- CE认证
- ISO9001认证
- ISO14001认证
- idt OHSAS 18001认证
- WRAS认证



# EFFICIENT

行动方案：理念+算盘，培养合格经营者

# PRECISE

为实现全体员工的物质和精神两方面幸福，同时为社会进步作贡献



# QUALITY

公司理念：追求全体员工物质和精神两方面的幸福，为社会进步作贡献



# PROFESSIONAL

公司使命：为客户热交换需求提供成套解决方案，成为行业中卓越的供应商



# 01

## 四连杆给汤机



优异的产品性能



全方位支持 - 提供各类增值服务



卓越能力满足苛刻工况



提供成套换热解决方案

### 主要特性

主要配件及电器元件均采用进口件。

采用四连杆结构、蜗轮蜗杆传动、变频器调速，进口 PLC 及变频器控制。

机身传动部位采用进口轴承和自润轴承，性能稳定；具有探针断线报警功能。

配有中文或中英文人机界面触摸屏对各种参数进行设定，可对机器状态进行实时监控并具有故障诊断显示功能。

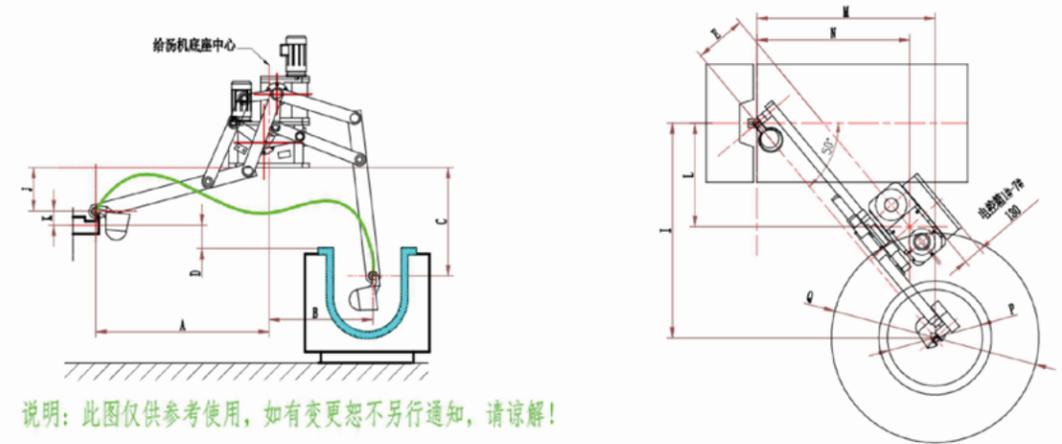
汤量控制采用进口编码器，数字化控制，调整方便；在手动 / 自动状态下均可增减汤量，给汤量精确，给汤稳定。

可单动，也可与压铸机、喷雾机、取出机连线，成为全自动化设备。

多元化的待机模式。有手动 / 自动两种操作方式，三种待机模式前待机、后待机和联动控制。

### 附给汤机外形尺寸图

### Attached Outline Dimensional Drawing of Feeding Machine



说明：此图仅供参考使用，如有变更恕不另行通知，请谅解！

### Main characteristics:

Main parts and electrical components adopt the imported parts.

It is driven by the four-bar linkage and worm and gear, and regulated by frequency converter, which is controlled by the imported PLC and frequency converter.

The driving parts must adopt the imported bearings and self-lubricating bearings to improve the performance stability. With the probe broken-wire alarm function.

The human-machine interface touch screen in Chinese or both Chinese and English can be used for setting various parameters and monitoring the machine status in real time. It also has the functions of fault diagnosis and display and probe breakage alarm.

The feeding volume is controlled by the imported encoder for digital control and easy adjustment. The feeding volume can be increased or decreased at manual/automatic state stably.

It can work singly and can become a full-automatic equipment through wiring with the die casting machine, sprayer and extractor.

It has many standby modes. There are two operation modes of manual/automatic, three standby modes of front standby, rear standby and linkage control.

规格 / 机型	WTRL-1#	WTRL-2#	WTRL-3#	WTRL-4#	WTRL-5#	WTRL-6#	WTRL-7#	WTRL-8#
适用于压铸机	125T-200T	250T-400T	500T-580T	630T-900T	1000T-1250T	1600T-2000T	2500T-3000T	3500T-4500T
给汤量	0.5-2.0KG	1.0-5.0KG	2.0-7.0KG	2.5-12KG	8-25KG	18-40KG	30-50KG	40-80KG
给汤精度	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%
汤勺	0.5/0.8KG	1.5/2.5KG	3.5/4.5KG	6.0/8.0KG	10/12KG	15/20KG	20/25KG	30/40KG
坩埚最小内径	500mm	500mm	550mm	600mm	800mm	850mm	900mm	950mm
坩埚最大壁厚	300mm	300mm	300mm	350mm	350mm	500mm	500mm	500mm
坩埚最小深度	400mm	500mm	500mm	580mm	600mm	750mm	800mm	850mm
电源容量	三相 380V /3.0KVA	三相 380V /3.0KVA	三相 380V /3.0KVA	三相 380V /3.0KVA	三相 380V /5.0KVA	三相 380V /6.0KVA	三相 380V /6.0KVA	三相 380V /6.0KVA
操作电源	DC24V							
汤勺马达	0.4KW	0.4KW	0.4KW	0.4KW	0.75KW	1.5KW	1.5KW	1.5KW
汤臂马达	1.5KW	1.5KW	1.5KW	1.5KW	2.2KW	3.7KW	3.7KW	3.7KW
一次送汤注汤时间	5sec	5sec	6sec	6sec	10sec	12sec	12sec	13sec

# 02 伺服给汤机



优异的产品性能



全方位支持 - 提供各类增值服务



卓越能力满足苛刻工况



提供成套换模解决方案

## 主要特性:

主要配件及电器元件均采用进口件。

四连杆结构、机器人用 RV 减速机传动、YASKAWA 伺服电机控制，控制精确，机械强度高，稳定性好，汤勺运动更加平稳，使用寿命长。

具有中文或中英文人机界面触摸屏对各种参数进行设定，可对机器状态进行实时监控并具有故障诊断显示功能；具有探针断线报警功能

机身传动部位采用进口轴承和自润轴承，性能稳定。

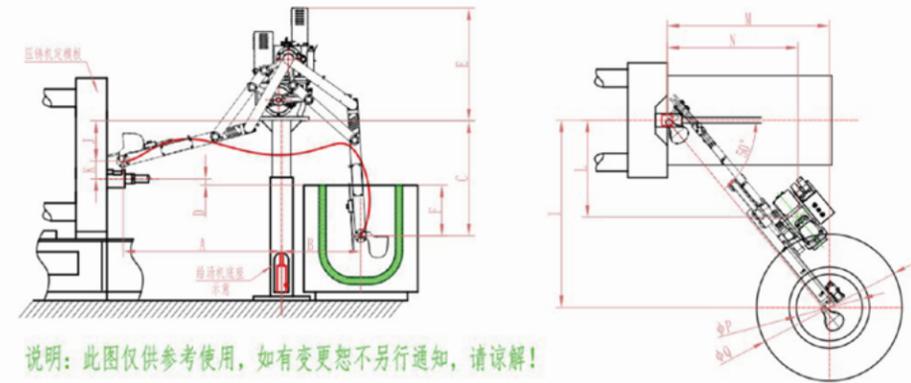
汤量采用 YASKAWA 伺服电机控制，数字化控制，调整方便。在手动 / 自动状态下均可增减汤量，给汤量稳定。

自动化程度高，用户使用调整方便，可单动，也可与压铸机、喷雾机、取出机连线，成为全自动化设备。

多元化的待机模式，有手动 / 自动两种操作方式，三种待机模式及前待机、后待机和联动控制，复杂多变的模具也能控制自如。

## 附伺服给汤机外形尺寸图

Attached outline dimensional drawing of servo feeding machine



说明：此图仅供参考使用，如有变更恕不另行通知，请谅解！

## Main characteristics:

Main accessories and electric components are imported parts.

With four-bar linkage, RV reducer for robot for driving and YASKAWA servo motor for control, it is featured by precise control, high mechanical strength and good stability, achieving smoother ladle motion and longer service life.

The human-machine interface touch screen in Chinese or both Chinese and English can be used for setting various parameters and monitoring the machine status in real time. It also has the functions of fault diagnosis and display and probe breakage alarm.

The driving part of the machine body uses imported bearing and self-lubricating bearing with stable performance.

YASKAWA servo motor is used for controlling the feeding volume, which is digital control and convenient for adjustment. In the manual/auto mode, the feeding volume can be increased or decreased to achieve stable feeding volume.

With a high degree of automation, it is convenient for users to use and adjustment. It can be used independently or linked with die-casting machine, sprayer and extractor to form fully automatic equipment.

It has diversified standby mode, including manual/auto operation mode, three standby modes, front standby, rear standby and linkage control. The complicated and changing dies can also be controlled freely.

规格 / 机型	WTSGB-2#	WTSGB-3#	WTSGB-4#	WTSGB-5#	WTSGB-6#	WTSGB-7#	WTSGB-8#
适用于压铸机	250T-400T	500T-580T	630T-900T	1000T-1250T	1600T-2000T	2500T-3000T	3500T-4500T
给汤量	1.0-4.5KG	1.5-6kg	2.5-8.0KG	8-25KG	18-40KG	30-50KG	40-80KG
给汤精度	±1%	±1%	±1%	±1%	±1%	+±1%	±1%
汤勺	1.5/4.5KG	1.5/6.0kg	2.5/8.0KG	10/12KG	15/20KG	20/25KG	30/40KG
坩埚最小内径	500mm	550mm	600mm	800mm	850mm	900mm	950mm
坩埚最大壁厚	300mm	300mm	350mm	350mm	500mm	500mm	500mm
坩埚最小深度	≥ 500mm	500 ≥ mm	≥ 580mm	≥ 600mm	≥ 750mm	≥ 800mm	≥ 850mm
电源容量	三相 380V /1.5KVA	三相 380V /1.5KVA	三相 380V /12.5KVA	三相 380V /5.0KVA	三相 380V /7.0KVA	三相 380V /7.0KVA	三相 380V /7.0KVA
操作电源	DC24V	DC24V	DC24V	DC24V	DC24V	DC24V	DC24V
汤勺马达	0.4KW	0.4KW	0.4KW	1.3 KW	1.8 KW	1.8 KW	1.8 KW
汤臂马达	0.85KW	0.85KW	1.3KW	2.9 KW	4.4 KW	4.4 KW	4.4 KW
一次送汤注汤时间	4sec	5sec	5sec	10sec	12sec	12sec	13sec

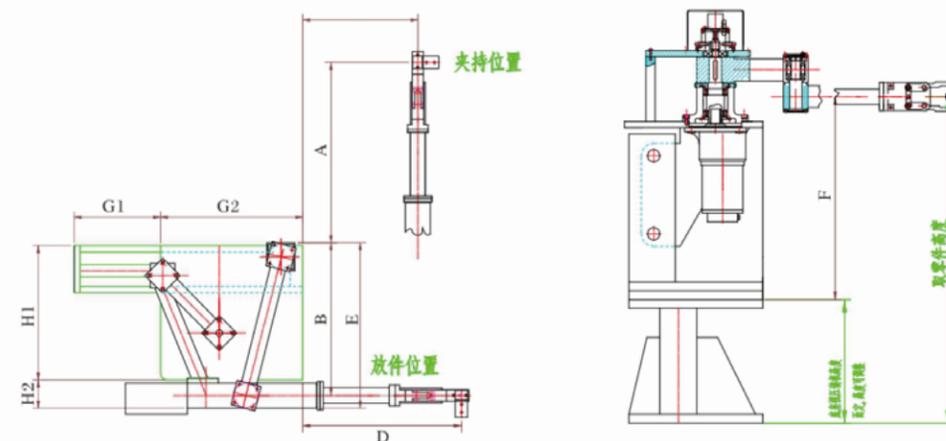
# 03

## 单伺服取件机



### 附取件机外形尺寸图

### Attached Outline Dimensional Drawing of Extractors



说明：此图仅供参考使用，如有变更恕不另行通知，请谅解！



优异的产品性能



全方位支持 - 提供各类增值服务



卓越能力满足苛刻工况



提供成套换热解决方案

### 主要特性:

主要配件及电器元件均采用进口件，故障率低，使用寿命长。

采用连杆式手臂，承载能力强。采用机器人用 RV 减速机，YASKAWA 伺服电机控制，高速运行平稳且无冲击。

因采用 YASKAWA 伺服控制，所以手臂可在其行程范围内的任意点待机(在开模之前手臂提前前进至模具边缘等待)有效缩短了取出周期，提高了生产效率。

采用中文人机界面触摸屏，可方便的对各种参数进行设定，对机器状态进行实时监控并带故障自诊断显示功能，使得操作和维护都非常的方便。

可单机自动，也可与压铸机给汤机，喷雾机连线，成为全自动化设备。

取件手臂最大可以旋转 110°，放工件范围广，适用性更强。

采用进口双平行夹爪，两边夹指运动同步，夹持工件更加稳定可靠。

### Main characteristics:

Main accessories and electric components are imported parts with low fault rate and long service life.

The linkage-type arm is used to achieve strong bearing capacity. RV reducer for robot and YASKAWA servo motor for control are used to achieve high-speed and stable operation without shock.

As YASKAWA servo is used for control, the arm can stand by at any point within the travel range (the arm moves to the edge of die for waiting in advance before die sinking), effectively reducing the extracting cycle and improving the production efficiency.

The human-machine interface touch screen in Chinese is used to facilitate the setting of various parameters. It can monitor the machine status in real time and has the functions of fault self-diagnosis and display, which is convenient for operation and maintenance.

It can be used independently or linked with die-casting machine, feeding machine and sprayer to form fully automatic equipment.

The extracting arm can rotate by 110° to the maximum extent, with wide workpiece placement range and stronger applicability.

The imported double parallel clamping jaws are used. With synchronous motion of clamping jaws on both sides, the workpieces can be clamped more stably and reliably.

规格 / 机型	WTE-BS2#	WTE-BS4#
适用于压铸机	125T-400T	500T-900T
夹手直径	Ø30-100MM	Ø70-110MM
夹爪数	2	2
引拔力	68 KGF	98 KGF
引拔方向可调距	160MM	170MM
引拔距离	300MM	500MM
空气源	6kgf/cm <sup>2</sup>	6kgf/cm <sup>2</sup>
夹持重量	4KG	10KG
驱动电机	0.75KW	1.3KW
固定方式	落地式	落地式

# 04 连杆式伺服喷雾机



- 优异的产品性能
- 全方位支持 - 提供各类增值服务
- 卓越能力满足苛刻工况
- 提供成套换热解决方案

## 主要特性:

采用连杆式结构, 机器人用 RV 减速机驱动, 机械强度高, 稳定性好, 使用寿命长。

采用日本 YASKAWA 伺服电机, 日本 NTN/NSK 轴承。

可以在开模选择前待机, 减短喷雾下降时间, 有效节约喷雾周期。

电动模厚调整功能, 省时、省力、安全。

可存储多套模具喷涂程序, 更换模具时直接在人机界面中调用已存储的程序即可直接使用, 使操作和维护非常方便。

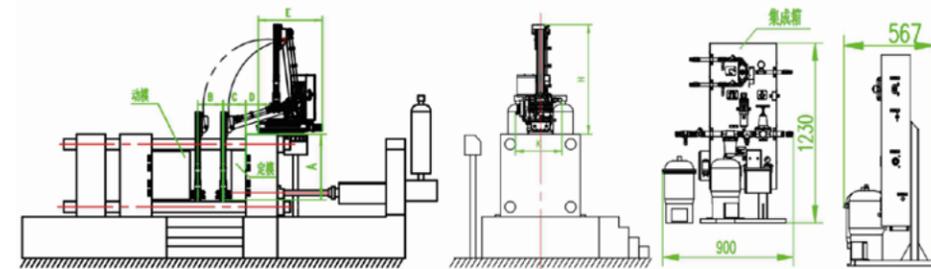
控制箱预留信号, 可与压铸机半自动操作, 也可与压铸机、取出机等连线, 成为全自动化设备

采用人机界面触摸屏, 方便对各种参数进行调整设定, 具有故障诊断显示功能, 方便后期的故障诊断与维修。

配备喷嘴式喷头组, 雾化效果好, 方便更换安装。具备定点喷雾、循环喷雾、浮动喷雾。

动、定模可同时吹气, 也可动、定模单独控制。在喷雾状态下不吹气, 在吹气状态下不喷雾。有上升吹气功能, 可在喷雾工作完成后喷头上方的同时吹气以清扫模面的污物, 使模面保持清洁以上喷嘴采用气囊控制方式(气控水), 可对流量进行精确控制满足不同产品, 不同位置的喷涂需求。气囊控制, 设备的维护与清理上是最方便、成本最底的一种控制方式。采用外混合式喷涂, 每模喷涂结束后在喷嘴处就能实现关闭喷雾, 大大减少了脱模剂的用量, 减少了残留, 提高了压铸车的生产环境。每个喷嘴在喷涂间歇都持续喷射空气, 加快水分蒸发, 同时防止喷头滴水, 减少水分残留; 喷涂结束后, 还有独立设置压强的强劲喷气回路, 进一步吹走水分和杂质。

附喷雾机外形尺寸图  
Attached Outline Dimensional Drawing of Sprayer



说明: 此图仅供参考使用, 如有变更恕不另行通知, 请谅解!

## Main characteristics:

Linkage-type structure and RV reducer for robot for driving are used to achieve high mechanical strength, good stability and long service life.

Japan YASKAWA servo motor and Japan NTN/NSK bearing are used.

Front standby can be selected for die sinking to shorten the spray falling time, so as to effectively reduce the spraying cycle.

Electrical die thickness adjustment function is time-saving, labor-saving and safe.

Multiple die spaying programs can be saved, and when changing the die, the saved program can be directly called on the human-machine interface for direct use to facilitate the operation and maintenance.

The control box is reserved with signals for linking with die-casting machine for semi-automatic operation and with die-casting machine and extractor to form fully automatic equipment.

The human-machine interface touch screen is used to facilitate the adjustment and setting of various parameters. It has the function of fault diagnosis and display to facilitate subsequent fault diagnosis and repair.

It is equipped with nozzle-type sprinkler group with good atomization effect and easy for replacement and installation. It is featured by fixed-point spraying, circulating spraying and floating spraying.

Simultaneous and separate blowing is available for moving die and fixed die. No blowing is performed in the spraying state and no spraying is performed in the blowing state. It has the function of ascending blowing, for blowing while the sprinkler ascends after the spraying work is completed to clean the dirt on the die surface and keep the die surface clean.

The above nozzle is controlled by leather bag (air-controlled water), which can precisely control the flow rate to meet the spraying needs of different products and different positions. The leather bag control is a control mode most convenient for maintenance and cleaning of equipment with the lowest cost. With external mixing spraying, the spraying can be closed at the nozzle after each die is sprayed, thus greatly reducing the consumption of release agent, reducing residues and improving the production environment of the die-casting workshop. Each nozzle continuously sprays air at the spraying interval to speed up the evaporation of water, and prevent the sprinkler from dripping water and reduce the residual water at the same time; after the spraying is finished, the strong air injection circuit with independent pressure setting can be used to further blow away the water and impurities.

机型	WTSYPD-2#	WTSYPD-3#	WTSYPD-4#
适用于压铸机	125T-400T	500-580T	630-900T
喷涂形式	左中右控制	左中右控制	左中右控制
喷涂控制单元	总共 6 个单元	总共 6 个单元	总共 6 个单元
喷涂喷嘴数量	总喷雾位置 28 个所配喷嘴总数为 14 个 (动定模各 7 个) 其余 14 个用扣盖	总喷雾位置 32 个所配喷嘴总数为 18 个 (动定模各 9 个) 其余 14 个用扣盖	总喷雾位置 36 个所配喷嘴总数为 26 个 (动定模各 13 个) 其余 10 个用扣盖
高压吹气喷嘴	总吹气数为 14 个、动定模各 7 个	总吹气数为 16 个、动定模各 8 个	总吹气数为 18 个、动定模各 9 个
升降行程	750mm	950mm	1100mm
底座行程	250mm	400mm	400mm
升降马达功率	1.8KW	1.8KW	1.8KW
电源容量	三相 380V/2.0KVA	三相 380V/2.0KVA	三相 380V/2.0KVA
循环节拍	5 sec	6 sec	6 sec

# 05 连杆式伺服喷雾机

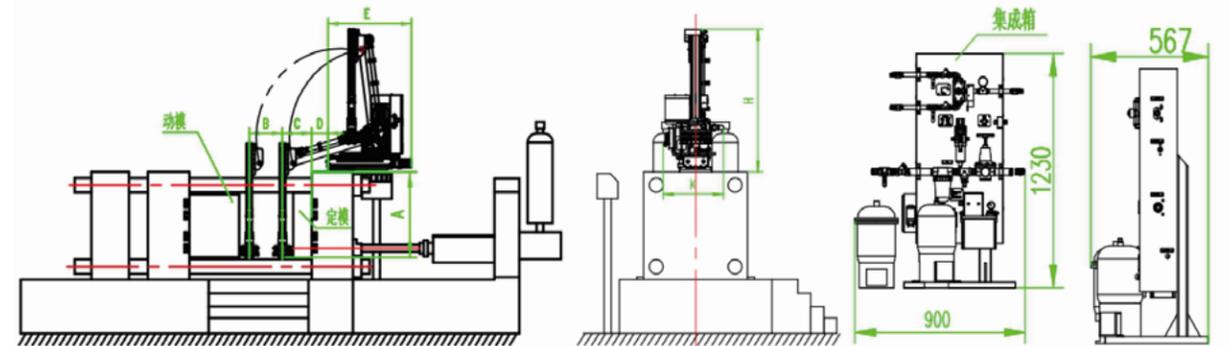


- 优异的产品性能
- 全方位支持 - 提供各类增值服务
- 卓越能力满足苛刻工况
- 提供成套换模解决方案

## 主要特性:

- 采用连杆式结构, 机器人用 RV 减速机驱动。
- 采用日本 YASKAWA 伺服电机, 日本 NTN/NSK 轴承。
- 可以在开模后离喷雾最近的地方待机, 减短喷雾下降时间, 大大提高喷雾周期。
- 电机模厚调整功能, 省时、省力、安全。
- 可存储多套模具喷涂程序, 更换模具时直接在人机界面中调用已存储的程序即可直接使用, 使操作和维护非常方便。
- 控制箱有信号预留, 可与压铸机半自动操作, 也可与压铸机、取出机等连线, 成为全自动化设备。
- 采用人机界面触摸屏, 方便对各种参数进行调整设定, 具有故障诊断显示功能, 方便后期的故障诊断与维修。
- 配有铜管式喷头组, 更换安装方便。
- 动、定模可同时吹气, 也可动、定模单独控制。在喷雾状态下不吹气, 在吹气状态下不喷雾。有上升吹气功能, 可在喷雾工作完成后喷头上方的同时吹气以清扫模面的污物, 使模面保持清洁

附喷雾机外形尺寸图  
Attached Outline Dimensional Drawing of Sprayer



说明: 此图仅供参考使用, 如有变更恕不另行通知, 请谅解!

## Main characteristics:

- Linkage-type structure and RV reducer for robot for driving are used.
- Japan YASKAWA servo motor and Japan NTN/NSK bearing are used.
- It can stand by at the place closest to the spray after die sinking to shorten the spray falling time and greatly improve the spraying cycle.
- Electrical die thickness adjustment function is time-saving, labor-saving and safe.
- Multiple die spaying programs can be saved, and when changing the die, the saved program can be directly called on the human-machine interface for direct use to facilitate the operation and maintenance.
- The control box is reserved with signals for linking with die-casting machine for semi-automatic operation and with die-casting machine and extractor to form fully automatic equipment.
- The human-machine interface touch screen is used to facilitate the adjustment and setting of various parameters. It has the function of fault diagnosis and display to facilitate subsequent fault diagnosis and repair.
- It is equipped with copper tube type sprinkler group, which is easy for replacement and installation.
- Simultaneous and separate blowing is available for moving die and fixed die. No blowing is performed in the spraying state and no spraying is performed in the blowing state. It has the function of ascending blowing, for blowing while the sprinkler ascends after the spraying work is completed to clean the dirt on the die surface and keep the die surface clean.

机型	WTSYPE-2#	WTSYPE-3#	WTSYPE-4#
适用于压铸机	125T-400T	500-580	630-900
喷涂形式	铜管喷雾 (前后)	铜管喷雾 (前后)	铜管喷雾 (前后)
喷涂铜管数量	单排 18PCS, 共 36PCS	单排 21PCS, 共 42PCS	单排 24PCS, 共 48PCS
高压吹气铜管数量	17 pcs	20 pcs	23 pcs
喷涂时间, 喷涂量	动、定模可单调整	动、定模可单调整	动、定模可单调整
升降行程	750mm	950mm	1100mm
底座行程	250mm	400	400
升降马达功率	1.8KW	1.8KW	1.8KW
电源容量	380V/0.5KVA	380V/0.5KVA	380V/0.5KVA
循环节拍	5 sec	6 sec	6 sec

# 06

## 两轴伺服喷雾机



优异的产品性能



全方位支持 - 提供各类增值服务



卓越能力满足苛刻工况



提供成套换模解决方案

### 主要特性:

采用日本 YASKAWA 伺服电机驱动, 精密行星减速机。

采用高精度齿轮齿条传动, 对齿轮、齿条进行防锈处理; 日本进口润滑系统及齿条吹气, 更良好的保证了设备的稳定及长期运行。

喷头组动、定模控制单元独立控制, 每个喷嘴可独立精确调整喷雾量, 喷嘴采用万向节结构可在任意方向进行调整, 喷嘴备有可弯式喷嘴及加长喷嘴可选, 适合较复杂的模具。

伺服喷雾采用手持式触摸屏, 在触摸屏人机界面上可自由编辑喷涂步骤, 参数设定一目了然, 并带有故障自诊断显示功能, 使用与维修都极为方便。

喷雾机在喷雾时可同时作上下前后运动, 可设定浮动喷涂, 定点喷涂。喷头设有独立的强力吹气喷嘴, 可有效清理模具上方残留物。

喷嘴具有清洗功能, 防止长期停用涂料堵塞喷嘴。

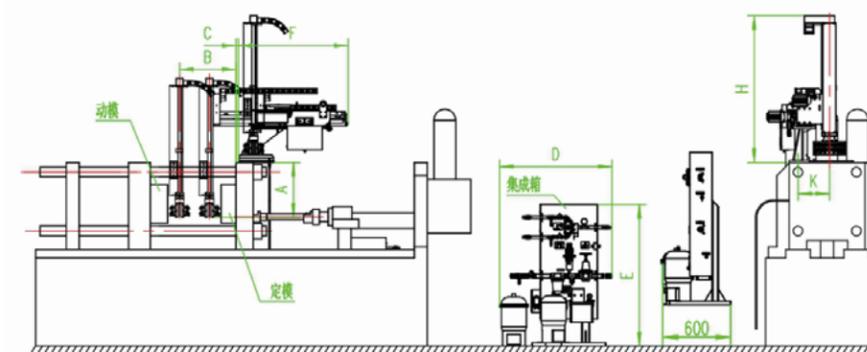
具有模组存储功能, 更换模具时只需要输入相应的模具编号即可读取参数, 避免重复参数设定而浪费时间。

具有前后待机功能, 喷头提前在待机位等待, 提高生产效率。



附喷雾机外形尺寸图

Attached Outline Dimensional Drawing of Sprayer



说明: 此图仅供参考使用, 如有变更恕不另行通知, 请谅解!

### Main characteristics:

Servo motor adopts the Japan Yaskawa drive motor and high precision planetary reducer.

The gear rack drive system is adopted, with nickel plated treatment taken for gear and rack to prevent rust. Improve the oiling and blowing function to the gear and rack, to well ensure the stable and long-term operation of the equipment.

Moving and fixed moulds of the nozzle can be controlled independently layer by layer. Spray volume of each nozzle can be independently and precisely adjusted. Nozzle can be adjusted at any direction thanks to its U-joint structure. There are optional flexible and extended nozzles to suit any complex mould.

Servo sprayer adopts the handheld touch screen and the spraying steps can be freely edited on the human-machine interface on it, with the parameter settings cleared at a glance. It also has the fault self-diagnosis display function for very convenient use and maintenance.

Sprayer can move around while spraying, with the floating spray set for fixed-point spraying. Nozzle has a separate powerful air blow pipe to effectively remove the residues above the mould.

Nozzle has a cleaning function and shall be plugged with coating if not used for a long time.

Servo sprayer has a modular storage function, so only the corresponding mould number is required to be entered to read the parameter when the replacement of the mould, to avoid a waste of time due to repeated parameters setting.

It has a before and after standby function. Therefore, the nozzle can wait at the standby position in advance to improve the production efficiency.

规格 / 机型	WTP-XL1#	WTP-XL2#	WTP-XL3#	WTP-XL4#	WTP-XL5#	WTP-XL6#	WTP-XL7#
适用于压铸机	125T-200T	250T-400T	500T-580T	630T-900T	1000T-1250T	1600T-2000T	2500T-3000T
喷涂形式	左中右控制	左中右控制	左中右控制	左中右控制	左中右控制	左中右控制	左中右控制
喷涂控制单元	总共 6 个单元	总共 6 个单元	总共 6 个单元	总共 6 个单元	总共 6 个单元	总共 6 个单元	总共 6 个单元
喷涂喷嘴数量	总喷雾位置 24 个所配喷嘴总数为 12 个 (动定模各 6 个) 其余 12 个用打盖	总喷雾位置 28 个所配喷嘴总数为 14 个 (动定模各 7 个) 其余 14 个用打盖	总喷雾位置 32 个所配喷嘴总数为 18 个 (动定模各 9 个) 其余 14 个用打盖	总喷雾位置 36 个所配喷嘴总数为 26 个 (动定模各 13 个) 其余 10 个用打盖	总喷雾位置 78 个所配喷嘴总数为 50 个 (动定模各 25 个) 其余 28 个用打盖	总喷雾位置 90 个所配喷嘴总数为 60 个 (动定模各 30 个) 其余 30 个用打盖	总喷雾位置 102 个所配喷嘴总数为 70 个 (动定模各 35 个) 其余 32 个用打盖
高压吹气喷嘴	吹气总数为 12 个、动定模各 6 个	吹气总数为 14 个、动定模各 7 个	吹气总数为 16 个、动定模各 8 个	吹气总数为 18 个、动定模各 9 个	吹气总数为 26 个、动定模各 13 个	吹气总数为 30 个、动定模各 15 个	吹气总数为 34 个、动定模各 17 个
供气压力	6 kgf/cm <sup>2</sup>	6 kgf/cm <sup>2</sup>	6 kgf/cm <sup>2</sup>	6 kgf/cm <sup>2</sup>	6 kgf/cm <sup>2</sup>	6 kgf/cm <sup>2</sup>	6 kgf/cm <sup>2</sup>
水源压力	4kgf/cm <sup>2</sup>	4kgf/cm <sup>2</sup>	4kgf/cm <sup>2</sup>	4kgf/cm <sup>2</sup>	4kgf/cm <sup>2</sup>	4kgf/cm <sup>2</sup>	4kgf/cm <sup>2</sup>
离型剂接管口径	PT 1/2 "	PT 1/2 "	PT 1/2 "	PT 1/2 "	PT3/4 "	PT 3/4 "	PT 3/4 "
控制气源接管口径	3/8 "	3/8 "	3/8 "	3/8 "	3/8 "	3/8 "	3/8 "
气源接管口径	1 "	1 "	1 "	1 "	2 "	2 "	2 "
纵向行程	700mm	800mm	1100mm	1200mm	1500mm	1700mm	1900mm
横向行程	650mm	750mm	900mm	1100mm	1300mm	1450mm	1650mm
上升速度	2m/sec	2m/sec	1.5m/sec	1.5m/sec	1.5m/sec	1.5m/sec	1.5m/sec
下降速度	2 m/sec	2 m/sec	1.5 m/sec	1.5 m/sec	1.5 m/sec	1.5 m/sec	1.5 m/sec
循环节拍	4sec	5sec	6sec	7sec	9sec	10sec	12sec

# 07

## 三轴喷雾机



优异的产品性能



全方位支持 - 提供各类增值服务



卓越能力满足苛刻工况



提供成套换模解决方案

### 主要特性:

采用日本 YASKAWA 伺服电机驱动, 精密行星减速机。

采用高精度齿轮齿条传动, 对齿轮、齿条进行防锈处理; 日本进口润滑系统及齿条吹气, 更良好的保证了设备的稳定及长期运行。

喷头组动、定模控制单元独立控制, 每个喷嘴可独立精确调整喷雾量, 喷嘴采用万向节结构可在任意方向进行调整, 喷嘴备有可弯式喷嘴及加长喷嘴可选, 适合较复杂的模具。

伺服喷雾采用手持式触摸屏, 在触摸屏人机界面上可自由编辑喷涂步骤, 参数设定一目了然, 并带有故障自诊断显示功能, 使用与维修都极为方便。

三轴同步运动控制可实现直线插补和圆弧插补, 可设定浮动喷涂, 定点喷涂。喷头设有独立的强力吹气喷嘴, 可有效清理模具上方残留物。

喷嘴具有清洗功能, 防止长期停用时涂料堵塞喷嘴。

具有模组存储功能, 更换模具时只需要输入相应的模具编号即可读取参数, 避免重复参数设定而浪费时间

具有前后待机功能, 喷头提前在待机位等待, 提高生产效率。

### Main characteristics:

Japan YASKAWA servo motor for driving and precise planetary reducer are used.

High-precision pinion and rack are used for driving, with anti-rust treatment made to the pinion and rack; the lubrication system and rack blowing imported from Japan better ensure the stable and long-term operation of the equipment.

The moving and fixed die control unit of the sprinkler group is of independent control, and each nozzle can adjust the spray volume independently and precisely. The nozzle is of universal joint structure and can be adjusted in any direction. Bendable nozzle and extended nozzle are optional, suitable for complicated die.

Handheld touch screen is used for servo spraying. On the touch screen of human-machine interface, spraying steps can be edited freely, parameter settings are clear at a glance, and the fault self-diagnosis and display function is available, which is very convenient for use and repair.

Three-axis synchronous motion control can achieve linear interpolation and circular interpolation, and floating spraying and fixed-point spraying can be set. The sprinkler is provided with independent strong blowing nozzle to effectively clean the residue on the die.

It has nozzle cleaning function to prevent the paint from blocking the nozzle when it is not used for a long time.

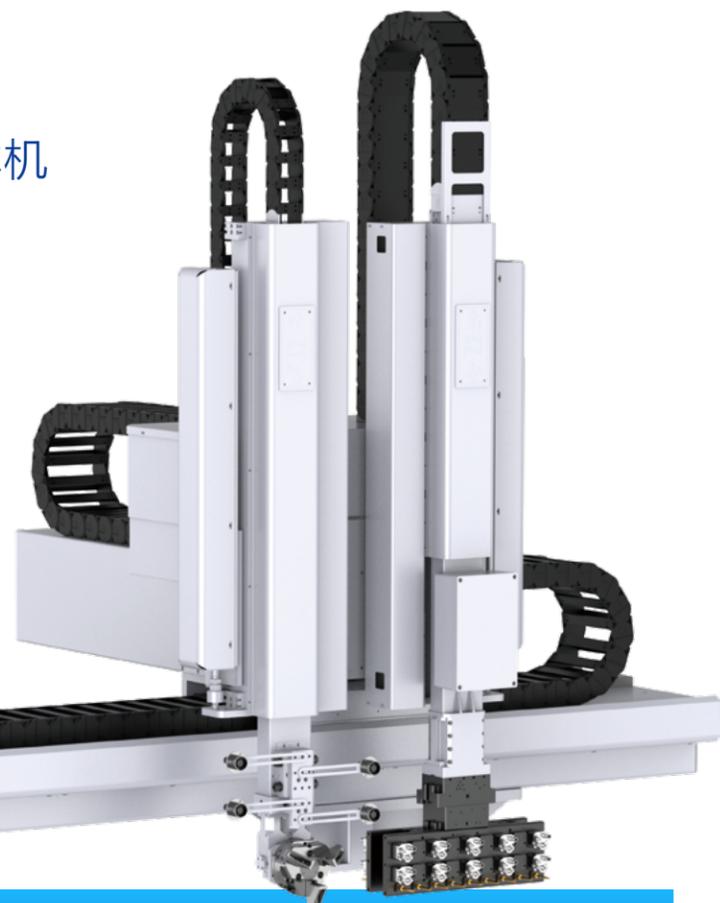
With the module saving function, the parameters can be read by entering the corresponding die number when changing the die, avoiding the waste of time for repeated parameter setting.

With the front and rear standby function, the sprinkler waits at the standby position in advance to improve the production efficiency.

机型	WTSPA-4#	WTSPA-5#	WTSPA-6#
适用于压铸机	500-850T	1000-1600T	2000-2800T
喷涂形式	左中右控制	左中右控制	左中右控制
喷涂控制单元	总共 6 个单元	总共 6 个单元	总共 6 个单元
所配喷嘴数量	总喷雾位置 36 个所配喷嘴总数为 26 个 (动定模各 13 个) 其余 10 个用打盖	总喷雾位置 78 个所配喷嘴总数为 50 个 (动定模各 25 个) 其余 28 个用打盖	总喷雾位置 90 个所配喷嘴总数为 60 个 (动定模各 30 个) 其余 30 个用打盖
高压吹气喷嘴	吹气总数 18 PCS( 动定模各 9 PCS )	吹气总数 26PCS( 动定模各 13 PCS )	吹气总数为 30 个、动定模各 15 个
X 轴行程	1500mm	1700mm	3200mm
Y 轴行程	700mm	1000mm	1600mm
Z 轴行程	1200mm	1600mm	2200mm
移动速度	1.5m/s	1.5m/s	1.5m/s
循环节拍	7sec	9sec	10sec
供气压力	6bar	6bar	6bar
脱模剂压力	4bar	4bar	4bar
电源容量	380V/5.0KVA	380V/6.0KVA	380V/7.5KVA

# 08

## 四轴取喷一体机



优异的产品性能



全方位支持 - 提供各类增值服务



卓越能力满足苛刻工况



提供成套换热解决方案

### 主要特性:

开模后模内快速下降取件，模外慢速下降放件，具“快拿轻放”动作功能，实现稳定，完美的取出动作。

可以在开模后离喷雾最近的地方待机，减短喷雾下降时间，大大提高喷雾周期。

具有模组存储功能，更换模具时只需要输入相应的模具编号即可读取参数，避免重复参数设定而浪费时间。

采用人机界面触摸屏，方便对各种参数进行调整设定，具有故障诊断显示功能，方便后期的故障诊断与维修。

控制箱有信号预留，可与压铸机半自动操作，也可与压铸机、取出机等连线，成为全自动化设备。

四轴同步运动控制可实现直线插补和圆弧插补。

采用进口三指专用气爪。夹爪接触部进行增强处理、提高耐久性、耐磨性。圆形机体结构，高效地解决了夹持工件中心困难等问题。

### Main characteristics:

The action function of “quick picking-up and gentle putting-down” that is quick descending for picking up inside the die and slow descending for putting down outside the die after die sinking can achieve the stable and perfect extraction action.

It can stand by at the place closest to the spray after die sinking to shorten the spray falling time and greatly improve the spraying cycle.

With the module saving function, the parameters can be read by entering the corresponding die number when changing the die, avoiding the waste of time for repeated parameter setting.

The human-machine interface touch screen is used to facilitate the adjustment and setting of various parameters. It has the function of fault diagnosis and display to facilitate subsequent fault diagnosis and repair.

The control box is reserved with signals for linking with die-casting machine for semi-automatic operation and with die-casting machine and extractor to form fully automatic equipment.

Four-axis synchronous motion control can achieve linear interpolation and circular interpolation.

Imported three-finger special air gripper is used. The contact part of clamping jaw is enhanced to improve its durability and wearability. The round body structure effectively solves the problem of difficulty in clamping the center of the workpiece.

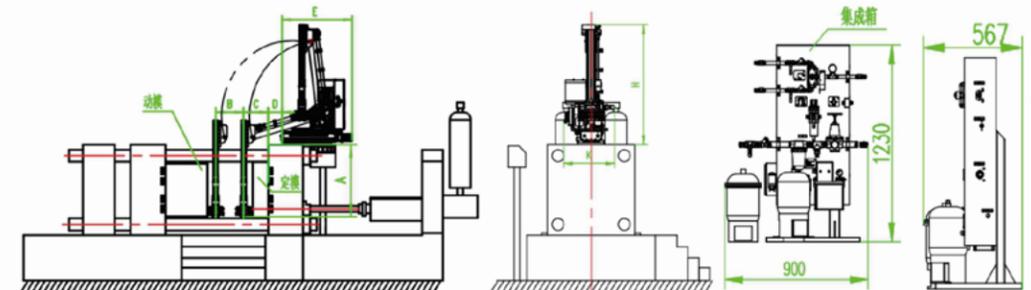
机型	WTSQPB-2#- III	WTSQPB-4#- III
适用于压铸机	125-400T	500-850T
喷涂形式	左中右控制	左中右控制
喷涂控制单元	总共 6 个单元	总共 6 个单元
所配喷嘴数量	总喷雾位置 28 PCS 所配喷嘴总数为 14PCS( 动定模各 7 PCS) 其余用打盖 14 PCS	总喷雾位置 36 PCS 所配喷嘴总数为 26PCS( 动定模各 13 PCS) 其余用打盖 10PCS
高压吹气喷嘴	吹气总数 14 PCS ( 动定模各 7 PCS )	吹气总数 18 PCS( 动定模各 9 PCS )
夹爪数	3	3
夹取范围	φ50-70MM	φ70-100MM
最大夹取重量	4Kg	10Kg
X 轴行程	1900mm	2200mm
Y 轴行程	600mm	800mm
Z1/Z2 轴行程	1000mm	1200mm
移动速度	1.5m/s	1.5m/s
循环节拍	8sec	12sec
供气压力	6bar	6bar
脱模剂压力	4bar	4bar
电源容量	380V/6KVA	380V/7KVA

# 09

## 五轴喷雾机



附喷雾机外形尺寸图  
Attached Outline Dimensional Drawing of Sprayer



说明：此图仅供参考使用，如有变更恕不另行通知，请谅解！

### Major characteristics:

Japan YASKAWA servo motor, Imported precision bearings and RV reducer are adopted.

The lubrication system imported from Japan can ensure stable lubrication at the equipment lubrication points, improving the service life of linear rail.

After spraying, the sprayer rotates by 90° to stop in order to avoid the possible water dripping from the sprinkler group to the die.

With multi-axis servo linkage, this machine is well adapted to the die and can spray some special positions such as oblique plane and deep cavity by adjusting different angles, to achieve a satisfactory effect for complicated die. The service performance and spraying effect can be comparable to 6-axis robot, while the investment cost is lower than that of spraying robot.

The control box is reserved with signals for connection with die-casting machine for semi-automatic operation and with die-casting machine and extractor to form fully automatic equipment.

The human-machine interface touch screen is used to facilitate the adjustment and setting of various parameters. It has the function of fault diagnosis and display to facilitate subsequent fault diagnosis and repair.



优异的产品性能



全方位支持 - 提供各类增值服务



卓越能力满足苛刻工况



提供成套换模解决方案

### 主要特性

采用日本 YASKAWA 伺服电机，进口精密轴承，机器人用 RV 减速机。

日本进口润滑系统，保证设备润滑点稳定润滑，提高直线轨道使用寿命。

喷涂完成后，喷雾机旋转 90° 停靠，避免喷头组上残余水滴到模具上。

多轴伺服联动，对模具适应性强，可调整不同角度对一些特殊位置如斜面、深腔等部位进行喷涂，对复杂的模具能取得满意的效果，使用性能及喷涂效果完全可以媲美 6 轴机器人，投资成本低于喷雾机器人。

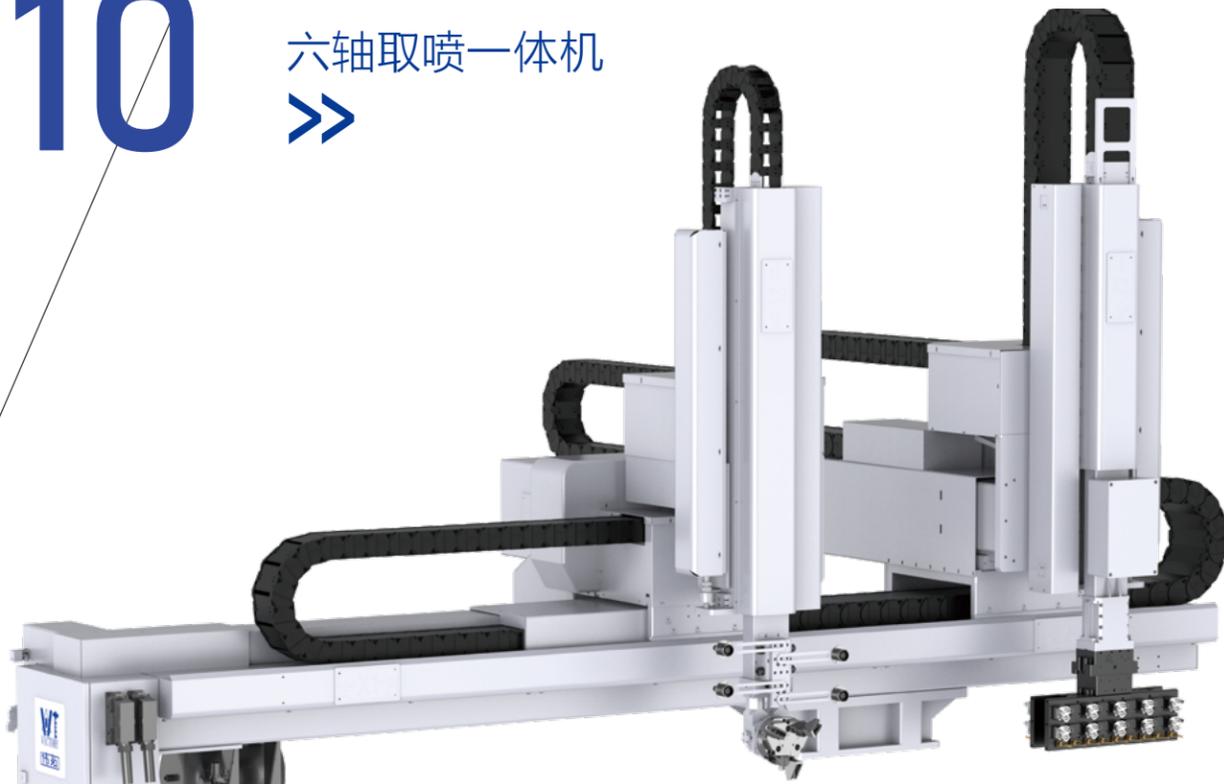
控制箱有信号预留，可与压铸机半自动操作，也可与压铸机、取出机等连线，成为全自动化设备。

采用人机界面触摸屏，各种参数调整设定简单易懂，具有故障自诊断显示功能，方便后期的故障诊断与维修。

机型	WTSDZP-4#	WTSDZP-5#
适用于压铸机	500-850T	1000-1300T
喷涂形式	左中右控制	左中右控制
喷涂控制单元	总共 6 个单元	总共 6 个单元
所配喷嘴数量	总喷雾位置 36 PCS 所配喷嘴总数为 26PCS( 动定模各 13 PCS) 其余用打盖 10 PCS	总喷雾位置 60PCS 所配喷嘴总数为 42PCS( 动定模各 21 PCS) 其余用打盖 14PCS
高压吹气喷嘴	吹气总数 18 PCS ( 动定模各 9 PCS )	吹气总数 30 PCS ( 动定模各 15 PCS )
喷头中心到定模板最小距离	400mm	550mm
A1 轴 / 机器主体左右旋转角度	-20 ~ +90	-20 ~ +90
A2 轴 / 机器进退行程	600mm	900mm
A3 轴 / 喷头组最大下降距离	1200mm	1500mm
A4 轴 / 喷头组左右旋转角度	±45	±45
A5 轴 / 喷头组前后旋转角度	±30	±30
供气压力	6bar	6bar
水源压力	4bar	4bar
离型剂接管口径	PT1/2	PT3/4
控制气源接口	PT3/8	PT1/2
气源接口	PT1-1/4	PT1-1/4
机器外形尺寸 / 长 X 宽 X 高	2000mm*2500mm *2700mm	2800mm*3100mm *2700mm

# 10

## 六轴取喷一体机



优异的产品性能



全方位支持 - 提供各类增值服务



卓越能力满足苛刻工况



提供成套换热解决方案

### 主要特性：

日本 YASKAWA 伺服控制系统，高防护等级适合恶劣环境下长期运行。

开模后模内快速下降取件，模外慢速下降放件，具“快拿轻放”动作功能，实现稳定，完美的取出动作。

可以在开模后离喷雾最近的地方待机，减短喷雾下降时间，大大提高喷雾周期。

可根据要求在系统内增加存储多套模具喷涂程序，更换模具时直接在人机界面中调用以前已经存储的程序即可直接使用，使得操作和维护非常方便。

采用人机界面触摸屏，方便对各种参数进行调整设定，具有故障诊断显示功能，方便后期的故障诊断与维修。

控制箱有信号预留，可与压铸机半自动操作，也可与压铸机、取出机等连线，成为全自动化设备。

配备喷嘴式喷头组，雾化效果好，方便更换安装。

具备定点喷雾、循环喷雾、浮动喷雾。

动、定模可同时吹气，也可动、定模单独控制。在喷雾状态下不吹气，在吹气状态下不喷雾。有上升吹气功能，可在喷雾工作完成后喷头上方的同时吹气以清扫模面的污物，使模面保持清洁

喷嘴采用气囊控制方式（气控水），可对流量进行精确控制满足不同产品，不同位置的喷涂需求。采用外混合式喷涂，每模喷涂结束后在喷嘴处就能实现关闭喷雾，从而减少了脱模剂的用量，减少了残留，提高了压铸车间的生产环境。每个喷嘴在喷涂间歇都持续喷射空气，加快水分蒸发，同时防止喷头滴水，减少水分残留；喷涂结束后，还有独立设置压强的强劲喷气回路，进一步吹走水分和杂质。

### Main characteristics:

With Japan YASKAWA servo control system, it is suitable for long-term operation in a harsh environment due to high protection class.

The action function of “quick picking-up and gentle putting-down” that is quick descending for picking up inside the die and slow descending for putting down outside the die after die sinking can achieve the stable and perfect extraction action.

It can stand by at the place closest to the spray after die sinking to shorten the spray falling time and greatly improve the spraying cycle.

Multiple die spraying programs can be added in the system as required. When changing the die, the previously saved program can be called directly on the human-machine interface for direct use to facilitate the operation and maintenance.

The human-machine interface touch screen is used to facilitate the adjustment and setting of various parameters. It has the function of fault diagnosis and display to facilitate subsequent fault diagnosis and repair.

The control box is reserved with signals for linking with die-casting machine for semi-automatic operation and with die-casting machine and extractor to form fully automatic equipment.

It is equipped with nozzle-type sprinkler group with good atomization effect and easy for replacement and installation.

It is featured by fixed-point spraying, circulating spraying and floating spraying.

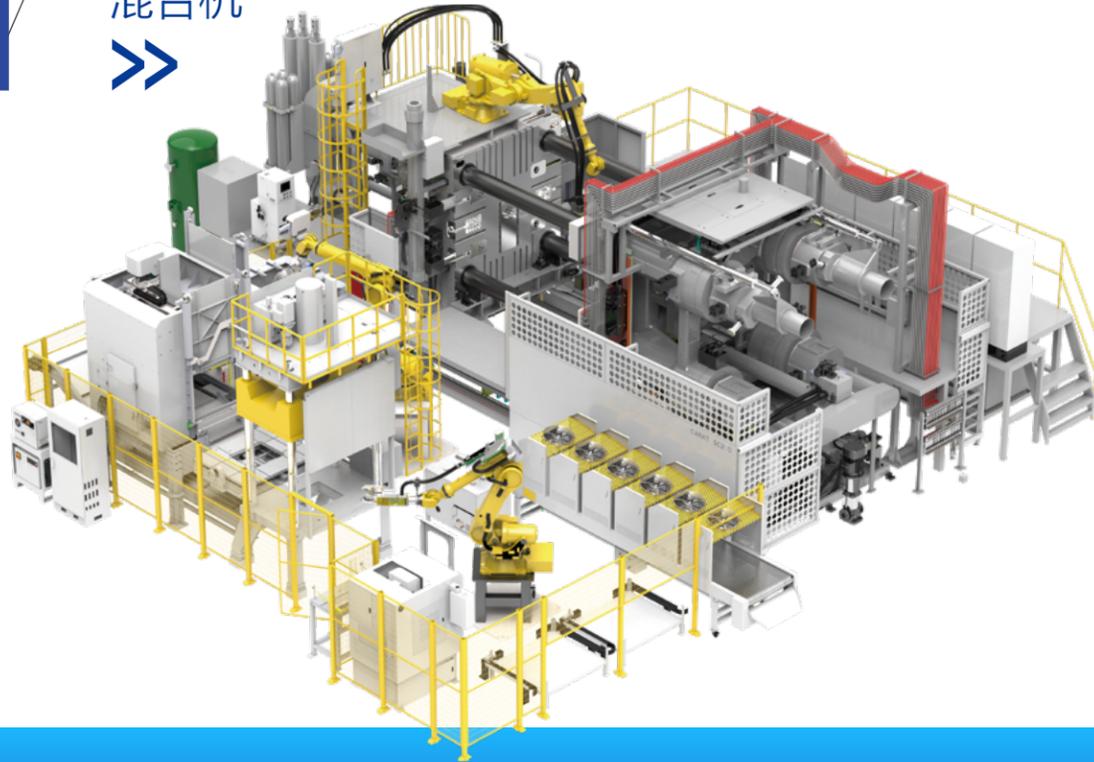
Simultaneous and separate blowing is available for moving die and fixed die. No blowing is performed in the spraying state and no spraying is performed in the blowing state. It has the function of ascending blowing, for blowing while the sprinkler ascends after the spraying work is completed to clean the dirt on the die surface and keep the die surface clean.

The nozzle is controlled by leather bag (air-controlled water), which can precisely control the flow rate to meet the spraying needs of different products and different positions. With external mixing spraying, the spraying can be closed at the nozzle after each die is sprayed, thus reducing the consumption of release agent, reducing residues and improving the production environment of the die-casting workshop. Each nozzle continuously sprays air at the spraying interval to speed up the evaporation of water, and prevent the sprinkler from dripping water and reduce the residual water at the same time; after the spraying is finished, the strong air injection circuit with independent pressure setting can be used to further blow away the water and impurities.

机型	WTSQP-B-2#	WTSQP-B-4#	WTSQP-B-5#
适用于压铸机	125-400T	500-850T	1000-1600T
喷涂形式	左中右控制	左中右控制	左中右控制
喷涂控制单元	总共 6 个单元	总共 6 个单元	总共 6 个单元
所配喷嘴数量	总喷雾位置 28 PCS 所配喷嘴总数为 14PCS( 动定模各 7 PCS) 其余用扣盖 14 PCS	总喷雾位置 36 PCS 所配喷嘴总数为 26PCS( 动定模各 13 PCS) 其余用扣盖 10PCS	总喷雾位置 60 PCS 所配喷嘴总数为 6PCS( 动定模各 18 PCS) 其余用扣盖 24PCS
高压吹气喷嘴	吹气总数 14 PCS ( 动定模各 7 PCS )	吹气总数 18 PCS( 动定模各 9 PCS )	吹气总数 20 PCS( 动定模各 10PCS )
夹爪数	3	3	3
夹取范围	Φ50-70MM	Φ70-100MM	Φ100-150MM
最大夹取重量	4Kg	10Kg	30Kg
X1/X2 轴行程	取件 X1 轴 1900mm ( 喷雾 X2 轴 1000mm)	取件 X1 轴 2200mm ( 喷雾 X2 轴 1200mm)	取件 X1 轴 3500mm ( 喷雾 X2 轴 2000mm)
Y1/Y2 轴行程	600mm	800mm	1200mm
Z1/Z2 轴行程	1000mm	1200mm	1600mm
移动速度	1.5m/s	1.5m/s	1.5m/s
循环节拍	8sec	12sec	18sec
供气压力	6bar	6bar	6bar
脱模剂压力	4bar	4bar	4bar
电源容量	380V/3.5KVA	380V/4.5KVA	380V/4.5KVA

# 11

## 混合机 ➤



优异的产品性能



全方位支持 - 提供各类增值服务



卓越能力满足苛刻工况



提供成套换热解决方案

### 主要特点

主要配件及电器元件均采用进口件，故障率低，使用寿命长。

采用进口比例阀控制药剂和水的比例，可随流量的大小自动调整浓度。使其保证了混合液比例的精确和稳定，稀释可调整范围 50-500 倍可选。

可作为一般性药剂混合和特殊药剂混合。

不锈钢混合桶，智能液面检测系统，离型剂液面低于设定值时报警灯自动报警，更人性化更安全。

采用鼓泡式自动搅拌（或气动搅拌），使混合液混合均匀。

采用进口气动隔膜泵，自动恒压输出混合液。

混合液液位为下限时，比例阀和水阀自动打开，开始补充混合液直到混合液液位回到上限为止。

原液用完时，黄色指示灯亮，警示灯亮，比例阀和水阀自动打开。直到原液补充后才恢复正常工作。

### Major characteristics:

Main parts and electrical components adopt the imported parts with low failure rate and long service life.

The automatic proportional valve is used to control the proportion of agent and water, and the concentration can be adjusted automatically based on the flow, which can assure the accurate and stable mixture proportion. The adjustable range of 50-500 times for dilution is optional.

It can be used for mixing of general agent and special agent.

Stainless steel mixing barrel and smart level detection system are adopted. Automatic warning light alarm will be triggered when the release agent level is below the set value, which is more humanized and more safety.

The bubbling type automatic mixing (or pneumatic mixing) is adopted to make the mixture uniform.

Imported pneumatic diaphragm pump is adopted, featuring automatic constant voltage to output mixture.

When the mixture level reaches the lower limit, the proportional valve and water valve will be automatically opened and began to supplement the mixture until the mixture level returns upper limit.

When the concentrate is used up, the yellow indicator light and the warning lights will be on, and the proportional valve and water valve will be automatically opened. It will not be restored to normal work until the concentrate supplement is finished.

规格 / 机型	WTYH	WTH
可自动供给喷雾机台数	1 台	1 ~ 8 台
泵浦数量	1 pcs	2 pcs
混合桶容量	80L	260L
原液桶容量	30L	无
泵最大输送量	2.5 m³/h	2.5 m³/h
空压源	6 kgf/cm²	6 kgf/cm²
水源入口	PT 1/2 "	PT 3/4 "
空气源接管口径	φ 8	φ 8
混合液出口	PT 3/4 "	1 "
稀释倍数	1 : 50 ~ 1 : 500	1 : 50 ~ 1 : 500
混合液输出压力	6 kgf/cm²	6 kgf/cm²
稀释能力	(0.1 ~ 2.5) m³/h	(0.1 ~ 2.5) m³/h
电源	单相 220V	单相 220V
机器外形尺寸 / 长 × 宽 × 高	750x600x1000	800x700x1130

# 12

切边机  
»»



优异的产品性能



全方位支持 - 提供各类增值服务



卓越能力满足苛刻工况



提供成套换热解决方案

## 性能特点

本系列油压机冲压速度快, 开合模行程大, 对切边模的模厚适用范围广, 人性化导料槽与防护罩设计, 对工作现场的环境卫生起一定的保持和便于清洁的作用。

控制系统采用日本 OMRON 可编程控制器控制, 独特的程式设计 (单手按键操作开机超时报警, 双手操作开机) 多重保护, 安全性能高, 人性化的操作面设计, 简单易懂, 便于维修及保养。

机器油箱采用全密封设计, 保证了机器液压系统的高效平稳运行及延长了液压油的使用寿命。

采用子母缸达到快速合模慢速保压;

设有吹气功能, 以除去工作台面的铝屑等杂物, 吹气时间可调。

液压系统配备自锁功能, 多重保护, 安全更人性化。

冷却方式为水冷。

所有液压元件均采用国内及国外知名品牌, 保证了机器的使用寿命。

配套机器人使用时, 切边机标配两组中子 (A、B)。

## Performance Characteristics:

This series of hydraulic press features with fast stamping speed, large clamping and opening mould travel, and wide application range to the mould thickness of the trimming mould. Its humanized guide chute and protective hood are designed to facilitate and keep the cleaning of work site environment.

Control system adopts Japan OMRON programmable controller, with unique programming designed (electric eye, single-hand key operated start-up timeout alarm and double-hand operated start-up) multiple protection for high safety. Its designed humanized operation interface is simple and easy to understand for convenient repair and maintenance.

Machine oil tanks are of the fully sealed structure, to ensure the high effective and stable operation of the machine oil hydraulic system and to extend the service life of the hydraulic oil.

The primary-secondary cylinder is adopted to ensure fast clamping mould and slow holding pressure.

It has the air blowing function to remove the aluminum chips etc. debris from the working table, with the blowing time adjustable.

Hydraulic system has a self-locking function for multiple protections and safety, as well as more humanization.

Cooling method is water-cooled .

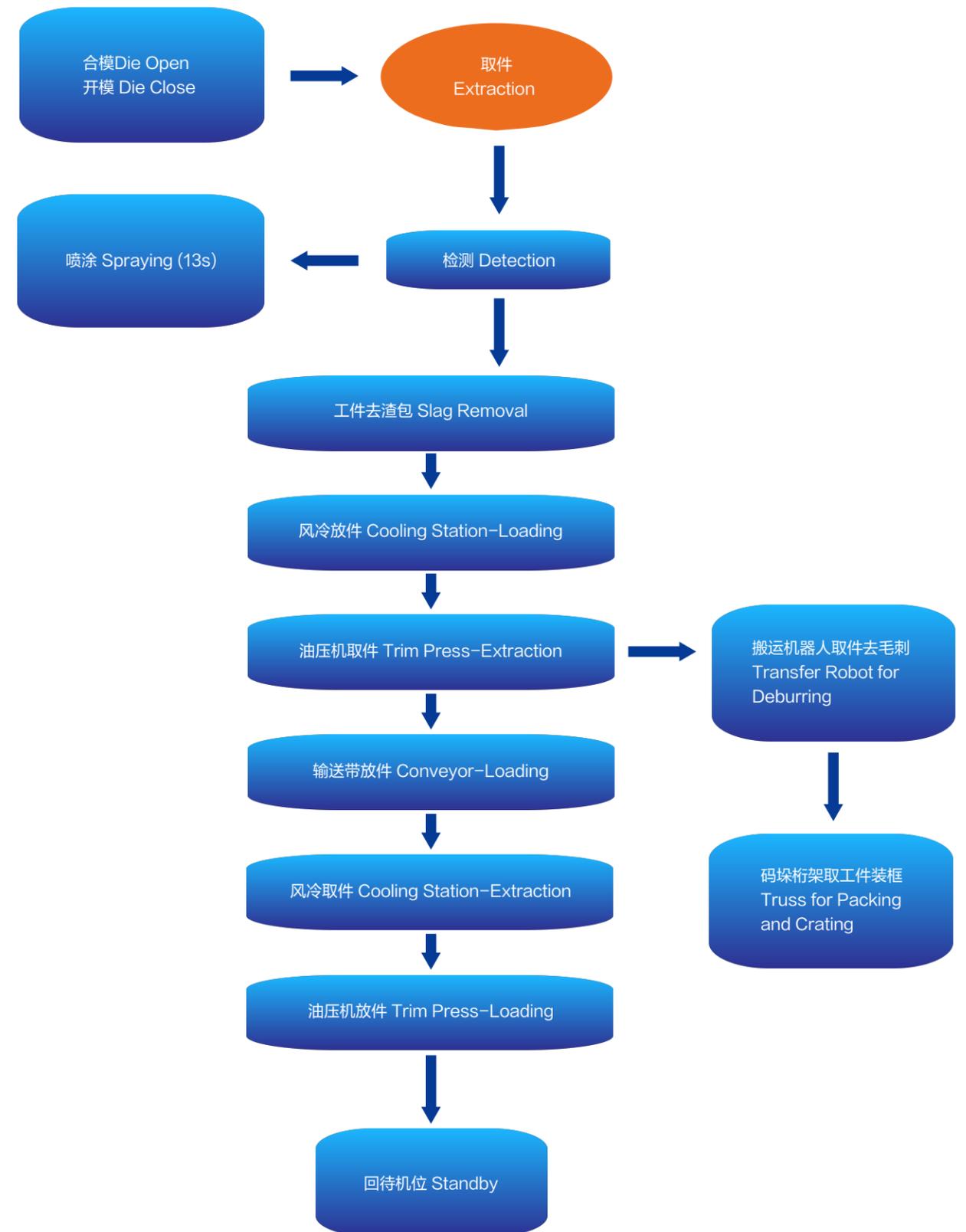
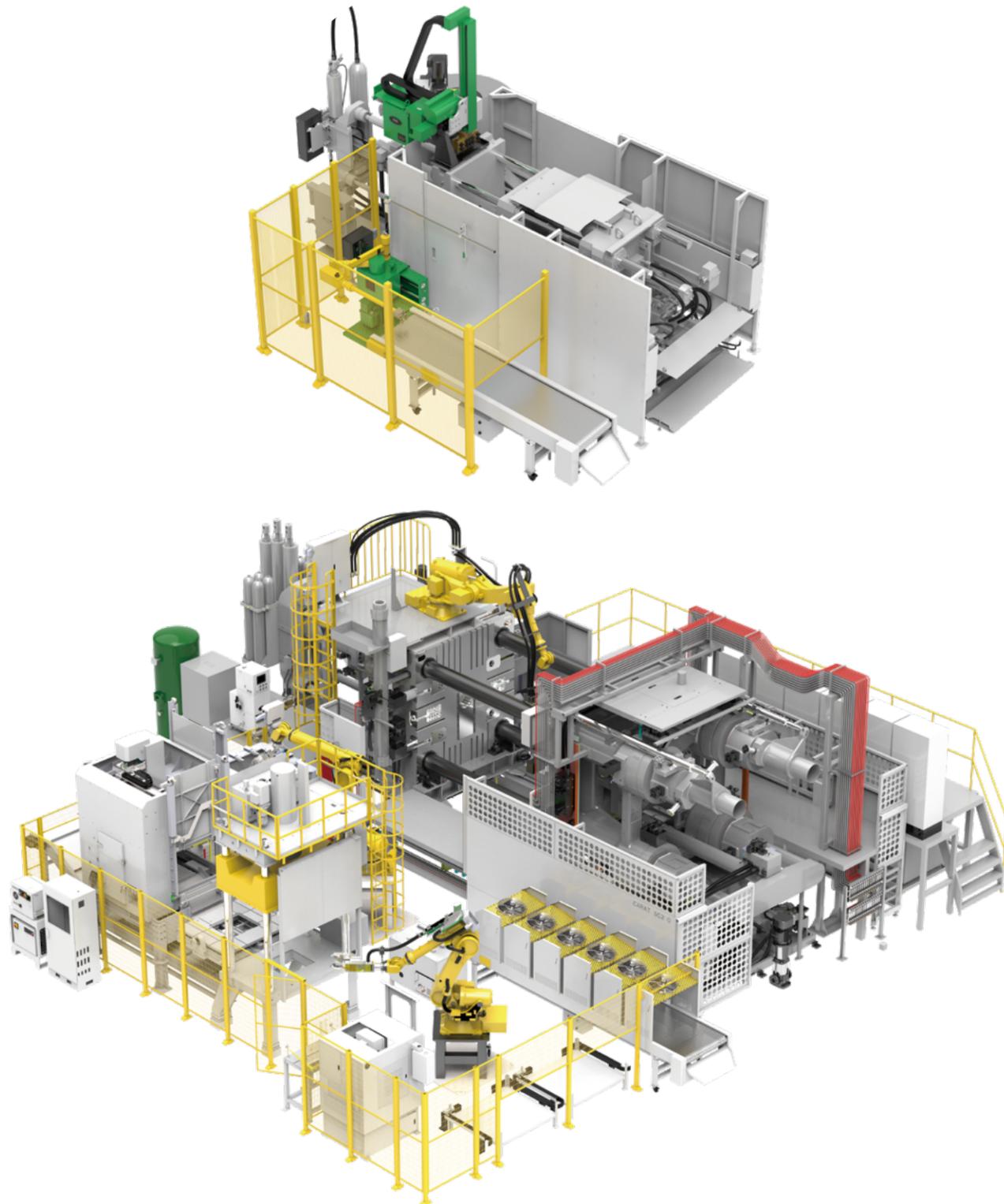
All hydraulic components adopt the well-known domestic and foreign brands to ensure the service life of the machine.

When used with robot, the edge-cutting machine is equipped with two sets of neutrons (A and B).

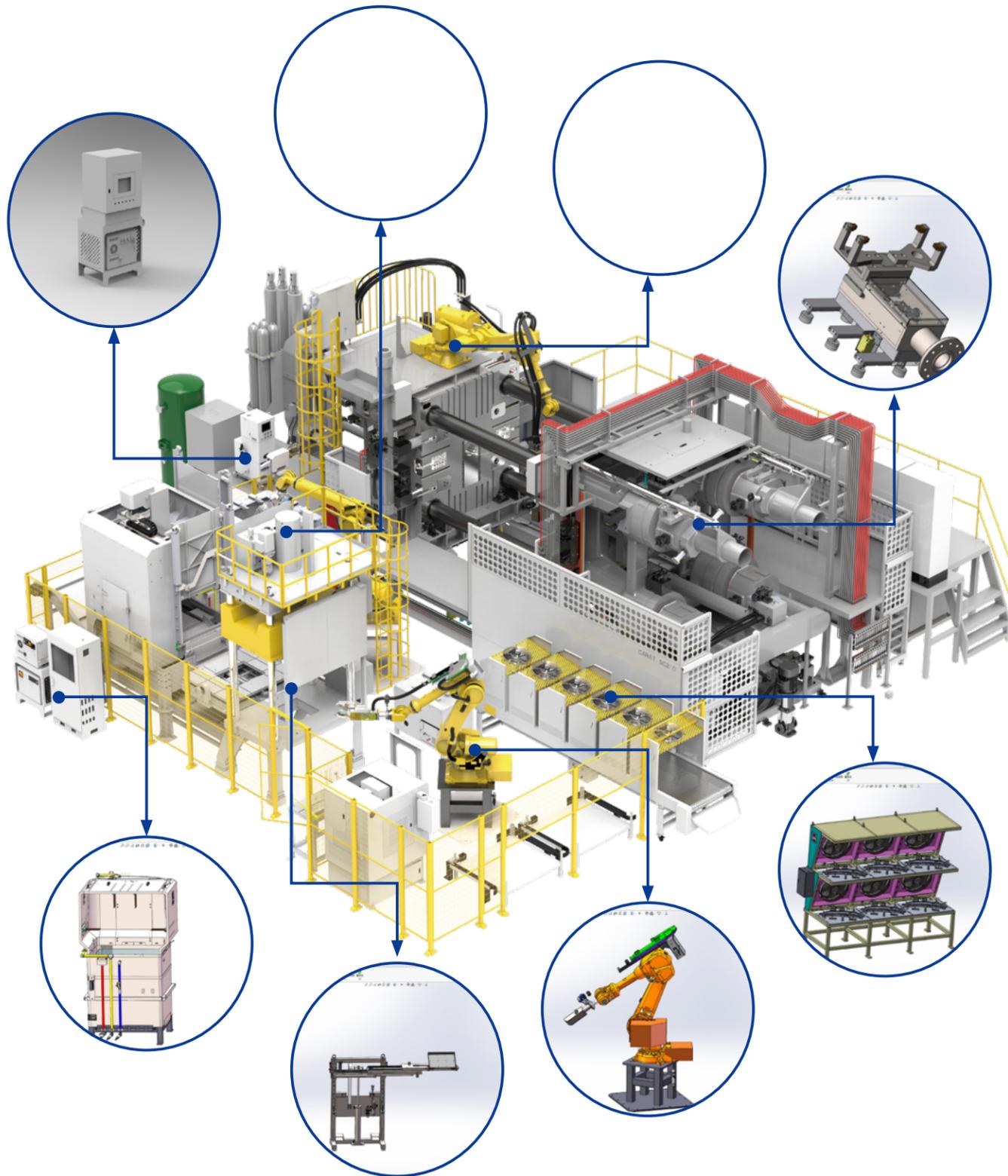
机型	WTUPE-20T	WTUPE-40T	WTUPE-60T	WTUPE-80T	WTUPE-100T
合模力 (T)	20	40	60	80	100
开模力 (T)	5.7	8.1	10	11	12.5
系统压力 (MPa)	14	14	14	14	14
开模间距 (mm)	1000	1100	1500	1700	1700
合模间距 (mm)	400	400	600	600	600
合模行程 (mm)	600	700	900	1100	1100
哥林柱内间距 (mm)	左右 650 前后 450	左右 800 前后 575	左右 1200 前后 900	左右 1500 前后 900	左右 1600 前后 1000
顶出缸顶出距离 (mm)	0-100	0-100	0-100	0-100	0-100
顶出缸作用力 (T)	3	5	5	5	8
行程控制方式	编码器 Encoder	编码器 Encoder	编码器 Encoder	编码器 Encoder	编码器 Encoder
下降速度 (mm/s)	180	170	240	180	180
上升速度 (mm/s)	160	100	170	140	140
冷却水接口	3/4"	3/4"	3/4"	3/4"	3/4"
电机功率 (Kw)	7.5	7.5	11	11	15
设备重量 (T)	1.6	3.5	10	13	16
设备外形尺寸 (长 × 宽 × 高) mm	870×1100×3600	1115×1200×4200 (不含检修平台尺寸)	1450×2240×5300 (不含检修平台尺寸)	1450×2240×5800 (不含检修平台尺寸)	1550×2350×5900 (不含检修平台尺寸)

# 机器人集成项目 Robot integration project

## 部分方案布局 Layout



# 机器人集成项目 Robot integration project



## 部分方案布局 Layout

