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LANSON® 联升
Shaping The Quality

LS218-LS5000

LS系列 冷室压铸机

LS SERIES

COLD CHAMBER DIE CASTING MACHINE



生产基地 (五沙工业园)

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压铸注塑 装备制造商

中国压铸机经过数十年的发展，功能及配置上已大大缩小了与国外品牌的差距，耐用性及稳定性是需改善的关键，决定机器稳定性及耐用性的重要因素之一。是制造精度与制造工艺。这需要厂商具备坚实的机械加工实力及丰富的先进制造经验，联升压铸正是把两者完美结合的高科技制造企业。

联升压铸科技有限公司是一家专业生产高性能铝镁合金压铸机的高科技制造企业，凭借母公司“广东联升精密机械有限公司”雄厚的资金及树模实力，充分发挥其先进的机械加工工艺和设备，不断创新积累，**拥有行业领先的研发、制造、服务、营销团队**，以“**技术创新 引领装备制造业未来**”为企业使命，不断提升压铸机制造标准，同时以“满足客户需求，一站式解决方案”的服务理念为广大客户提供稳定、耐用、精密、高效的优质产品。

Chinese die-casting machine's function and specification that undergo more than ten years development to narrow the gap between foreign brands. Improvement is key to durability and stability of die-casting machine, it is one of decisive factor of stability that accuracy of manufacturing and manufacturing process. high technology manufacturing enterprise shall be equipped with excellent processing abilities and advanced manufacturing experience which are make perfect combination by Lanson die-casting machine.

LANSON Die-Casting Machinery Co., Ltd is high technology enterprise specialized in high-performance aluminum magnesium alloy. With support from parent company LANSON Precision Machinery Co., Ltd, which has abundant fund and large-scale equipment, it gives us play advanced technology for our company's research and development. We have a professional sales team and marketing team. We take technology innovation, which leads a new future for machinery manufacturing, as our company mission. Continued effect to improve machine manufacturing standard, to meet customer needs and provide turn-key solution as our service concept, we aim to provide stable, durable, high precise and high efficient product to our customers.

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LS218-LS5000 LS系列冷室压铸机

高性能的冷室压铸机 HIGH PERFORMANCE DIE CASTING MACHINE

联升以其拥有国际化的技术人才，通过国内外主流设计技术，充分研究到满意客户的使用习惯及需求，全新研发出的铸造质量稳定、工艺精湛的优质压铸装备，世界级水准的设计及高品质的压铸、锁模和控制系统，代表了国内最先进的技术水平。

LS系列冷室压铸机大大提升了设备平稳性、效率和实用性，包含了高度集成、高度自动化、高效率的压铸单元综合应用技术，更好地帮助提升客户在当今竞争激烈的环境中脱颖而出。

联升研发团队以拥有行业最为丰富的冷室压铸机成套设备的研发制造的经验和丰富经验，引进欧美最先进的冷室压铸机设计制造技术，为您量身制造高品质、可靠性的冷室压铸机，并提供专业与优质的服务。

Through domestic and international mainstream design technology, and fully research and insight into the customer's habits and needs, LANSON research and develop the newest high-quality die-casting equipment with high casting quality, accurate technology and high quality control system. Compared with domestic most advanced technology level by the world-class design and high quality of injection, clamping and control system, LS series cold chamber die casting machine has greatly improved the equipment stability, efficiency and practicality, containing a highly integrated, highly automated, efficient integrated application of technology die-casting unit, better to help all customers showing their advantages in today's competitive environment.

LANSON'S R&D technical team has the richest experience of large tonnage cold chamber die casting machine equipment manufacturing, research and development. Introduced the European most advanced and mature high-grade large tonnage die casting machine design and manufacturing technology, offering customers tailor-made manufacture high quality, high reliability of large tonnage die-casting machine, and provide professional and high quality service.

Technological innovation, leading bright future of equipment manufacturing 技术创新 引领装备制造新未来

联升压铸机按国际标准设计制造

联升压铸机按国际标准设计制造，运用当前工业最新技术，结合多年的压铸机设计使用经验及理论验证，设计出提升专有技术的新一代冷室压铸机。采用德国西门子控制系统，功能强大、运行稳定。国内领先的嵌入式最新实时控制技术，使压铸系统的性能达到世界级水准，强劲高效锁模系统的设计，曲轴运动机构受力更合理、运行更平稳，系统刚性更好。联升压铸机LS系列产品具有先进的压铸、锁模、控制外壳，广泛应用于制造各类高质量要求的压铸零部件，如：机壳外壳、中板、薄壁、厚壁结构件、发动机缸体、气缸盖、曲轴箱、油底壳、变速箱、变速箱端盖、仪表板、电动扶手梯级踏板、工业公路制灯外壳、建材零件、通讯器件等。

LANSON DIE CASTING MACHINE DESIGNED AND MANUFACTURED ACCORDING TO THE INTERNATIONAL STANDARDS

LANSON die casting machine is designed and manufactured according to international standards. Through applying the newest technology of current industry, combining years of die casting machine operating experience and theoretical research, LANSON created a new generation die casting machine with high casting quality, accurate technology and high quality control system to meet the world-class by equipping the German Siemens control system with powerful function, stable operation. Domestic leading embedded real time control system, stable operation, efficient clamping system design, to make the toggle unit taking more reasonable force, running more smoothly, better system rigidity. LANSON LS series die casting machines have advanced injection, clamping and control performance. Widely applied in manufacturing all kinds of high-quality requirement die-casting parts such as: mobile phone shell, middle plate, thin wall, thick wall structure, engine cylinder, cylinder cover, crankcase, oil bottom shell, gearbox, gearbox end cover, instrument panel, electric handrail cascade pedal, industrial road lamp housing, building parts, communication's equipment and so on.

主要特点:

- 采用模块积木式结构件，客户可根据产品要求选择合理配置机器。
- 最大空转速度：≥8m/s，增压建压时间：≤20m/s（大机），≤15m/s（小机）。
- 更高响应，更加稳定的压铸系统。
- 多点设定，多级控制，压铸参数调节范围宽，适应性强。
- 压射和增压回路独立设计。
- 高度集成的液压系统，高效节能，便于维护及保养。
- 优化设计的双曲肘合模机构，移模动作更加平稳、快速、有力。
- 强化设计的加强型设计模板及抽射系统。
- 独特锁模技术，有效缩短生产周期，提高生产效率。
- 防水防尘设计的哥林柱自动抽芯装置（大机标配，小机选配），满足大型模具的安装要求。
- 双液缸缸顶出力系统，顶出均匀。
- 可选自动锁模力调节。
- 标配各种周边设备的接口，可为客户提供完整的压铸单元。

FEATURES:

- Adopt modular building block type component. Customers can make accurate and reasonable configuration of the machine according to the requirements of the product.
- Maximum air injection speed ≥8m/s, intensification pressure building time ≤20m/s (big tonnage), ≤15m/s (medium and small tonnage).
- Higher response, more stable injection system.
- Multi-point setting, multi-section control, wide range of injection parameter adjustment, strong adaptability.
- The independent design of the injection and the intensification saving, convenient to maintain.
- Highly integrated hydraulic system, high efficiency and energy saving, convenient to maintain.
- Optimization of the design of the double toggle clamping mechanism, moving action more stable, fast and powerful.
- Strong and durable reinforced design template and toggle system.
- Waterproof and dustproof design, tie bar extraction system (standard for large tonnage machine, optional for small and medium tonnage machine), meet the needs of large-scale mold installation.
- Dual hydraulic cylinder, ejection system, ejecting uniformly.
- Optional automatic clamping force adjustment.
- With all kinds of auxiliary machine interface, providing customer the complete die casting unit.



Injection System 压射系统

稳定可靠的高性能压射系统

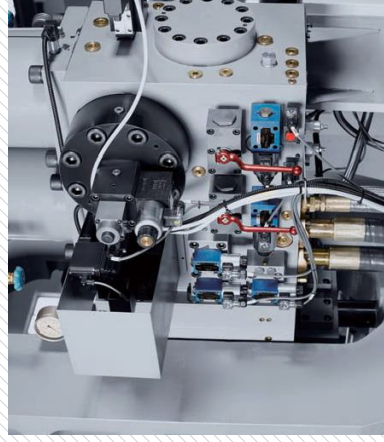
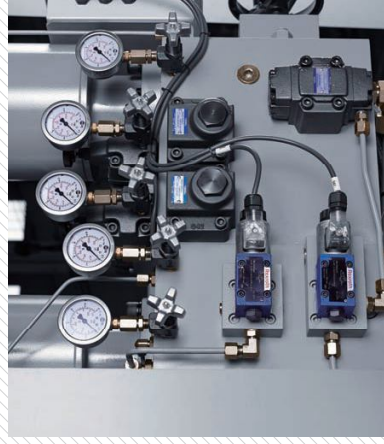
STABLE AND RELIABLE HIGH PERFORMANCE INJECTION SYSTEM

主要特点:

- 采用可靠耐用的国外著名品牌液压元件;
- 无接触式位移行程检测, 速度转换位置控制精准稳定, 可靠性高;
- 配合锁模系统的整体刚性设计, 压射要稳定可靠;
- 能量加大型设计, 压降小, 能源稳定, 压射重复性高, 压力速度更稳定;
- 独立储能功能, 缩短储能时间, 提升效率;
- 模块化设计, 可方便升级为实时控制;
- 压铸阀板整体式设计, 一次加工完成, 保证压射精度和稳定性;
- 嵌入式油阀组设计, 提高压射稳定性和安全性。

FEATURES:

- Adopt reliable and durable foreign famous brand hydraulic components
- Non-contact injection stroke control, precision and stable speed changing position with high reliability
- With the integral rigidity design clamping system, more stable and reliable injection
- Increased energy design, small pressure drop, stable energy, high injection repetition, more stable injection speed
- Independent energy saving function, shorten energy saving time and improve efficiency
- Modularization design, convenient to upgrade to real time control
- The integral design of the injection valve plate, one time finishing process, to ensure the accuracy and stability of the injection
- Embedded oil valve assembly design, improve the stability and safety of injection



Clamping System 锁模系统

强劲高效的锁模机构

POWERFUL AND HIGH EFFICIENCY CLAMPING SYSTEM

主要特点:

- 独有的锁模液压系统结合曲肘机构特性, 充分保证高响应、高效率、高安全;
- 机铰及铰链铰耳加宽设计, 受压均匀, 降低变形弯曲, 刚性更强;
- 加大锁模空间设计, 可容纳更大的模具;
- 可升级为智能锁模系统;
- 专有特别设计的高拉力合金钢导柱, 保证可靠耐用;
- 创新型模腔面加强技术, 解决模腔面受压变形问题(溢配)。

FEATURES:

- Unique clamping hydraulic system combined with toggle unit characteristics fully guarantee the high response, high efficiency and high safety
- The toggle and the template hinge ear widening design, the compression is even, reduces the distortion and bend, increase strongly rigidity
- Increase the mold holding space design, can accommodate larger mold
- Can be upgraded to intelligent clamping system
- Proprietary specially designed high tensile alloy steel tie bar to ensure reliable and durable
- Innovative platen and platen surface strengthening technology, to solve the problem of platen and platen surface distortion and damage

创新的箱体式模板

高刚性

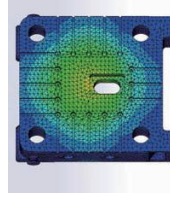
- 应用先进的有限元分析软件优化设计, 应力分布合理, 变形小;
- 模板加厚设计, 刚性更强;

高稳定性

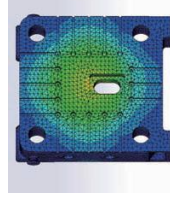
- 超长动板导向, 极大提升合模稳定性及机器使用寿命;

高强度

- 解析模板的抗压强度和构造, 并按照高一安全要求来进行设计, 更耐冲击, 寿命更长。
- 创新的箱体式模板, 结合铸造工艺设计, 高强度、高刚性, 延长使用寿命。



应力分析
Stress Analysis



位移分析
Displacement Analysis



超长动板导向
Extra long moving plate guiding



模板加厚设计
Thicker platen design

NEW INTEGRATED BOX TYPE PLATEN

High rigidity

- Applying advanced finite element analysis software to optimize the design, the stress distribution is reasonable, and the distortion is small

- Thicker platen design, stronger rigidity

High Precision

- Extra long moving plate guiding, greatly enhance the stability of the clamping unit and machine durability

High strength

- Analyze the implementation of the intensity and structure of the platen, and designed according to the higher safety level requirement, more impact resistant, longer usage life
- Innovative box type platen, combined with casting process design, provide higher strength, higher rigidity and extend the usage life

Electrical Control System 电控系统

功能完善的压铸控制系统

PERFECT FUNCTIONAL DIE CASTING CONTROL SYSTEM

主机控制特点:

- 采用德国西门子公司PLC为主要控制硬件, 性能稳定可靠, 维护率低;
- 12"大型彩色显示屏 (大机标配, 小机选配) , 配置了联升独有技术的压铸专用控制系统, 简单易用, 丰富的参数设置界面及监控界面, 功能完善的自诊断系统, 让设定、调整、确认、检查等所有操作都变得简单流畅;
- 多段式压铸, 操作简单方便, 工艺响应率高;
- 配备生产管理及生产监测功能;
- 控制系统配置完善的安全操作功能, 具备电气互锁、电源互锁等多种安全措施, 确保人身和设备安全
- 防抽芯短路设计, 保证生产连续性及安全性 (大机标配, 小机选配)。

Main Machine Control Features

- Adopt German brand Siemens PLC as the main control hardware, reliable and stable performance, low maintenance rate
- 12" color display screen (standard for large tonnage machine, optional for medium and small tonnage machine), the configuration of the LANSON unique technology for die casting dedicated control system, easy to use, rich parameter setting interface and control interface, perfect function of self diagnosis system, make setting, adjustment, confirmation, examination and all other operations become simple and smooth
- Multi-phase injection, simple and convenient operation, high responsive process
- Equipped with production management and production monitoring function
- The control system is equipped with perfect function of safe operation, and it has many safety measures such as electric interlocking, electric hydraulic interlocking and so on, to ensure the safety of personal and equipment
- Core puller anti short circuit design, ensure production continuity and safety (standard for large tonnage machine, optional for medium and small tonnage machine)

系统增强功能 (选配)

- 品质在线监控功能
- 生产管理系统
- 压铸生产工业4.0解决方案

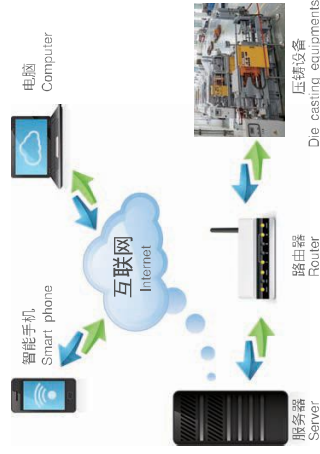
压铸生产工业4.0解决方案

4.0 SOLUTION OF DIE CASTING PRODUCTION INDUSTRY

- 专为压铸机开发的网络控制与传输功能, 实现对整个压铸车间的设备和生产过程进行信息化管理;
- 联网后可随时随地通过智能手机或电脑管控管理压铸机及压铸生产过程, 提升压铸生产管理水平和, 提高生产效率, 降低成本。
- Network control and transmission function specially developed for die casting machine, to realize information management for the equipment and production process of the whole die casting workshop
- Connecting the network to control and manage the die casting machines and production process through smart phones and computers at any time and place, improve the die casting production management level and production efficiency, reduce

SYSTEM ENHANCE FUNTION (OPTIONAL)

- Online quality monitoring system
- Production management system
- 4.0 solution of die casting production industry



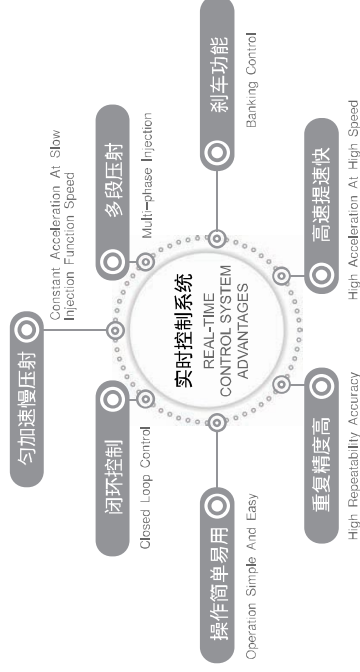
Real Time Control 实时控制

嵌入式实时控制压铸系统

EMBEDDED REAL TIME CONTROL INJECTION SYSTEM

联升是国内将实时控制技术应用于压铸机的企业之一, 联升研发的嵌入式实时控制压铸系统结合了优良的液压设计系统及精确的控制系统, 能有效按指令执行用户要求的压铸速度, 并在指定位置进行速度转换, 实际速度与设置速度完全配合, 完全实现了对压铸过程的精确控制, 并提供完美的多段式速度控制与压力控制曲线, 加上在低速时具备匀加速, 在充型结束后的刹车功能等, 给用户提供了强劲的压铸控制能力, 适用于压铸结构复杂的高质量压铸铸件。

LANSON is one of the domestic manufacturers which apply the real time control technology on the die casting machines, developed by unique real time control injection system combines closed loop control, multi-phase injection and so on. Can be effectively execute the injection speed according to the user required instruction, and change the speed at the appointed injection position. The perfect match of real speed and setting speed fully realize the accurate control of injection process, and provide perfect multi-phase injection speed control and pressure control curve. Coupled with the Constant acceleration at low speed, brake function at the end of the mold filling, etc., providing the user a strong die casting control, suitable for complex structure of high quality die castings parts.



主要特点:

- 十段式速度设定, 并在单次压铸中可实时反馈及控制, 操作简单、设定方便、工艺参数范围广, 可满足各种复杂产品的工艺要求;
- 在低速段可实现无冲击启动压铸, 并开始匀加速, 压铸铸头平稳移动, 大大减少空气卷入金属熔液内, 提升铸件质量。
- 利用闭环反馈控制, 可在充型接近完成时进行刹车控制, 减少飞溅问题, 并延长模具寿命。
- 实时控制系统以本流量、高响应性的伺服阀进行精准的缩短提速时间, 最短的提速时间, 更能满足客户需求, 既保证了产品的外观品质, 又减少了产品内部残留的空气量。

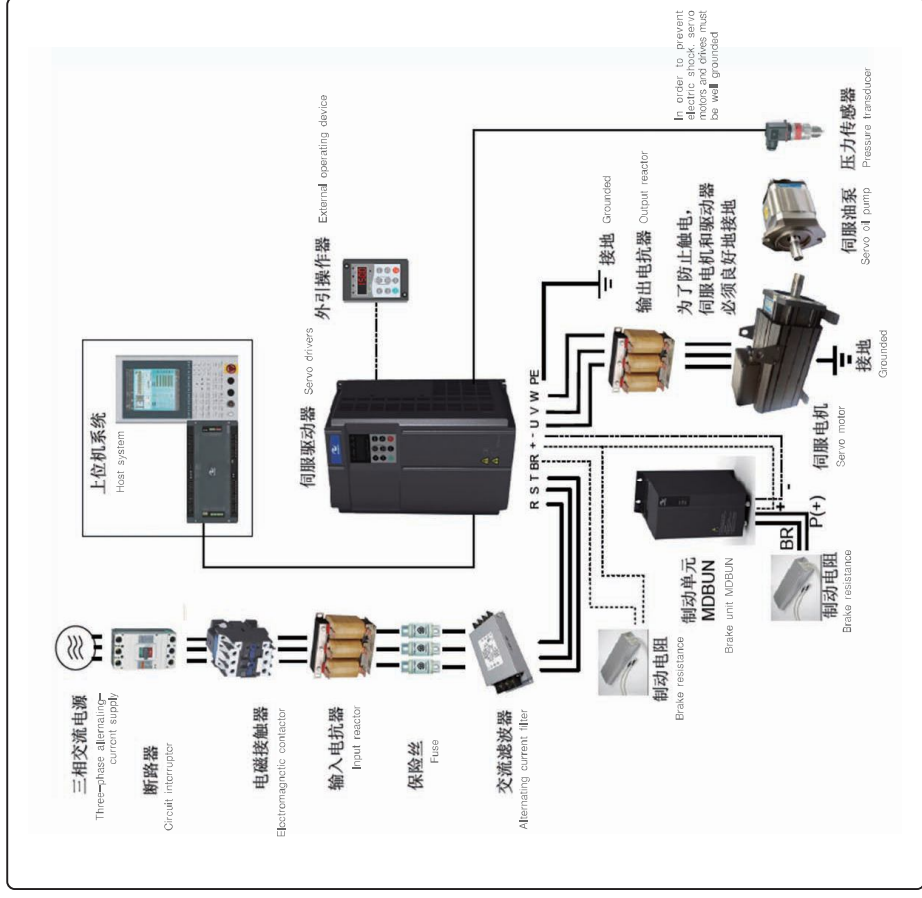
FEATURES:

- Ten phase injection speed setting, real time feedback and control in single shot, simple operation, convenience setting, wide technology parameter, can satisfy all kinds of process requirement of complex products
- Can realize injection start up without impact at the low speed phase, and start by constant acceleration, injection plunger head move smoothly, greatly reduced the air drawn into metal solution, to improve the quality of castings parts
- Based on closed loop feedback control, brake control can be carried out when the mold filling is close to completion, the problem of fins is reduced, and extend the usage life of mold
- Real-time control system with high flow, high response servo valve to effectively shorten the acceleration time and achieve the shortest acceleration time, can better meet the needs of customer requirements, to ensure the appearance and the quality of the product, and reduce the air content inside the product.

Servo System 伺服系统

伺服系统的构成

THE COMPOSITION OF THE SERVO SYSTEM



环保型压铸机

ENVIRONMENTAL PROTECTION TYPE DIE CASTING MACHINE

环境改善
Environmental improvement

=

节省能源
Energy saving

+

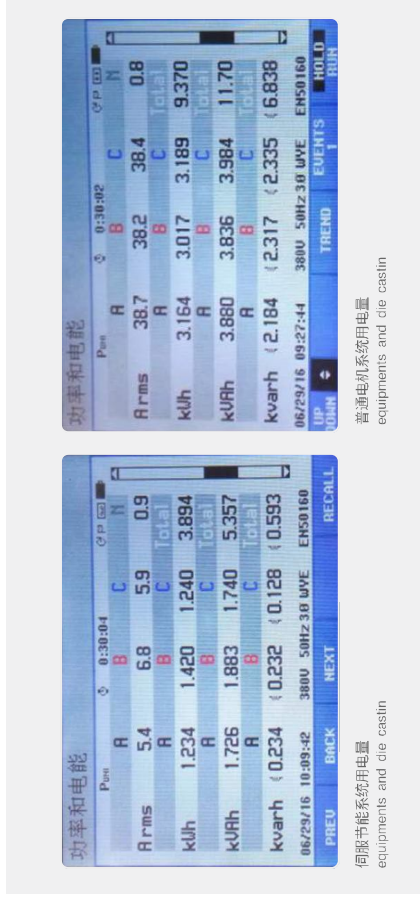
快速循环
Fast loop

+

高品质稳定成型
High quality stable forming

伺服节能系统与普通电机系统用电量的对比

Comparison of power consumption between servo energy saving system and normal motor system



经本厂空机检测，418T伺服压铸机比普通压铸机一小时省电10.96kW，节能58%。

According to our factory's empty shooting test, 418T servo die-casting machine can save power 10.96kW per hour, energy saving rate is 58%.

节约能源40-70%以上，
缩短生产周期10%以上。

Motor to Effectively Energy Saving Above 40-70%,
Production Cycle Shorten Over 10%.



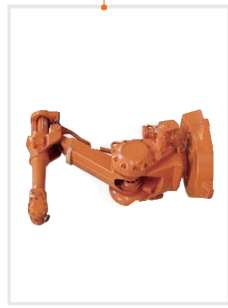
Die Casting Unit (options) 压铸单元 (选配装置)

高效生产需要周边设备与压铸机的完美结合，联升主机标配
有与各种周边设备的接口和软件程序，亦可以为客户提供全套
的周边自动化集成方案，交付给您完整的压铸单元。

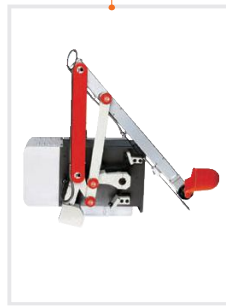
High productivity needs a perfect combination with peripheral
equipments and die casting machines. The main body of
LANSON die casting machine equips various interfaces and
programs suitable for different peripheral equipments. We
can provide a turn-key automation solution to customers,
furnishing an integrated die casting unit.



输送带 Conveyor



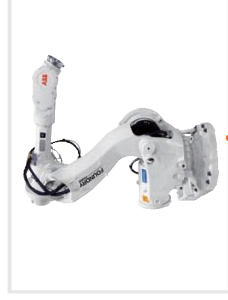
喷漆机器人 SPRAYING ROBOT



铸汤机 AUTO LADLE



切边机
Trimming Machine



取件机器人
Extracting Robot

