Qf heatsink



QiFeng Metal NewMaterials Co.. Limited

EMBARK ON THE PATH OF INNOVATION
DILIGENCE AND WISDOM FORGE BRILLIANCE

COMPANY PROFILE

QiFeng Metal NewMaterials Co.. Limited is a one-stop service provider for heat conduction and dissipation, integratingresearch and development, production, and sales.
The company's main products include customized shovel tooth radiators, profile radiators, water-cooled liguid cooled plateswater-cooled triction welding. precision hardware processing, etc. The companv's products are widely used in variousindustries and fields such as aerospace, new
energy, energy storage, photovoltaic inverters, transportation, communicationeauipment, consumer electronics, precision components, medical eauipment, molds, automation equipment. etc.

DEVELOPMENT HISTORY OF THE COMPANY

2008

Qifeng Metal has begun to take shape

2011

Qifeng Metal was established

2014

After in-depth integration and further focusing on services, QiFeng Metal NewMaterials Co.. Limited was established in Dongguan

2016

The Qifeng team achieved an annual revenue of 100 million RMB

2018

In-depth services in the photovoltaic inverter field and the energy storage industry, achieving rapid growth in performance. In the same year, we were recognized as a " High-tech Enterprise" in Dongguan City.

2018

The factory area of Qifeng Company has expanded from 6,000 square meters to 18, 000 square meters. It has added CNC equipment and formed a research and development technical team, achieving a dual upgrade in production capacity and technology.

2022-now

Through comprehensive market analysis Resourceintegration,excluding peer clients in the EM industry,and adding several clients from listed companies.Continuously advancing product upgrades forphotovoltaic energy storage Inverter motor Waiting fordomestic giants to provide better and superior servicesthe annualrevenue has exceeded 420 million RMB



A total of 86 inventions and patents

Military system certification

IATF 16949 Automotive Industry Quality Management System

ISO 9001 International Quality Management System

ISO 14001 International Environmental Management System

AS9100 Aerospace Standardized Quality Management System













SKIVING &
HEAT PIPE HEAT SINK

Material:AL1060+CU1100
Size:Customized by clients,neeeds and solutions
Heat dissipation power: Customized by clients’ neeeds and solutions
Working environment:-40 to+120
Processing technology: uniform temperature plate/heat pipe embedded, solder welding/glue filing
Application scope: high-powerinverters, power supplies, energy storage, etc
Advantages:Low cost,high quality,and efficient docking



APPLICATION SCENARIO

Excellent material selection
Strictly select raw materials, with good processing performance, good thermal conductivity and natural heat dissipation
Exquisite craftsmanship
Excellent production equipment, exquisite craftsmanship, smooth and burr free product surface
Non standard customization
Customized according to customer needs, the product can be cut in any length and width. The thinnest teeth can reach 0.01mm, the thickest 2mm, the widest 700mm, and the highest 130mm

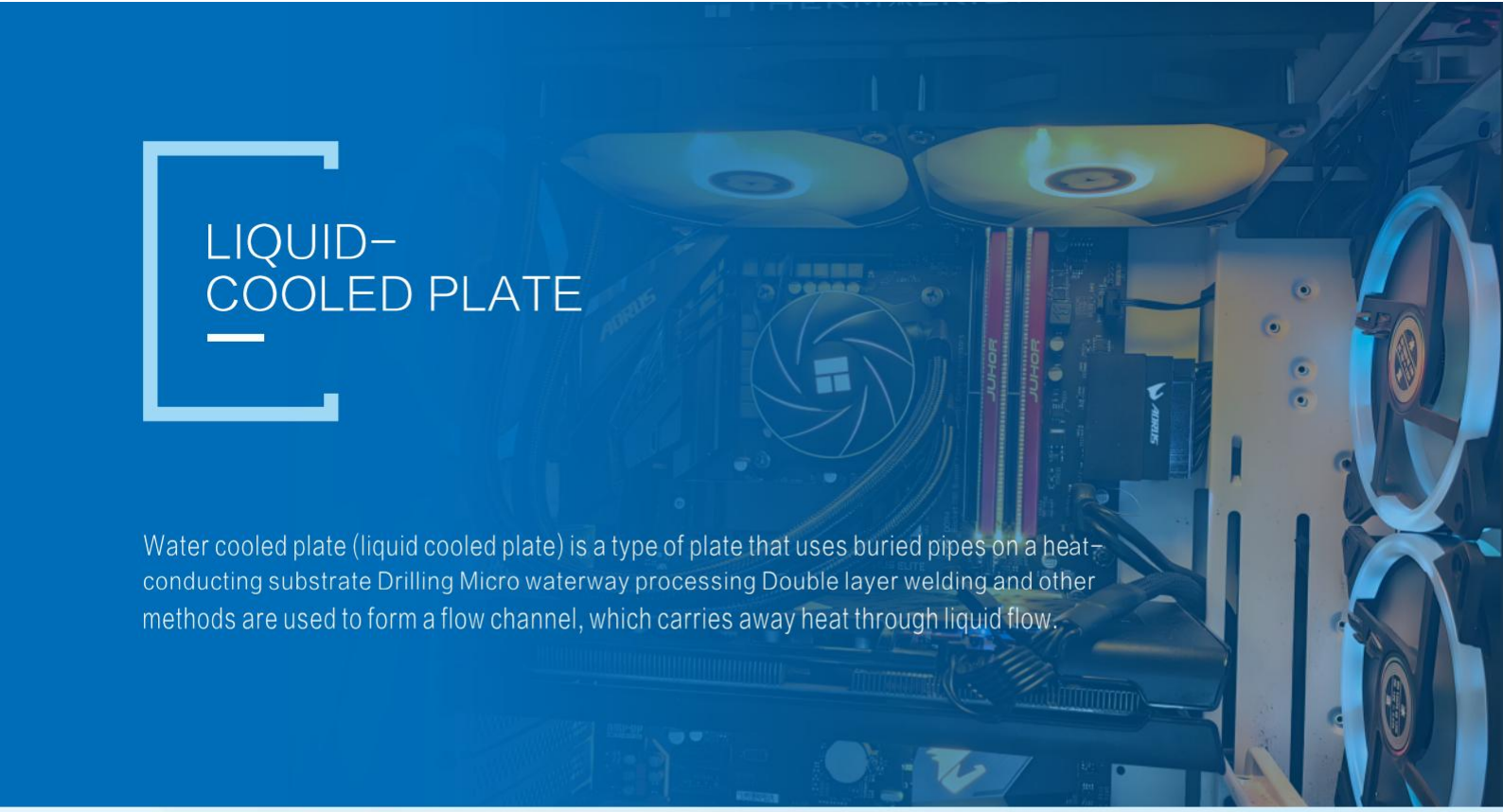

Energy storage inverter cabinet



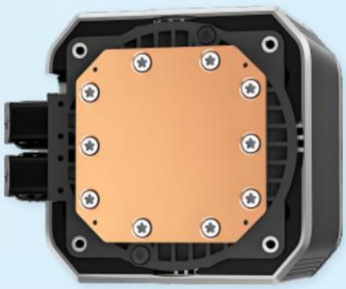


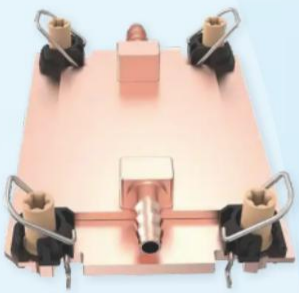
Industry Fields	Specific application cases	Technical benefit indicators
Data Center	Blade Server Cluster Cooling (Single Cabinet Power Density 5KW)	The PUE value is reduced to below 1.15, and the energy consumption of IT equipment is decreas ed by 30%
New Energy Equipment	Converter valve module forced air cooling system	The temperature rise control is less than 8K (under 1200A load conditions)
Automotive Manufacturing	Electric Drive System Cooling Management Platform	Heat loss is reduced by 22% and the cruising range is increased by 15%
Chemical Reactor	Heat dissipation supporting precision temperature - controlled reactors	The temperature fluctuation range is ±0.8 degrees (set at ±5 degrees)

LIQUID-COOLED PLATE



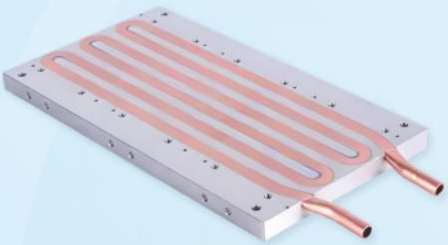
Water cooled plate (liquid cooled plate) is a type of plate that uses buried pipes on a heat-conducting substrate Drilling Micro waterway processing Double layer welding and other methods are used to form a flow channel, which carries away heat through liquid flow.





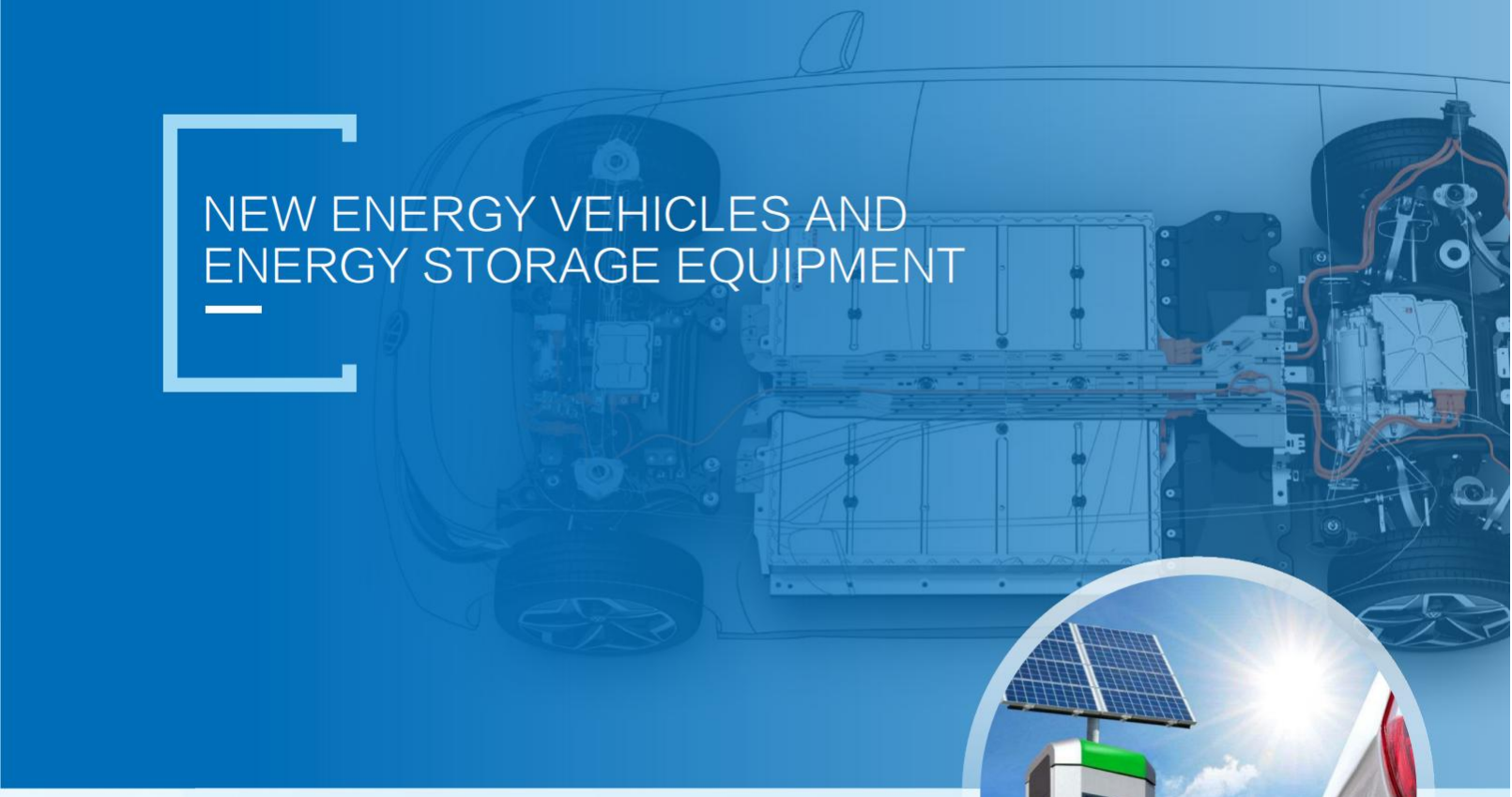








NEW ENERGY VEHICLES AND ENERGY STORAGE EQUIPMENT

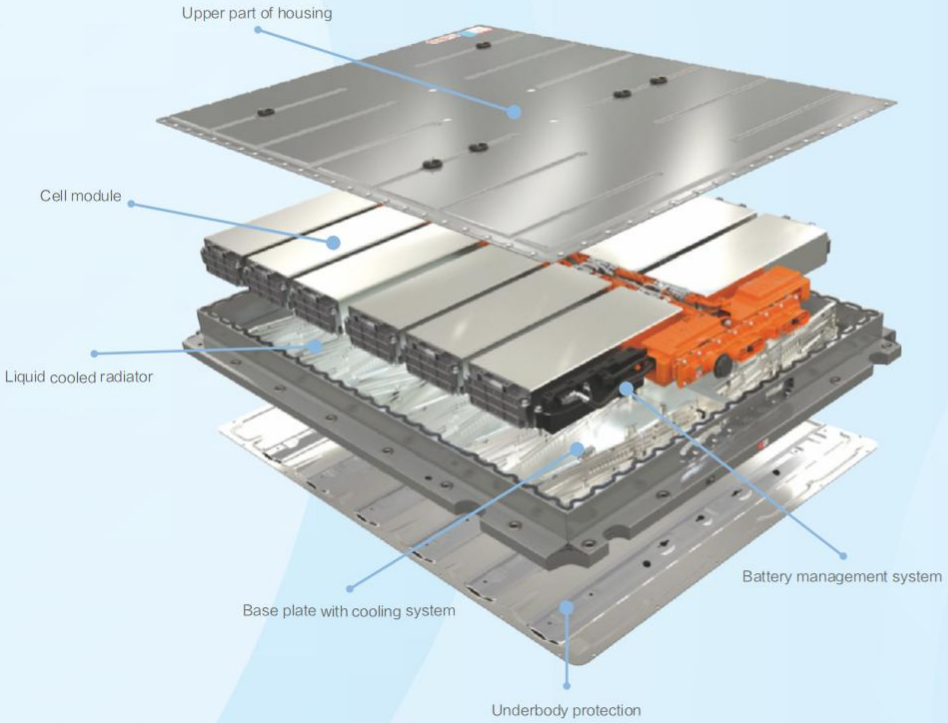


New energy

The aluminum alloy body is 40% lighter than the steel body, thereby improving the endurance of new energy vehicles and improving the corrosion resistance of the body; Meet the economic and efficient requirements of the new energy and energy storage fields, while also meeting the needs of heat dissipation, welding, and plastic processing.



Water-cooling plate



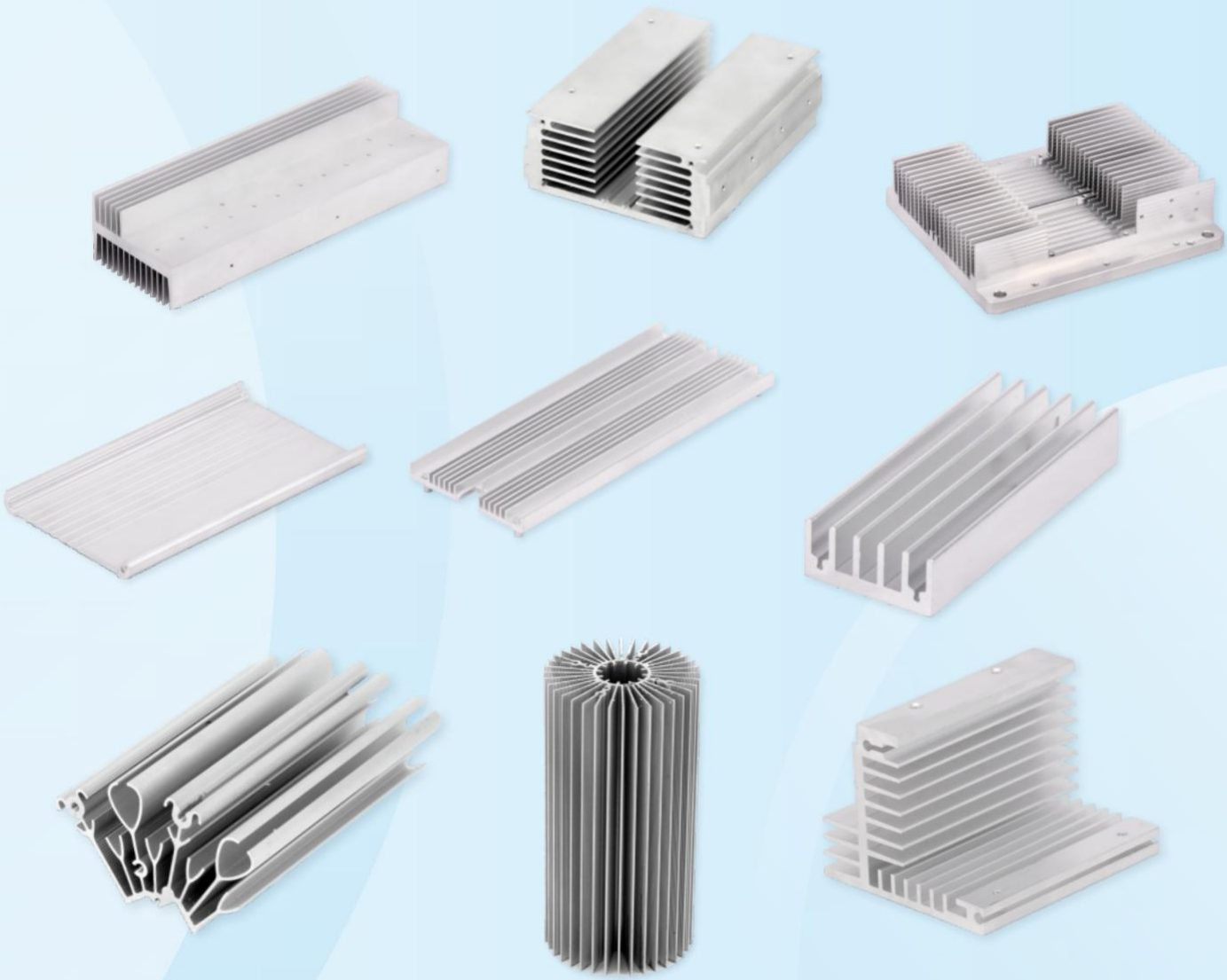


PROFILE HEAT SINK



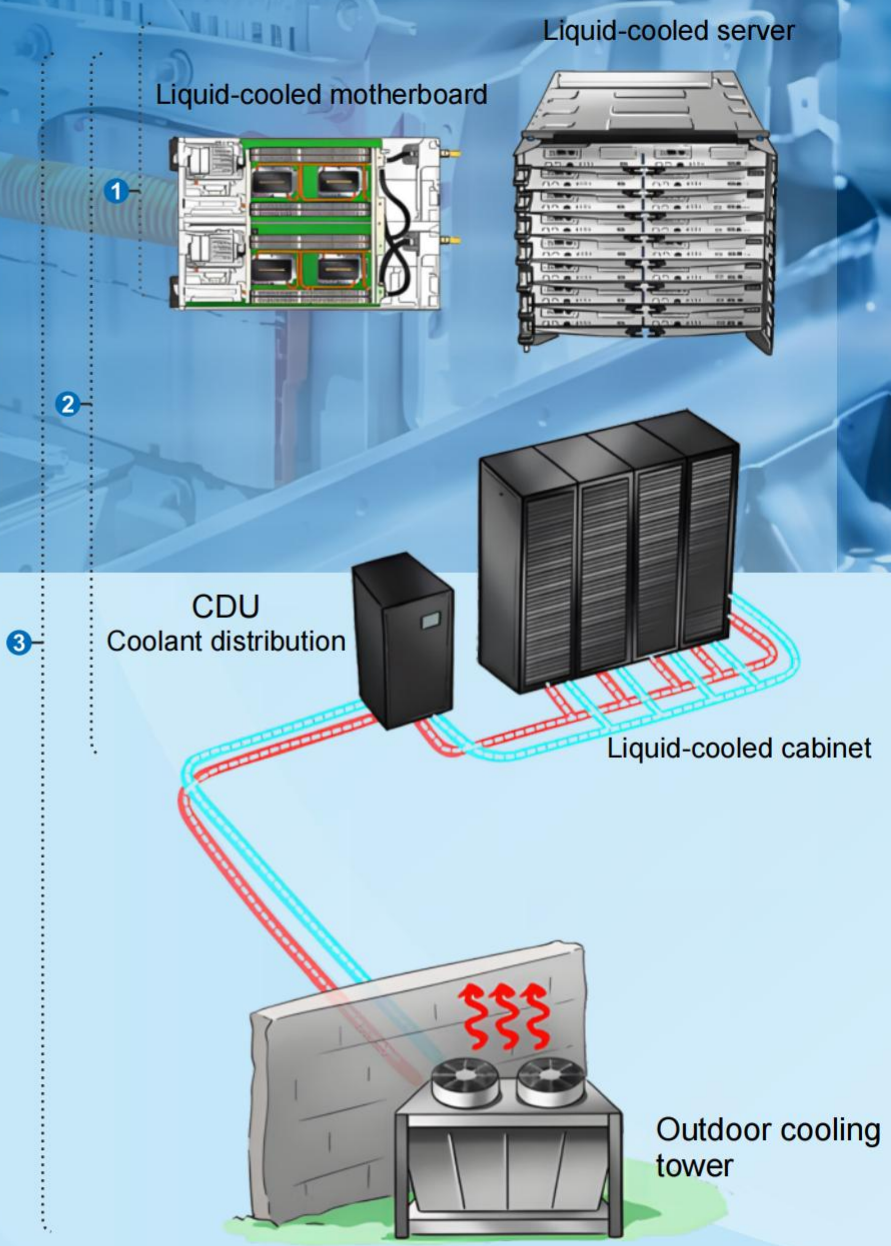
There are over 5,000 extrusion molding heat sinks to choose from for processing shapes.

These solutions enable higher-power systems to achieve a wider range of natural convection solutions and can also be used in combination with high-performance forced convection cooling fans. Demi's extruded heat sinks range from simple flat inverted fin structures to complex geometers, designed to optimize the cooling performance of any plate or device.



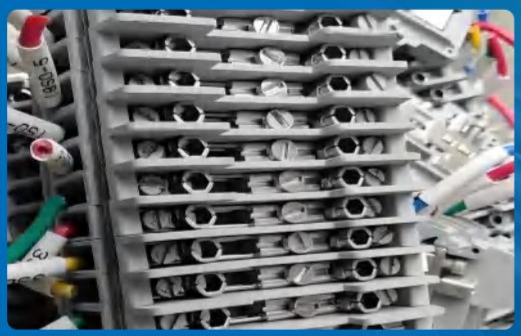
APPLICATION SCENARIO





Industry Fields	Specific application cases	Technical benefit indicators
Supercomputing Center	Liquid – cooled blade server cluster (power density of a single cabinet: 15KW)	The PUE value is reduced to below 1.12, and the energy consumption of IT equipment is decreased by 40%.
Cloud Computing Base	Liquid – cooled heat dissipation solution for hosted servers	The proportion of heat dissipation power consumption is reduced from 35% to 12%.
5G Base Station	Liquid – cooled system for base station power modules	The overall machine rate is increased to 96%, and the noise is lower than 65dB(A)
Biomedicine	Cooling for high – temperature PCR instrument groups	The temperature control accuracy is 0.2 degrees (set at 4 degrees).

APPLICATION SCENARIO

















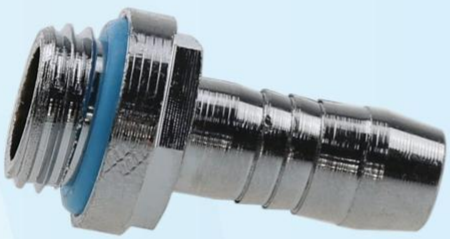




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Data Center	Blade Server Cluster Cooling (Single Cabinet Power Density 5KW)	The PUE value is reduced to below 1.15, and the energy consumption of IT equipment is decreased by 30%
New Energy Equipment	Converter valve module forced air cooling system	The temperature rise control is less than 8K (under 1200A load conditions)
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PRECISON HARDWARE PROCESSING PARTS

A significant reduction in the number of tooling is required to process parts with complex shapes without the need for complex tooling. If you want to change the shape and size of a part, you only need to modify the part processing program, which is suitable for new product development and modification.
Stable processing quality, high processing accuracy, high repeatability, suitable for the processing requirements of aircraft.
In the case of multi variety and small batch production, the production efficiency is higher, which can reduce the time for production preparation, machine tool adjustment, and process inspection, and also reduce cutting time due to the use of optimal cutting quantity.
It can process complex surfaces that are difficult to process using conventional methods, and even some unobservable machining parts.





PRECISON HARDWARE PROCESSING PARTS

QIFENG has a wide range of applications in this field, such as golf poles, ski poles, diving boards, luggage trolleys, trolleys, beach chairs, etc.













Precision lathe machined parts





Precision machined parts



Precision parts

CONSUMER, SMART HOME



Applications in electronic appliances include: Mobile phone casings, power banks, speakers, monitor casings, water-cooled motor casings, etc. the

The processing solutions provided by QIFENG have the following main advantages: various surface treatments can be carried out, multiple patterns and colors are available, there are no weld points, it has strong decorative properties, is beautiful and durable And it can meet personal needs.



Consumer electronics



Seamless aluminum tube: automotive fasteners



Seamless aluminum tube: optical lens



Optical equipment



Seamless aluminum tube: lens frame

PRECISON HARDWARE PROCESSING PARTS



QIFENG provides on-demand customized manufacturing services for aerospace metal and plastic parts to the global market. Our value proposition lies in a fast delivery cycle, rigorous material assessment, and strict quality control at different production stages. For over a decade, this has helped us provide all our customers with exemplary aerospace components!



Spacecraft



High-speed rail



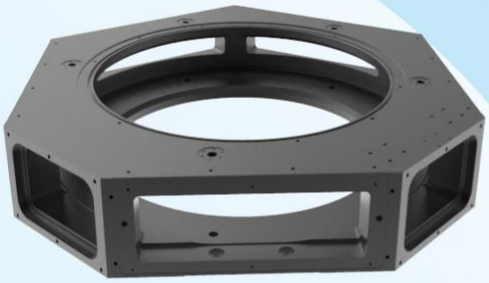


SEMICONDUCTOR CNC MACHINING

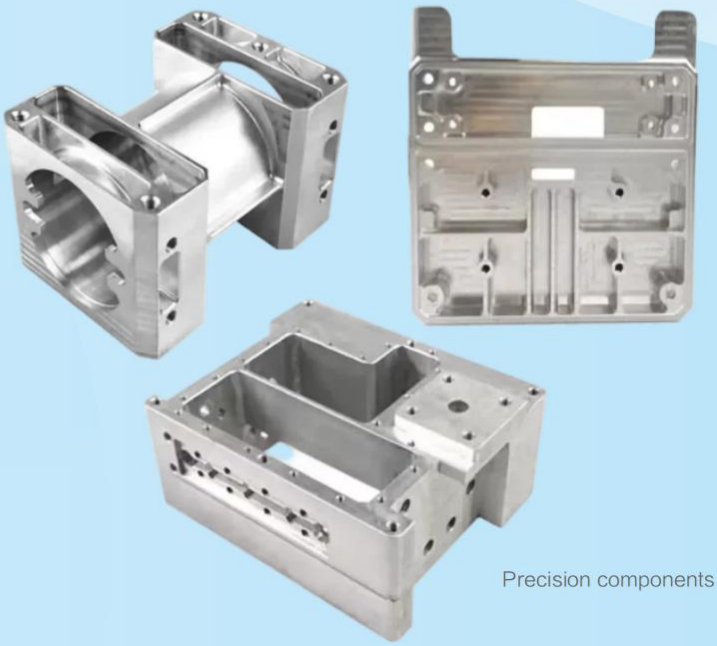
A full-service supplier of CNC machining, precision cleaning and assembly. We foc us on medium and high batch precision custom parts projects, which require intern al high-precision processing, cleaning, assembly and packaging.

Our semiconductor manufacturing team is always ready to provide you with the precision parts you need. Our process begins with direct communication with you to understand the specific specification requirements of each part. Are you interested in the semiconductor CNC precision machining required when producing multiple assembly parts?

Our team can provide you with professional services. We have an experienced semiconductor processing team that is well aware of your needs. Whether you need 50 or 50,000 semiconductor components, our team can produce a variety of products that meet your needs and satisfy the demands of your numerous customers. We focus on precision and quality, striving to do everything to the best of our ability at one go. By cooperating with us, you can increase your chances of achieving your monthly production targets and ensure that you produce the high-quality products that your customers expect.



Aluminum cavity



Precision components

Structural components



FORGING PRODUCTION AND PROCESSING

QIFENG strictly controls every step of the process from raw material production to aluminum alloy forging processing, aluminum alloy forging and pressing, and aluminum alloy forging and pressing cnc processing. It conducts strict quality inspection on products to ensure product quality. According to the product requirements of customers, it can process based on provided drawings and samples.



CNC machining of forgings



Production equipment



Semiconductor cavity



Forging production



Aerospace forgings



Equipment frame

PRODUCTION STRENGTH

- A sound production management organizational structure and proficient production process design Research and development Quality control experience.
- We have advanced equipment both domestically and internationally, and our team has efficient and flexible organizational capabilities, which can meet various customers' flexible delivery needs.
  At present, our company has a professional team with 200 employees.
- The equipment includes more than 150 sets of CNC machining center, tooth relieving machine, centering machine, tool feeding machine, cutting equipment, gear hobbing machine, friction welding, constant temperature and humidity, heat dissipation simulation test, heat pipe test, high and low temperature test, tensile test, three-dimensional, anime, film thickness meter, roughness meter, etc.


Friction welding equipment


CNC skiving machine


CNC machining center production line


High-precision through-spindle machine


CNC machining center production line


Friction welding equipment


High-precision through-spindle machine


CNC machining center production line

PRODUCTION CAPACITY

All processes are completed in the same factory. With professional technology and advanced equipment, QIFENG is capable of providing a variety of processing services , such as milling, boring, turning, tapping, thread milling, kimmering, profile processing, reaming, end face processing, etc.



CNC Turning machine



5-Axis CNC Machining



CNC Turning machine

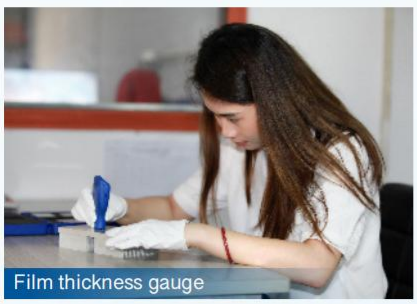


3-Axis CNC Machining

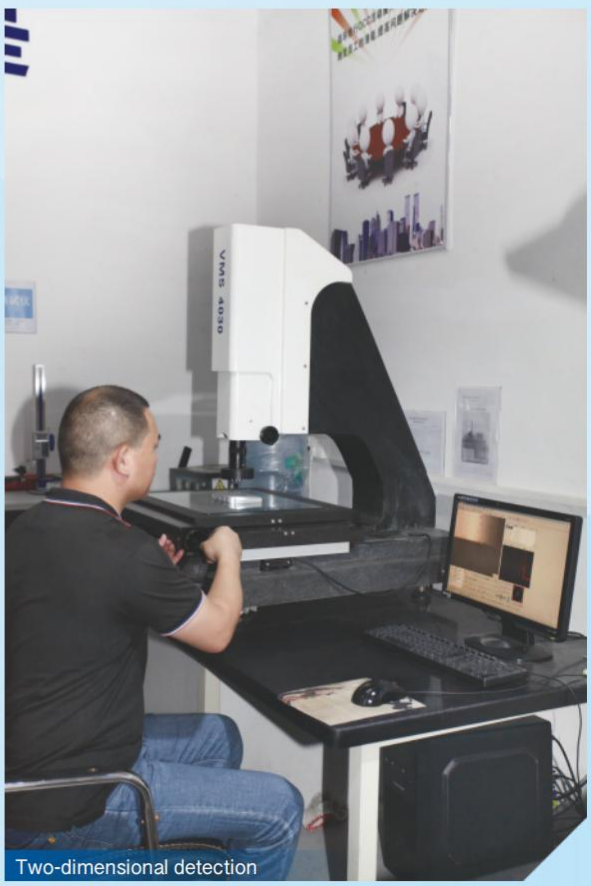
QUALITY CONTROL CAPABILITY

We have a well-established quality department organizational structure, a professional quality management team of over 20 people, and advanced testing equipment both at home and abroad!


Roughness tester


Film thickness gauge


Three-dimensional detection



Two-dimensional detection

QUALITY CONTROL

质量控制



- We have multiple sets of advanced testing instruments and tools, spectral analyzers, metallographic microscopes, universal testing machines, and a team of over 20 people in the three-dimensional laboratory testing and quality inspection
- Raw material composition testing, process standardization operation



Hardness tester machine



Three-D



Metallographic microscope



Spectral analysis instruments

R & D CAPABILITIES



R&D team: 20 R&D engineers, simulation engineers, and testing engineers
Structural design: CREO
Thermal simulation: FloEFD、Flotherm
QMAX: Withstand voltage test,Flow resistance test
Performance test: thermal resistance tester, anemometer, pressure drop meter, wind tunnel, high and low temperature cycle, cold and hot shock, high temperature aging, water cooling cycle system



Heat pipe Qmax test



High and low temperature cycling aging test



Thermal resistance performance test

High-temperature constant temperature box



COOPERATIVE CLIENTS

Shaping the future, embarking on the path of innovation



Corporate Vision

To become a solution preacher in the application field of copper and aluminum new materials in China

Enterprise mission

Serve customers well and create value!
Promote the progress and development of the industry!
Achieving a happy life for employees!

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