



China GCE Co.,Ltd

Company Introduction

2024

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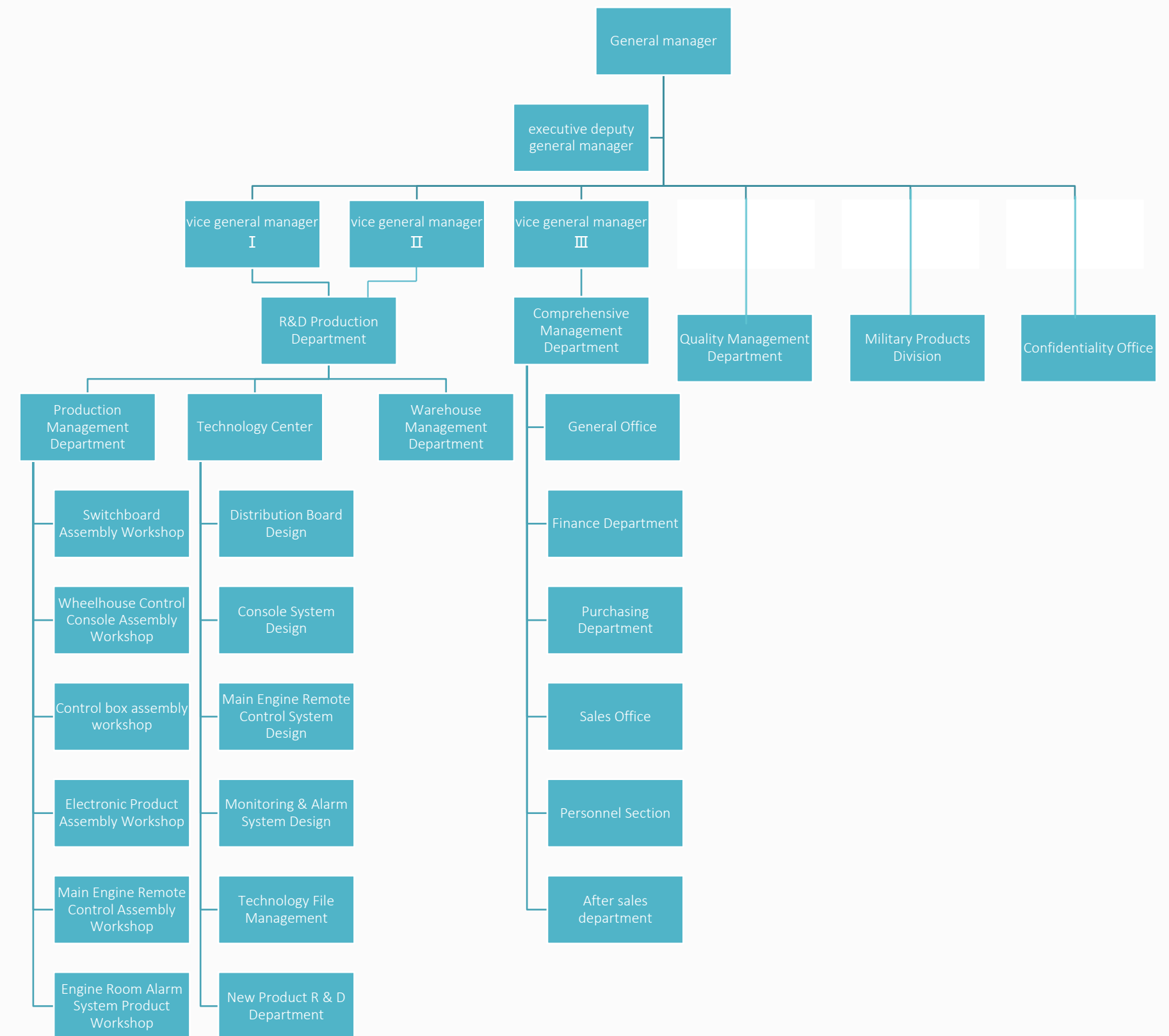
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Company Profile



- China GCE Co., Ltd. was established in 1998, specializing in **developing and manufacturing marine electrical distribution equipments and automation equipments**. It is one of the rare system solution providers in the industry, providing customized system product solutions, after-sales service, and Giat platform to monitor product operating conditions.
- Our core management personnel have excellent industry backgrounds and rich frontline experience. Our organizational structure is clear and reasonable, and we attached great importance to building a technical research and development team. Among the company's employees, the **proportion of technical research and development personnel reaches 20%**.



Company Profile

- Predecessor:

Electrical appliance factory

- Products:

Low voltage distribution equipment for ships

Design and Manufacturing of Offshore Ship Electrical Appliances

Bus system detecting alarm system

Electric control type main engine remote control system

1998

2006

2008

- Renamed:

China GCE Co., Ltd.

- Layout:

Established 10 sales outlets in China

Established Shanghai Marketing Technology Center

- Qualifications and Licenses:

Signed IWS with ABB and Rexroth

Signed OEM manufacturing license with Schneirder

Sales revenue exceeds 100 million

- Layout:

Hongkong GCE was established.

- Qualifications and Licenses:

Main engine remote control system and engine room monitoring alarm system have passed CCS/GL type approval.

Established a global service network with IMESA from Italy.

AMS products have passed NK type approval.

GCE

Company Profile



- Production:
- The new factory covering an area of 50 acres has been completed
- Qualifications and Licenses:
- Establish a strategic partnership with Siemens marine medium voltage distribution system
- Main engine remote control system has passed DNV GL and KR type approval

2013-2018

2020-2021

2023

- Layout
- Established Singapore ANCAI Electric Pte.ltd
- Continuous progress in business management and product production**

- Qualifications and Licenses:
- Obtained **military product manufacturing qualification certificate**
- The AMS system has passed NK and ABS type approval
- Shore power products have obtained the first batch of CCS type approval
- Production and Products:
- Moved to the Equipment Demonstration Park in Anyang High tech Zone and collaborated on the research and development of Ship-to-shore communication system products
- Layout:
- Established Shanghai GCE Co.,ltd

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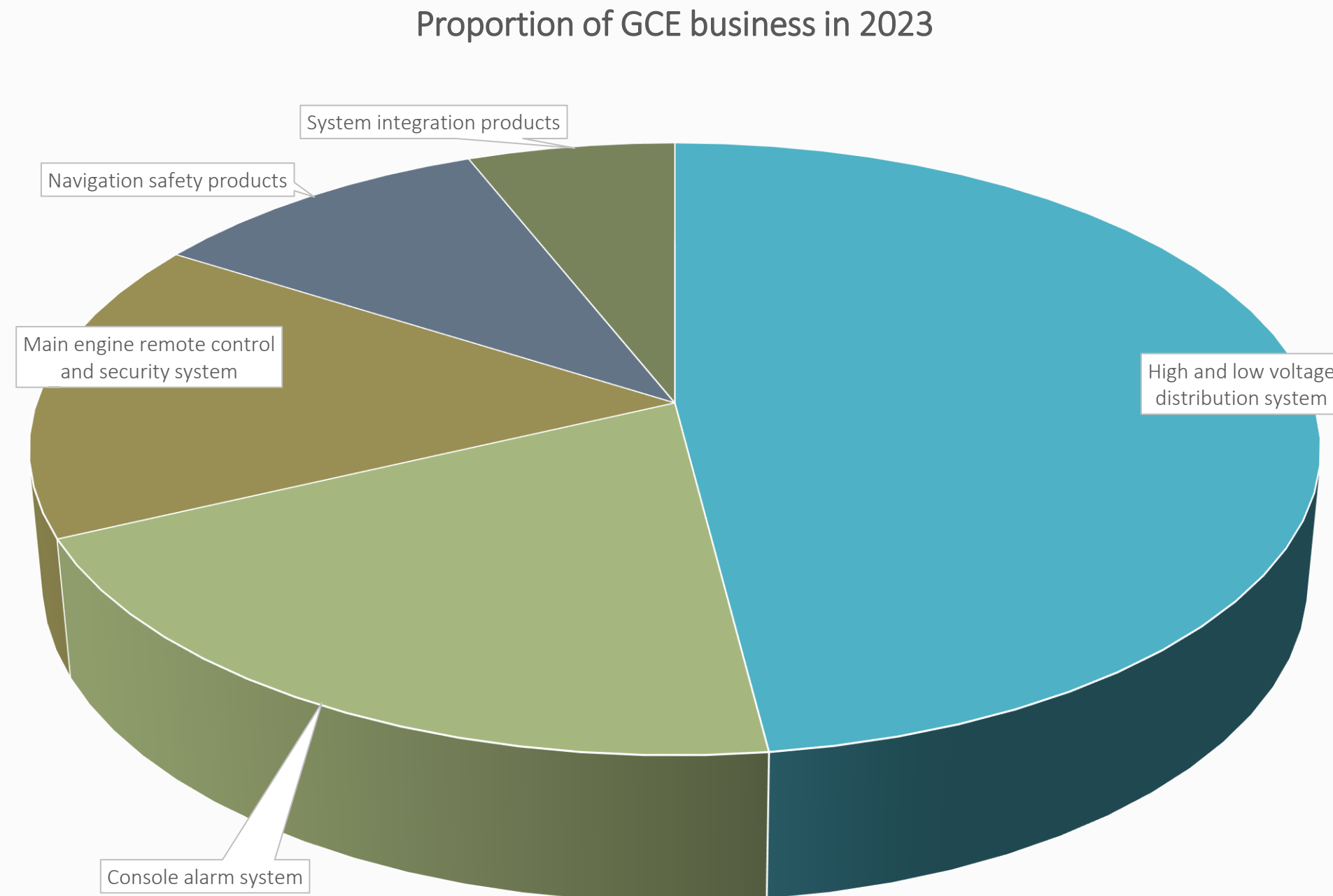
04 Market Advantage

05 Production Advantage

Diverse Product Portfolio



- We offer a wide range of products including marine electrical systems like boat main switchboard and ESB, and automation systems like monitoring alarm systems and remote control systems to meet various customer needs.
- Our products include international brand authorized cooperative products and independent brand products.



Diverse Product Portfolio

GCE



GCE Medium voltage cabinet



GCE Low voltage cabinet



GCE Charging and discharging panel



Schneider MB301/401 cabinet



ABB MD190 cabinet

High and low voltage distribution system



Engine control console



Chart table



GCJK Wheelhouse control console



Front wall ceiling panel

Control system



Cabin microcomputer alarm monitoring system



Medium speed main engine remote control



Low speed main engine remote control

Automation products system



main engine telegraph



Telegraph Recorder



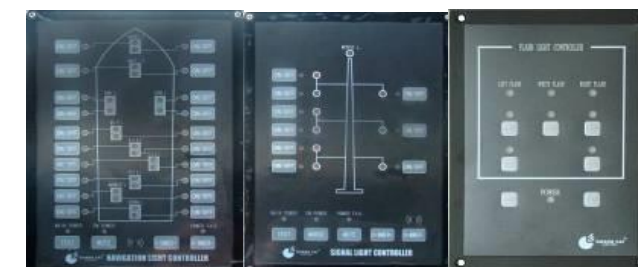
Navigation watch alarm system



Ship Navigation Integrated Information Display System



Combination sound and light alarm light board



Controllers for navigation lights, signal lights, and flashing lights

Navigation safety products

System Integration Capability

GCE

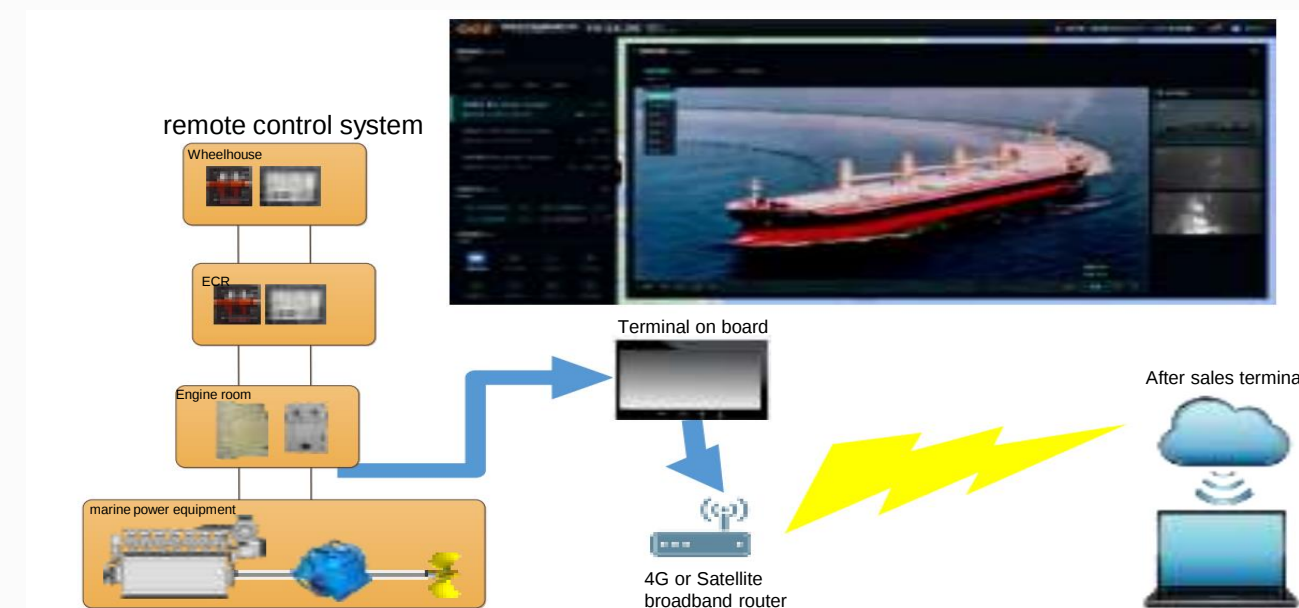
- The diverse product portfolio has enabled the company to transform from a simple equipment factory into a system solution provider with the abilities of marine power distribution system integration and ship/port automation system integration, which actively respond to the development goal of "significantly improving supporting capabilities and levels" proposed in the 12th Five Year Plan for the development of the shipbuilding industry.

GCE intelligent distribution system integration



Based on precision measurement technology, embedded motor control unit, frequency conversion control unit, insulation monitoring and fault location, and other types of intelligent control units. Based on a single controller as the basic control node, a digital ship intelligent distribution control system is constructed through device level data collection, state perception, precise control, and device interconnection. The system utilizes IoT technology to achieve autonomous control, state monitoring, fault analysis, data visualization, and intelligent management of ship electrical equipment, achieving optimal energy efficiency management.

GCE automation system integration



- Our company has launched 5400 sets of automation products on board and 200 sets of products annually to the market. With a large number of ships and constantly changing navigation dynamics, the maintenance and fault diagnosis of port automation products have become one of the pain points in the full lifecycle management.
- Our company is committed to upgrading and transforming the automation system of ships in navigation, achieving the ability to monitor the operation of products at the shore end. Through comparative analysis of recorded data and parameters, combined with the characteristics of relevant equipment and the composition of the entire system, fault points and related pre alarms can be identified. The data can be transmitted back to the server through communication equipment at the dock, and clearer judgment ideas and maintenance plans can be made through a large amount of data.

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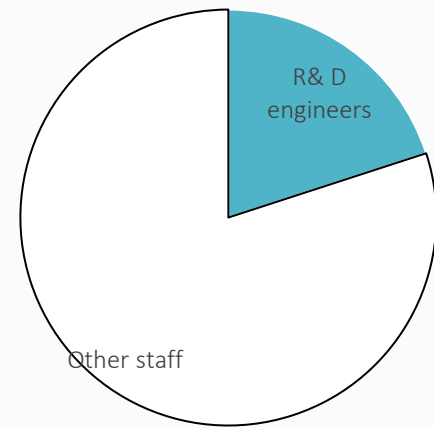
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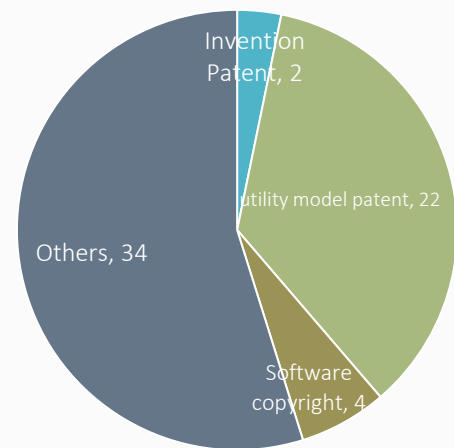
R & D Advantage



Proportion of technical personnel



Authorized intellectual property rights



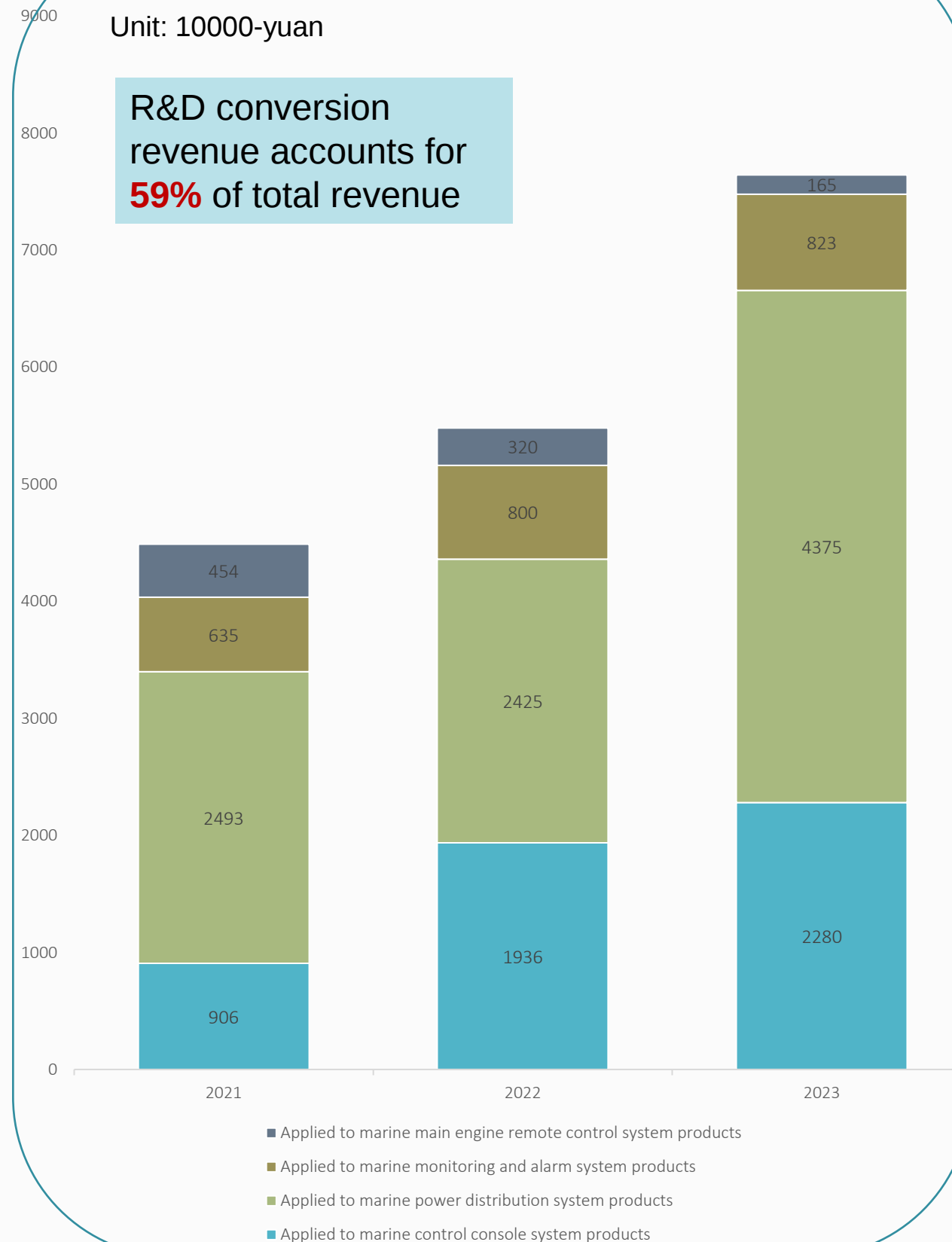
Honorary Title

National High-tech Enterprises
Tech SMEs
Provincial Engineering
Technology Research Center

Sales revenue of products corresponding to GCE patents

Unit: 10000-yuan

R&D conversion
revenue accounts for
59% of total revenue



Partial self-developed products



AMS control console



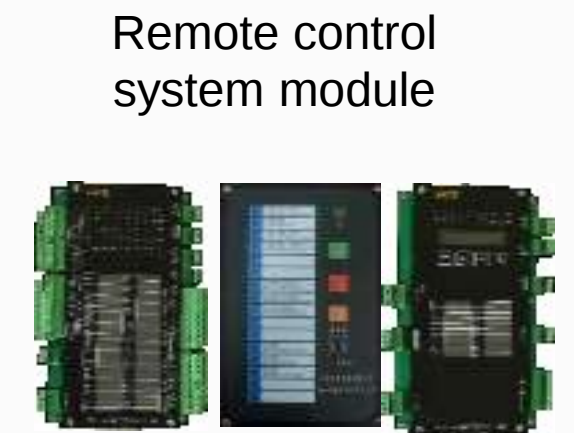
Monitoring alarm system



GCYDK-05
remote manipulator



Diesel engine
remote control &
oil pressure
monitoring



Remote control
system module

Control panel of
full rotation
remote control
system



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Civil product market: fully certified by classification societies



* In the civilian market, ship accessories must be certified by classification societies before they can be loaded onto ships.

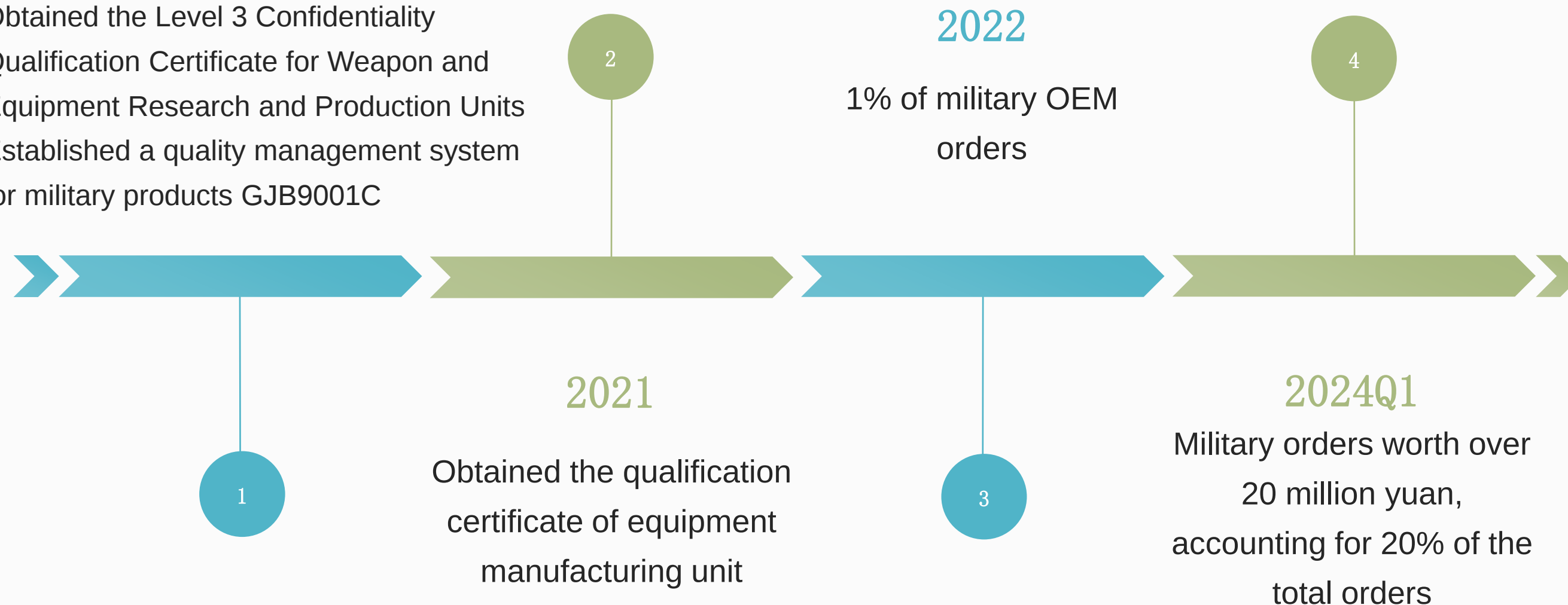


Military product market: possessing military product manufacturing qualifications



- The **military market has higher prices and less competition compared to the civilian market**. Military products have higher requirements for product performance and technical capabilities, and overall competition is relatively small, **resulting in higher gross profit margins for ship supporting enterprises**.
- As a well-known domestic enterprise with strong self-developed capabilities, **GCE has obtained the military product manufacturing qualification certificate in 2021**, and its market share in the military product market is expected to rapidly increase in the future, thereby **improving GCE's performance and profit level**. **2020**

- Obtained the Level 3 Confidentiality Qualification Certificate for Weapon and Equipment Research and Production Units
- Established a quality management system for military products GJB9001C



Long Term International Cooperation



International brands with long-term cooperative relationships

International brand license for production that GCE has obtained:



GCE International Brand Authorized Partner:

Low-voltage Power Distribution System



Mediem-voltage Power Distribution System



Engine Room AMS



Main Engine Remote Control System



GCE system integration international brand products:

Engine Room AMS



Mechanical flexible shaft control system
Electronic flexible shaft control system



auto-pilot instrument



- **Product technology:** GCE has been deeply cooperating and learning from international leaders through two relationship models of license production and authorized cooperation for many years. Currently, the product technology and process level have achieved leapfrog development
- **Sales Network:** Established a global service network with more than ten international brands, broke through the bottleneck of global service gaps, expanded the downstream application space of products, and formed a large-scale development. By 2023, the number of foreign users reached 34.79%.

GCE International Brand Cooperation Certificate



Customer Recognition

GCE

customer	industry status	products supplied
	One of the world's largest dry bulk cargo companies	25*82k Bulk Carriers, 12*64k Bulk Carriers, 6*208k Bulk Carriers
	The world's second largest container shipping company	6*13000TEU
	The world's third largest container shipping company	9*16000TEU、 2*8800TEU
	European old brand shipowner	8*250k Chemical tanker
	Saudi Arabia's largest maritime service provider	14*350ft platform

* The marine electrical and automation industry is a highly specialized industry that combines technology and services. On the one hand, this leads to high entry barriers, and on the other hand, it also brings **strong customer stickiness**. Therefore, the competition for high-quality customer resources is one of the key competitive factors in this industry.

- GCE Company, relying on own product advantages and a comprehensive domestic and international service network, has not only gained recognition from well-known shipowners at home and abroad (such as China Merchants Group, Oldendorff from Germany, CMA-CGM from France, MSC from Mediterranean Shipping, ZAMIL OFFSHORE from the United Arab Emirates, as well as large shipbuilding enterprises such as Hudong Zhonghua Shipbuilding, Xiangyu Offshore Engineering from Nantong, and Yingji Heavy Industry from Jiangsu Hantong), but also established long-term and stable cooperative relationships, **covering up to 5400 ships currently in operation.**

Classic Case

GCE

The World's First 13000 TEU LNG Dual Fuel
Powered Large Container Ship



Shipowner: CMA AGM
Classification Society: BV
Product Supplied: Switchboard

60 meters PSV



Shipowner: Singapore Bule Horizon
Marine Ltd
Classification Society: ABS
Product Supplied: Ship wide power
distribution, control panel, alarm system

6000 ton self-propelled floating
dock



Shipowner: Navy South China Sea Fleet
Classification Society: CCS
Product Supplied: Whole ship power
distribution, shore power supplyFour
legged draft, valve remote control, liquid
level telemetry.

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Production Advantage



- The construction of the production base is complete, with well-equipped facilities that can meet the needs of the entire process.
- Design production capacity is sufficient, which can meet short-term performance growth needs.



Fiber laser cutting machine



Multi station CNC punching machine



CNC bending machine



CNC cutting machine



Multi-station bus machine



CNC nameplate engraving machine



ABB main switch tester



Schneider main switch tester



Generator set for commercial ship distribution board experiment



Multi functional test bench for distribution board



Insulated Withstand Voltage test Instrument



Temperature rise test recorder

	Design Production Capacity	2023 Production/ Sales Volume	2023 Capacity Utilization
Switchboard	3500	2115	60%
Control Box	8000	4021	50%
Monitoring/ Driving Console	400	201	50%
Main Engine Remote Control System	100	Not included	/
Alarming System	100	Not included	/



**Looking forward to
your cooperation**