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# STAMPING AUTOMATION AN INTEGRATED ENGINEERING APPROACH



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# COMPANY PROFILE

# ABOUT STAMPING

- Stamping is a forming process performed on sheet metal by a series of stamping stations used to produce mass quantities of finished products. The stamping process is the forming of metal made out of sheets containing Steel, Aluminum, Zinc, Nickel, Titanium, and Brass.

The sheet metal is formed into preset shapes in a stamping press. The tool and die is the component of the press that forms parts when the sheet metal is inserted. The shaping of parts is completed by the tool and die component called the punch. The punch pushes the sheet metal through the cavity of the die, creating the shape desired.

# DIFFERENT TYPES OF STAMPING

- Electric Metal Stamping- This is when electric components are used to stamp metal.
- Fourslide Metal Stamping- Intricate stamps are produced from stripes and wires by fourslides. The slide tools go into metal blanks from 4 directions at 90 degrees.
- Progressive Metal Die Stamping- This type uses several workstations in which the metal moves from station to station to complete the stamping process.
- Short Run Metal Stamping- This is the most involved and expensive type, but produces from 5-10,000 stamped pieces.

# ADVANTAGES OF ROBOTS IN STAMPINGS

- **1. Cost efficiency.** Metal stamping is faster and requires less labor and machine work, so it is the most cost-effective metal forming method available today, and the perfect way to manufacture large quantities of products.
- **2. It is a highly automated process and has the ability to incorporate secondary operations,** including in-die tapping, in-die welding, automatic nut insertion, etc. This increases the overall value of the stamped parts.
- **3. High precision.** Metal stamping techniques today are incredibly detailed and sophisticated and are the most precise ways to process even the toughest, most complex shapes. In normal cases the stamped parts do not need to be machined again to achieve defined tolerances.
- **4. It is a consistently high quality process** even though multiple pieces are being cut together.
- **5. The stamped parts have high strength, high stiffness, light-weight and perfect metal finishing properties** including painting, coating, powder coating, electroplating, etc.
- **6. Less material scrap** than other metal forming techniques.
- **7. Easy to operate** and does not necessarily require the operators to have high level of skills.

# 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

# ESTEEM CUSTOMER LIST OF BORUNTE





# FIVE AXIS STAMPING ROBOT



BRSR-3040-S5  
五轴冲压机械手

## 产品特点 Product Features

- 1.运动轴数为5轴（在4轴基础上增加翻转功能），采用全伺服控制，全行程范围内可调；
- 2.控制系统采用专用运动控制系统，运行平稳，传送精度高；
- 3.人机界面友好，人性化设计，采用手持式操作终端，集设定与操作于一体；
- 4.采用高精度直线导轨，适合在恶劣的环境下长期运行，具有较高的防护等级；
- 5.可由多台主体（4轴或者5轴冲压机械手）连接多台冲床组成冲压连线，效率高，同步精度高、安全性高；
- 6.大幅调高生产效率，提高产品合格率及尺寸统一性；
- 7.有故障警报说明，维护简单明了易懂。

1. Five-axis AC servo driving, all the traverse-stroke can be adjustable.
2. With special robot control system, stable function and high precision movement.
3. Palm controller with dialogue type operation interface, easy for learn.
4. Adopt of the high precision linear guide rail, with high protection degree, can be work in rough condition.
5. Can be work in group to cooperate with the stamping machinery to make the stamping robot system. With high efficiency, synchronization accuracy and great safety protection.
6. Reduce the manpower and accurately control the output to reduce the waste.
7. With fault warning instructions, simple maintenance and easy to understand.

# 4 AXIS STAMPING ROBOT



BREA01M4005A  
四轴冲压机械手

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THANKS