

**CREATE
FOUR
FUTURE
TOGETHER**

**SHANGHAI
ELECTRIC**



STRATEGIC VISION



Strategic Goal

To Be a
World-class Manufacturer
Leading in
Industrial Development

A key force in building
new energy systems and
new power systems

A pacesetter in modern
industrial systems and
new industrialization

A pioneer in solid foundations
and key industrial chains with
independent resilience

Energy Equipment | Industrial Equipment | Industrial Parts

High-End | Intelligent | Green

CONTENTS

01 GROUP OVERVIEW

About the Group	Development History
Operating Performance	Global Presence

02 BUSINESS FIELD

Energy Equipment	Industrial Equipment
Industrial Parts	

03 SUSTAINABLE DEVELOPMENT

Building a Sustainable Future
Empowering a More Livable World

Note: Businesses involved in thermal management systems, automotive compressors, AC compressors, instruments, and medical equipment solutions are businesses/companies belonging to Shanghai Electric Holdings Group Co., Ltd. rather than Shanghai Electric Group Co., Ltd.



SHANGHAI ELECTRIC GROUP PROFILE

As a global leader in **industrial-grade green intelligent systems**, Shanghai Electric remains committed to “**serving national priorities, fostering new productive forces, building core competitiveness, and achieving high-quality development**”. Our expertise spans energy generation and transmission, intelligent manufacturing, and automation systems. We cover a comprehensive industrial value chain that integrates “marine, transportation, aerospace, grid, and petrochemical industries”. By leveraging cutting-edge technological innovations, Shanghai Electric empowers industries and delivers green, sustainable value for a brighter future.

With over 120 years of history, we have consistently demonstrated a steadfast commitment to technological self-reliance and excellence. In recent years, we have received 94 national, municipal, and provincial science and technology awards, achieving numerous world-first, domestic-first, and industry-leading milestones. Honored with the prestigious China Industry Awards, we boast a **brand value of RMB 228.565 billion**.

Operating on a global scale, we drive innovation across a wide range of industries. In the energy sector, we provide integrated solutions for integrated “wind-solar-storage-hydrogen”, multi-energy systems and “generation-grid-load-storage”, ecosystems. In the industrial sector, we leverage our advanced manufacturing expertise to strengthen industrial solutions across marine, transportation, aerospace, grid, petrochemical, digital healthcare, and intelligent building systems, among others. Looking ahead, Shanghai Electric is committed to driving innovation through strategic investments in cutting-edge fields, including next-generation energy technologies and advanced industrial systems.

Guided by the principles of “**openness, coordination, and win-win cooperation**”, we are dedicated to building strong partnerships with global customers, industry partners, and our workforce. Together, we aim to deliver exceptional industrial solutions, foster innovation, and promote sustainable development worldwide.



Empower Global Industry, Make Life Smarter

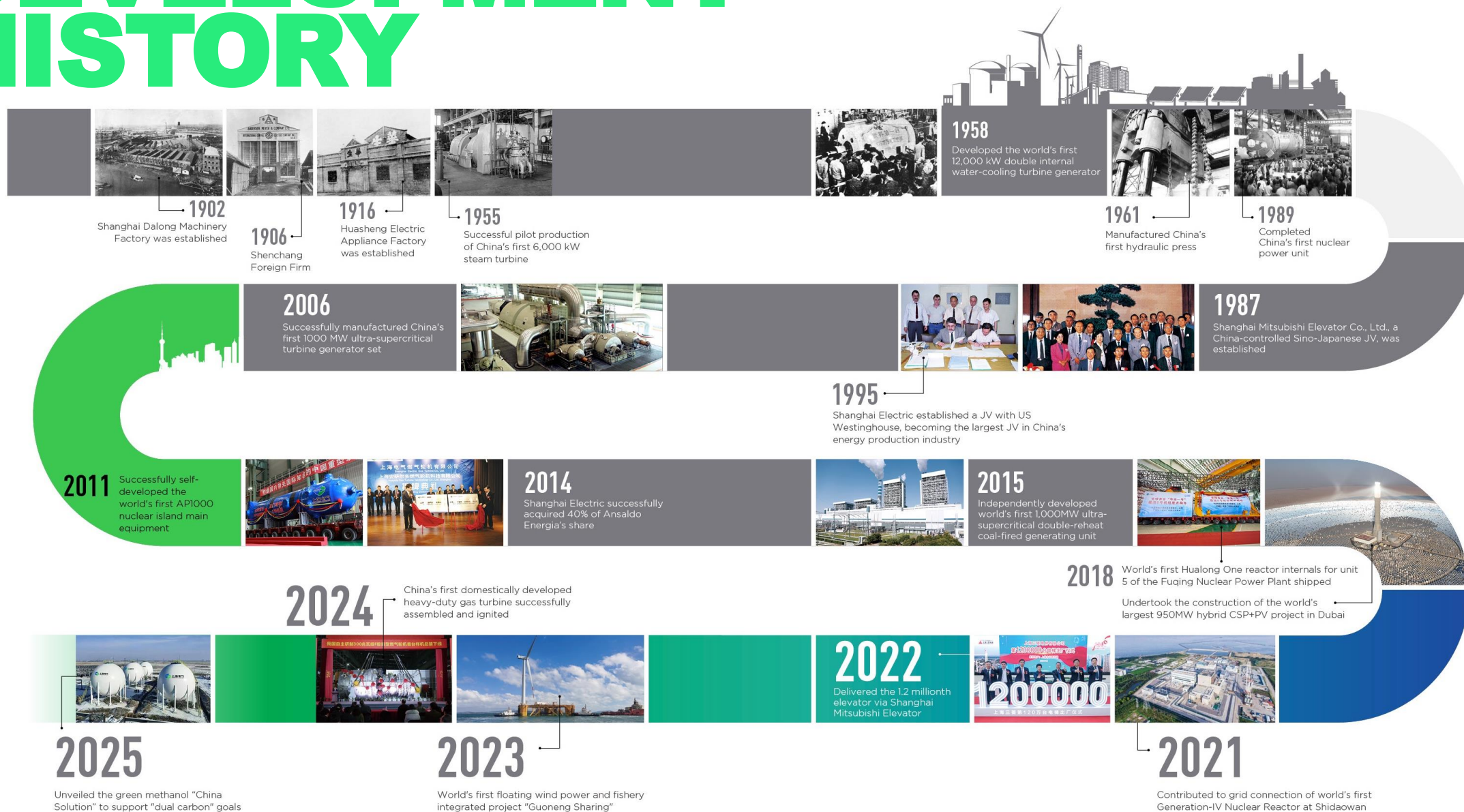
To Be a World-class Manufacturer Leading in Industrial Development

**Commitment to Excellence,
Empowerment with Innovation, Win-
Win Cooperation, Customer Success**

A Provider of Green Smart Industrial System Solutions



DEVELOPMENT HISTORY



OPERATING PERFORMANCE

Shanghai Electric is committed to continuously strengthening and optimizing our core businesses, accelerating our progress toward becoming a world-class enterprise.

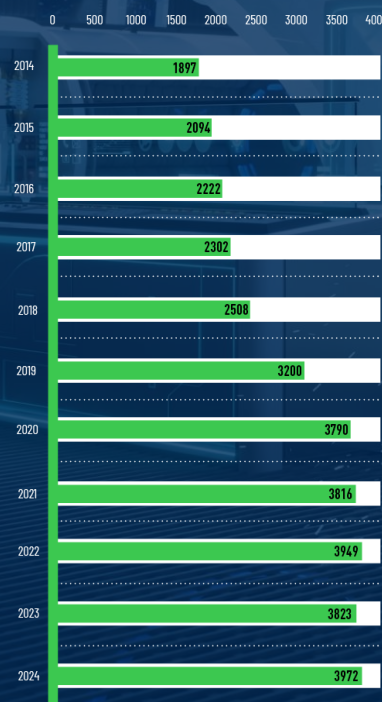


Total Assets

RMB **397.2** billion

Total Assets Growth (2014-2024)

■ Total assets (unit: RMB 100 million)



Net Assets

RMB **88.18** billion



Valid Patents

8,417



Brand Value

RMB **228.56** billion



Number of Employees

77,000+

90+
High-Tech Enterprises

14
Engineering Technology
Research Center in
Shanghai and Other Cities

9
Academician &
Expert Workstations

9
National-Level Corporate
Technical Centers

2
Shanghai Key
Laboratories

7
Postdoctoral Research
Workstations

29
Enterprise Technology
Centers in Shanghai
and Other Cities

19
CNAS-Accredited
Laboratories

TECHNOLOGY AND INNOVATION

GLOBAL PRESENCE

70+

World-class enterprise partnerships

RMB 60 billion

Overseas assets exceed

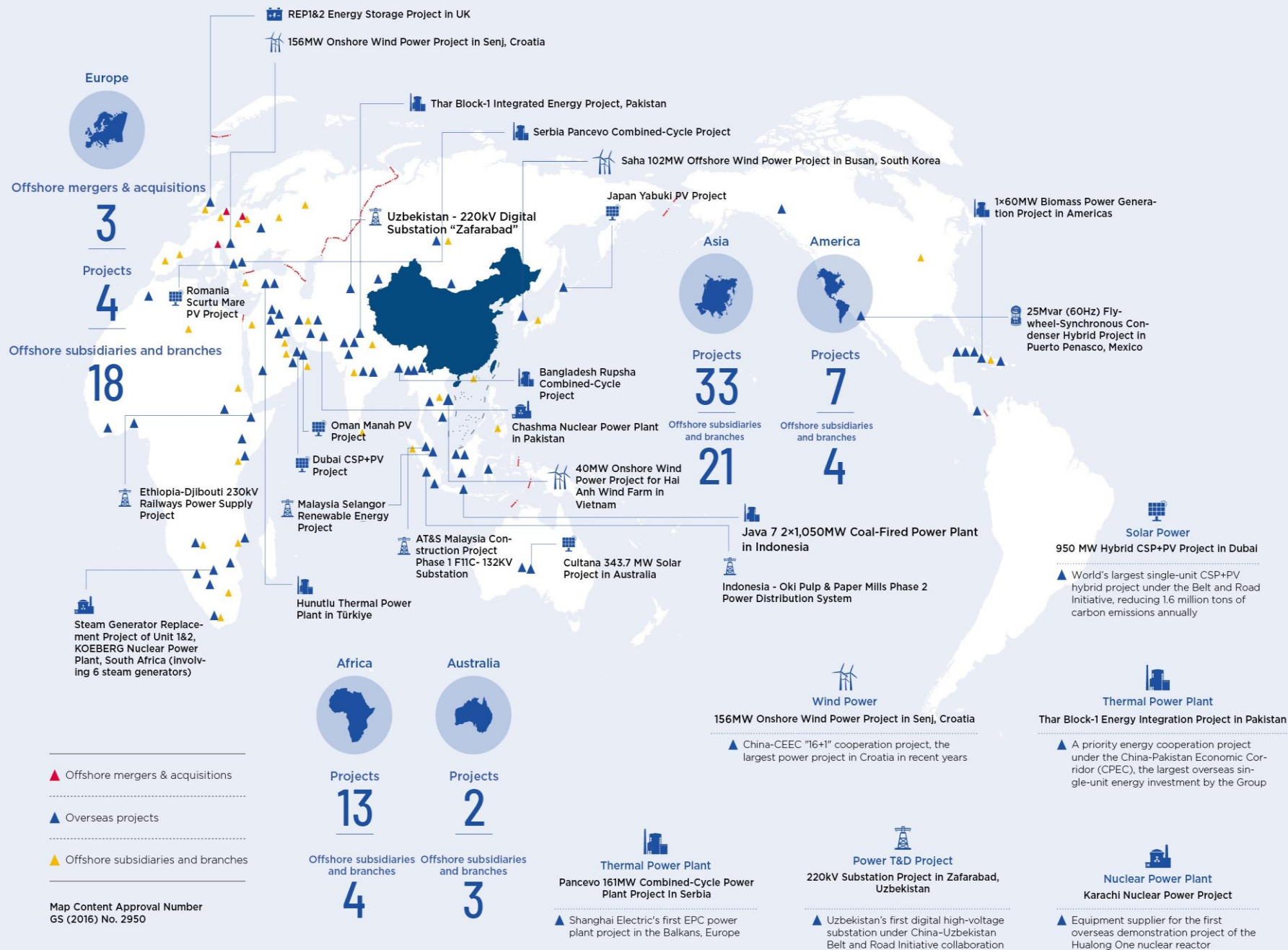
20%

Overseas revenue share

7500+

Overseas employees

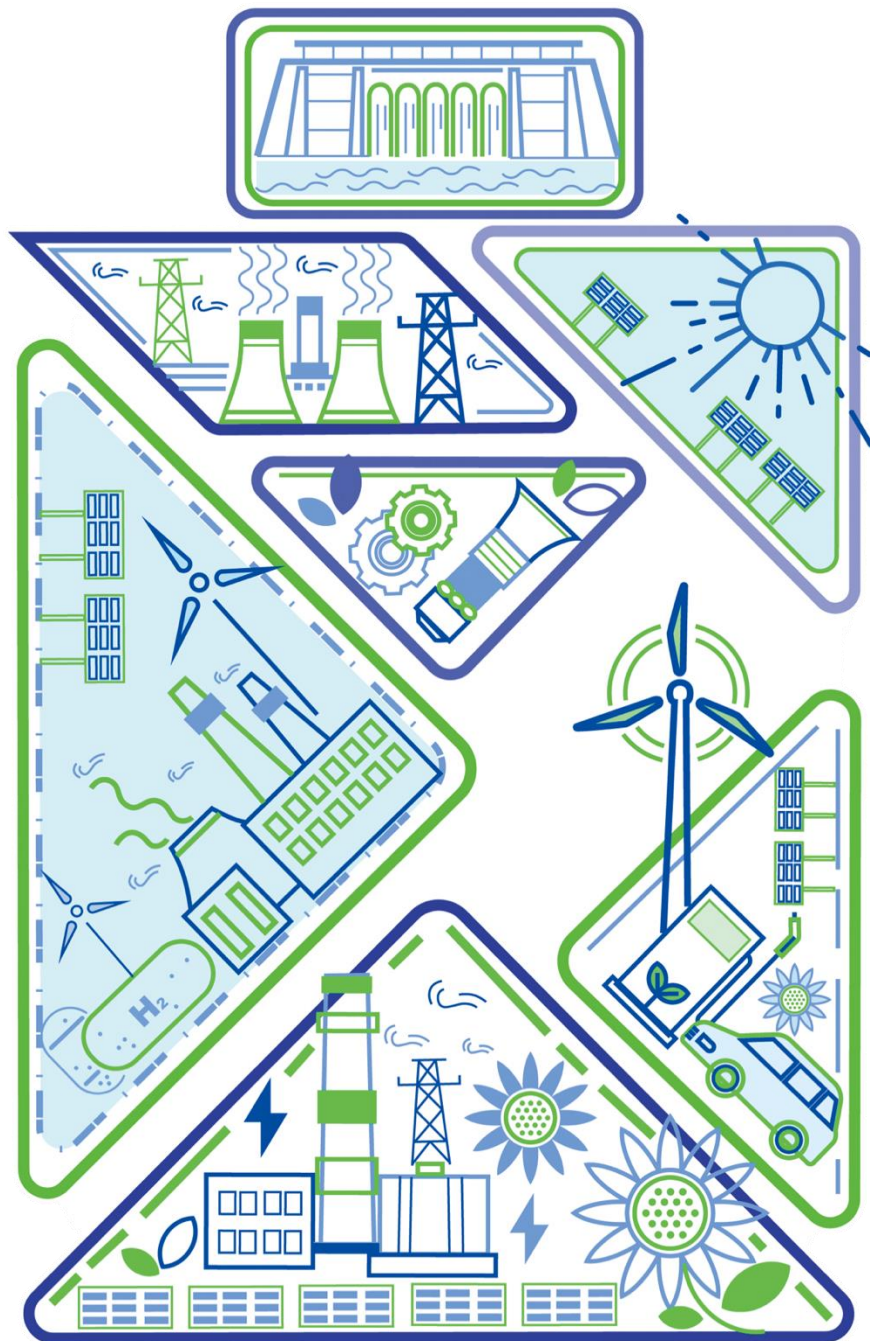
Shanghai Electric steadfastly advances global engagement, driving three strategic transformations to enhance overseas project execution and operational excellence, while building worldwide marketing networks and service ecosystems, contributing to the high-quality development of the Belt and Road Initiative.



BUSINESS FIELD



STEP01



ENERGY
EQUIPMENT

CLEAN COAL POWER

Ensuring global energy security

As part of the national strategy for "safe carbon reduction", the Group will fully leverage its advantages in high-efficiency and clean coal power and new energy.

Shanghai Electric has established

A complete product portfolio ranging from **10MW** to **1350MW**, with cumulative installed capacity reaching **574GW** by 2024, continuously setting new global records for lowest coal consumption.

The new generation of coal-fired power technology focuses on four core goals



Clean and low-carbon



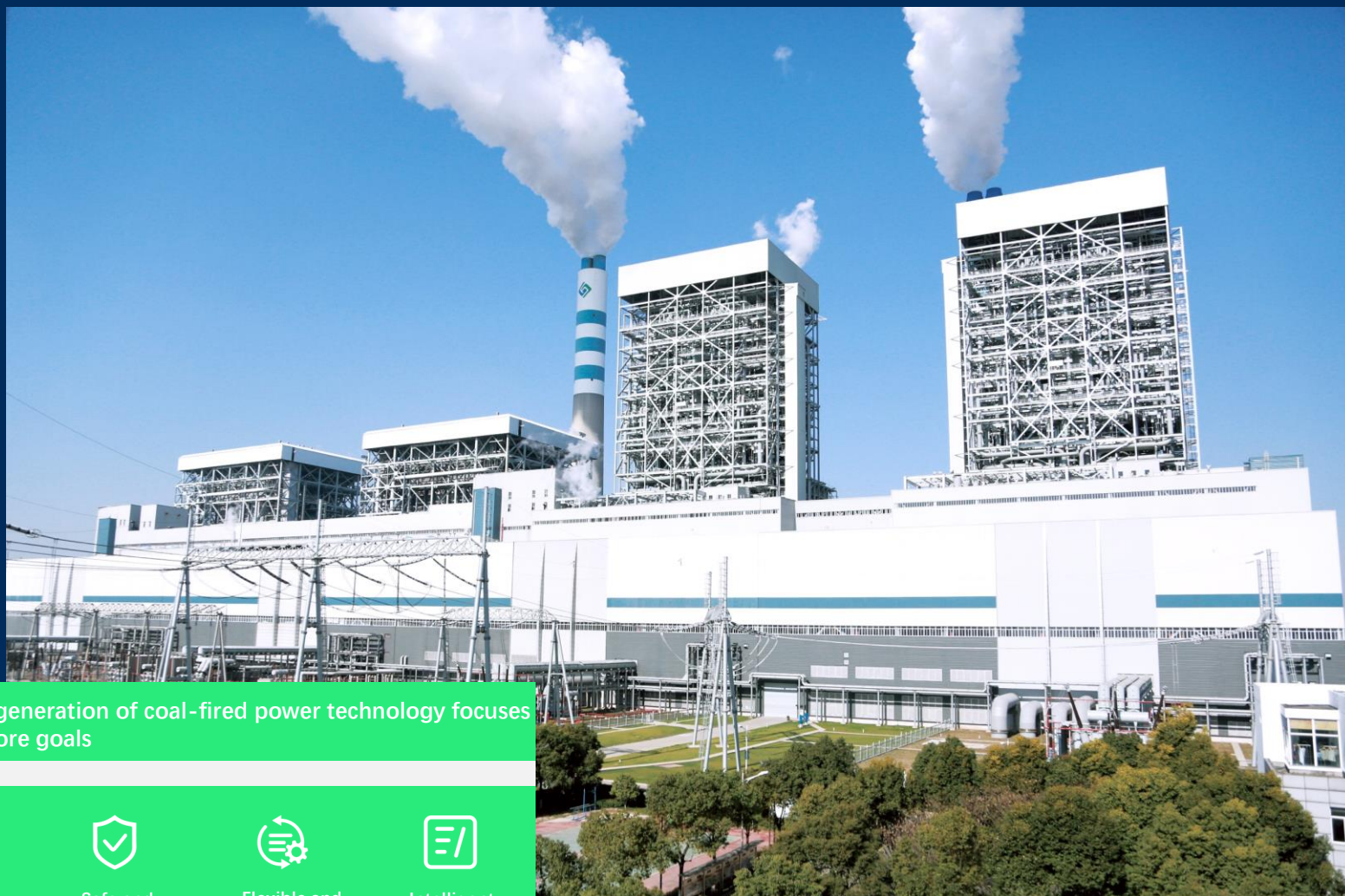
Safe and reliable



Flexible and efficient



Intelligent operation



FLEXIBLE GAS POWER

Steady advance in gas turbine localization

Shanghai Electric is China's only heavy-duty gas turbine supplier with proven full life-cycle supply and service capabilities.

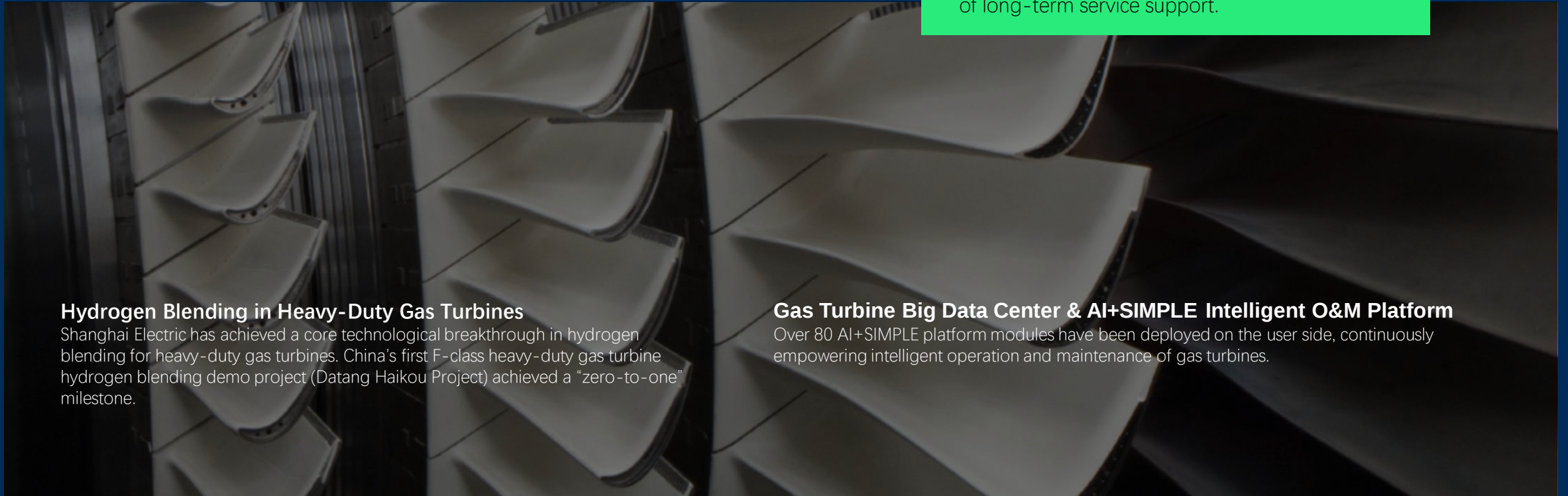
Since 2014, installed capacity of Shanghai Electric produced gas turbine units has exceeded **17,000MW**, with over **1.03 million hours** of long-term service support.

Hydrogen Blending in Heavy-Duty Gas Turbines

Shanghai Electric has achieved a core technological breakthrough in hydrogen blending for heavy-duty gas turbines. China's first F-class heavy-duty gas turbine hydrogen blending demo project (Datang Haikou Project) achieved a "zero-to-one" milestone.

Gas Turbine Big Data Center & AI+SIMPLE Intelligent O&M Platform

Over 80 AI+SIMPLE platform modules have been deployed on the user side, continuously empowering intelligent operation and maintenance of gas turbines.



ADVANCED NUCLEAR ENERGY

Active, safe and orderly development of
advanced nuclear power technologies

With a complete industrial chain ranging from large forgings and main equipment for nuclear power main island to conventional island and auxiliary equipment products cover all domestic nuclear power plants and have continuously maintained a leading position in comprehensive market share of China.

Generation III PWR

Complete set of main equipment
for nuclear islands

Supplied types:

AP1000, EPR, CAP1000, CAP1400,
HPR1000

Advanced Nuclear Power Technology

- HTR1000
- Fusion Reactor
- SFR
- Thorium Reactor
- SMR
- Other key equipment



Long history

Nuclear product development since
the 1970s
In step with China's nuclear
industry

Extensive delivery track record

Leading market share in nuclear island
main equipment
240 sets of equipment were delivered

Comprehensive product offerings

Products ranging from main equipment of
nuclear island, conventional island,
supporting auxiliary machinery, I&C to large
forgings

Extensive technical scope

40 key technical routes comprehensively
covering domestic mainstream
technologies

Sophisticated production equipment

Over 2,500 sets of processing and testing
equipment
Over 40 sets of world-class processing
equipment

Significant worldwide cooperation

Carry out global nuclear power business
Partnership with more than 50 world-
renowned enterprises

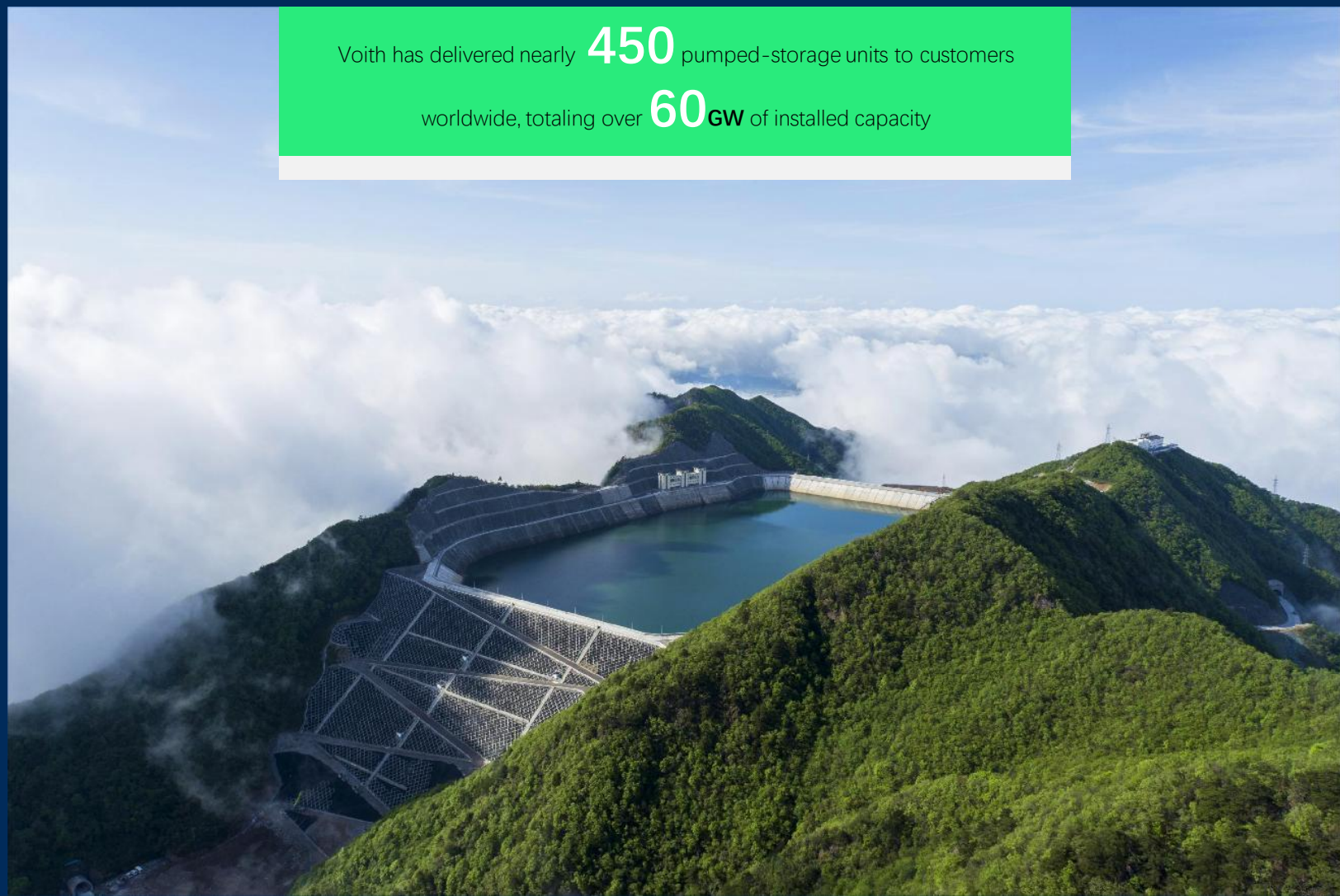
PUMPED HYDRO STORAGE

Flexible peak shaving and load balancing ensuring the safe and stable operation of power grids

High-performance pumped-storage units from Voith are playing a key role in new power systems.

Voith supplied the world's most technologically advanced units for the Changlongshan Pumped Storage Power Station, which features the highest water head (rated head: 710m) and maximum rotational speed (600rpm). The project ranks first globally in terms of design and manufacturing complexity, demonstrating world-leading technical capabilities.

Voith has delivered nearly **450** pumped-storage units to customers worldwide, totaling over **60GW** of installed capacity



WIND POWER

Comprehensive wind
power lifecycle solutions

Vigorously promoting the high-quality development of China's wind power industry, and supporting national energy security and the achievement of "dual carbon" goals.



Top-ranked in cumulative offshore wind power installations **in China for 10 consecutive years**



Hosts **China's largest** offshore wind database



Poseidon Platform

Drawing on over a decade of mature offshore experience, this independently developed next-generation large wind rotor semi-direct-drive wind turbine features fully independent intellectual property rights.

Unit capacity: **8.5MW-25MW**
Rotor diameter: **230-310m**

Zhuoyue Platform

Next-generation doubly-fed technology for onshore wind power turbines, developed under modular, platform-based, and customized development modes.

Unit capacity: **5MW-11MW**
Rotor diameter: **202-230m**

Steel-Concrete Hybrid Tower

Comprehensive industry-chain service for prefabricated wind turbine concrete tower sections. Independently developed with full intellectual property rights.

Design finalized: **200m hub height**
Fleet operational: **180m hub height**

SOLAR POWER

PV + CSP:

100% renewable energy for continuous power generation round the clock

Shanghai Electric empowers clean energy development with industry-leading heterojunction (HJT) photovoltaic technology, full-industry-chain CSP equipment supply capabilities, and multi-scenario system solutions.



High-end Photovoltaic Products

Creator 1.0

132 half-cut bifacial double-glass HJT modules

High-efficiency design

With power output up to 640W

Superior bifacial performance

With bifaciality up to 90%

Bifacial power gain of approx. 3%–5%

Low temperature coefficient

Temperature coefficient down to -0.24

Enhanced module reliability

Reliable warranty

15-year product warranty

30-year linear power output guarantee

Pioneer 2.0

132 half-cut bifacial double-glass TOPCon modules

High-efficiency design

With power output up to 630W

Superior bifacial performance

With bifaciality up to 80%

Bifacial power gain of approx. 2%–4%

Low temperature coefficient

Temperature coefficient down to -0.28

Enhanced module reliability

Reliable warranty

12-year product warranty

30-year linear power output guarantee



950 MW Hybrid CSP+PV Project in Dubai

World's largest

single-site CSP+PV project in terms of installed capacity

World's largest

single-site CSP+PV project in terms of land area

World leading

tower solar field technology

ENERGY STORAGE

One-stop solution provider for energy storage systems

Shanghai Electric enables full-scenario energy storage solutions, ranging from sub-second, power-type applications to energy-type systems exceeding 8 hours, fully supporting the development of next-generation power systems.



Compressed air energy storage

We provide core equipment solutions for Compressed Air Energy Storage (CAES) systems, including: high-load, high-flow air turbine expanders, high-efficiency, large-capacity air-cooled generators, large-capacity, ultra-high-speed, high-efficiency synchronous motors and more.

Redox flow battery energy storage

Shanghai Electric specializes in the R&D and manufacturing of key materials, stacks, and system integration for redox flow batteries.

Flywheel energy storage

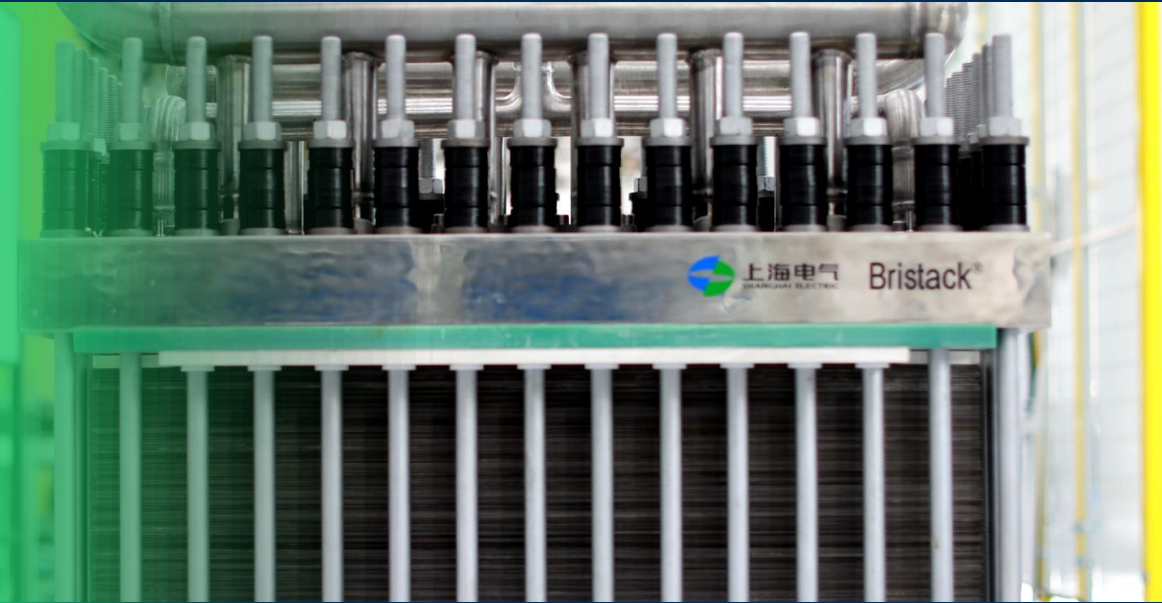
Shanghai Electric's 25 Mvar high-inertia flywheel-synchronous condenser integrated unit is the first Chinese-manufactured synchronous condenser exported overseas and the first domestically developed high-speed (60 Hz) flywheel-synchronous condenser hybrid unit in China.

Lithium-ion battery storage

Shanghai Electric has long been committed to technological R&D, engineering application and market, which covers the whole industrial chain from cells to energy storage systems.

HYDROGEN SOLUTIONS

Proactively establishing the core equipment cluster for the "production-storage-refueling-utilization" hydrogen ecosystem



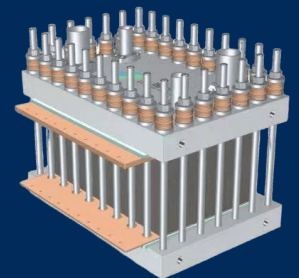
Alkaline Water Electrolysis Hydrogen Production Equipment

Wide load capacity, high current density
Suitable for centralized, continuous hydrogen production scenarios
Bristack®-Z product series coverage: 100-3000Nm³/h
Annual production capacity: 1GW



PEM Water Electrolysis Hydrogen Production Equipment

High reliability, low energy consumption
Suitable for distributed, flexible hydrogen production scenarios
Bristack®-P product series covers:
5-400 Nm³/h
Annual production capacity of 200MW



Hydrogen Storage Device

Covers multiple pressure levels: 1.6-20-45-90MPa

Diaphragm Compressor

Supports multiple pressure levels: 20-45-90MPa

SMART GRID

Providing customers with
an efficient, stable and strong smart grid

Shanghai Electric actively contributes to the construction of a new power system. We offer a comprehensive industry chain and an extensive product portfolio, covering power transmission and distribution equipment up to 1,100 kV. Our integrated solutions include smart grid system integration, EPC, equipment packages, and overhaul support, forming a one-stop platform for holistic solutions.

≥220kV

Substations

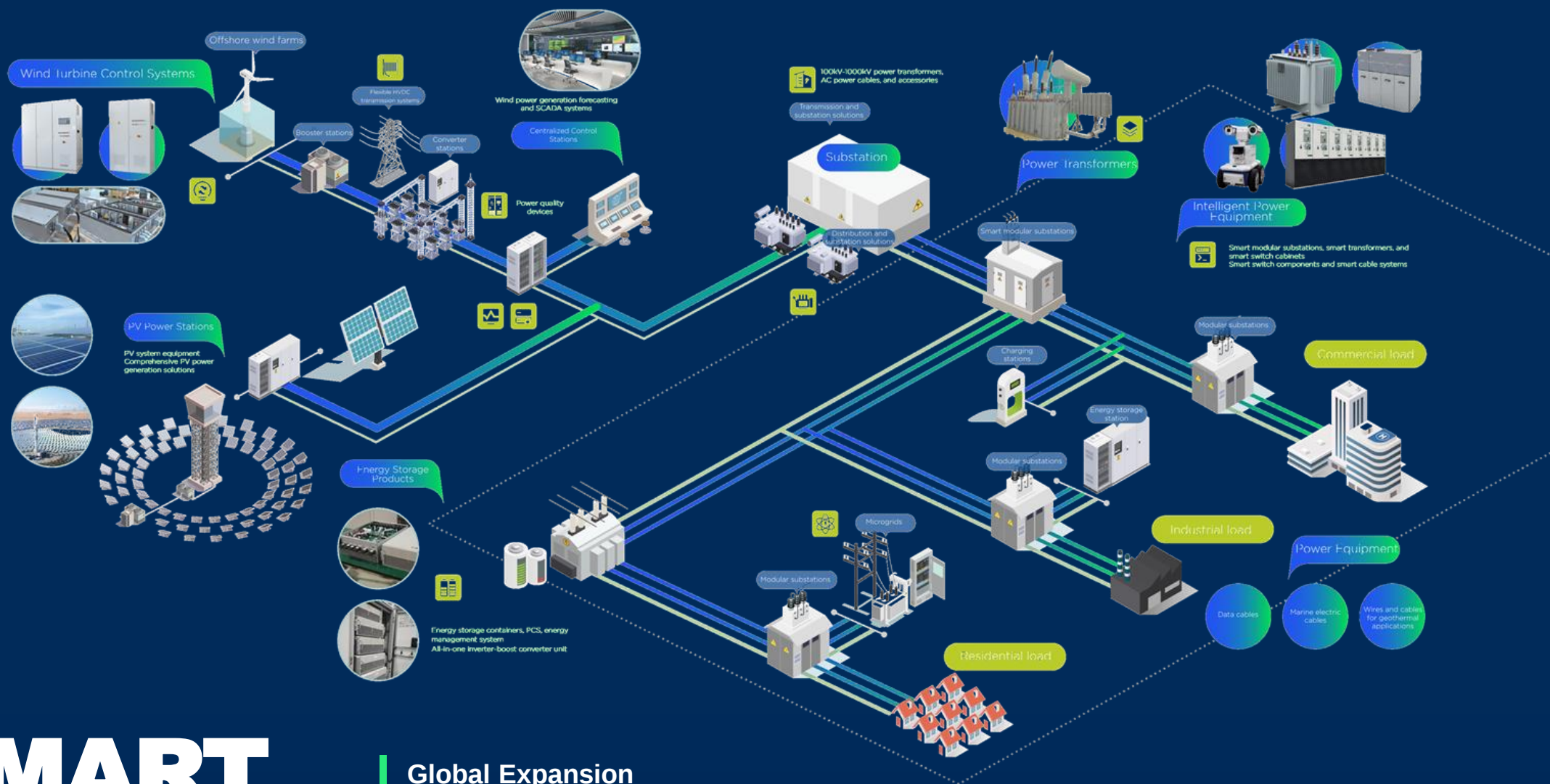
60+

≥220kV

Transmission lines

2,500+ kilometers



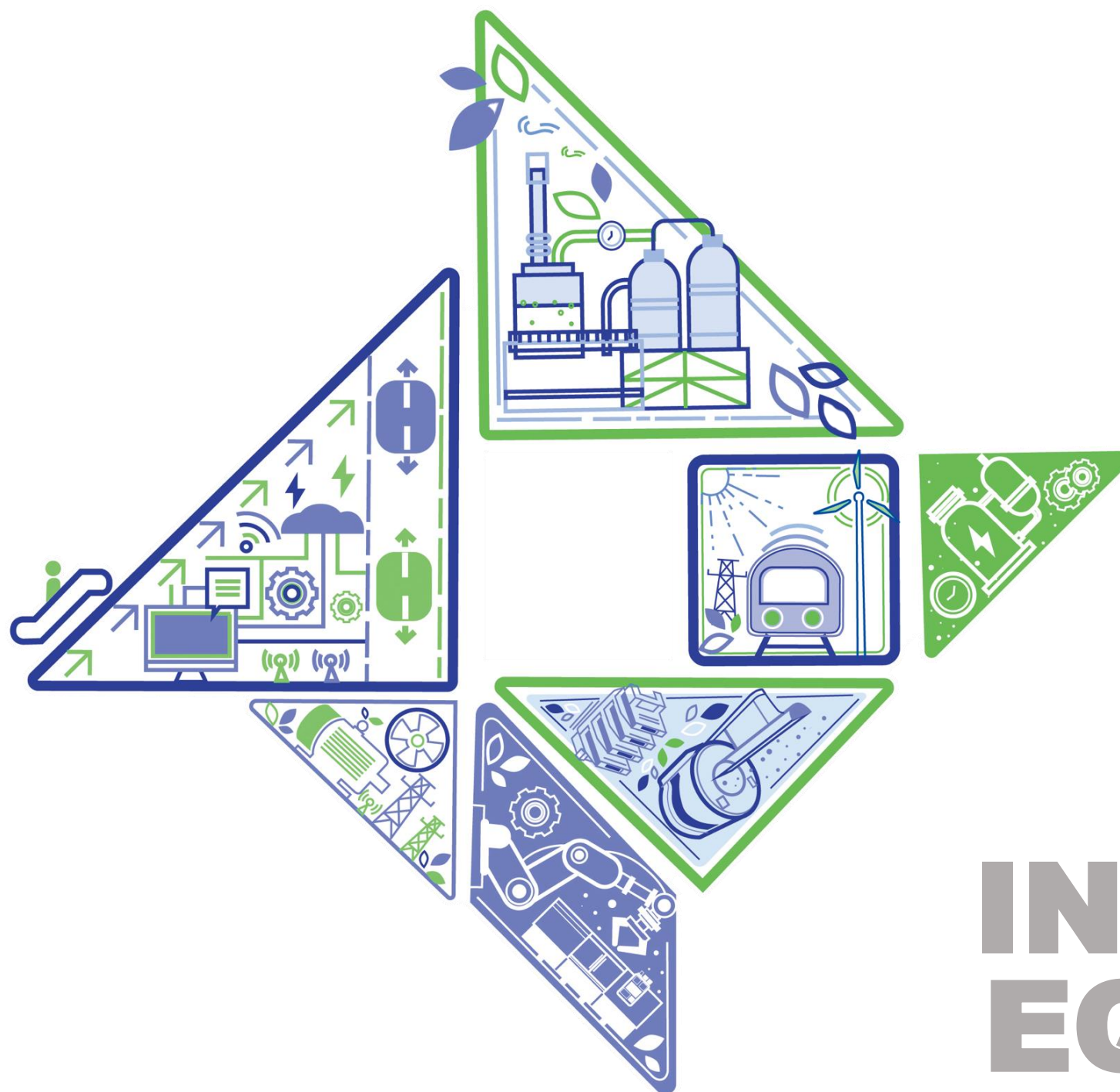


SMART GRID

Global Expansion

Shanghai Electric promotes high-quality development under the Belt and Road Initiative, undertaking numerous large-scale EPC and equipment turnkey projects. Our power transmission and distribution business now spans more than 30 countries, with notable success in Africa, Southeast Asia, Central Asia, the Middle East, Eastern Europe, the Caribbean, and North America.

STEP02



**INDUSTRIAL
EQUIPMENT**

CHEMICAL EQUIPMENT

A global leader in integrated high-end equipment solutions for oil, gas, and chemicals



World's first 3,000 TPD coal-water slurry gasification waste heat boiler.



World's first 300 TPD pure oxygen pressurized fluidized bed biomass gasifier.



Powered the "Aerospace Pressurized Pulverized Coal Gasification Technology" by providing critical process technology and support the manufacturing.

New Energy

Offshore wind power

Onshore wind power

PV

Waste-to-energy

Biomass power generation

Hydrogen Production & Storage

Large-scale alkaline water electrolysis hydrogen production

PEM water electrolysis hydrogen production

Coupling technologies for hydrogen production and new energy generation

Seawater hydrogen production technology

Gaseous hydrogen storage

Liquid and solid hydrogen storage

Chemical Container

Fischer-Tropsch synthesis reactor

PE reactors

Maleic anhydride reactors

Oxidation reactors

Methanol synthesis reactors

Hydrogenation reactors

Distillation columns, separation towers, and scrubbing towers

Waste heat boilers and steam superheaters

Biomass Gasification

Pressurized pure-oxygen biomass gasification technology

CO₂ Capture Technology

Carbon capture systems for biomass power plants

Carbon capture systems for waste-to-energy plants

Carbon capture systems for sludge incineration facilities

Chemical Technology

CO₂-rich syngas to methanol synthesis

Aerospace pressurized pulverized coal gasifier series



First in China to achieve ISCC EU certification for the full process of green methanol production

Shanghai Electric has obtained ISCC EU certification for its integrated process—encompassing biomass collection, storage, processing and gasification coupled with green hydrogen-to-methanol production—making it China's first supplier to obtain the full-process ISCC EU certification from biomass field collection and storage to green methanol production.

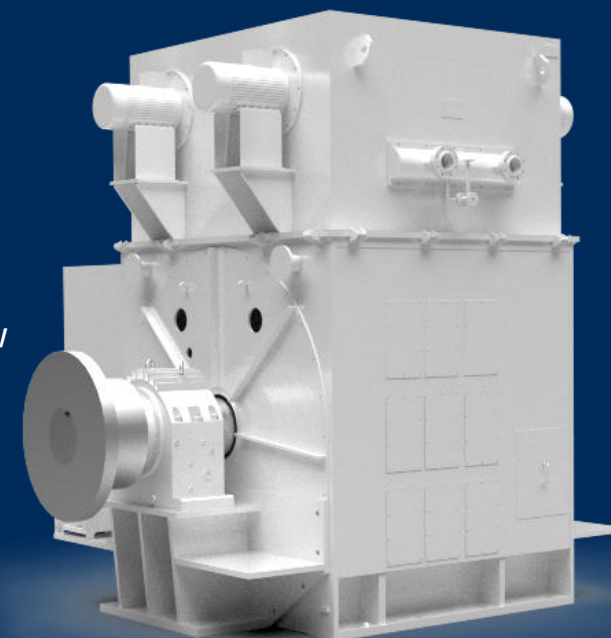
INDUSTRIAL DRIVES

Full-lifecycle system solutions for industrial drive equipment

From motors and frequency converters to loads, our integrated industry-driven solutions provide customers with reliable, efficient, high-performance technologies and products for energy savings and consumption reductions.

Developed the largest domestically produced **2x9 MW** dual-drive mill motor

Successfully completed China's first full-power system joint test of "dual-drive mill motor + frequency converter"



Motors

> **25%**

National market share for large and medium-sized AC/DC motors

87 series

Hundreds of models

Frequency Converters

Air-cooled version (10kV)
Single unit capacity up to

16,500 kVA

Water-cooled version (10kV)
Single unit capacity up to **43,300** kVA

Blowers

Nearly **50%** of the domestic market share

Maximum adaptable unit capacity up to **1,350** MW

Pulverizing Equipment

> **35%**
Domestic market share

5,500+

Coal mills produced and delivered globally (all speeds)

RAIL TRANSIT

“Green + Intelligent” solutions driving high-quality development of urban rail transit

TSTCBTC® Autonomous Signaling System

TSTCBTC® is a next-generation urban rail transit signaling system independently developed in China. Building on the core advantages of the previous generation—“genuine moving block” based on refined line resource management—the system integrates advanced technologies such as autonomous obstacle detection and LTE + WiFi/5G communication. These innovations significantly enhance train control efficiency and support smarter, more autonomous operations.



Signaling System Project Mileage

Projects in
operation
1,432km

Projects under
construction
286.72km

Total
1,656.5km

eMetro Comprehensive Monitoring System

The eMetro system enables real-time centralized monitoring of station electromechanical equipment and coordinated interaction between subsystems.

i-PH Mart® Intelligent O&M and Prognostics Health Management Platform

i-PH Mart® is an intelligent maintenance and health management platform tailored for urban rail transit based on a multi-disciplinary integration and multi-data sharing.

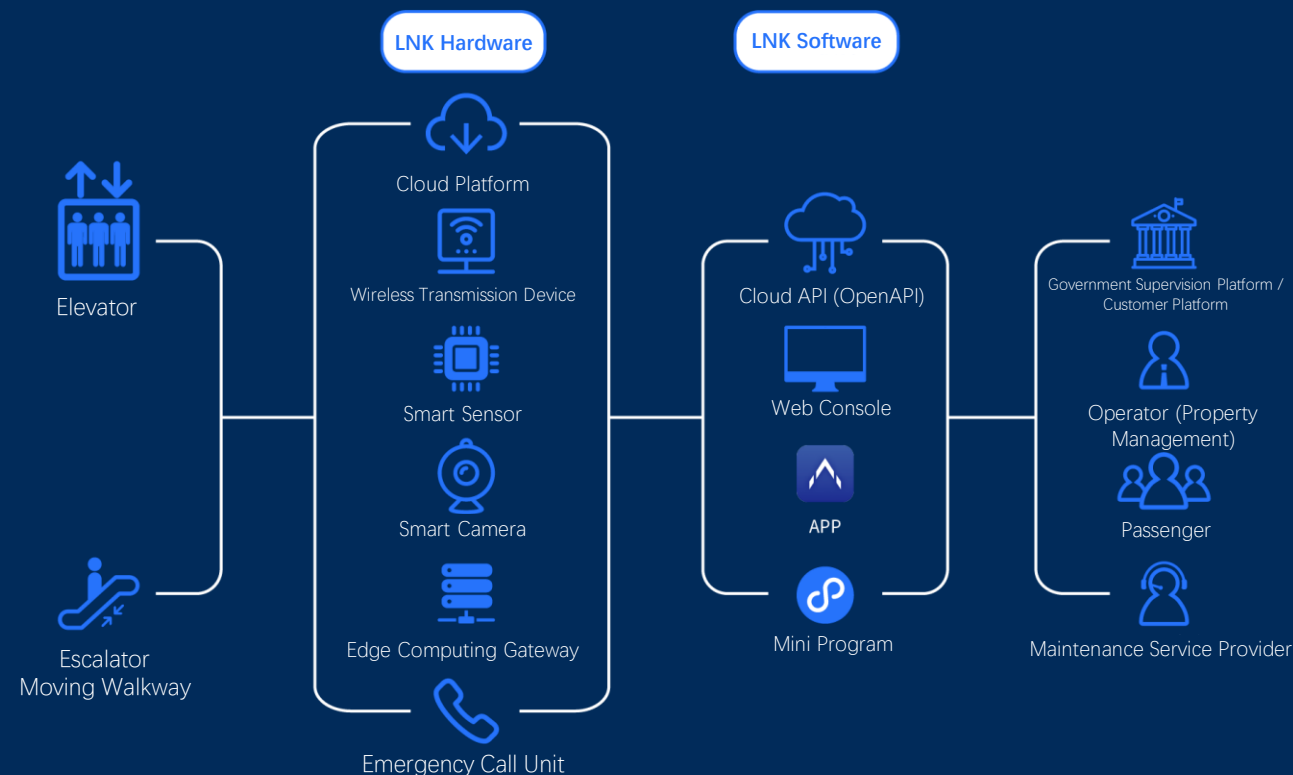
iDRT Digital Rail Transit System

iDRT is a new-generation transportation system designed for lightweight, intelligent, and green mobility.

SMART ELEVATORS

Elevate your life with intelligence

Shanghai Mitsubishi Elevator maintains a leadership position by combining dynamic technology introduction with independent innovation. Its products are energy-efficient, environmentally friendly, safe, reliable, and comfortable, providing full-scenario vertical mobility solutions for all types of buildings. In 2024, the independently developed 12.5 m/s ultra-high-speed elevator, possessing complete intellectual property rights, passed full model testing and was officially launched. Self-developed products account for 70% of total company sales.



Over **1.4 million** units of elevators and escalators installed worldwide

Exported to **101** countries and regions

SMART MEDICAL EQUIPMENT

Localization of High-End Medical Equipment: Technology with a Human Touch

Shanghai Electric is committed to advancing the localization of high-end medical equipment through technological innovation. Through all-round cooperation with prestigious research institutions, we provide comprehensive solutions ranging from overall hospital design and construction to medical equipment configuration.



MirraLan e7 3.0T Superconducting MRI System

70cm wide-bore design for enhanced patient comfort; precise imaging with a scanning range up to 185 cm; scalable architecture supporting up to 128 independent RF receive channels.



IROS Intelligent Robotic Orthopedic System

The total solution of the IROS includes the IROS Intelligent Robotic Orthopaedic System, the IROS Multifunctional Orthopaedic Surgical Bed system and the IROS Portable Intraoperative Navigation system. The IROS Intelligent Robotic Orthopaedic System, researched by Shanghai Electric, is a high-end intelligent surgical robotic solution designed for Total Hip Arthroplasty(THA) procedures. With sub-millimeter accuracy, IROS features "Precise Planning + Intelligent Execution + Minimally Invasive Safety", making it especially effective in complex hip deformities.

IROS offers a complete solution for Orthopaedic surgeons.

ROBOTICS

Shanghai Electric focuses on core technologies, product development, and ecosystem building for intelligent robotics, empowering China's manufacturing industry to achieve intelligent transformation and upgrading toward higher standards and higher-quality development.



Industrial Robot

SHANGHAI-FANUC, a joint venture between Shanghai Electric and FANUC Japan, offers over 260 robotic product lines with payloads ranging from 0.5 kg to 2.3 tons. These robots are widely applied in material handling, assembly, welding, casting, painting and palletizing, meeting the automation needs of various industries and enabling intelligent manufacturing transformation.



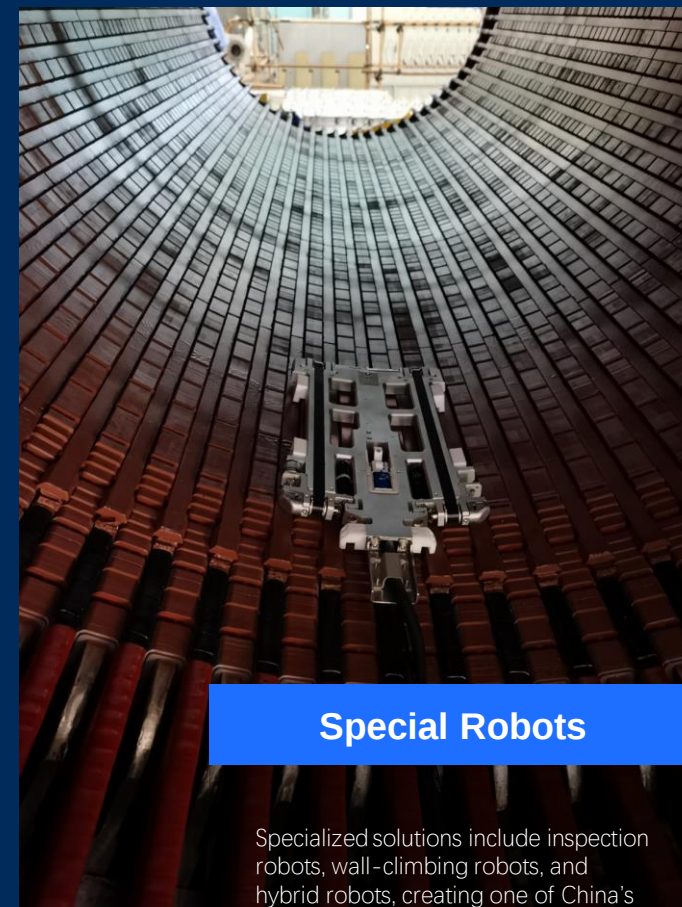
Humanoid Robot

Shanghai Electric has independently developed a humanoid robot system that is fully interoperable with conventional industrial automation systems. The humanoid robot ecosystem also includes critical component R&D and a full supply chain system for humanoid robot parts.



Precision Reducer

Precision reducers, essential for joint motion in industrial and humanoid robots, provide both high accuracy and strong load-bearing capacity. Shanghai Nabtesco Motion-equipment, majority owned by Shanghai Electric, is a joint venture between Shanghai Electric and Nabtesco. The Japanese Nabtesco brand has over 30 years of experience and over 10 million units shipped.



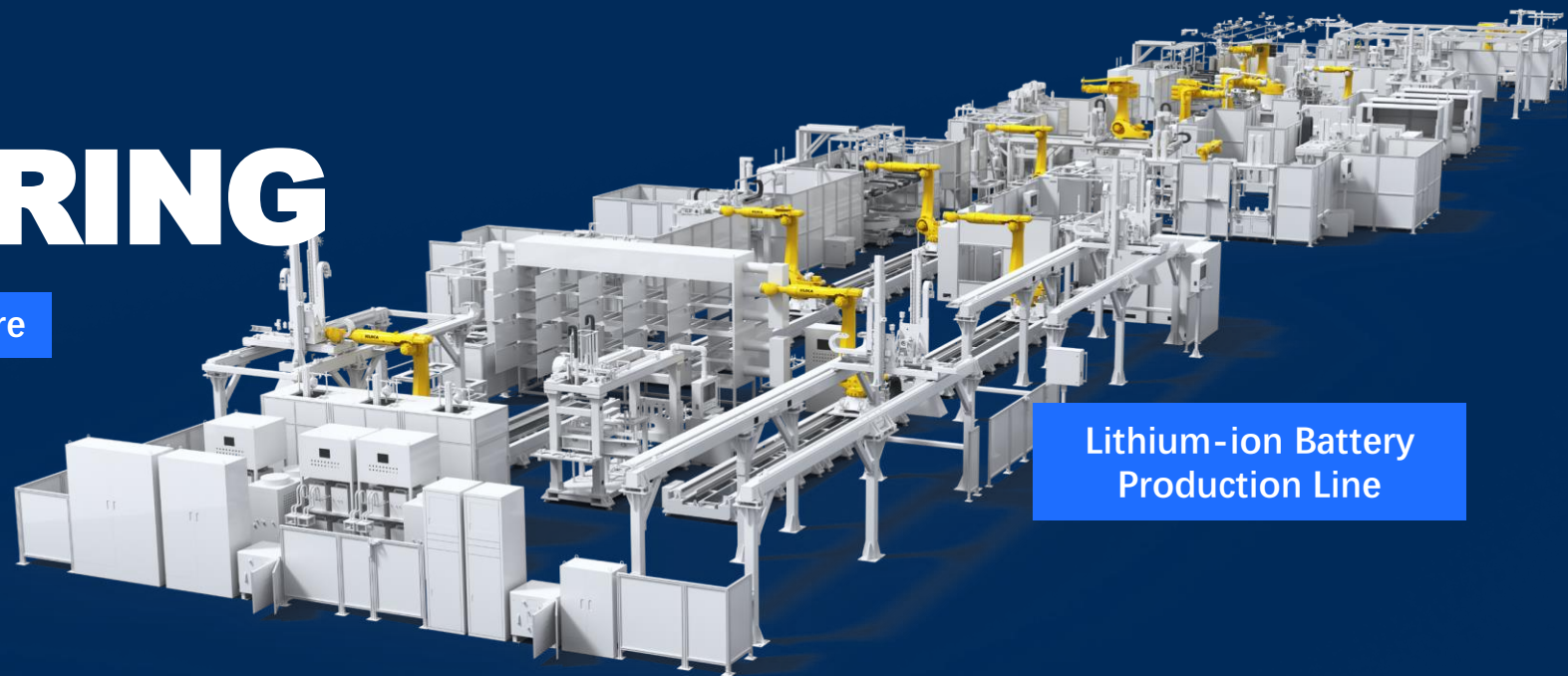
Special Robots

Specialized solutions include inspection robots, wall-climbing robots, and hybrid robots, creating one of China's most comprehensive special robotics application platforms.

SMART MANUFACTURING

Driving a green and intelligent manufacturing future

Shanghai Electric offers customers intelligent production lines that fit their digital and intelligent manufacturing needs with its extensive experience and technical expertise in automation equipment and integration services.



Lithium-ion Battery
Production Line



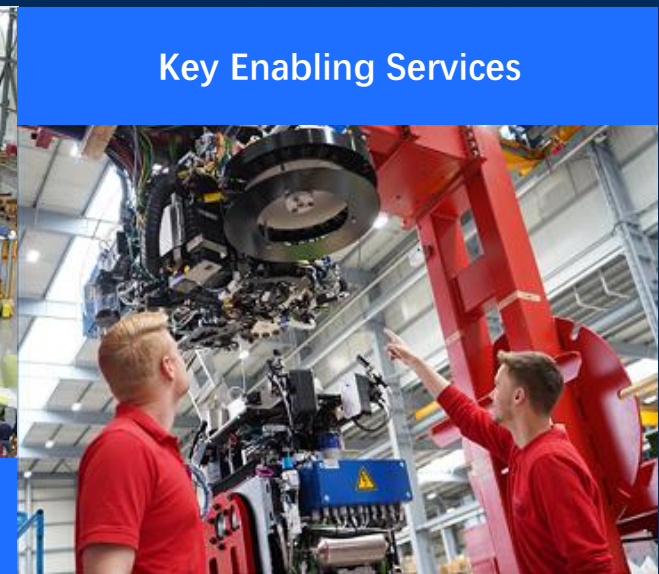
Advanced Automation Equipment



Process Optimization



Production Line Integration

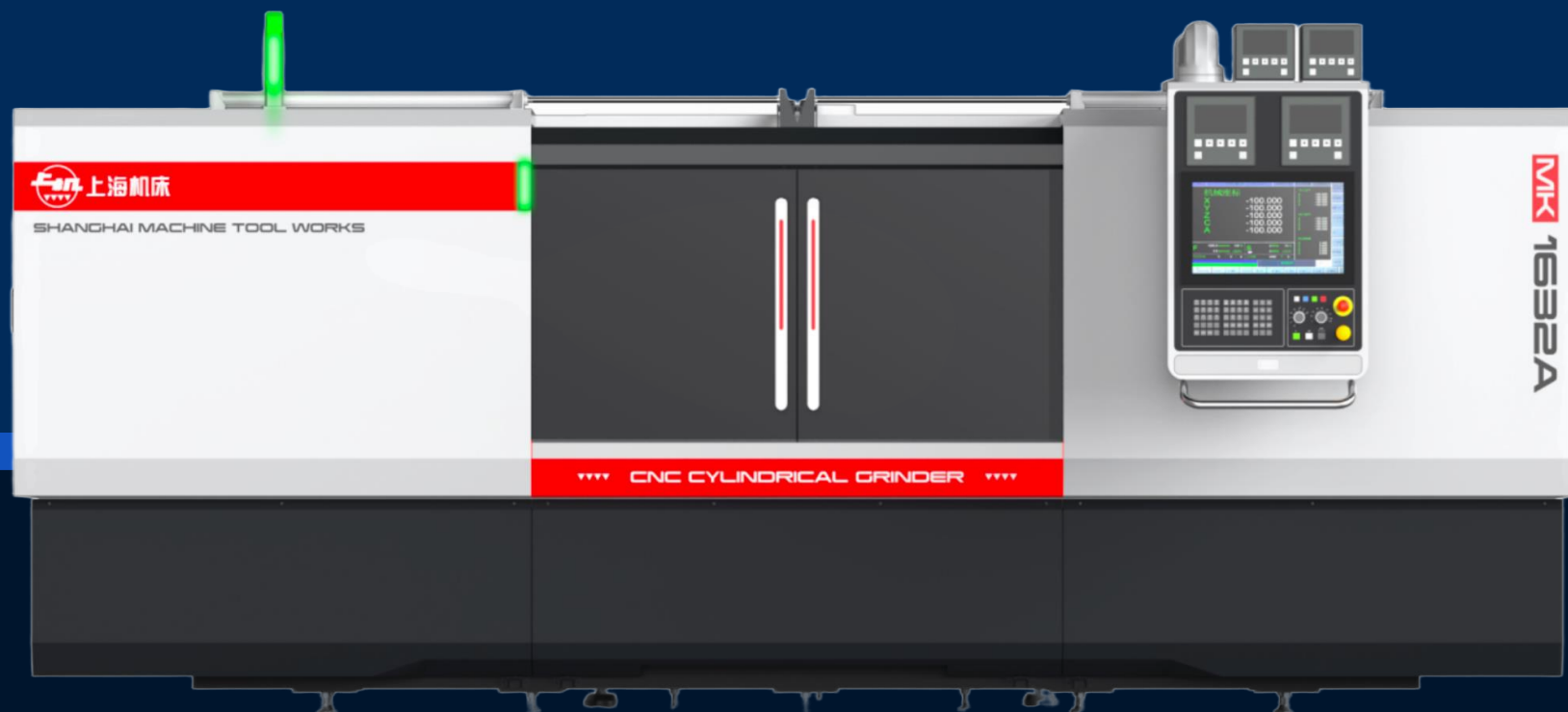


Key Enabling Services

MACHINE TOOLS

The Foundation of Strength

With our expertise, we can design and manufacture large precision grinding machines as well as medium to high-grade CNC machine tools. The products we offer include over 200 different varieties and 600 specifications.



Maximum machining diameter
3,000mm

Maximum machining accuracy
Nanometer

Maximum machining weight
250 tons

* Refers to maximum data from all product series

ENVIRONMENTAL SYSTEMS

Full-chain treatment: Solid-Gas-Water
Restoring industrial cycles to nature

Shanghai Electric offers full-chain solutions in solid waste, flue gas, and water treatment..

Design

Core Equipment

System Integration

EPC

Flue Gas Treatment

Core Process Planning and System Equipment for Flue Gas Treatment

Shanghai Electric provides customized integrated solutions for desulfurization, denitrification, dust removal, wastewater treatment, and VOCs control based on different unit operating conditions.



Huaxia Yangxi Environmental Protection Island Project, the largest one in China in terms of total installed capacity

Flue gas environmental protection island :: Flue gas desulfurization systems :: Flue gas denitrification technology :: Dust removal technology

Completed projects

125 units
Installed capacity
69,694 MW

483 units
Installed capacity
266,137 MW

36 units
Installed capacity
8,734 MW

Water Treatment

Integrated Water Treatment System Solutions

Shanghai Electric is advancing innovation in water treatment processes and equipment.

Water conservancy projects :: Integrated water environment treatment :: Rural sewage treatment :: Reclaimed water reuse

Completed projects

Daily sewage treatment capacity:
200,000 tons/day

Rural townships served:
41

Population served:
1.5 million



Huaihe River Water Diversion Project

Solid Waste Treatment

Solid Waste Treatment Process Planning & Key Equipment

Tailored integrated service solutions based on the specific disposal needs of urban and industrial solid waste.

Waste-to-energy incineration :: Biomass power generation :: Agricultural waste resource utilization
Hazardous waste treatment & disposal :: Classified recycling at garbage terminal

Completed projects

Household waste:
7,350 tons/day

Hazardous waste treatment capacity:
1,000 tons/day

Straw processing capacity:
8,850 tons/day

Daily generation:
7 million kWh

Daily heat supply:
10,000 tons

Population served:
15 million



Shanghai Electric Nantong Waste Incineration Cogeneration Project

PRINT & PACKAGING

To build world-leading intelligent printing equipment and deliver an exceptional customer experience

Goss Graphic Systems (China) Co., Ltd. is committed to building world-leading smart printing solutions, delivering superior performance and environmental sustainability to the global market through independent innovation.



Compact Newspaper Printing Solution

Maximum printing speed

50000 CPH

Openable printing towers with integrated infeed sections, all independently driven by servo motors, are designed to deliver superior newspaper printing quality for customers.



M-700S Publication Printing Solution

Maximum speed

45000 CPH

One of Goss (China)'s most popular models, renowned for its high efficiency, flexibility, and precision, the M-700S delivers superior print quality to meet demanding publication standards.

INDUSTRIAL SOFTWARE

To become a core driving force in the digital transformation of both discrete and process industries

Vision: We develop digital platforms for both discrete and process industries, leveraging scenario-based expertise to support the localization and innovation of industrial software in China.

Power

Petrochemical & Chemical

Mechanical Equipment

Automobile Manufacturing

Marine

Aviation

Digital & Intelligent Solutions

Digital factories

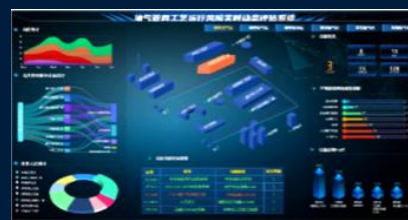
Intelligent energy systems

Smart manufacturing

Smart cities



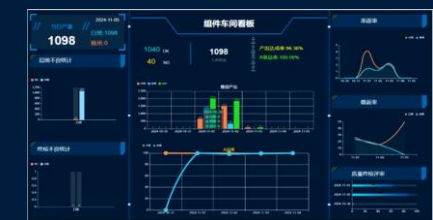
Development software



Management software



Production software



Control software

SEunicloud industrial Internet platform

Shanghe smart supply chain platform

HVAC EQUIPMENT

Heating and cooling core products

Providing sustainable cooling and heating solutions to ensure a comfortable life and offering leading transportation solutions.

Automotive Parts

Shanghai Highly is the first to develop internationally advanced compressors and thermal management systems for new energy electric vehicles, while providing high-quality, safe and reliable precision casting components for global automobile manufacturers.

AC Compressor

A total of 5 world-class green factories and 5 technology support centers have been established by Highly around the world. More than 1,000 types of high-efficiency energy-saving compressors are available in 9 series, ranging in refrigerant, voltage, and frequency.



Global market share: **1/7** in AC compressors

Average manufacturing time of a compressor with 130+ processing steps: **7s**

Industrial robot density: **1,638** units per 10,000 workers

TOP3

Globally in AC
compressor market

NO.1

in New energy
bus market

11

Countries

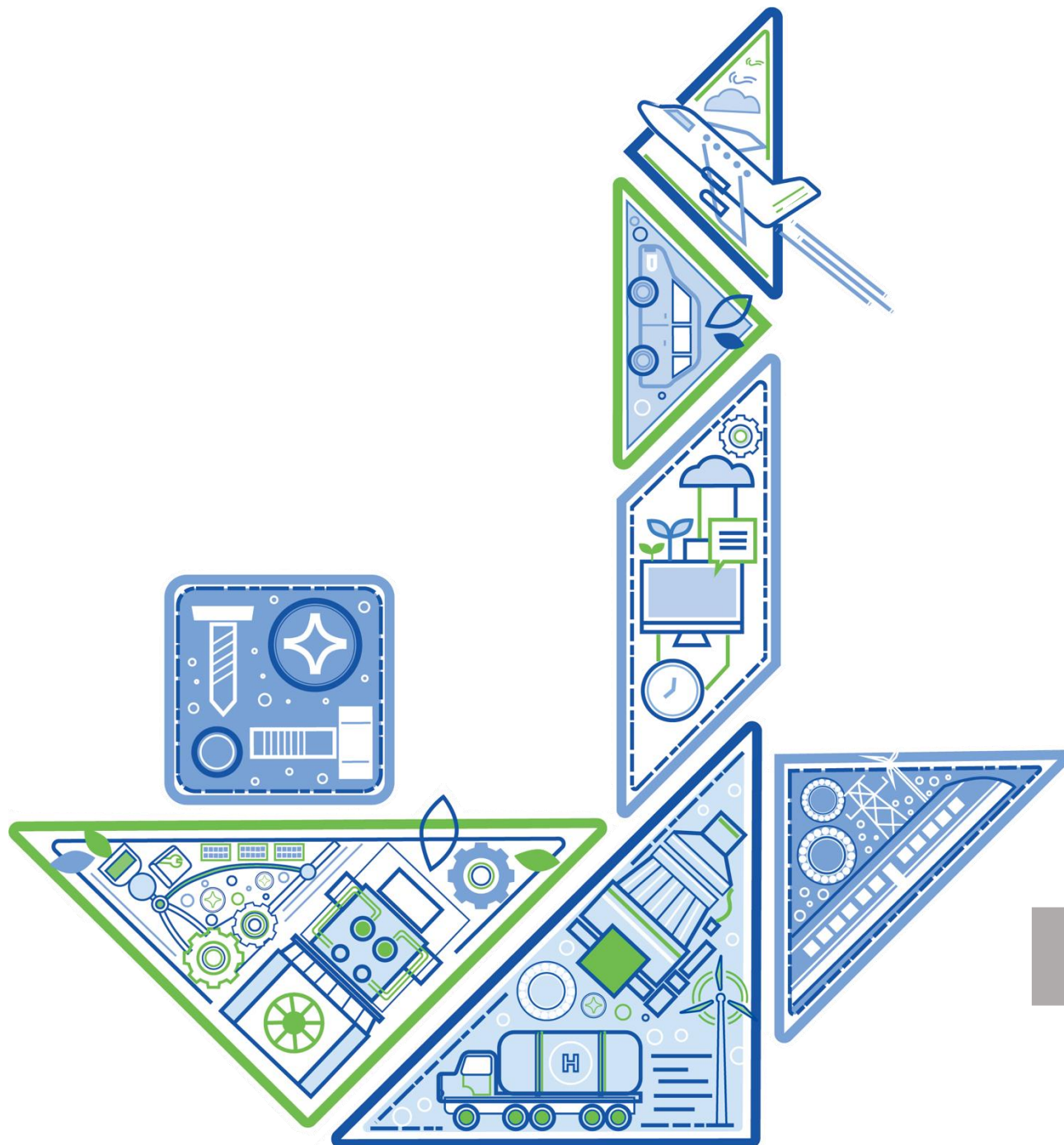
35

Manufacturing
sites

17

R&D & technical
service centers

STEP03



**INDUSTRIAL
PARTS**

HEAVY CAST AND FORGED COMPONENTS

To resolve the key challenges associated with critical basic components and specialized metallic structural materials

Our work supports key projects in fusion reactors, sodium-cooled fast reactors, heavy-duty gas turbines, advanced marine propulsion systems, deep-sea exploration devices, aero-engines, aviation, and aerospace.

Core Figures

We provide high-quality large-scale castings and forgings for various fields including nuclear power, thermal power, naval vessels, special steel, chemical industry, and industrial equipment. We undertake the crucial task of developing and industrializing key large-scale castings, forgings, and special materials in high-end equipment fields such as nuclear power, efficient and clean thermal power, high-end marine equipment, aerospace critical facilities, large scientific devices, and large-scale petroleum refining equipment, which filled multiple domestic technological gaps and achieved numerous "**China's First**" and "**World's First**" accomplishments.



Highlight Metrics

Annual molten steel production capacity:

250,000 tons

Market share in nuclear island main equipment forgings:

≈ **50%**

701

Nuclear-grade large forgings delivered:

85

Sets of reactor internals forgings supplied

MARINE CRANKSHAFT

To build a trusted ship shaft manufacturing base

Shanghai Electric is dedicated to the independent development of low-speed marine diesel engine crankshaft technologies. we are tackling the full industrial chain localization of large-diameter marine crankshafts, a key technology, to ensure the security of the supply chain for low-speed diesel engine crankshafts.

Core Figures

Large-diameter low-speed diesel engine crankshafts

Applied in high-end equipment manufacturing, including large ocean-going vessels.

Indicators of integrated precision machining technology for ultra-large crankshaft have reached the international advanced level.

Highlight Metrics

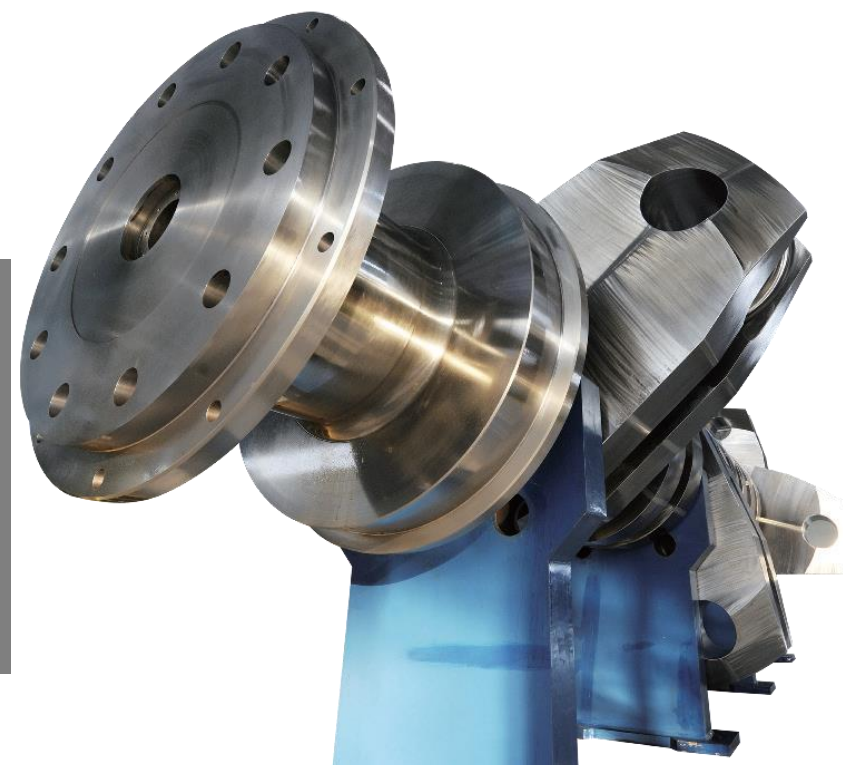
50% improvement in bottleneck process efficiency

Main journal radial runout **<0.02 mm**

Flange face runout **<0.02 mm**

Main journal levelness **<0.08 mm/m**

Crank pin levelness **<0.1 mm/m**



TURBINE BLADES

One of the world's largest specialized manufacturers of turbine blades

Shanghai Electric focuses on the energy and aerospace sectors, specializing in high-end power components. Key products include thermal power and nuclear power steam turbine blades, gas turbine components, marine propulsion parts, and aero-engine blades, disks, shafts, and structural components.

Energy Sector

Customized bearings for OEMs with diverse models and rapid delivery
Approx. 70% market share in the domestic large turbine blade market
World's largest supplier of large power station turbine blades

- Blades for thermal power steam turbines and nuclear conventional island steam turbines
- Gas turbine components

Aerospace Sector

Shanghai Electric keeps pace with global advanced manufacturing trends, achieving multiple landmark products with domestic leadership and international comparable process levels.

- Aero-engine blades
- Aero-engine structural components
- Aero-engine disks and shafts
- Aircraft structural parts

BEARINGS

Manufacturer of railway bearings and high-end precision miniature bearings with the most complete specifications and varieties



Product Portfolio

Application Scenarios	aerospace, automotive, rail transit, medical equipment, industrial equipment and new energy sectors	
Bearing Structural Types	Size Range	
Deep groove ball bearings Angular contact ball bearings Tapered roller bearings Cylindrical roller bearings	0.6 mm to 320 mm	
	Precision Classes	
	P0, P6, P5, P4, P2	

Market Shares in Key Segments

Freight railway bearings	Automotive transmission shaft bearings	
18.8%	22.2%	
Automobile steering gear bearings	Tensioner bearings	Aerospace miniature bearings
11.4%	2.4%	80%

FASTENERS

Dedicated to becoming a leading domestic supplier of fastening system solutions

Industrial Fasteners

Integrating high-end manufacturing, modern service, and authoritative testing. Leading the fastener industry in export volume for 16 consecutive years.

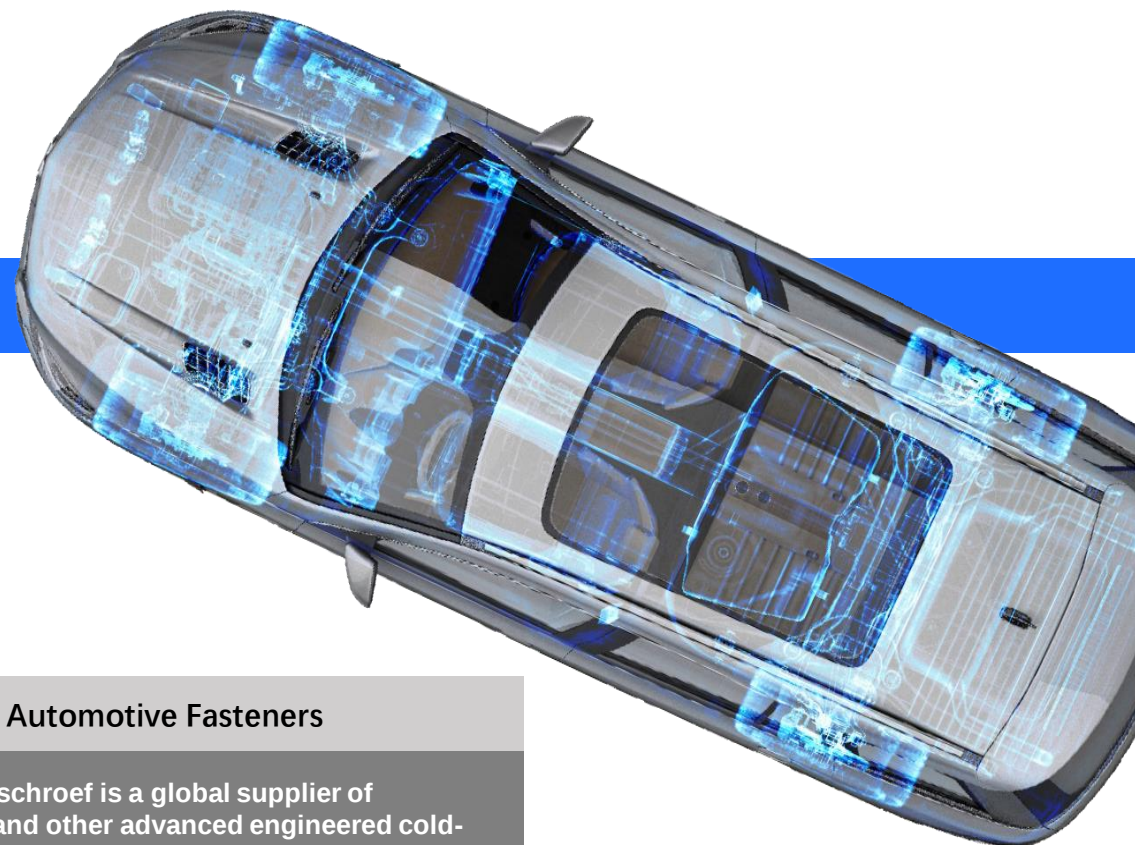
Product portfolio

- A comprehensive range of fastener products compliant with international standards including GB, EN, ANSI, AS/NZS, and JIS.
- Product categories cover **11** major types: bolts, nuts, washers, nails, pins, keys, and more.
- Materials include carbon steel, stainless steel, copper, among others, with strength grades from **4.8** to **12.9**.
- Surface treatments available: black oxide, galvanized, hot-dip galvanizing, Dacromet, GreenKote®, etc.
- Equipped with a fully automated warehouse with **100,000** storage locations and over **30,000** standard SKUs in stock to ensure on-time delivery.

Automotive Fasteners

Royal Nedschroef is a global supplier of fasteners and other advanced engineered cold-formed components for the automotive and aerospace industries.

- Unique capabilities covering the entire fastener value chain
- Providing comprehensive services for the automobile and metal forming industries
- Dedicated to innovation, serving as a senior engineering partner in fastener development



HYDRAULIC PUMPS AND VALVES

Aims to become a manufacturer and service provider of intelligent hydraulic systems

With a long-term focus on hydraulic components and hydraulic systems, we provide a comprehensive range of hydraulic products including the A2F/E series fixed displacement piston motors, A6VM/E series variable displacement piston motors, SEI1V(L)O series piston pumps, SE4VC piston pumps, screw in cartridge valves, a full series of 6 to 200 tons excavator motor relief valves. These hydraulic solutions are widely applied in construction machinery, coalmining machinery, agricultural machinery, and other industrial fields.



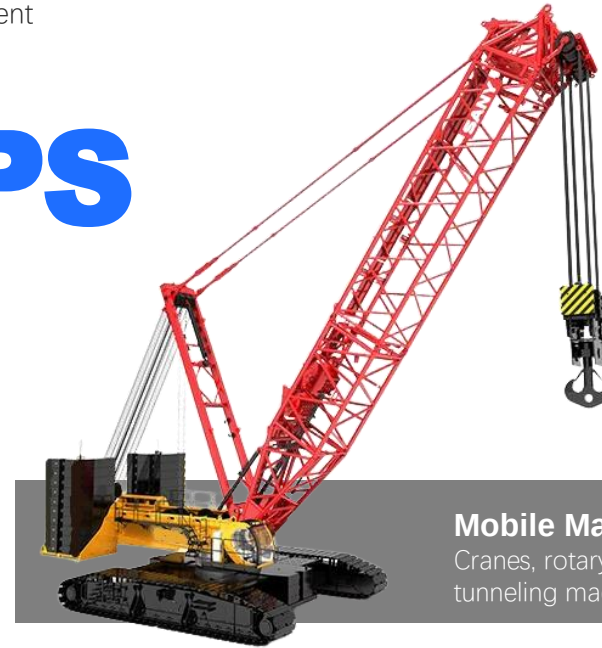
Bent-axis motor



Threaded cartridge valve



Hydraulic system



Mobile Machinery

Cranes, rotary drilling rigs, rollers, tunneling machines, etc.



Agricultural machinery

Harvesters, sprayers, etc.



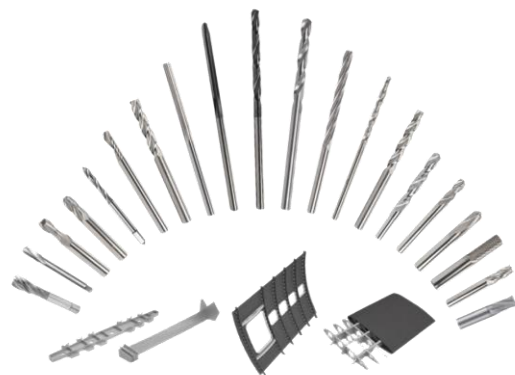
Industrial systems

Wind power, metal smelting, battery electrode calenders, gravity energy storage, hydrogen energy, and AGVs

CUTTING TOOLS

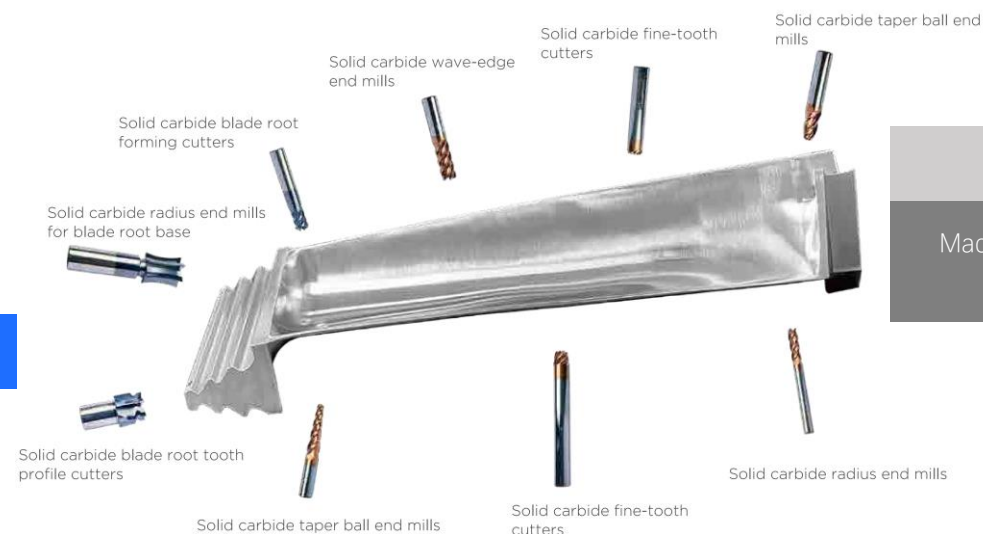
Leading manufacturer in metal cutting tools

With over 70 years of professional manufacturing experience, our tools are widely applied in aerospace, automobile, general machinery, electronics, communications, metallurgy, and mold industries, meeting demands for precision and high-efficiency machining.



Aerospace Applications

Engine disk/ring & blade machining, titanium alloy and composite materials machining, aluminum structural component machining, forging die machining



Energy Sector

Machining of steam turbine and gas turbine blades

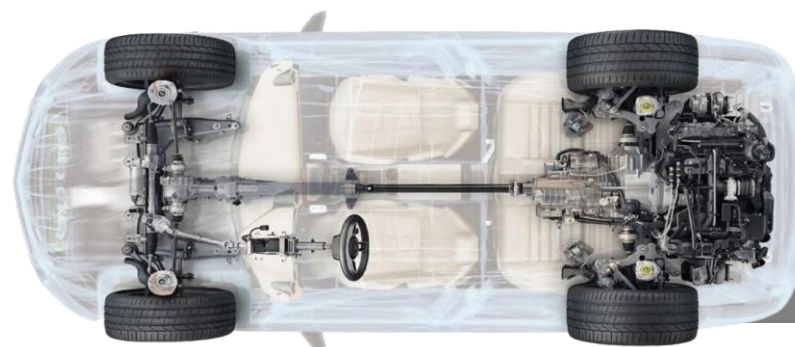
Mold Manufacturing Sector

End mills for processing electrodes (graphite and copper electrodes)
Conventional and high-speed end mills for hard materials such as pre-hardened steel



Automobile Sector

Machining of engine cylinder blocks, connecting rods, and crankshafts



INSTRUMENTATION

A leading domestic provider and pioneer of process industrial automation solutions with proprietary core technologies and products

We serve critical sectors such as nuclear power, thermal power, petrochemicals, and more, offering comprehensive instrumentation, control, and integration services to meet diverse user needs, from field instruments to full solutions.

Intelligent manufacturing integrated solutions for process industries

Thermal power	Nuclear power	Petrochemical & chemical
Steel metallurgy	Environmental protection	New energy

50+ turnkey thermal power/environmental I&C EPC projects

400+ instrumentation integration projects for thermal and nuclear power

2,000+ DCS projects

Our products are deployed in all operational and under-construction nuclear power plants in China, providing high-performance ball valves for the main pipeline of the West-to-East Gas Pipeline Project.



Measurement instruments



Valves and actuators



Control systems and devices



The Halo system

It can withstand static loads dozens of times the vehicle's gross vehicle mass.

CP-driven half-shaft system

Made from ultra-lightweight aerospace-grade materials, it has a maximum output torque exceeding 11,000 N·m and is over 35% lighter than similar products



HIGH-PERFORMANCE AUTOMOTIVE PARTS

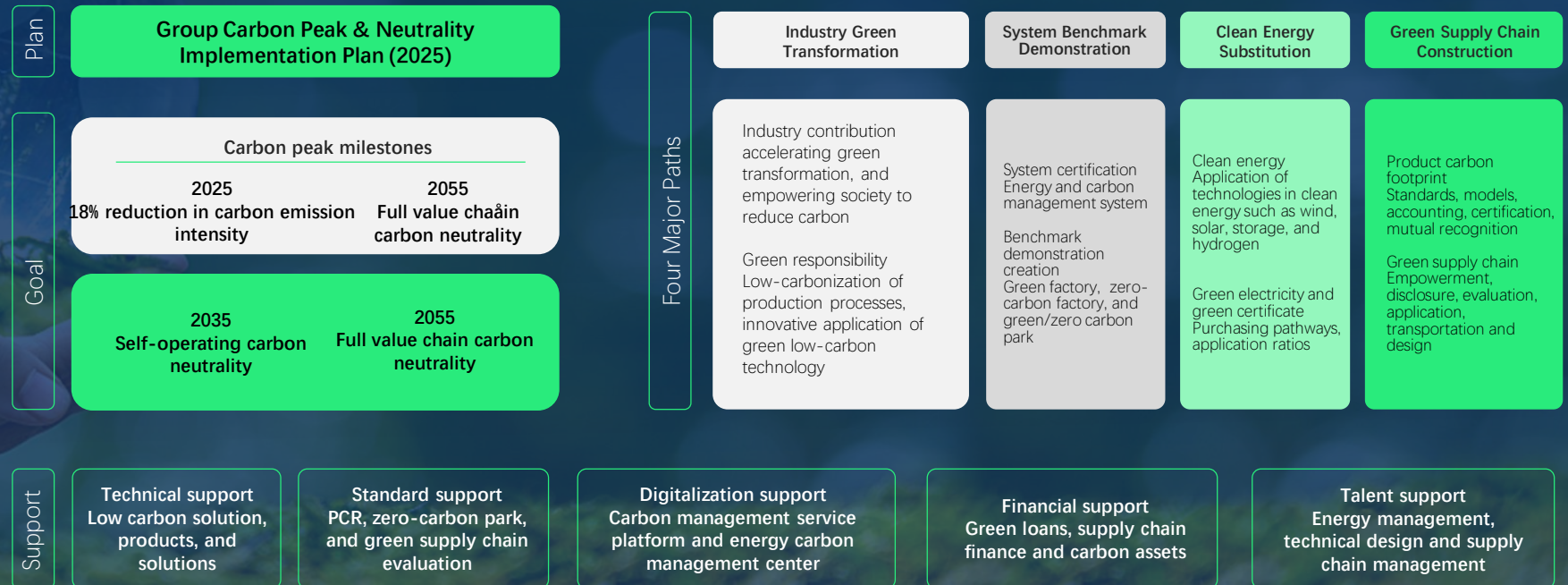
SUSTAINABLE DEVELOPMENT

Building a Sustainable Future

Advancing ecological progress to harmonize humanity and nature

- 1 Promoting changes to address climate
- 2 Utilizing resource for circular development
- 3 Improving systems for environmental friendliness
- 4 Green governance enabling cleaner production
- 5 Respecting nature and prioritizing protection

Ensure Carbon Peak by 2030



Total CO₂ reduction empowered by Shanghai Electric for society in 2024

202,647,002 tons

SUSTAINABLE DEVELOPMENT

Where Responsibility Meets Warmth,
Where Innovation Sparks Joy.

Empowering lives with purpose. advancing every step with care.

Shanghai Electric upholds its social responsibilities and supports public welfare initiatives while pursuing robust operational growth. We actively contribute to national strategies such as Rural Revitalization and the Belt and Road Initiative, address critical social challenges, and leverage our expertise and resources to drive philanthropic programs—advancing harmonious coexistence with society.





与创造者共创未来

CREATE OUR FUTURE TOGETHER

