

2021



COMPANY SUMMARY

SHENZHEN GOOD-LINK TECHNOLOGY CO.,LTD

Innovation Efficiency and Excellence

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企业客户

CUSTOMER



ABOUT COMPANY

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公司简介 (Company Introduce)

Shenzhen Good-Link Technology Co., Ltd. was founded in 2013. It is a Chinese technology company that produces high-quality POGO PIN connectors that integrates design, R&D, manufacturing, electroplating, assembly, packaging and sales.

This product has the advantages of high precision, small size, long life, high current, high waterproof, good electrical conductivity, beautiful appearance, stable signal transmission, and can be customized. It is deeply loved by engineers and human-machine interactive solutions companies. Well adapted to the high-end needs of the market, it is widely used in magnetic connectors, medical equipment, security equipment, computer digital (tablets, laptops, audio-visual equipment), TWS Bluetooth headsets, smart wearables (bands, watches, VR, AR), smart home, smart door locks, smart cameras, smart robots, e-cigarettes, drones, shared charging, printing devices, GPS devices, 5G communications, new energy vehicles, radio frequency antennas, automation and industrial equipment; aerospace models, Military electronics and communications, etc.;

We have been rated as a 5A credit enterprise in the industry. Passed ISO9001 & ISO14001 certification, has obtained more than 20 national invention patents,



and won the "national high-tech enterprise" certification.

We have accumulated a wealth of theoretical and practical experience, and can provide customers with complete design and development solutions and quickly mass production.



客户至上 Customer First

用心服务 Quality Service

Business Pursuit :

Innovation, Efficiency and Excellence

Quality Policy :

Quality first, customer satisfaction.



发展历程 (Development History)

2013

2013.10.
Founded

2016

2016.07
Establish an independent factory with integrate R&D and manufacturing one-stop service

2018

2018.04
ISO quality management system ISO9001, ISO14001, and obtained relevant certificates

2019

2019.12

The company's annual sales reach 80 million RMB.

(TWS headset Shenzhen market share accounts for 70%)

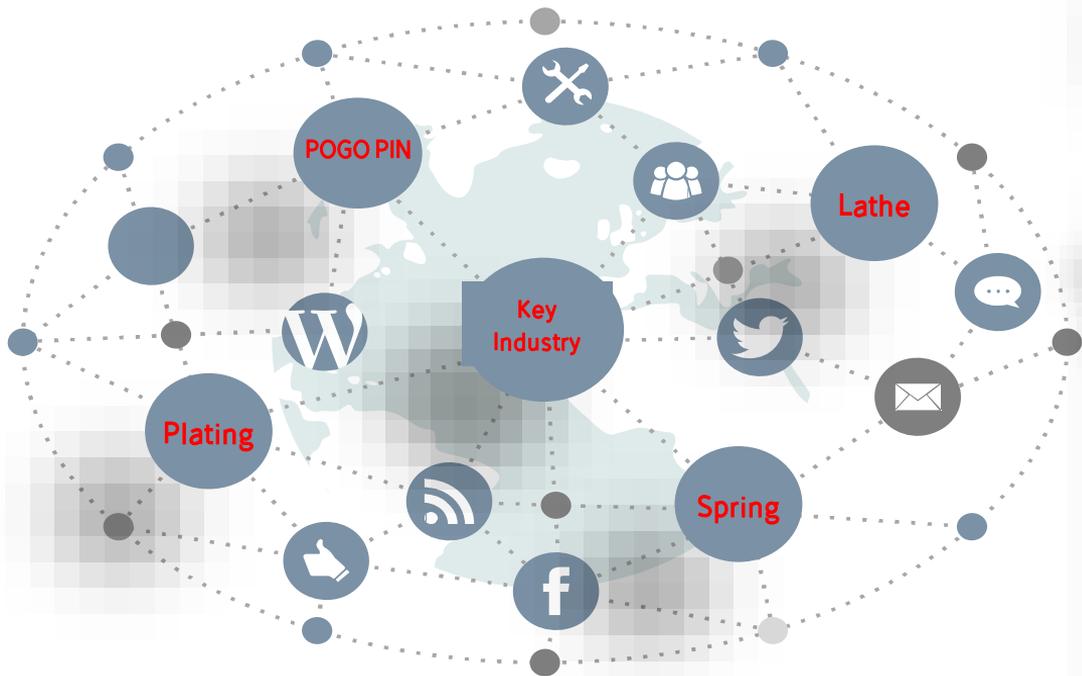
2020

2020.07

Got the "National High-tech Enterprise" certification.



产业结构 (Industrial Structure)

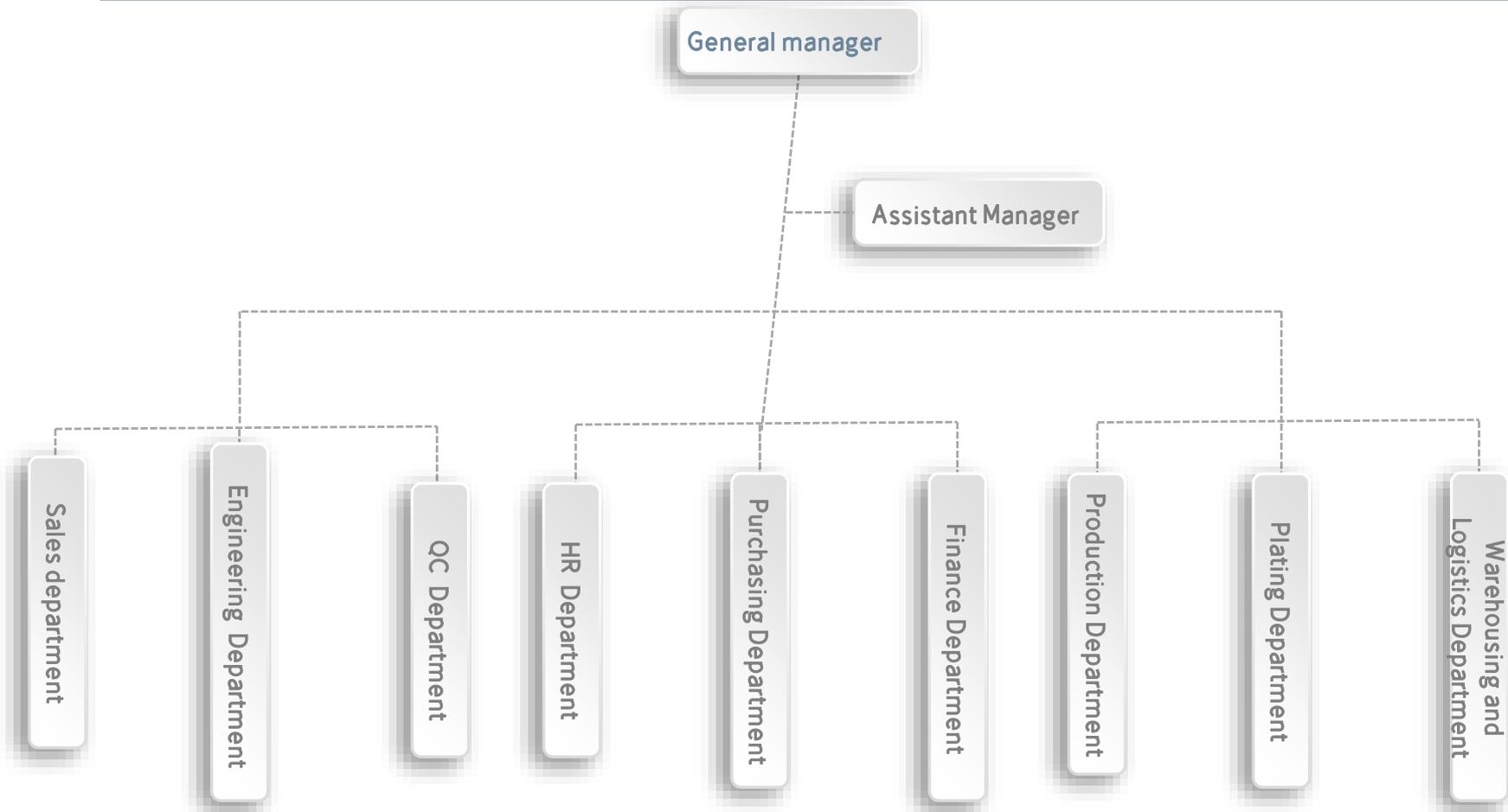


1 Industry Introduction

We has a complete production process, including: plating, workshop, from the turning of materials to the surface coating treatment, as well as the assembly and packaging of the end product, all of them are done by ourselves independently, so that we can provide customers with products faster and more efficiently, greatly shortening.



组织架构 (Organizational Structure)





生产检测设备 (Production Machines & Testing Equipment)



We have our own Machining and turning workshop to control every production process of pogo pin products from the source to the end. Independent research and development of bevel needle cutting technology, high precision of processing and stable pogo pin products.



生产检测设备 (Production Machines & Testing Equipment)



Till now, our company have more than 80 automatic precision lathes, mainly including Japan STAR core moving machine, Taiwan Ming yang cutting machine, with mature and stable manufacturing technology.



生产检测设备 (Production Machines & Testing Equipment)



In order to provide better serve for our customers and ensure quality, the company has an electroplating workshop. Adhering to the company's long-term development and the concept of excellence in quality, we start from the details, strictly control the process parameters of each production process, and provide the most suitable electroplating solutions for the requirements of different customers and different products.



生产检测设备 (Production Machines & Testing Equipment)



Today, there are many mature and stable coating processes, and the conventional coating processes such as copper plating, nickel plating, tin plating, silver plating, gold plating, and palladium plating have been mass-produced.



生产检测设备 (Production Testing Equipment)

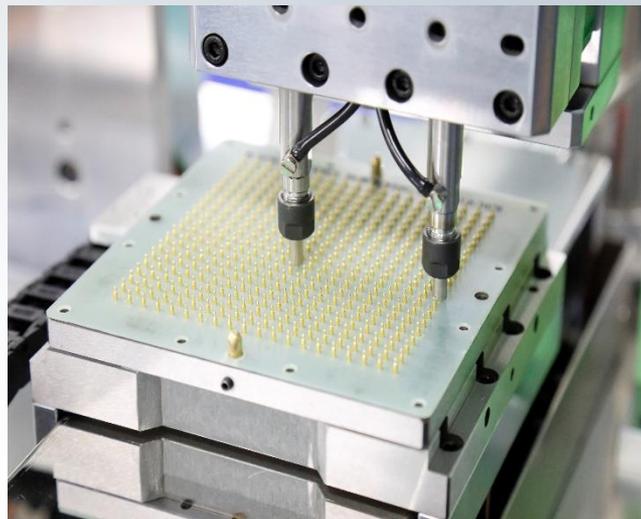


Assembly workshop:

There is complete production and assembly capabilities, from riveting assembly to packaging and taping. Professional technical team, stable technical support.



生产检测设备 (Production Testing Equipment)



Customized automatic POGO PIN precision riveting machine, higher accuracy and consistency, shorter delivery cycle, sample delivery only takes 3 to 5 days.



生产检测设备 (Production Testing Equipment)



Force and resistance dynamic tester

Test the dynamic positive force and contact resistance of the product, and simulate the change value of the positive force and contact resistance during testing.



Two-dimensional measuring instrument

Accurately measure the size of the product and analyze the measurement data at any time.



CCD electron microscope

CCD electron microscope, micro analysis, continuous improvement, the sample can be magnified up to 200 times.



生产检测设备 (Production Testing Equipment)



Wan Hao Projector

It can efficiently detect the contour size and surface shape of various products with complex shapes.



DC current load meter

Test the current carrying current of the product and perform performance test of related products .



ROHS tester

Material ROHS and halogen-free testing ensure the environmental protection requirements of products.



生产检测设备 (Production Testing Equipment)



Reflow soldering

Simulate the SMT process, test the weld ability of the product, and the high temperature resistance of the plastic .



Salt spray corrosion test chamber

Test the corrosion resistance of the product and collect various salt spray test data.



Humidity Chamber

Test the performance of the product under various temperature and humidity environments, the temperature range is $-40^{\circ}\text{C}\sim 150^{\circ}\text{C}$, the humidity range: 20%~98%RH .



目前产能 (Our Capacity)

- Pogo Pin 1.3KK pcs / Day ;
- New components 300 K Sets/ M
- Fixture parts 10 K Sets/ M
- Precision parts 100 KK pcs / M





质量保证体系(Quality Assurance System)



The company's products have passed ISO9001, ISO14001, and corporate trademark certification. And passed the Guangdong Province high-tech enterprise qualification certification, the company has 3 invention patents and 18 practical patent qualifications. We are committed to ensuring that our six management systems work closely together to meet customer standards.

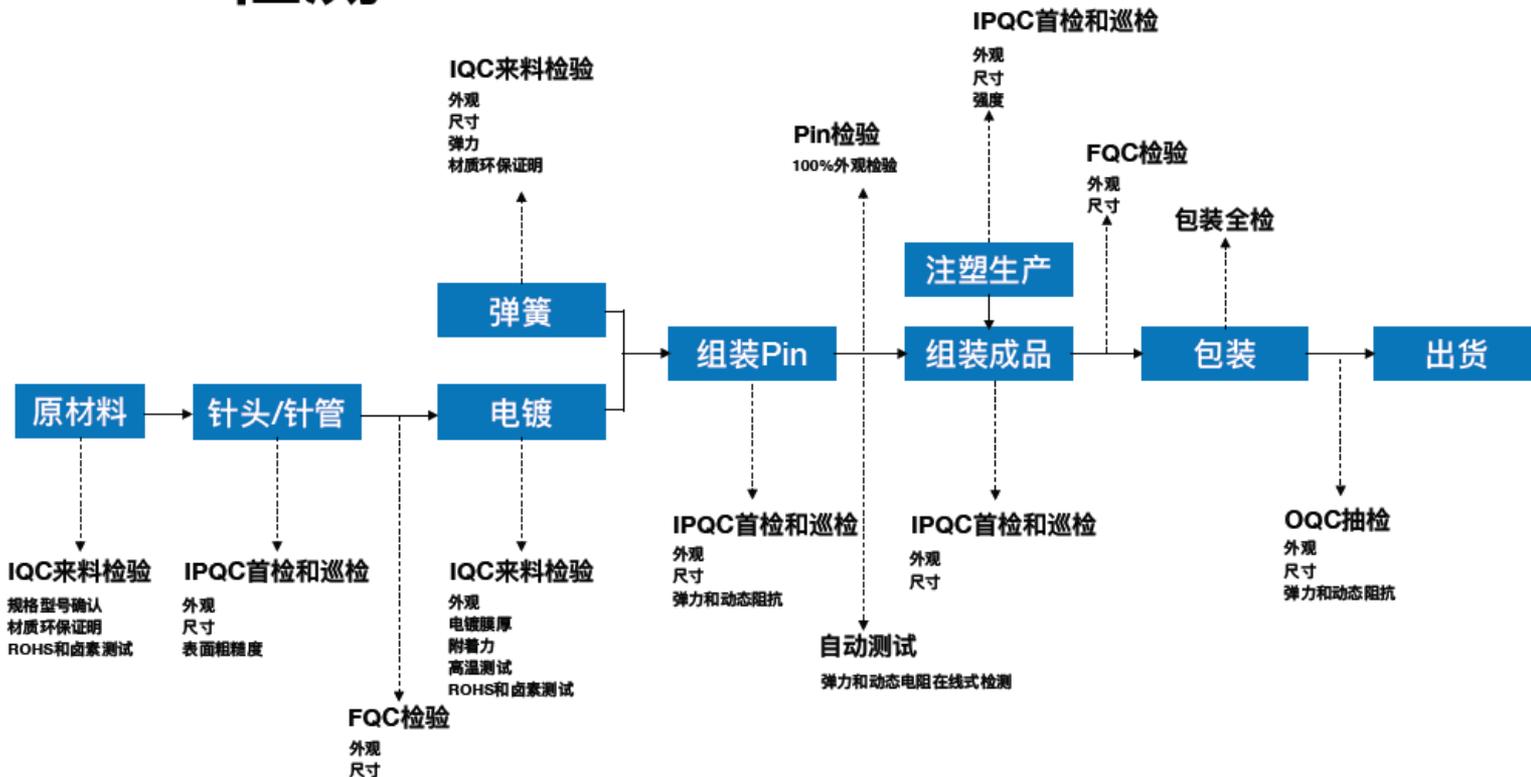
Quality system and process control:

- 1) The system documents are complete, and each process is identified and defined in the form of program documents and WI;
- 2) IQC incoming materials have normative documents for various raw material sources and key control points, and there are monitoring records;
- 3) The production documents and quality control documents are complete, and the product size and key parameters of the first article and inspection are operated, confirmed and recorded in accordance with the requirements of SIP and SOP;
- 4) Molds, fixtures, and inspection tools have a complete quality monitoring process and record output;
- 5) Process stability and process verification have a complete quality monitoring process and record output;
- 6) Product protection, reliability testing, HSF hazardous substance control, labeling and traceability have complete quality monitoring processes and record output;



100% 检测 (100% Inspection)

100% 检测





测量实验室



ROHS/无卤测试



工具显微镜



恒温恒湿箱



混合气体



三坐标测量仪



影像测量仪



冷热冲击



盐雾腐蚀试验箱

机电实验室



插拔力测试仪



力和电阻动态测试仪



卧式剥离试验机



绝缘耐压测试仪



三坐标测量仪



振动平台



防水测试仪



温升测试仪

02



Product Introduce

- ✓ Product description
- ✓ Product specification
- ✓ Product Category
- ✓ Products Show



产品概述 (Product Description)

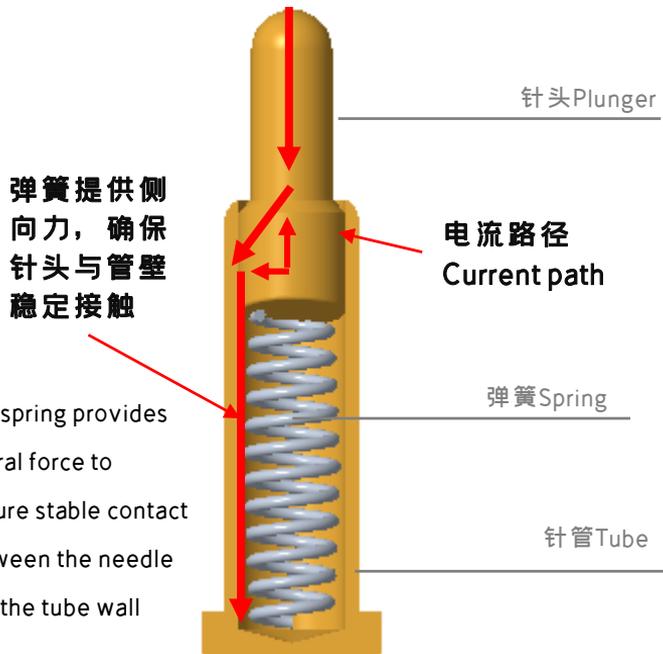


Pogo Pin Description

Pogo Pin is a spring-type probe formed by the three basic components of Plunger, Tube and Spring after being riveted by a precision instrument. It is also called spring probe, and Pogo Pin connector.

The bottom of the Pogo Pin's Plunger is usually an inclined structure to ensure that the Plunger contacts with the inner wall of the Tube during work, so that the current mainly passes through the gold-plated Plunger and the Tube to make sure the stability and low impedance of the Pogo Pin.

Generally, Pogo Pin is applied in precision connection in electronic products such as mobile phones, 5G communications, artificial intelligence, TWS Bluetooth headsets, medical equipment, etc.; because Pogo Pin is a very fine probe, the volume can be very small, so it is used in precision connections The connector can reduce the weight of the connector, save space, and beautify the appearance of products (such as ultra-thin mobile phones, smart watches, etc.) .





产品规格 (Product Specification)

1.0 overview

1.1 This specification defines the general performance parameters and test requirements of Pogo pin series products.

2.0 requirements

2.1 Appearance size meets product drawing requirements

3.0 Material materials and plating

3.1 Barrel is a brass alloy, which needs to be electroplated, nickel-plated and gold-plated. The thickness of the plating layer is different due to different product use occasions.

3.2 Plunger is a brass alloy, which needs to be electroplated, nickel-plated and gold-plated. The thickness of the plating layer is different due to different uses of the product.

3.3 Spring is stainless steel SUS 304, or it can be electroplated piano steel wire.

3.4 The plastic is a high temperature resistant material, such as PA46, PA4T, LCP, PA9T and so on.

4.0 Parameters

4.1 Working voltage: 12V

4.2 Continuous working current: 1.0A

4.3 Service life: 10000 times

4.4 Working temperature: -25°C to $+75^{\circ}\text{C}$ 95% R.H. Max.

4.5 Storage temperature: -40°C to $+85^{\circ}\text{C}$ 95% R.H. Max.

5.0 Electrical performance

5.1 Contact resistance: The contact resistance at the working point is $<30\text{mohm}$.

5.2 Withstand voltage: 500VAC for 1 minute, the maximum leakage current is 0.3mA.

6.0 Mechanical properties

6.1 Positive force, working point is greater than 30gf

6.2 Durability 20,000 times the spring force remains within the range

7.0 Environmental performance

7.1 High temperature resistance 260°C , no discoloration or blistering after 6min.

7.2 Constant temperature and humidity 95% R.H, 60°C , 96hours constant temperature and humidity test after contact impedance $<200\text{mohm}$, no appearance damage.

7.3 Salt spray test A 5% salt solution will be free of corrosion for 48 hours.

7.4 Soldering tin test $245\pm 5^{\circ}\text{C}$, time 2~3 seconds, wet area above 95%.



产品概述 (Product Overview)

Product assembly method

针头 (Plunger) : Brass plated Gold (C3604) .The thickness of the coating changes due to different use occasions. Generally, plating Nickel first 1.25~2.5um (Converted to 50~100μ ”),then plating Gold0.075~0.75um (Converted to 3~30μ ”)

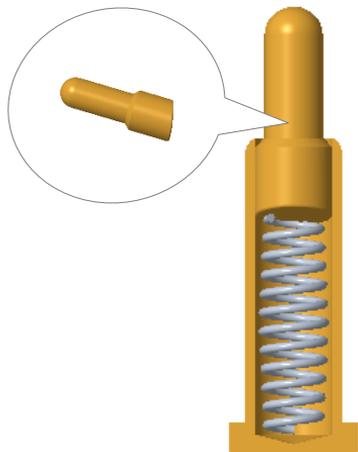
针管 (Barrel) : Brass plated Gold (C3604) ,The thickness of the coating changes due to different use occasions Generally, plating Nickel first 1.25~2.5um (Converted to 50~100μ ”),then plating Gold0.075~0.75um (Converted to 3~30μ ”)

弹簧 (Spring) : SUS 304Or beryllium copper

胶芯 (Housing) : PA46, PA9T, of which PA4T and LCP are halogen-free materials

盖子 (CAP) : PA46, PA9T, of which PA4T and LCP are halogen-free materials

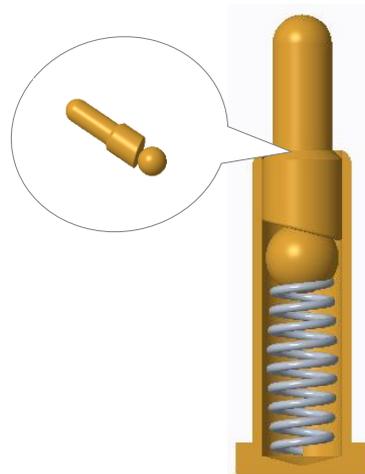




Oblique structure

In order to ensure that the needle shaft is in 100% contact with the needle tube during operation, we cut the end of the needle shaft in contact with the spring into a bevel, which can ensure a stable low impedance.

Product advantages: The contact resistance is small and the performance is stable, which can ensure that the needle is in full contact with the inner wall of the needle tube, which greatly reduces the probability of instantaneous power failure



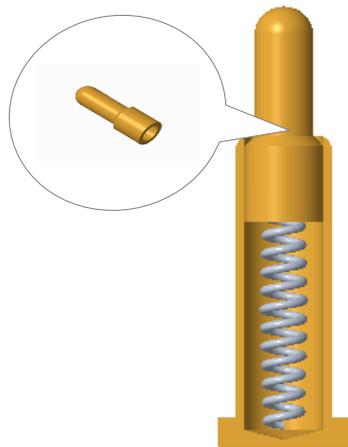
Oblique structure with Steel ball

The steel ball is added inside the needle tube to increase the contact area with the needle tube, so that the current passing through the spring is smaller, and the electrical performance is more stable.

Product advantages: the carrying current is larger, the contact resistance is smaller, and the performance is more stable.

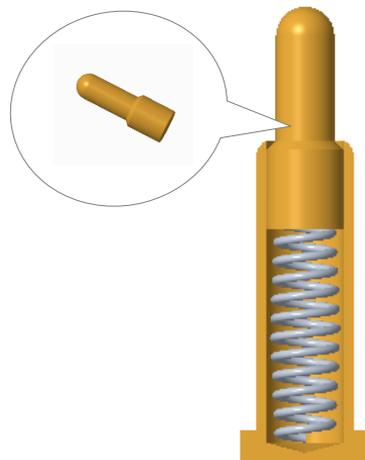


产品类别 (Product Models)



Perforated structure 斜头结构

It is designed for products with small size and short needle tube stroke. In the case of limited space structure, the needle is drilled back to obtain a certain assembly space, which can meet the stable elasticity and stroke required by customers.

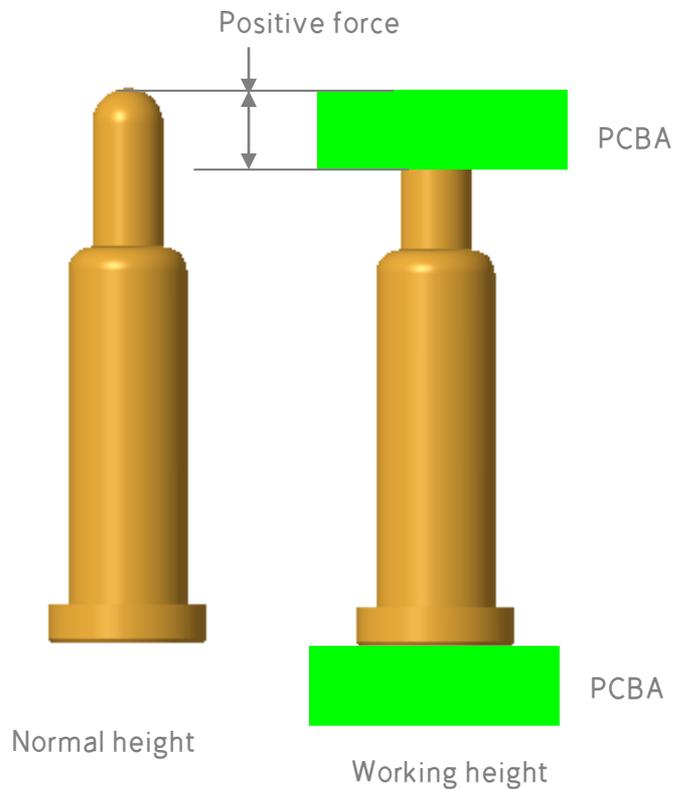


Plane structure 平头结构

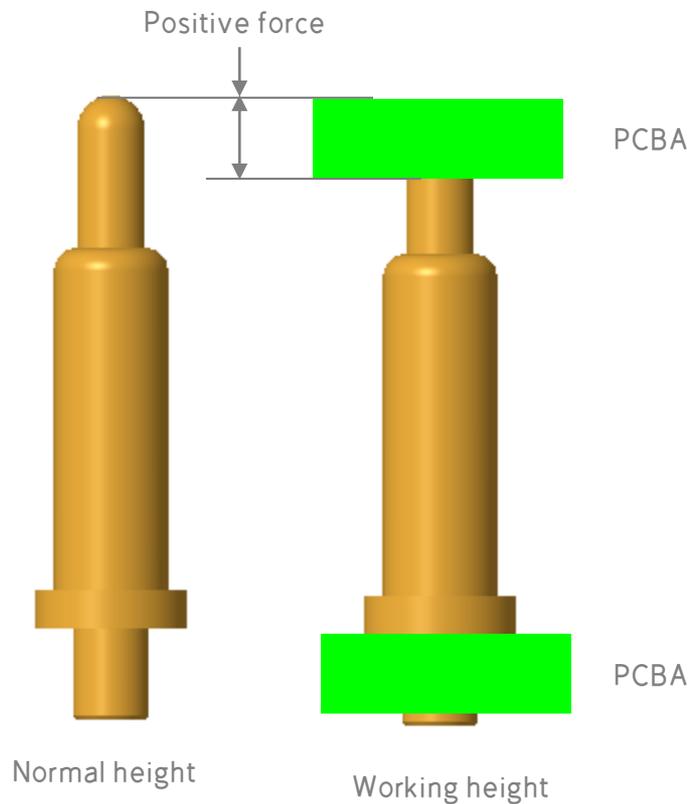
Due to the structure of the needle and the needle tube, the structure of the needle will not be able to contact under certain conditions, which will cause the current to not go through the wall of the needle tube but will follow the spring, resulting in excessive resistance, a sharp drop in voltage, and a high probability of instantaneous power failure phenomenon .



产品展示 (Product Application Show)



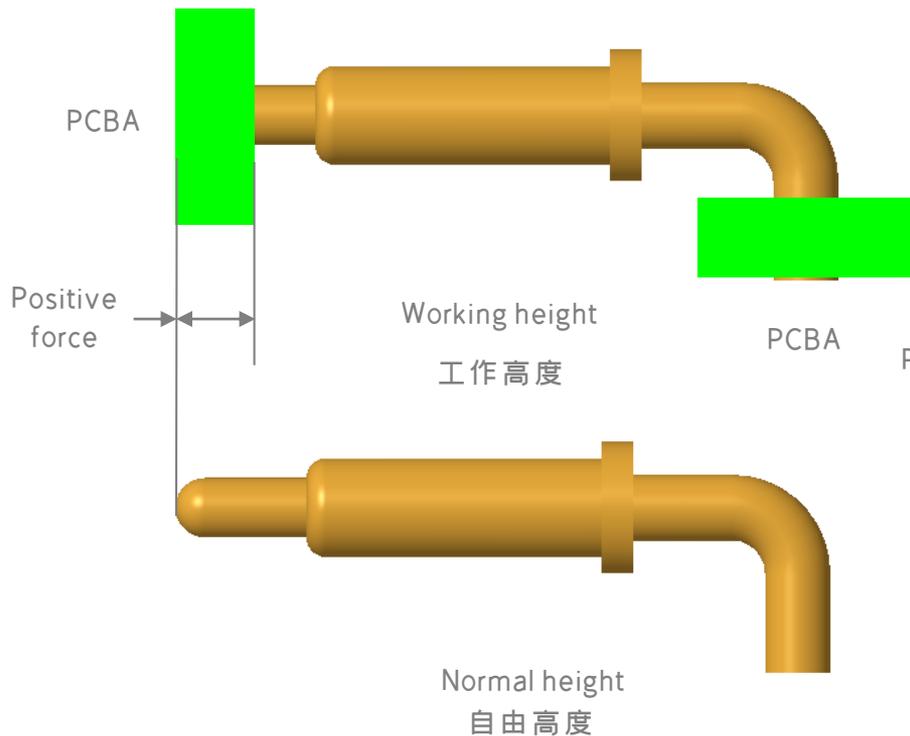
Flat Paste 平贴式



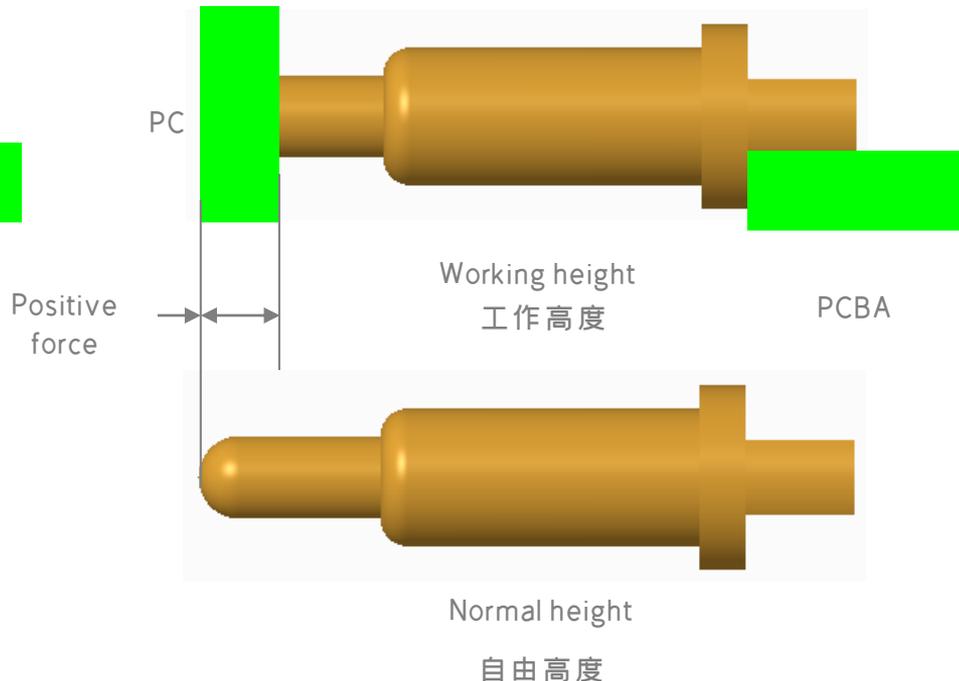
Insert Style 插针式



产品展示 (Product Application Show)



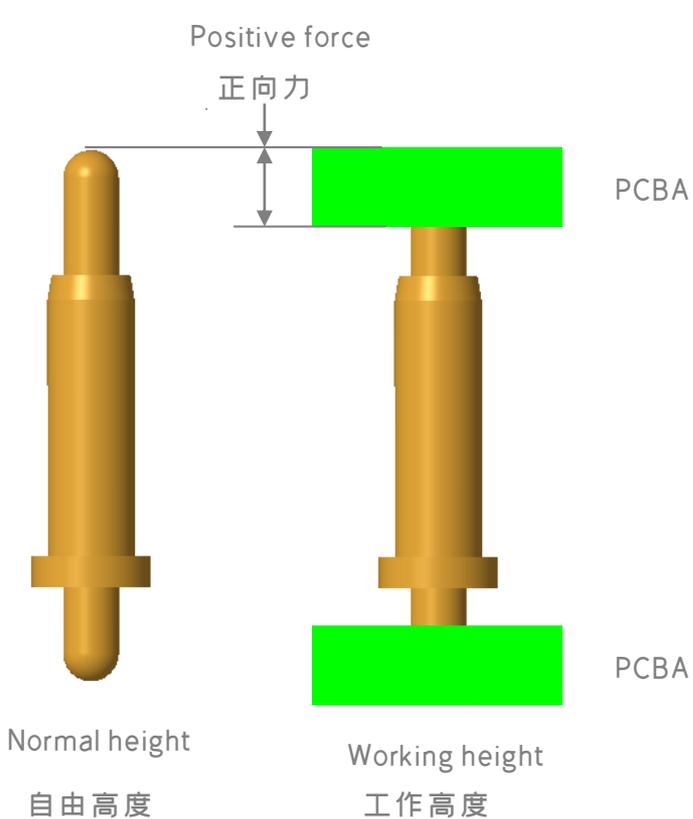
Bending 折弯式



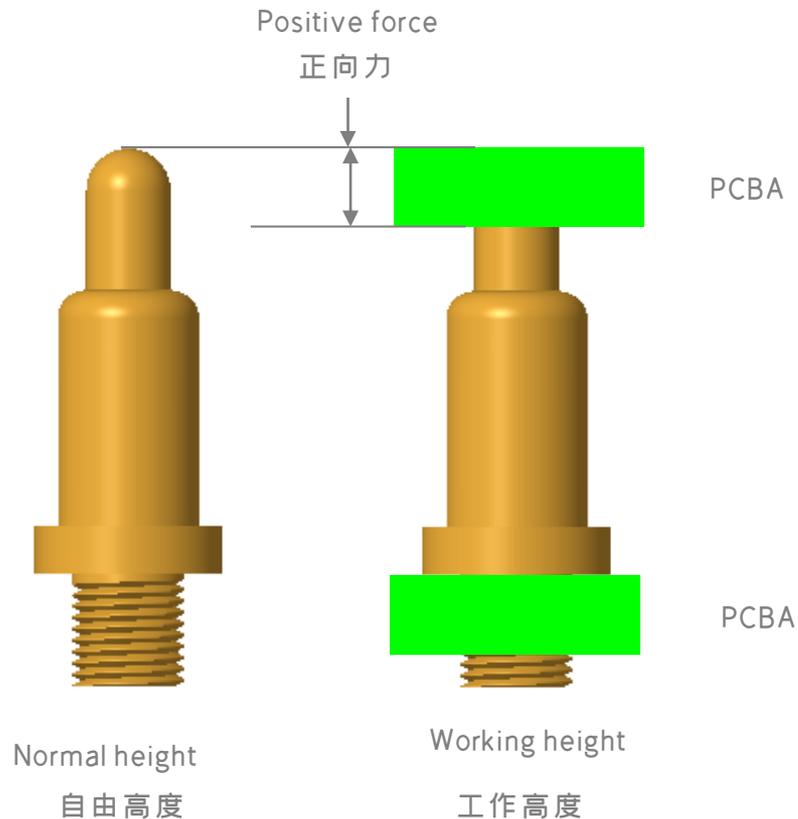
Side stick 侧贴式



产品展示 (Product Application Show)



双头式 Double head



特殊定制 Special customized

03



应用领域

APPLICATION FIELD



应用领域 (Application fields)

At present, our products have been successfully and widely used in product areas: smart wearable, TWS Bluetooth headsets, Bluetooth speakers, smart homes, smart phones, 5G communications, medical equipment, portable electronic products, etc.

What structural engineers are interested in is its excellent space saving ability due to the ultra-short and ultra-small size in the design, and the addition of the electroplating process allows our connectors to have excellent conductivity, high-frequency characteristics and extreme In addition to the low on-resistance, the design of the spring in the connector ensures a stable elasticity and a life stability of hundreds-thousands! Based on the excellent performance of the Pogo Pin Connector, it is solving the connection technology that the traditional shrapnel connector cannot solve.

More and more product structure engineers are gradually getting to know and understand it. In many high-end product fields, Pogo Pin Connectors are rapidly swallowing and replacing the traditional shrapnel-type connector market, gradually becoming the mainstream of technology! The well-known Apple Inc. has used Pogo Pin Connectors on all series of Mac-Book to realize transmission and conduction, including power supply, data transmission, and signal transmission.



人工智能穿戴

Artificial intelligence wear



TWS蓝牙耳机

TWS Bluetooth headset



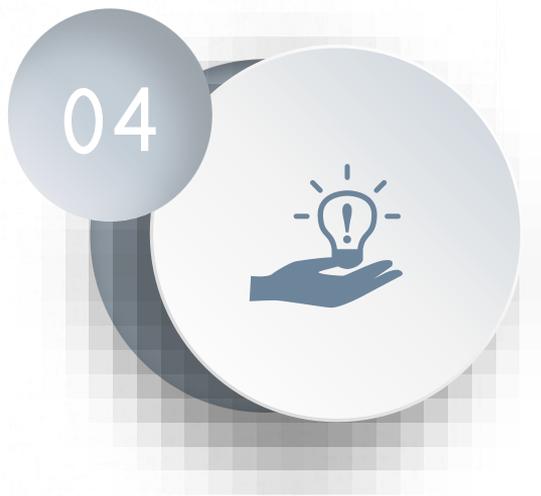
智能家居

Smart home



5G通讯

5G communication



企业荣誉

CULTURAL HONOR





专利证书 (Patent Certificates)

We have applied for 22 patents, including 10 appearance patents and 2 utility models
Has now completed the "National High-tech Enterprise" certification, passed the ISO9001,
ISO14001 quality management system and obtained relevant certificates





企业文化 (Cultural & Honor)





企业客户

COOPERATE CUSTOMER





合作客户 (Service Customers)

BOSE

Google

SAMSUNG

SONY

HUAWEI

GoerTek
have sound, will travel

瑞声科技
AAC Technologies

BYD

Microsoft

fitbit

BRAGI

SK

MERRY

FOXCONN

ANKER

vtech
伟易达

flex

logitech

JABIL

HARMAN

oppo

小米
xiaomi

huami
华米科技

vivo

B&O

LG

Leica



audio-technica

步步高

lenovo 联想

AFTERSHOKZ 韶音

TAG Heuer
SWISS AVANT-GARDE SINCE 1860

SENNHEISER

sivantos
the hearing company

1MORE

EDIFIER 漫步者

怪兽充电
ENERGY MONSTER

街电

Apple

b

IQOS

BRITISH AMERICAN
TOBACCO

JUUL

小天才

SMOK

UBTECH

SUNVALLEY

RELX 悦刻

三

美团



服务终端客户 (Service End Customers)

RAFI

LCHSE

ecobee

PASCOM



FIYTA 飞亚达

DESAY 德赛



cannice

realme



LG
Life's Good

FN-LINK™
Innovation For Surfing



PISEN® 品胜

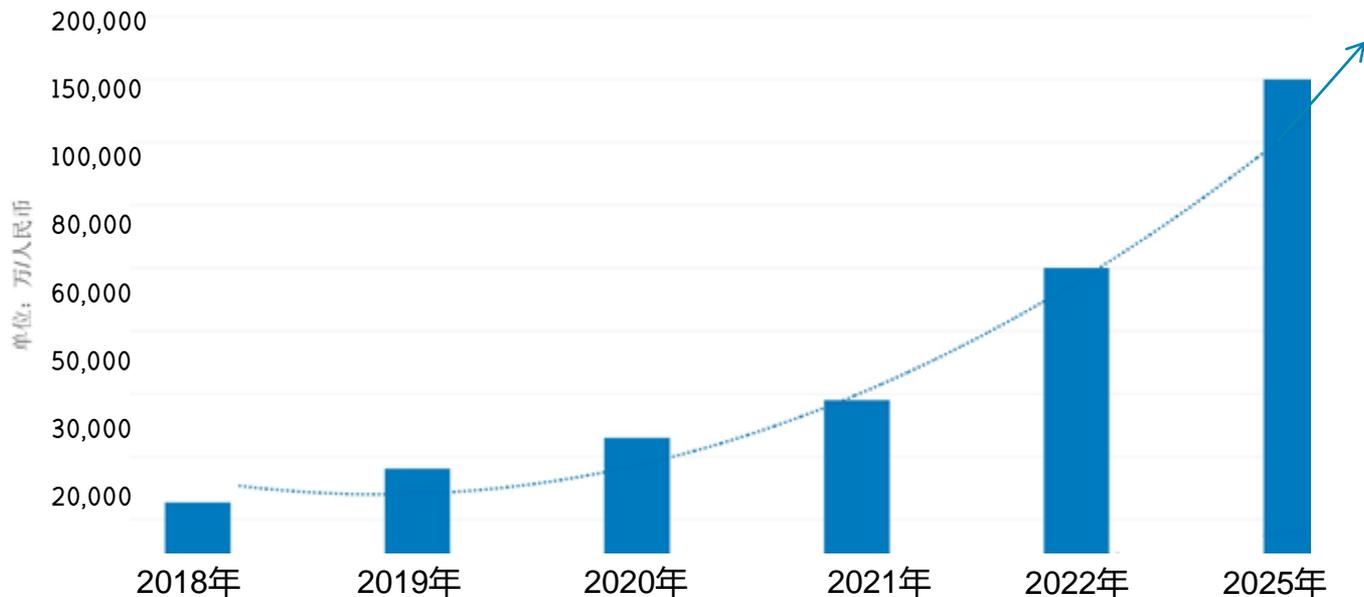


Microart





销售额趋势 **Sales trend**





联系我们 (Contact Us)



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