



# Product Introduction of Marine Vessel Products

——Sichuan Yonggui Technology Co., Ltd.



Technology Connection to Future



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# Company Introduction





# 1. Company Information



- ◆ Sichuan YONGGUI Technology Co., Ltd. was established in Mar 2008 with a registered capital of 120 million CNY and total assets of approximately 1.8 billion CNY. It is a wholly-owned subsidiary of Zhejiang YONGGUI Electric Appliance Co., Ltd. (Stock Code: 300351).
- ◆ Occupy an area of over 200 acres, with factory buildings and office spaces more than 200,000m<sup>2</sup>. Equipped with over 5,500 sets of R&D, and production equipment.
- ◆ Recognized as a national high-tech enterprise, a national intellectual property demonstration enterprise, and a national "Specialized, Refined, Distinctive, and Innovative" (Little Giant) enterprise. Capable of providing comprehensive interconnect system solutions for key national equipment industries.
- ◆ At the end of 2024, the company's sales performance reached 1.78 billion yuan.

Products are primarily used in rail transportation, industrial applications, special equipment, new energy vehicles, and energy storage systems. Among these, special equipment covers defense, explosion-proof, liquid cooling, shore power, watertight, and nuclear power sectors.



**Railway & Industry**

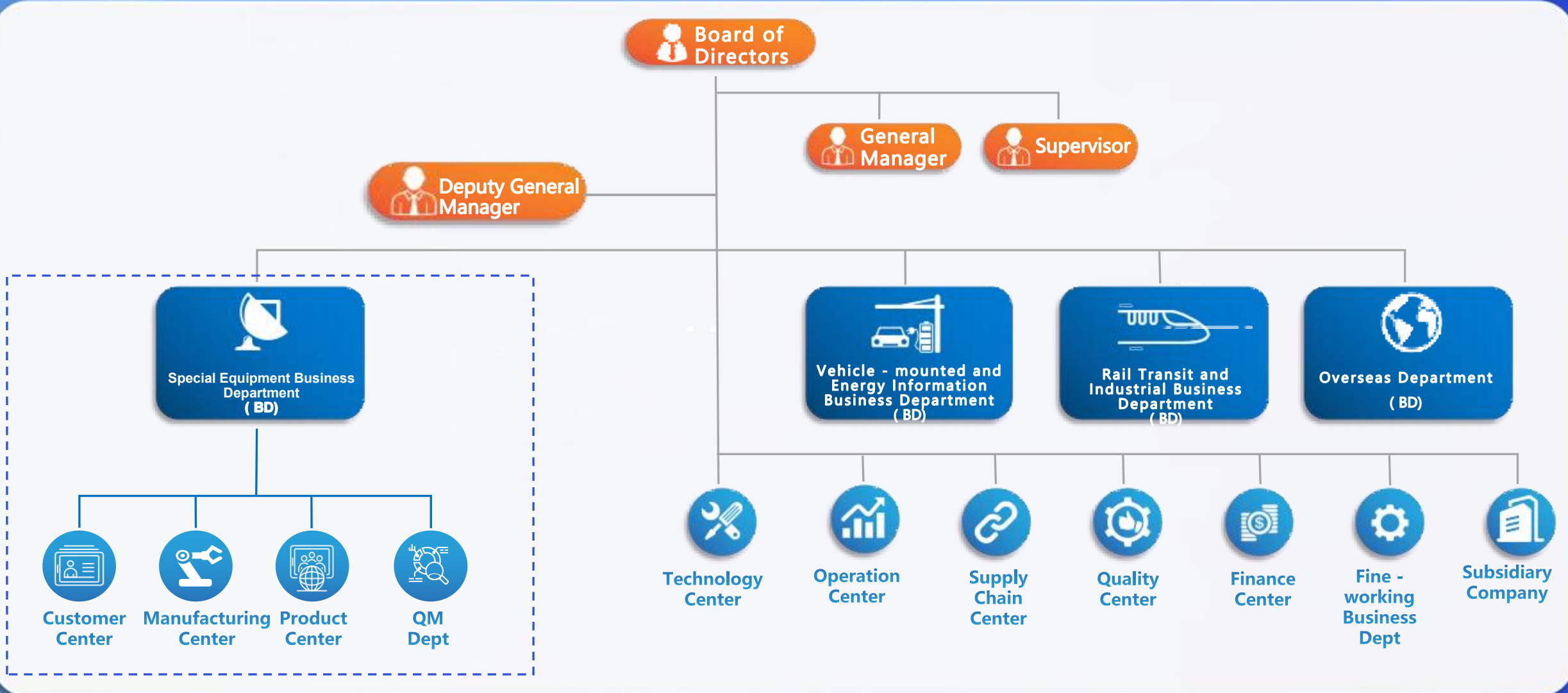


**Special Equipment**



**New Energy**

## 2. Organizational Structure





# 3. Quality System



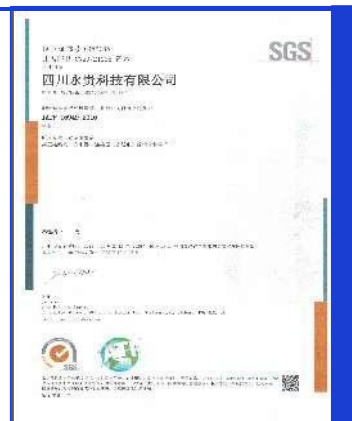
**ISO14001**  
**Environmental Management System**



**ISO45001**  
**Occupational Health and Safety Management System**



**ISO9001**  
**Quality Management System**



**IATF16949**  
**Quality Management System**



**ISO/IEC17025**  
**Laboratory Management System**



**GB/T29490**  
**Intellectual Property Management System**



**QC080000**  
**Hazardous Substances Management System**



**ISO/TS22163**  
**Quality Management System**

- GJB9001C System Certificate
- Level 2 Confidentiality Qualification Unit Certificate
- Weapon Equipment Scientific Research and Production License
- Equipment Supplier Registration Certificate

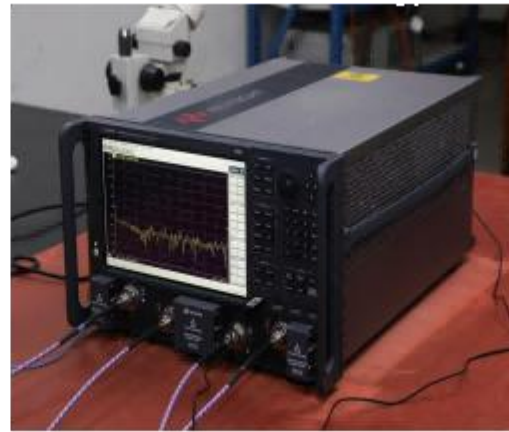
**Special Defense Qualification**



**AS9100D**  
**Quality Management System**

Combined with the multi-field application of products, YONGGUI has passed multiple QM system certifications. It helps YONGGUI continuously improve and standardize its management level, enhance its overall comprehensive competitiveness, and continuously provide high-quality products for multi-field applications to our customers.

# 4.Product Test



**YONGGUI has established a dedicated testing center, which has obtained CNAS certification. The testing center covers an area of over 2,000m<sup>2</sup> and is equipped with more than 200 sets of testing and experimental equipment. It is capable of conducting mechanical, electrical, environmental, and physicochemical testing and verification on various products, components, and materials.**



# 5. Part Processing

01

## Machining

Equipped with over 150 precision machining devices, capable of producing 70 million parts per year.



Machining

02

## Stamping

Possess more than 50 production machines, with an annual capacity of 1 million sets of cabinets / enclosures.



Stamping

03

## Mold Processing

Operate over 50 sets of injection molding machines, enabling the production of 80 million injection - molded parts per year.



Mold Processing

04

## Surface Treatment

Feature 11 production lines for processes including gold plating, silver plating, tin plating, zinc plating, phosphating, nickel plating, and oxidation coloring.



Surface Treatment

# 6. Intelligent Manufacturing



01

## Planning and Design

Development planning of the automated production, including the formulation, review, supervision, and execution of technical renovation plans.

02

## Assembly and Debugging

Design, development, assembly, and debugging of automated equipment, specialized equipment, and testing equipment, and technical training for relevant personnel.

03

## Upgrading and Transformation

Introduction and application promotion of advanced specialized equipment and automated equipment, production line planning and construction, and promoting the intelligent upgrading and transformation of equipment and production lines.

04

## Promotion and Cooperation

Tackling key challenges in the automation and digitalization of production equipment, promoting the application of new technologies, and engaging in external technical exchanges and cooperation.



Robot Applications



Visual Applications



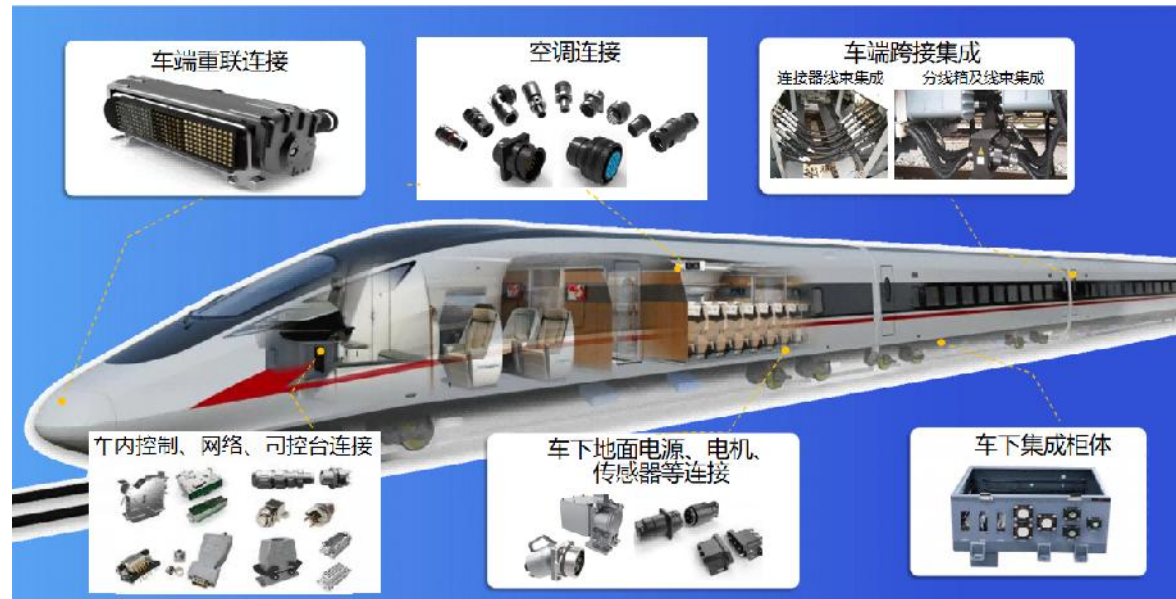
Data Collection



Complete Machine Development



# 7. Civilian Products







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# Marine Vessel Products



## 2. Development and Application of Marine Vessel Products



③

Underwater Sealing Series



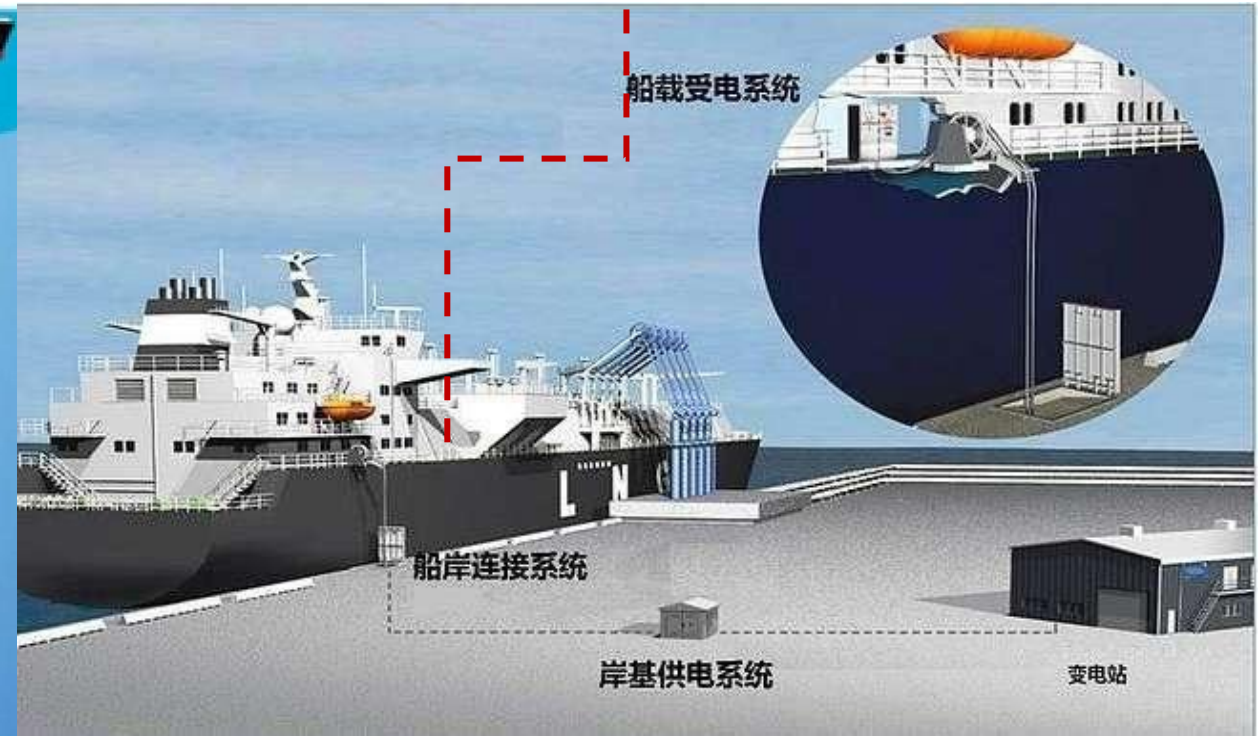
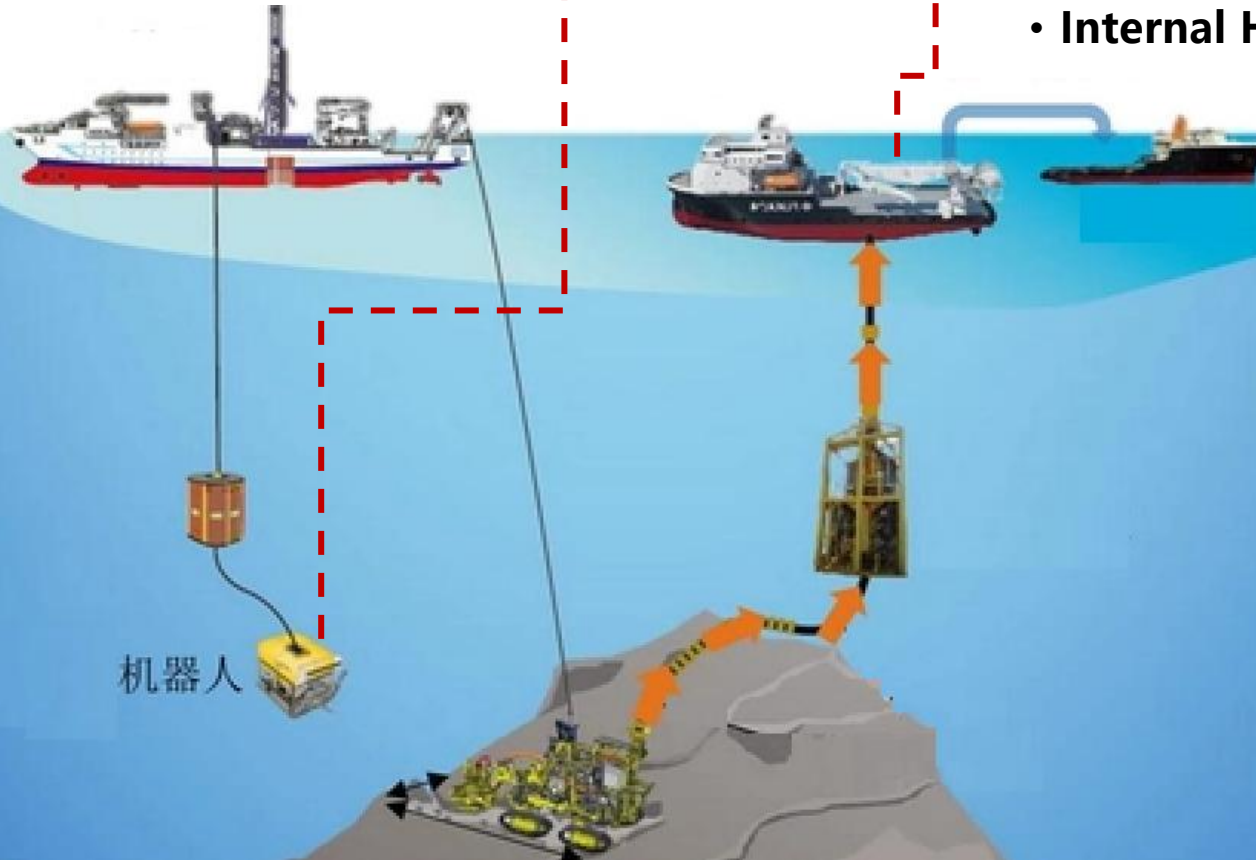
②

- Marine Stainless Steel Series
- Internal HV Interconnection Series



①

- Shore Power Series
- Charging Series



## 2. Development and Application of Marine Vessel Products



### ➤ Shore Power Series & Charging Series

Shore Power Series



For traditional fuel-powered vessels to provide shore power, ensuring the operation of lighting, communication, entertainment, and other facilities.

Charging Series



For charging electric vessels to replenish energy while docked.

Battery-swapping Series



For battery-swapping electric vessels to replenish energy after docking.



## 2. Development and Application of Marine Vessel Products



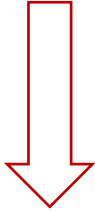
### ➤ Shore Power Series

Military Shore Power Connectors

High Voltage



Low Voltage



JG1431-P(3+9+2)P-350A  
AC 7200V 350A



JG16-3T/Z  
AC 500V 160/300A



JG536-D800  
DC 500V 800A



JG536-D320  
DC 500V 800A

# 2. Development and Application of Marine Vessel Products



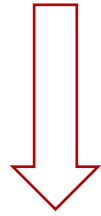
## ➤ Shore Power Series

Military Shore Power  
Integrated Products

Cable Reel



Charging Cabinet  
Shore Power Box



Electric Cable Reel



Manual Cable Reel



Charging Cabinet



Integrated Charging Cabinet



Integrated Shore  
Power Box



Integrated Shore  
Power Box



## 2. Development and Application of Marine Vessel Products



### ➤ Charging Series

In addition to equipping shore power products as charging ports, we also provide fast charging and super charging products compatible with Chinese standards.



- Category: Fast Charging
- Interface complies with Chinese National Standard (GB/T 20234)
- Charging Current: 250A
- Increase charging current to 300A without changing the interface size and using auxiliary cooling.



- Category: Super Charging
- Interface complies with Chinese National Standard (GB/T 20234)
- Charging Current: 500A/600A
- Integrate liquid cooling system in products and cables without changing the interface size to offset the heat effect of increased current.



- Category: Megawatt-level Super Charging
- Customized Interface
- Charging Current: 1000A/2000A
- Customized by YONGGUI for Huawei, with interface size transitioning to Chinese national standards, allowing compatibility with GB/T 20234 for charging.

## 2. Development and Application of Marine Vessel Products



### ➤ Charging Series

Super charging can provide solutions for the charging pile end and liquid cooling systems, with the ability to customize interfaces and systems according to customer requirements.

Liquid Cooling Systems

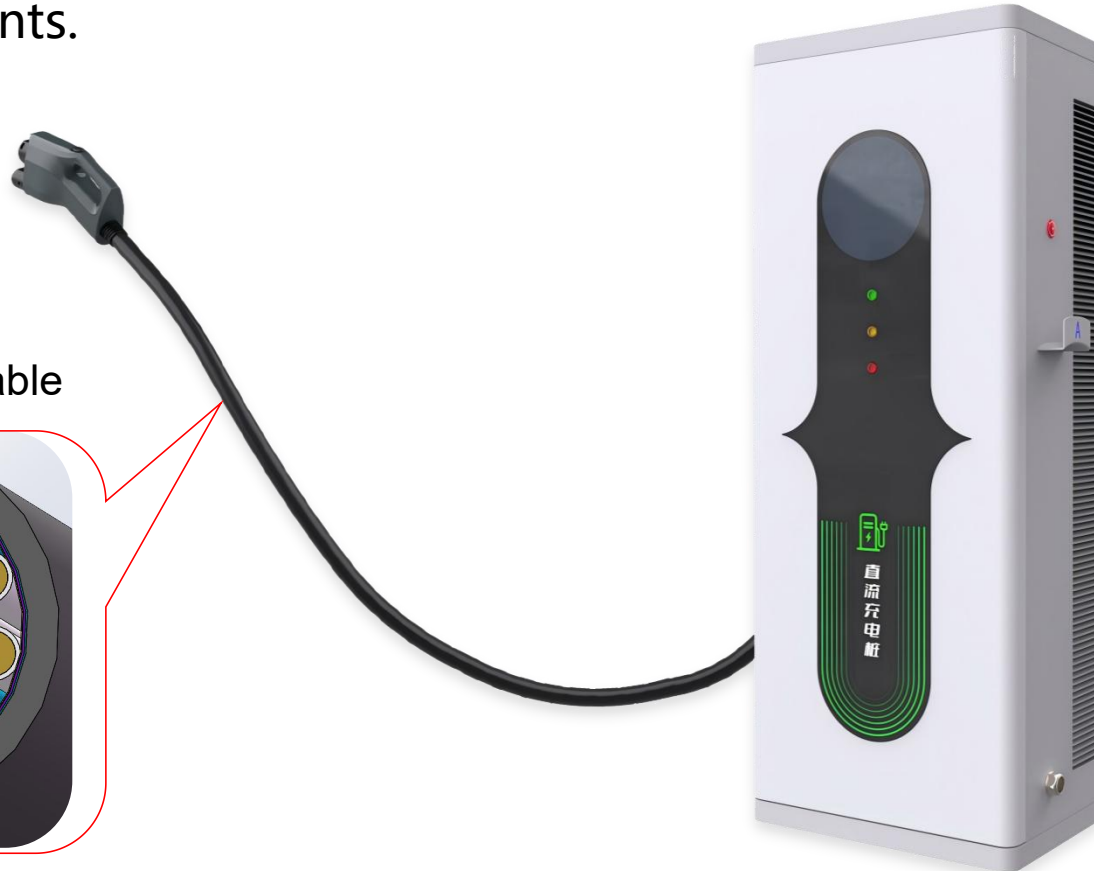
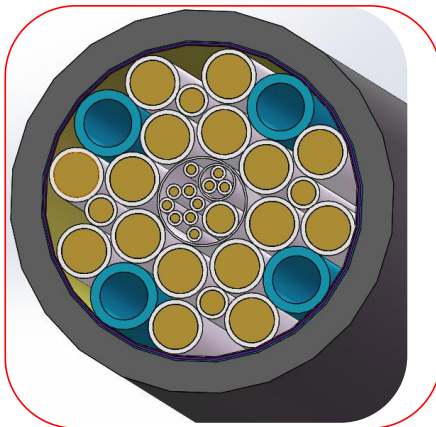


*1.8kW Water Cooling System*



*6.0kW Cooling System (shared for water and oil).*

Liquid Cooling Cable



Liquid-cooled Charging Station

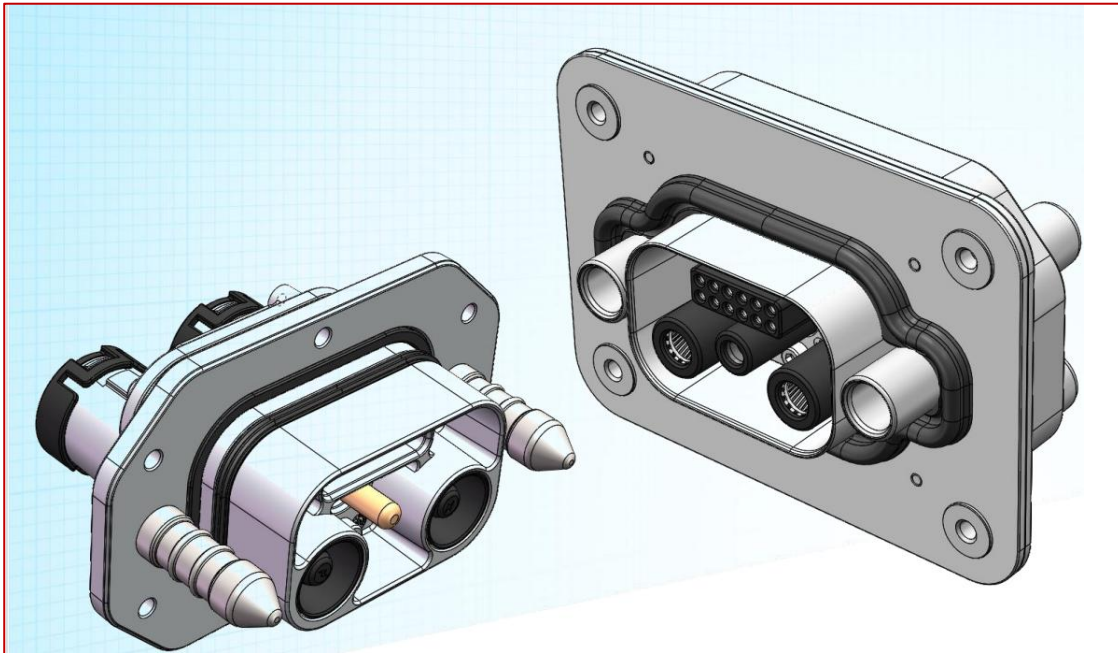


## 2. Development and Application of Marine Vessel Products

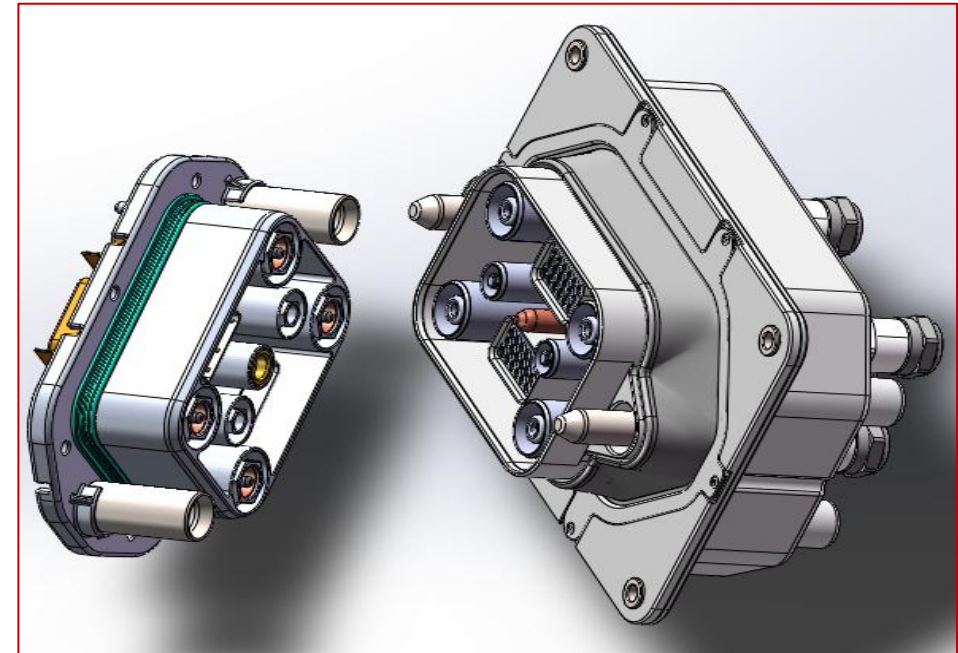


### ➤ Battery-swapping Series

Floating installation, supports automatic docking, and features advantages such as anti-electric shock, HVIL, temperature control, and high durability.



12-pin Battery Swap Connector



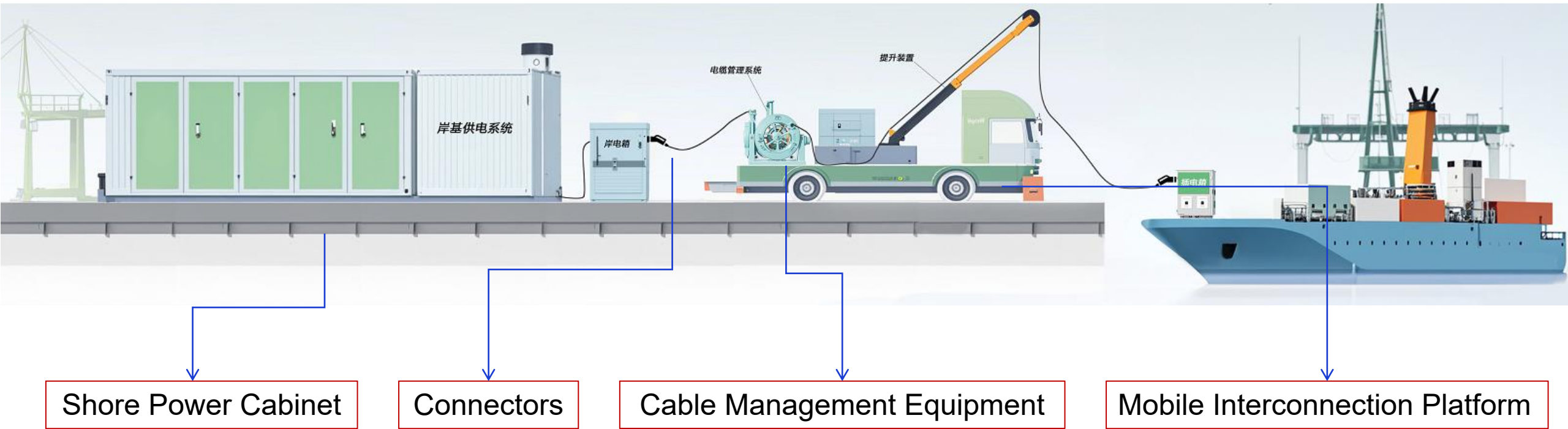
4+2+24-pin Battery Swap Connector

## 2. Development and Application of Marine Vessel Products



### ➤ System Solution

YONGGUI can offer system solution of shore power products.





## 2. Development and Application of Marine Vessel Products



### ➤ Marine Vessel Connectors – Stainless Steel

The product belongs to the YM series, featuring high corrosion resistance suitable for marine environments.

- YMA Series: Bayonet connection, marine signal connectors, with 9 types of housings and 57 type range.
- YMB Series: Threaded connection, marine signal connectors, with 9 types of housings and 57 type range.
- YMD Series: Threaded connection, marine high-current connectors, with 4 types of housings and 5 type range.
- YMG Series: Bayonet connection, marine signal connectors, with 9 types of housings and 57 type range.



YMD Grand Series Connectors



YMG Series Connectors

## 2. Development and Application of Marine Vessel Products



### ➤ Internal HV Connectors

The products mainly include battery module interconnection connectors, manual maintenance switches, HV cable group, and PDU products.



Battery Module Interconnection Connector



Manual Maintenance Switch

- Rated Current: 120A/200A/300A/400A
  - Rated Voltage: 1500V DC
  - Application: Power transmission between energy storage battery modules
  - Product Features: Multi-angle plugging, anti-rotation plugging, dual fool-proof design
- Rated Current: 250A/350A
  - Rated Voltage: 1500V DC
  - Application: Segmentation between energy storage battery modules
  - Product Features: Compact size, HV interlock, multi-stage unlocking



## 2. Development and Application of Marine Vessel Products

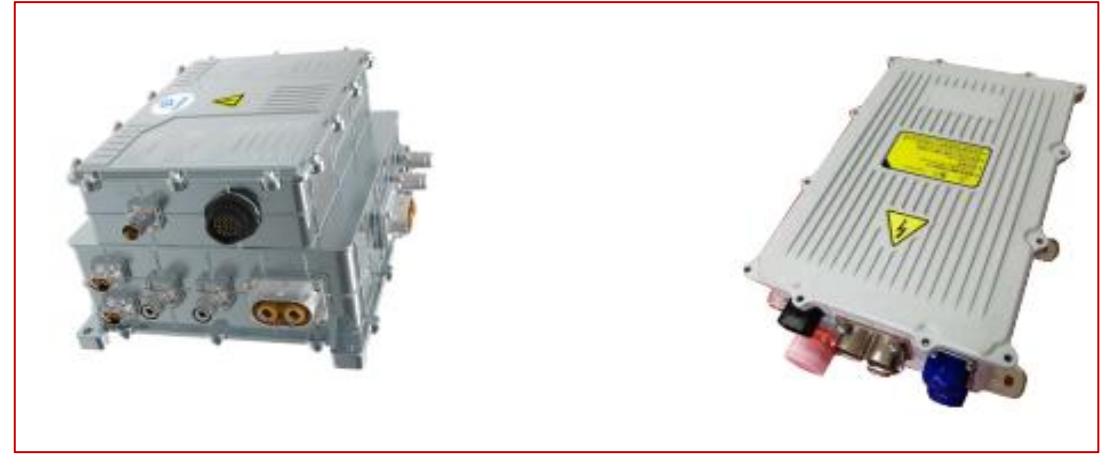


### ➤ Internal HV Products



HV Wiring Harness

- HV wiring harness could be customized according to user requirements.



PDU

- Rated Current: 100-500A
- Rated Voltage: 100-800V DC
- Enclosure: Cast aluminum & SPCC plate
- Features: High resistance to salt spray and developed to meet customized requirements.

## 2. Development and Application of Marine Vessel Products



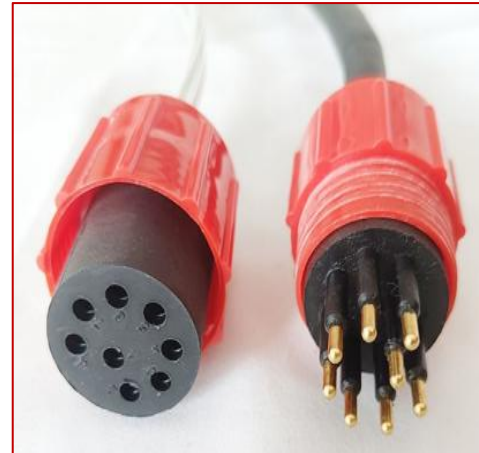
### ➤ Underwater Sealed Series Connectors

The products have two major series, SM and SH, covering low-frequency signal transmission, grid-power hybrid signal transmission, and optoelectronic hybrid signal transmission, etc.

- SM series: Suitable for a depth of 0 – 3000m. There are a total of 7 shell numbers and 40 model range. The products are sealed by glass sintering.
- SH series: Suitable for a depth of 0 - 7000m. There are a total of 8 shell numbers and 24 model range. It is sealed by rubber vulcanization.



SM Series Metal Sealed Connectors



SH Series Rubber Sealed Connectors



## 2. Development and Application



### ➤ Liquid Cooling Connectors and System



### Fluid Connectors



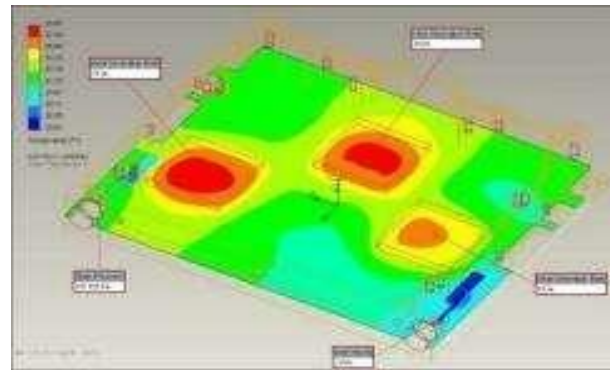
Fluid connectors can be quickly connected and disconnected manually without tools, and it is ensured that there will be no leakage of internal liquid during the process. Dual-sealing is functional.

There're three connection methods and diameter, LTF/LTFP series blind-mate type, the LTA/LTAX series bayonet type, and the LTC series push-pull type, meeting almost all requirements.

- Multiple matrix materials adapt to different working environments.
- Multiple sealing material options match different cooling media.
- Multiple interface types meet diversified requirements.



Temperature Nephogram



Sectional Temperature Nephogram



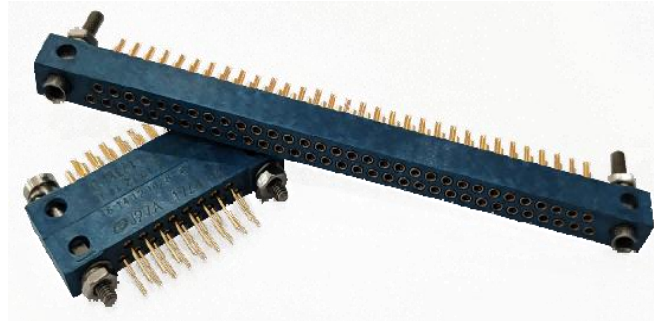
# 2. Development and Application

## ➤ Other Connectors

Device Internal Interface Micro Rectangular Series



Board-to-Board Interface Connectors



High-Frequency Connectors



Nuclear Power Connectors



Cable Reels



Component Integration







# Thanks for Watching

*YONGGUI Connectors·Interconnector Expert*