


PAINING AUTOMATION AN INTEGRATED ENGINEERING APPROACH

DRARHA ENTERPRISES






COMPANY PROFILE



Painting robots are used by vehicle manufacturers to do detailing work on their cars in a consistent and systematic way. Some of these robots are designed with a robotic arm that moves vertically and horizontally, to apply paint on all parts of the car.

Robot painting produces top quality results. Once properly programmed, an industrial painting robot can apply material without leaving behind drips, inconsistencies, overspray, etc. Paint and/or coating is applied precisely and consistently.

Industrial painting robots can provide exceptional part accessibility. Not only are robotic arms slim and far-reaching, but robots can be installed in a number of different locations (wall, shelf, rail) allowing for even greater flexibility.

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- Robotic painters also protect workers. The painting application is a hazardous and taxing job. Workers can be exposed to unsafe VOCs, iso-cyanides and carcinogens. Painting robots, on the other hand, are better equipped to handle the dangers of this particular work environment. Built with explosion-proof arms, these robots remain safe in the midst of combustible gas.
 - Anti-collision software makes it possible for multiple robots to work in close proximity to one another. With more robots working together, throughput and cycle times improve.



- Environmental Factors :

1. Safety is a major issue in die casting operations due to the extreme toxic and emissions that are generated during
2. Robots are used primarily to avoid humans from being exposed to this dangerous environment.

- Payload and Robot Selection :

1. Robot selection is driven not only by environmental conditions but also based on payload, reach and part access within the die. The mass, center of gravity and moments of inertia about the mounting face of the robot determines the robot model based on payload capacity.

COMPANY PROFILE OF BORUNTE ROBOTS

- Guangdong Bo Langte intelligent equipment CO.,Ltd. was founded in 2008. The registered capital is 45million RMB. Currently has about 400 employees. Bo Langte is also robot backbone enterprises of R&D, production, sales, service of industrial robots, level robot, IMM robot, stamping robot, die casting robot, intelligent equipment system in Guangdong Province.
- Guangdong Bo Langte Intelligent Equipment Co.,Ltd. became the first listed company after the NEEQ national expansion on January 24, 2014. Bo Langte is also the first listed company that completes the share register since the NEEQ national expansion in China Securities Depository and Clearing Co., Ltd. At the same time, we are the first listed company in linear industry.

SILENT FEATURES OF BORUNTE

- FASTEST GROWING ROBOTIC COMPANY IN CHINA
- SOLD MORE THAN 15,000 ROBOTS WORLDWIDE IN LAST FINACIAL YEAR
- ALL SERVO MOTORS ARE USED FROM INOVANCE
- VERY HIGH REAPETABILTY
- MANY CRUCIAL ELECTRONIC PARTS ARE USED FROM JAPANESE COMPANY
- UNBELIVABLE CHEAPEST ROBOTS AVAILABLE IN MARKET WITH GAURANTEE SUCCESS
- PROMT AFTER SALES SERVICE



BRIR801-5
六轴工业机器人

产品特点 Product Features

BRIR801-5型机器人是伯朗特机器人第三代，整个系统操作简单、结构紧凑、定位精度高、动态性能好，其5kg的负载能力尤其适用于喷涂、焊接、注塑、冲压、锻造、搬运、上下料、装配等领域。

BRIR801-5 type robot is BORUNTE's the third generation of robots. The whole operation system is simple, compact structure, high position accuracy and has good dynamic performance. The load ability is 5kg, especially suitable for painting, welding, molding, stamping, forging, handling, loading, assembling, etc.



产品特点 Product Features

延习标准串联6轴结构，加大各环节的活动范围，使之可以应对各种应用的考验。采用封闭式设计，防护等级达到ip68。适用于喷涂车间、多灰场地和潮湿环境。内走线和内藏式电机设计，极大降低本体的二次污染；外观圆滑、平整，不易藏污纳垢且方便清洁，适用于卫生级别较高的行业。

Carbon Fiber Six axis robot for Anti-explosion Application

The extension of the standard series 6 axis structure, increase the range of activities of each link, so it can be used to deal with a variety of applications. The close design, protection grade reaches IP68, suitable for spraying workshop, ash site and humid environment. In line with built-in motor design, greatly reduce the bulk of the secondary pollution; sleek, smooth, easy to filth and clean, and convenient for higher level health industry application.

BREP-CF-150

碳纤维防爆喷涂六轴机器人

BRTIRUS Series

六自由度工业机器人 Six Axis Industrial Robot

产品特点 Product Features

BRTIRUS3050A是广东伯朗特智能装备股份有限公司针对多自由度的复杂应用而开发的六轴机器人，其最大负载可达50kg的六轴机器人，拥有3000mm超长臂展。六个自由度的灵活性对上下料、装配、压铸，码垛等场景能够随心所欲。

防护等级高——IP 54，防尘防水

精度高——重复定位精度 ± 0.1 mm

BRTIRUS3050A type robot developed for complex applications. The maximum load is 50KG, the maximum arm length is 3000mm. Suitable for painting, welding, molding, stamping, forging, handling, loading, assembling, etc. The protection grade reaches IP54. The repeatability is ± 0.1 mm.





VIDEOS OF BORUNTE ROBOTS WORKING IN PAINTING

<https://www.youtube.com/watch?v=zNfAKqEXHB0>

<https://www.youtube.com/watch?v=0EUDxQuCQZA>

ESTEEM CUSTOMER LIST OF BORUNTE



COMMON INDUSTRIAL ROBOT APPLICATIONS

1. Arc Welding

- Arc welding, or robot welding, became commonplace in the 1980s. One of the driving forces for switching to robot welding is improving the safety of workers from arc burn and inhaling hazardous fumes.

2. Spot Welding

- Spot welding joins two contacting metal surfaces by directing a large current through the spot, which melts the metal and forms the weld delivered to the spot in a very short time (approximately ten milliseconds).

3. Materials Handling

- Materials handling robots are utilized to move, pack and select products. They also can automate functions involved in the transferring of parts from one piece of equipment to another. Direct labor costs are reduced and much of the tedious and hazardous activities traditionally performed by human labor are eliminated.

- 4. Machine Tending

Robotic automation for machine tending is the process of loading and unloading raw materials into machinery for processing and overseeing the machine while it does a job.

- 5. Painting

Robotic painting is used in automotive production and many other industries as it increases the quality and consistency of the product. Cost savings are also realized through less rework.

- 6. Picking, Packing and Palletizing

Most products are handled multiple times prior to final shipping. Robotic picking and packaging increases speed and accuracy along with lowering production costs.

- 7. Assembly
- Robots routinely assemble products, eliminating tedious and tiresome tasks. Robots increase output and reduce operational costs.
- 8. Mechanical Cutting, Grinding, Deburring and Polishing
- Building dexterity into robots provides a manufacturing option that is otherwise very difficult to automate. An example of this is the production of orthopaedical implants, such as knee and hip joints. Buffing and polishing a hip joint by hand can normally take 45-90 minutes while a robot can perform the same function in just a few minutes.
- 9. Gluing, Adhesive Sealing and Spraying Materials
- Sealer robots are built with numerous arm configurations that enable the robot to apply adhesives to any type of product. The primary benefit in this application is increased quality, speed and consistency of the final product.

