

Developing innovative
technology to improve
automotive components

BAOLONG

PRODUCT CATALOGUE

BUSBAR 母排

ABOUT BAOLONG AUTOMOTIVE

/关于保隆科技

保隆科技于1997年5月在松江创立，于2017年成功登陆上证主板（股票代码：603197）。公司总部位于上海市松江区，在上海松江、浦东、安徽宁国、安徽合肥、湖北武汉和美国、德国、波兰、匈牙利、奥地利等地有生产基地以及研发和销售分支机构，全球员工超过5300人。

保隆科技立足汽车制造业，向汽车智能化与轻量化方向发展。公司产品包括气门嘴、平衡块、智能空气悬架等橡胶金属部件；排气系统管件、汽车结构件和EGR管件等汽车金属管件；汽车胎压监测系统、汽车传感器、基于摄像头和毫米波雷达等技术的汽车驾驶辅助系统等汽车电子产品。

保隆科技是大众、丰田、通用、现代起亚、福特、斯特兰蒂斯、捷豹路虎、上汽、东风、一汽、长安、北汽、广汽、长城、吉利等国内外知名汽车厂的合格供应商。公司秉承“以人为本，依法管理，互予机会，共同发展”的管理理念，以“掌握领先技术，提升汽车部件”为己任，在汽车零部件领域作纵深发展。

Shanghai Baolong Automotive Corporation (hereinafter referred to as "Baolong") was founded in 1997, and is listed on Shanghai Stock Exchange (603197.SH). Headquartered in Songjiang District, Shanghai, Baolong has manufacturing sites, R&D and sales centers in China (Songjiang District and Pudong district, Shanghai; Ningguo and Hefei, Anhui Province; Wuhan, Hubei Province), the United States, Germany, Poland, Hungary, Austria, etc., and 5300 staff around the world.

Baolong has implemented the "Intelligent & Lightweight" strategy to illustrate its continuous innovation in automotive solutions. Its products include rubber & metal parts such as tire valves, wheel weights, ECAS; metal tubing such as exhaust pipes, structural parts and EGR pipes; and automotive electronics featured by TPMS, sensors, and drive assistance systems based on cameras and millimeter-wave radars.

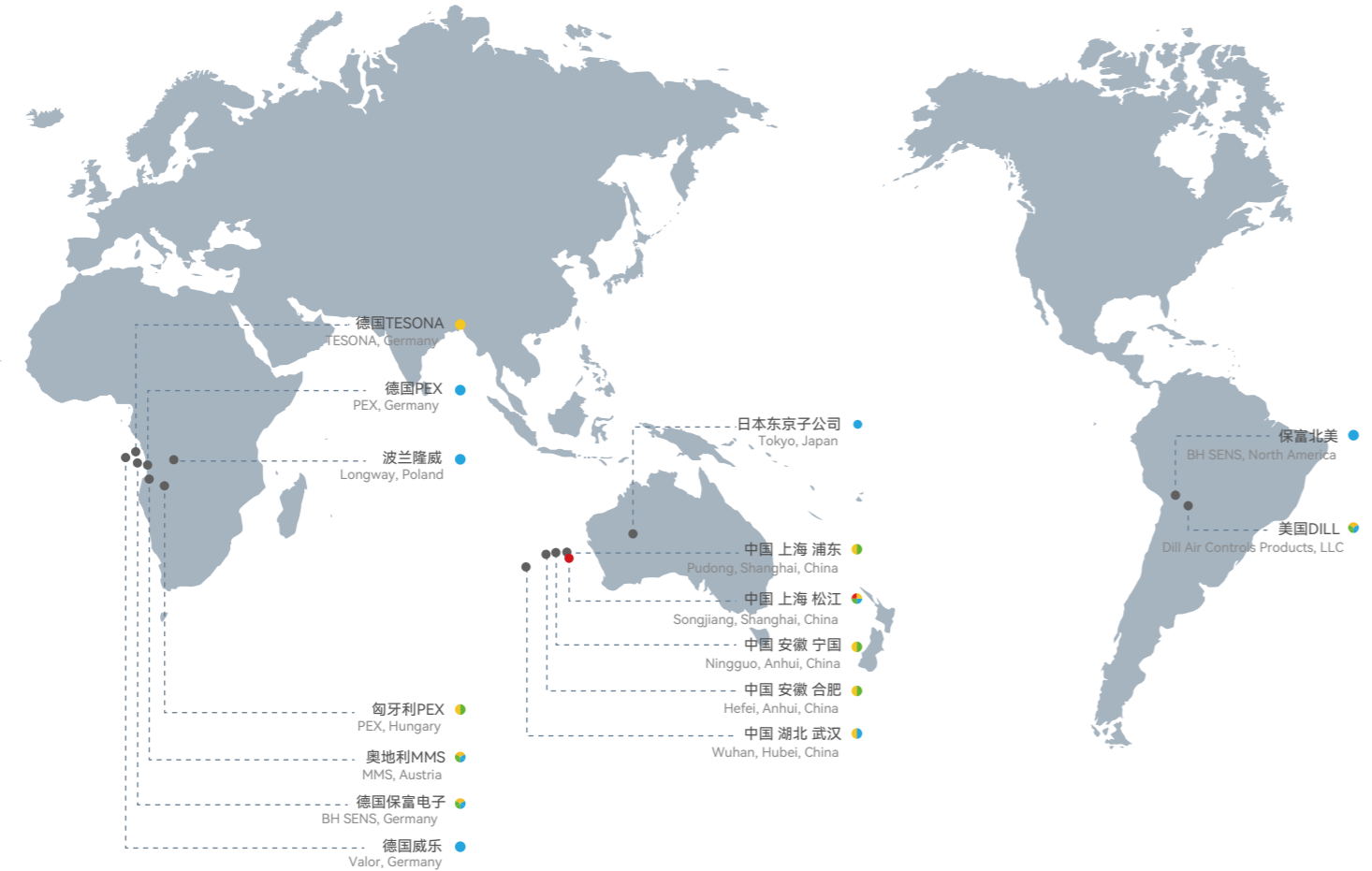
Adhering to the vision of "letting more people benefit from the development of automotive technology", and taking "mastering advanced technology to improve automotive components" as its mission, Baolong is a qualified supplier of Volkswagen, Toyota, GM, Hyundai-Kia, Ford, Stellantis, Jaguar Land Rover, SAIC, Dongfeng, FAW, Changan, BAIC, GAC, Great Wall, Geely, etc.



GLOBAL FOOTPRINT

/全球布局

- 公司总部
Headquarter
- 研发中心
R&D Centers
- 生产园区
Production Bases
- 销售分支机构
Sales Branches














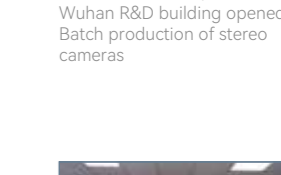






当客户选择保隆科技作为汽车产品和解决方案的供应商时，他们能够从保隆科技遍布全球的网点中获得广泛的服务。

When customers choose Baolong as a supplier of automotive products and solutions, they can be assured of abroad spectrum of services from Baolong's global network.

在全球范围内，我们保隆科技敬业的员工始终在客户的身边。保隆科技的这些人才，通晓汽车行业，并了解客户的具体需求，能够随时为客户提供各种支持。

Globally present, the access to Baolong's dedicated employees is never far away. Baolong's talents who all know the automotive industry and understand customers' specific demands and needs are always ready to support customers.

1995 → 2000 → 2005 → 2010 → 2015 → 2020

 <p>1997 公司成立 Baolong founded</p>	 <p>2000 研制车轮平衡块 Developed wheel weights</p>	 <p>2005 收购美国DILL公司 Acquired Dill Air Controls Products, LLC</p>	 <p>2012 研制汽车结构件、光学传感器、空气弹簧 Developed structural parts, optical sensors, and air springs</p>	 <p>2016 研制电控减振器 Developed air spring dampers</p>	 <p>2020 与领目科技合资，武汉园区新办公楼启用，量产双目视觉系统 JV with Leadmove; Wuhan R&D building opened; Batch production of stereo cameras</p>
 <p>1998 研制轮胎气门嘴 Developed tire valves</p>	 <p>2001 研制排气系统管件 Developed exhaust pipes</p>	 <p>2006 宁国园区成立 Ningguo (China) factory opened</p>	 <p>2013 研制视觉系统、毫米波雷达 Developed cameras and millimeter-wave radars</p>	 <p>2017 上海证券交易所上市 IPO on Shanghai Stock Exchange</p>	 <p>2021 SAP 上线、空气悬架新品量产、合肥园区启用 Introduced ERP system from SAP; Batch production of air suspension; Hefei (China) factory opened</p>
 <p>1999 总部园区成立 Songjiang (China) factory opened</p>	 <p>2002 研制TPMS Developed TPMS</p>	 <p>2009 研制汽车压力传感器 Developed pressure sensors</p>	 <p>2014 武汉园区成立 Set up R&D center in Wuhan, China</p>	 <p>2018 合肥园区成立，收购德国PEX和TESONA、研制ECAS Hefei (China) factory founded; Acquired PEX, TESONA; Developed ECAS</p>	 <p>2019 保富电子正式运营、保隆沙士基达成立、收购奥地利MMS BH SENS established; BSHF founded; Acquired MMS, Austria</p>

MILESTONES

/发展历史

CUSTOMER BASE

/主要客户

一级供应商 / Tier 1 Suppliers



售后客户 / Aftermarket



自主品牌 / Chinese Brands



造车新势力 / NEV Start-ups



外资品牌 / Foreign Brands



注：以客户英文名称首字母的先后顺序排列 (In alphabetical order of English name)

ENTERPRISE HONORS

/企业荣誉

客户认可&政府荣誉 / Customer & Government Awards



资质证书 / Certifications





更智能
舒适、便捷、互联

Intelligent
Comfortable, convenient and
mutually-connected



更环保
高效、清洁

Environmental Friendly
Efficient and clean



更安全
主动安全

Safe
Active safety



更轻量
轻量化技术

Lightweight
Lightweight technology



经济适用
可商业化的创新

Affordable
Creative

DEVELOPMENT STRATEGY

/发展战略



我们的愿景 Our Vision

让更多人受益于汽车科技的发展。
*Let more people benefit from the development of auto-
motive technology.*



我们的使命 Our Mission

掌握领先技术，提升汽车部件。
*Master advanced technology to improve automotive
components.*



我们的战略 Our Strategy

智能化、轻量化。
Intelligent and lightweight products.



我们的核心竞争力 Our Competitiveness

掌握和应用领先技术的能力。
Mastering and applying advanced technology.

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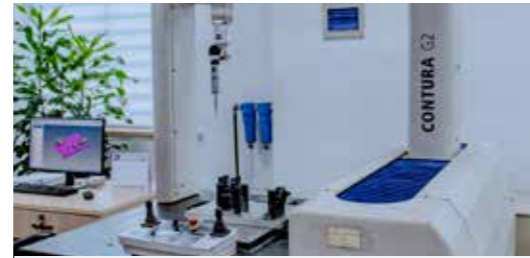
精密注塑产品案例 / Precision Injection Molding Products Page 15-16

TEST ABILITY

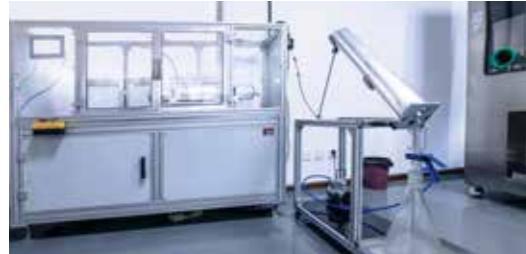
/试验能力

拥有全套BUSBAR产品检测、实验设备，满足BUSBAR母排的尺寸及形状公差、电学性能、机械性能、绝缘性能、以及电镀镀层厚度的检测。同时具备清洁度的检测要求，满足客户对于产品符合性，功能性的验证要求。

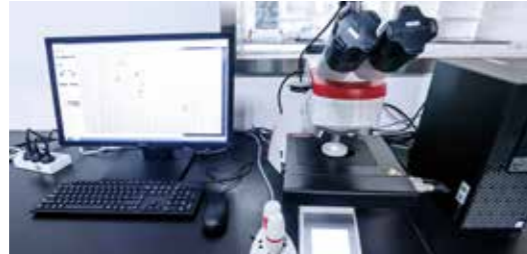
A full set of equipment for busbar testing including dimension and form tolerance, electrical property, mechanical property, insulation performance, plating thickness, and cleanliness. The laboratory also meets customers' verification requirements for product conformity and functionality.



蔡司三坐标检测仪 / Zeiss Coordinate Measuring Machine



清洁度萃取设备 / Cleanliness Extraction Equipment



清洁度检测设备 / Cleanliness Test Equipment



循环盐雾试验箱 / Salt Spray Test Chamber



耐压测试仪 / Voltage Tester



LCR数字电桥 / LCR Digital Bridge



绝缘电阻测试仪 / Insulation Resistance Tester

PRODUCTION EQUIPMENT

/生产设备



品牌注塑设备 / Injection Molding Machine



自动碳氢清洗 / Automatic Hydrocarbon Cleaner



6000W激光切割机 / 6000W Laser Cutting Machine



自动软排焊接设备 / Automatic Welding Equipment for Soft Busbar



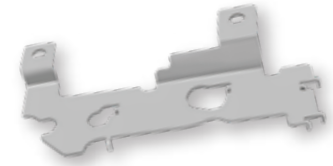
品牌冲床 / Punching Machine

各类冲床、注塑机、激光切割、CNC数控折弯机、激光焊机等先进的生产制造设备，满足了客户快速样件、小批生产以及大批量生产的要求。依靠品牌设备提升生产过程中的产品精度，为客户提供质优价廉的产品。

A complete set of state-of-the-art production equipment including punching machines, injection molding machines, laser cutting machines, CNC bending machines, laser welding machines, etc., satisfy customers' requirements for rapid prototyping, small batch production and mass production. And precision of products is ensured.

PRODUCTION CAPACITY

/生产能力展示



硬母排/结构冲压件

Hard Busbar / Structural Stamping Parts



软母排

Soft Busbar



毛刺控制
Burr Control



冲压
Stamping



扩散焊接
Diffusion Welding



清洁度管控
Cleanliness Control



压铆工艺
Pressing Riveting Technology



激光点焊
Laser Spot Welding



大族6000W激光切割机
Han's 6000w Laser
Cutting Machine



数控折弯机
CNC Bending Machine



冲切成型
Punching and Forming

DESIGN

/设计能力

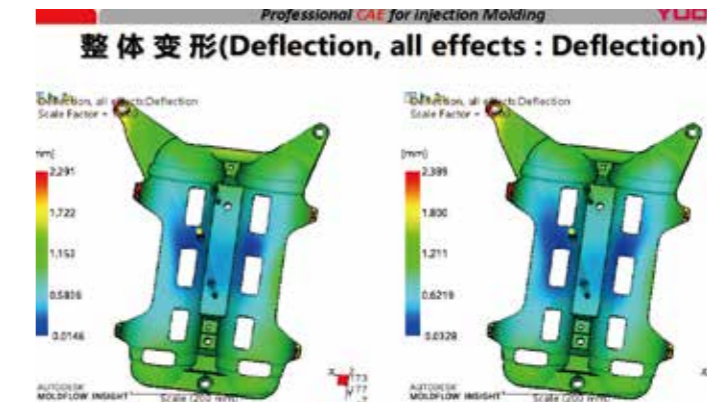
模具加工

Mould Processing

设计软件

Design Software

- > CAD/CAM
- > Pro-Engineering
- > Unigraphics
- > SolidWorks
- > Catia



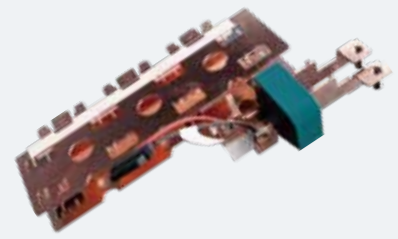
分析能力

Analytical Ability

- > 模流分析
Mold Flow Analysis
- > 设计失效模式及后果分析
Design Failure Mode and Effects Analysis
- > 早期供应商介入
Early Supplier Involvement
- > 产品开发
Product Development

PRODUCTS

/产品展示



压合母排

Pressed Busbar

1. 电气温度系数RTI \geq 130
 2. 阻燃等级94-V0级
 3. 绝缘耐压满足2800VDC/min
1. RTI \geq 130
 2. Flame retardant grade: 94-V0
 3. Insulation and withstand voltage: 2800VDC/min



叠层母排

Laminated Busbar

1. 电气温度系数RTI \geq 130
 2. 阻燃等级94-V0级
 3. 绝缘耐压满足3000VDC/min
 4. 满足单层到多层叠层
1. RTI \geq 130
 2. Flame retardant grade: 94-V0
 3. Insulation and withstand voltage: 3000VDC/min
 4. One or multiple laminated layers are available



新能源车载母排

New Energy Vehicle Busbar

1. 定制化
 2. 加工厚度0.1-10mm
 3. 表面处理: 钝化、镀锡、镀镍、浸塑
1. Customization
 2. Processed thickness: 0.1-10mm
 3. Surface treatment: passivation, tin plating, nickel plating and PVC coating



PDU/BDU母排

PDU/BDU Busbar

1. 电镀镍, 浸塑
 2. 压铆
1. Nickel plating and PVC coating
 2. Pressing rivet



EMI滤波器组件

EMI Filter Module

1. 冲压、注塑
 2. 电容、电感控制
1. Stamping and injection molding
 2. Capacitance and inductance control



软母排

Soft Busbar

1. 铜、铝软连接
 2. 表面绝缘处理
(热缩套, 布基胶带、云母带)
1. Copper and aluminum soft connection
 2. Surface insulation treatment
(Heat shrink sleeve, cloth tape, and mica tape)



EMI 滤波器组件

EMI Filter Module

- 注塑、灌胶
- Injection molding and glue filling

PRECISION INJECTION MOLDING PRODUCTS

/精密注塑产品案例



储气罐支架

Gas Holder Bracket

材 料：PA6T+30GF / 316不锈钢+锌镍

加工工艺：注塑

Material: PA6T+30GF / 316 Stainless steel + zinc-nickel
Processing technic: Injection molding



三相注塑母排

Three-phase Injection Molded Busbar

材 料：PA10T+30GF / 铜合金+镀雾锡

加工工艺：埋入成型

Material: PA10T+30GF / Copper alloy + mist tin plating
Processing technic: Embedding molding



定子引出线铜排组件

Stator Outlet Copper Busbar Module

材 料：PPA+30GF / 裸铜钝化

加工工艺：埋入成型

Material: PPA+30GF / Bare copper passivation
Processing technic: Embedding molding



滤波组件外壳

Housing of Filter Module

材 料：PBT+30GF / 铜合金+镀雾锡

加工工艺：埋入成型

Material: PBT+30GF / Copper alloy + mist tin plating
Processing technic: Embedding molding



三相注塑母排

Three-phase Injection Molded Busbar

材 料：PA66+30GF / 铜合金+镀雾锡

加工工艺：埋入成型

Material: PA66+30GF / Copper alloy + mist tin plating
Processing technic: Embedding molding



三相铜排支架

Three-phase Copper Busbar Bracket

材 料：PBT+30GF

加工工艺：埋入成型

Material: PBT+30GF
Processing technic: Embedding molding



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