



# Delivering Premium Power To The World



China Electric Equipment Transformer Co., Ltd.

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400-080-0008





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# 01 CORPORATE SECTION



## ABOUT CEEG

### CEEG

Since its founding in 1990, CEEG has upheld the core values of Vision, Innovation, Responsibility and the mission "Powering the World with Quality Energy".

It has developed three pillar businesses: Power Transmission & Distribution, Energy Internet, and New Energy & Energy Storage Solutions, providing efficient, reliable and green integrated energy solutions and equipment for electrolytic metallurgy, mining, transportation, smart cities, green buildings, data centers and other industries.

CEEG has participated in many key projects in China and globally, including the Beijing Olympics, Beijing South Railway Station, Shenyang National Games, Shanghai Expo, Shanghai Yangtze River Tunnel and Bridge, Lukou International Airport, Shuangliu International Airport, Huawei ICT Project in Ethiopia, India State Grid Upgrade, Saudi Aramco Al-Jailan Petrochemical Complex, Guinea Kindia Tunnel, Kenya Lamu Port, and Namibia Husab Uranium Mine.

Its products and services cover over 150 countries and regions across Asia, Africa, North America, Europe and Oceania. More than 400,000 CEEG products operate reliably worldwide, fully realizing the transformation of Global Manufacturing + Terminal Solutions + Service.

35<sub>year</sub>

Products & R&D

40w<sub>+</sub>

Sets in stable operation.

150<sub>+</sub>

National & Regional  
Layout

1.2w<sub>piece</sub>

Application Projects



## DEVELOPMENT HISTORY

1990

Founded as Jiangsu Huadong Microwave Instrument Factory; first-generation microwave detector independently developed.

2003

CEEG (Jiangsu) Insulation New Materials Co., Ltd. was founded and awarded both China Environmental Label Enterprise and China Environmental Label Product by the Ministry of Environmental Protection.

2006

CEEG won the "China Brand Annual Award NO.1" and became the world's largest dry-type transformer production base, launching YBD-12 underground substations and DMp DC metal-enclosed switchgear.

2012

Led national 863 Program project for high-efficiency battery R&D

2019

CEEG IoT Cloud Platform successfully launched.

2024

Second CNAS Testing Center inaugurated; patent obtained for Rectifier Transformer with Autotransformer for Hydrogen Power.

2001

Signed strategic cooperation agreement with DuPont. Launched SCRBH11 three-phase five-column amorphous alloy dry-type transformer, officially entered new energy industry.

2005

Won "China Top Brand" and "National Inspection-Free Product" awarded by AQSIQ.

2010

Fully automatic amorphous alloy transformer production line of international advanced level officially put into operation. Various transformers certified by authoritative bodies at home and abroad

2016

China's first large-capacity amorphous alloy dry-type transformer SCRBH15-3150/10 successfully shipped.

2020

Transformer for CEEG Energy Storage System Multi-voltage High-power Test Platform Successfully Rolled Off.

2025

Data center: full coverage in China Mobile, Telecom, Unicom centralized procurement.  
330kV transformers launched.  
Energy storage systems: top 3 in shipments.  
Lukou smart factory under rapid construction.



# MANUFACTURING

## Four Production Bases Of CEEG

CEEG has four major production bases: Yangzhong, Binjiang, Jurong, Lukou.

The under-construction Lukou intelligent base focuses on digital intelligent manufacturing, integrating IoT and intelligent control systems for R&D and production of new power equipment. It will produce 110kV–500kV rectifier transformers for electrolytic aluminum, carbon, chemical, metallurgy and other heavy industries.



Yangzhong Plant



Binjiang Plant



Jurong Plant



Lukou Plant

## Three Core Businesses Of CEEG



Transmission & Distribution



Energy Internet



New Energy + Energy Storage Integration



# 02 OUR STRENGTH



## R&D INNOVATION

CEEG intelligent O&M system for power transmission and distribution helps enterprises build smart systems featuring intelligent perception, intelligent decision-making and automatic execution.





# CEEG DIGITAL & INTELLIGENT TRANSFORMATION SOLUTIONS

## Top-level Strategic Planning



### Core Objectives

Quality · Cost · Efficiency · Green · Flexibility



### Strategic Direction

AI Empowers Manufacturing, Drives Industrial Intelligence Upgrade



### Core Architecture: 1+3+N

To develop highly customized, precise and rigorously testable solutions.

## Infrastructure

Build a solid digital foundation for hybrid and private clouds.



## AI Innovative Applications



### AI Silicon Steel Cutting & Nesting Exploration

Optimize material utilization, cut production costs, and enable precise scheduling.



### AI XiaoQ Q&A

Internal knowledge base retrieval based on large models improves information sharing efficiency.



### AI Intelligent Bid Generation

Automated standard bidding documents, greatly improving quality and efficiency.



### AI Intelligent Quotation System

Integrate historical data and cost models rapidly for accurate quotation.



## Business Digitization



### 01 Digital Marketing

Customer-centric, integrating omnichannel resources, leveraging big data and AI for precision marketing and personalized services to enhance customer experience and conversion rates.



### 02 Digital Operation

Integrates 15 core systems including OA, MES, SRM, unifies full-link data, and achieves efficient collaboration & intelligent decision-making from sales to after-sales.



### 03 Digital R&D

Deeply integrated CAD, PLM and ERP systems for seamless data flow from design to production, accelerating R&D cycles.



### 04 Digital Supply Chain Collaboration

Through the SRM platform, we realize full-process digital management from procurement sourcing to supplier performance evaluation, building an efficient and transparent supply chain ecosystem.



### 05 Intelligent Production

Based on the MES system, we realize intelligent scheduling, quality traceability, equipment monitoring and predictive maintenance, ensuring efficient and stable production.



### 06 Financial Digitization

Integrate business and finance for real-time data linkage. Supported by the financial data platform, we enable precise decision-making and value creation.

## Future Vision: Agent Application & Agent Cluster



### Intelligent Agent: Autonomous Perception & Decision-Making

Empower equipment and systems with autonomous perception, decision-making and execution capabilities, break through traditional automation boundaries, and achieve high intelligence throughout the production process.



### Agent Cluster: Collaborative problem-solving

Multi-agent collaboration and distributed task processing drive a quantum leap in operational efficiency and enhance system robustness.



### Intelligent Ecosystem: Self-Learning & Self-Optimization

Build a self-evolving closed-loop ecosystem, shift from passive response to active prediction, and lead a new level of digital-intelligent transformation.



# CNAS & TÜV Rheinland Certified

**Detection Quality:** The Group has 2 CNAS-accredited laboratories and 1 TÜV Rheinland witnessed laboratory, equipped with over 100 sets of advanced testing equipment, including impulse voltage generators, anti-interference dielectric loss testers, multi-channel PD analyzers, and environmental test chambers. Its hardware, testing capabilities, and management meet international standards.

**International Mutual Recognition:** CNAS test reports are mutually recognized by 109 international bodies, including IAF, ILAC and APAC.

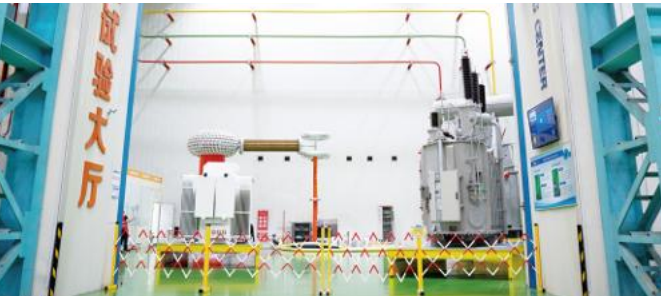
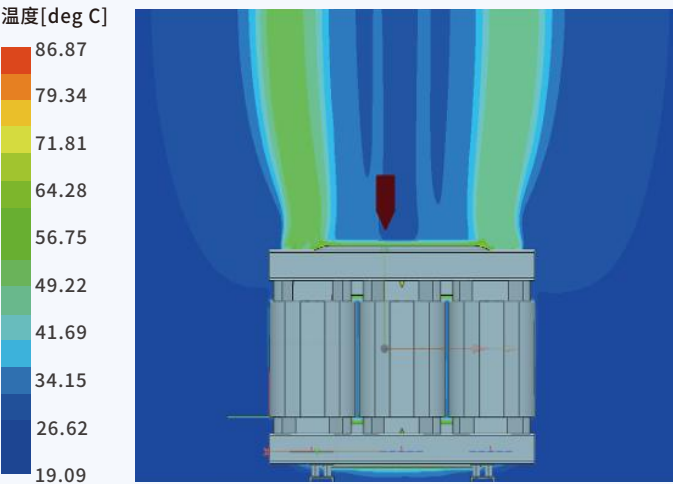
**Social Functions:** With years of R&D and engineering experience, the testing platform actively provides public services, participates in key national projects and the formulation of national and industrial standards, promoting the healthy development of the industry.



# R&D Cloud Platform Thermal-flow Simulation & Structure Optimization Based on Temperature Field

CEEG R&D Cloud Platform integrates electromagnetic optimization, parametric drawing, performance analysis, structural optimization and automatic drawing for transformers, realizing design resource sharing, data query, modification and version control.

Adopting an advanced simulation platform, our product design conducts thorough simulation verification. Thermal simulation tools are used to analyze internal heat transfer and temperature distribution, guiding the system design of heat dissipation, cooling methods and material selection. This effectively controls temperature rise, ensures thermal safety margin, long-term reliable operation and compliance with strict explosion-proof standards.





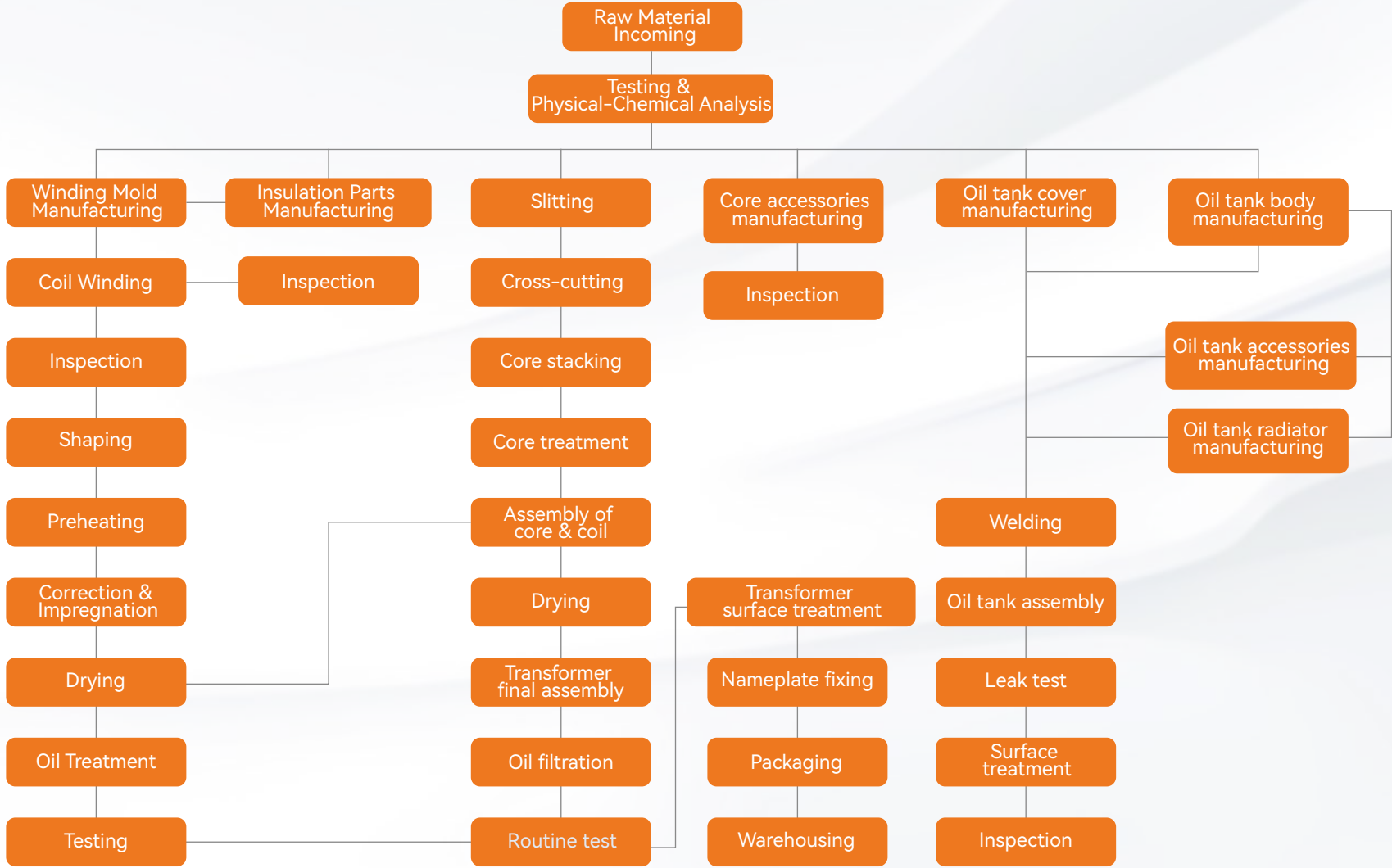
# CEEG Quality Assurance System

Quality comes from full-process control.Guided by ISO9001, CEEG is committed to meeting your needs.



# CEEG Production Flowchart

Sophisticated manufacturing runs through the entire process, ensuring precision, consistency and reliability at every production stage.





## PRODUCTION ENVIRONMENT



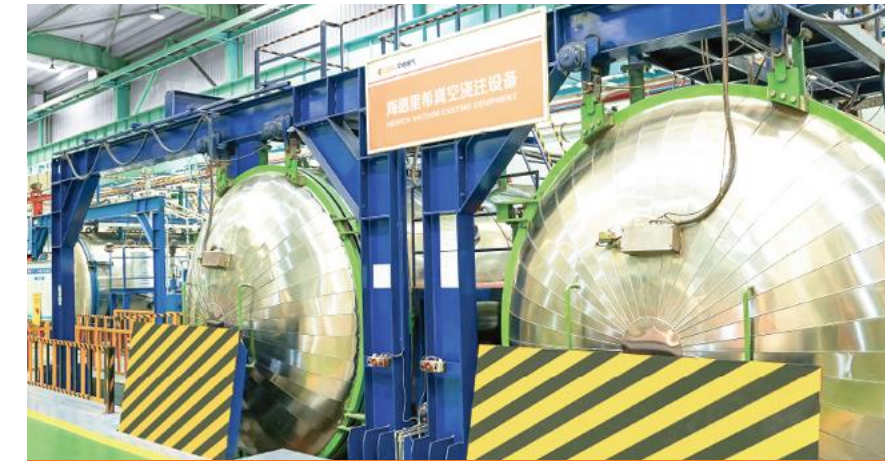
Power-frequency High-voltage Capacitive



Testing Center



VPI Vacuum Pressure Impregnation Tank



Germany Hedrich Vacuum Casting Equipment



High-voltage Test Hall



Lightning Impulse Voltage Generator



Drying Equipment



Automatic Core Cutting & Stacking Robot



## COOPERATION PARTNERS

Partnering with world-class suppliers to build a robust industrial ecosystem.



CEEG's cooperation with DuPont started in 1999. Together they developed the industry's first paper-insulated transformer, a pioneering product for China's transformer industry. Over two decades, the two parties have maintained mutual trust, sincere collaboration and inclusive innovation. This is a prominent achievement of CEEG's philosophy: "Growing with Giants, Moving in Step with the World."



CEEG highly values partnerships. It has established cooperation with world-leading enterprises including DuPont, ABB, Siemens, Schneider, Baowu Steel, and Advanced Technology & Materials Co., Ltd. It also conducts joint R&D and technological innovation with research institutes and universities such as the Chinese Academy of Sciences, Southeast University, Nanjing University of Aeronautics and Astronautics, and Jiangsu University.

Serving top global clients, embracing market challenges and opportunities together.





# AWARDS AND HONORS & QUALITY CERTIFICATIONS



Top 500 Private Enterprises in China (No.183)



Nanjing Mayor's Quality Award



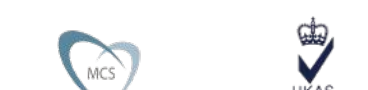
CNAS Laboratory Accreditation Certificate



2025 Nanjing Gazelle Enterprise



Second Prize, Science and Technology Achievement Award



Green Enterprise



Green Design Product



Green Supply Chain



Product Carbon Footprint



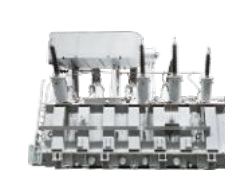
Intelligent Manufacturing System Certification



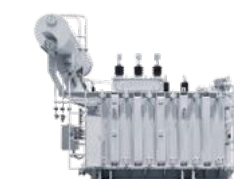
# 03 PRODUCTS

## PRODUCT INTRODUCTION

A global leader in one-stop solutions for power transmission & distribution, energy internet, and new energy & energy storage. Over 400,000 products in stable operation worldwide.



220kV Oil-immersed Transformer



High-temperature Resistant Oil-immersed Power Transformers (<35kV)



110kV Oil-immersed Transformer



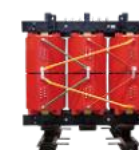
110kV Mobile Oil-Immersed Transformer



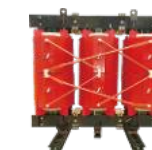
S Series 35kV Power Transformer



10kV S11 Series Power Transformer



Dry-type Rectifier Transformer For Hydrogen Energy



Dry-type Rectifier Transformer



Epoxy Dry-Type Transformer for Energy Storage



ZQSC(H)B Series Epoxy Cast Traction Rectifier Dry-Type Transformer



SG(B) Series Non-Encapsulated Class H Dry-Type Transformer



SRN-M Series High-Temp Liquid-Immersed Transformers



SCRBH15-17-19 Amorphous Alloy Dry-Type Transformer



Open-type Dry-type Transformer For Energy Storage



ZPSG Variable Frequency Transformer



SH15-M Oil-Immersed Amorphous Alloy Distribution Transformer



SCB Epoxy Resin Dry-type Transformer



S11-MD Underground Power Transformer



# Product Family (Partial)

|                                                                                     |                                                                                     |                                                                                      |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|    |    |     |  |  |  |
| IDC Intelligent Integrated Power Module                                             | 1000kWh Industrial & Commercial Energy Storage System                               | 372kWh Industrial Liquid-Cooled Energy Storage System                                | Offshore Platform Transformer                                                       | Standard Version Intelligent Dry-Type Transformer Thermostat                        | GCK(L) Low Voltage Withdrawable Switchgear                                          |
|    |    |     |  |  |  |
| Energy Storage Boost Converter Integrated Unit                                      | YBF Series Wind/PV Substation                                                       | 215 kWh Air-Cooled Energy Storage System                                             | Marine Transformer                                                                  | American-type Box-type Substation                                                   | Oil-immersed Transformer For Energy Storage                                         |
|    |    |     |  |  |  |
| 200kWh Air-cooled Industrial & Commercial Energy Storage System                     | High-temperature Liquid-immersed Traction Transformer For Electrified Railways      | 20kV S11 Series Power Transformer                                                    | Hydrogen-Special Oil-Immersed Rectifier Transformer                                 | Prefabricated Cabin-type Intelligent Substation                                     | 2020 European-style Box-type Substation                                             |
|  |  |  |                                                                                     |                                                                                     |                                                                                     |
| Industrial & Commercial Energy Storage PCS                                          | Mine Flameproof Transformer                                                         | Large Containerized Energy Storage Cabinet                                           |                                                                                     |                                                                                     |                                                                                     |

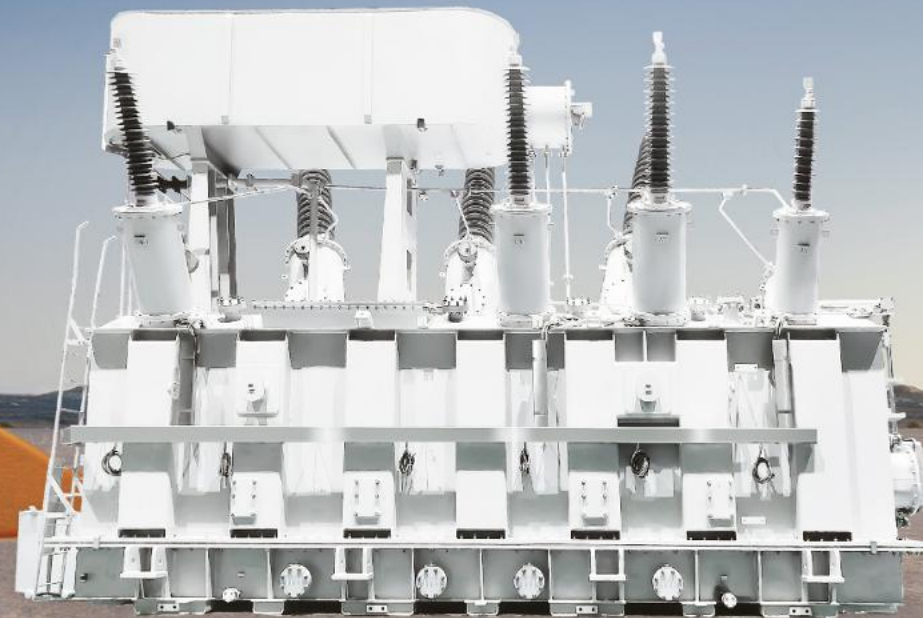
# CEEG STAR PRODUCT





# Oil-immersed UHV/HV Power Transformers 330kV, 220kV, 110kV (66kV)

CEEG's 330kV, 220kV & 110kV (66kV) oil-immersed extra-high / high-voltage power transformers are developed with independent core design technologies and authorized patents. Using high-quality low-loss silicon steel and self-optimized high-strength oil-paper insulation systems, the transformers feature precise magnetic field optimization via 3D leakage flux simulation. They achieve low loss, low partial discharge, low noise and high short-circuit withstand capability, well suited for grid hub projects, large integrated energy bases, wind-solar-storage integration and new energy grid connection.



## Product Description



### Clean Intelligent Manufacturing & Quality Control

We maintain a constant-temperature, constant-humidity, dust-free fully enclosed production environment, supported by a full-process digital traceability system. Lean management of every procedure ensures product consistency and stability.



### Clean Intelligent Manufacturing & QC

Innovative 7-level intelligent temperature control combined with 3D temperature field finite element simulation precisely matches heat dissipation requirements under various working conditions, maximizes insulation material performance, and extends service life.



### Quiet Optimized Design

For core noise, winding noise, oil tank noise and other key noise sources, low flux density design, elastic damping structure and noise reduction shielding technology are adopted to ensure noise performance exceeds national standards.



### Zero-leakage sealing

The sealed structural parts adopt an integrated one-step forming process, combined with a triple leak-testing system including fluorescent penetrant inspection, positive pressure holding test and negative pressure leak detection, eliminating hidden leakage risks from the source.



### Low-Loss Core Technology

The core adopts advanced lamination technology with low no-load loss.



### High Reliability & Short-Circuit Resistance

Passed the sudden short-circuit test at the National Transformer Testing Center in one go. Safe and reliable products.



**S(B) Series Silicon Steel Laminated & SH(B) Series Amorphous Alloy Oil-Immersed Distribution Transformers**

**S(B): 10kV/20kV/35kV, Class 13/18/20/22**

**SH(B): 10kV/20kV/35kV, Class 15/21/25**



CEEG S(B)/SH(B) Series Oil-immersed Distribution Transformers. Adopting CEEG's self-developed 3D parametric design platform, the transformers use high-quality low-loss silicon steel or amorphous alloy materials, together with an independently optimized high-strength insulation system. They feature four core advantages: low loss, low noise, leak-proof, and high short-circuit resistance. Widely applied in industrial parks, urban and rural power distribution networks, and rail transit supporting projects, the transformers deliver stable operation and outstanding energy efficiency.

**Product Description**



**Ultra-low energy consumption design**

High-permeability cold-rolled silicon steel, multi-stage full oblique joint fully automatic lamination, and overall compression PET tape binding effectively reduce no-load loss and no-load current of transformers. Amorphous alloy models use high-quality amorphous strips, with significantly lower no-load loss than traditional silicon steel transformers.



**Zero-leakage sealing protection**

Equipped with a German JOGE automatic corrugated tank production line, the tank is integrally formed without welds. Fully vacuum online oil filling and one-piece acrylate seals are adopted. Leakage is eliminated at the source through positive pressure holding, negative pressure leak detection, and reinforced flange groove sealing.



**Quiet operation experience**

Low flux density design, combined with precise stacking control by Swiss stacking machines, reliable clamping and bracing structures, and special shock absorption measures, making it ideal for noise-sensitive parks and urban grid scenarios.



**High short-circuit resistance**

Coils are wound with semi-hard copper wire, integrally assembled and fully compressed to ensure assembly accuracy. Core clamps are optimized for maximum short-circuit mechanical force, featuring stable structure, reliable operation and excellent resistance to sudden short-circuit shocks.



**Intelligent lean quality control**

Full-process digital traceability system with fully automatic finished product testing equipment. Real-time data comparison and analysis ensure consistent performance of each product, suitable for long-term continuous operation.

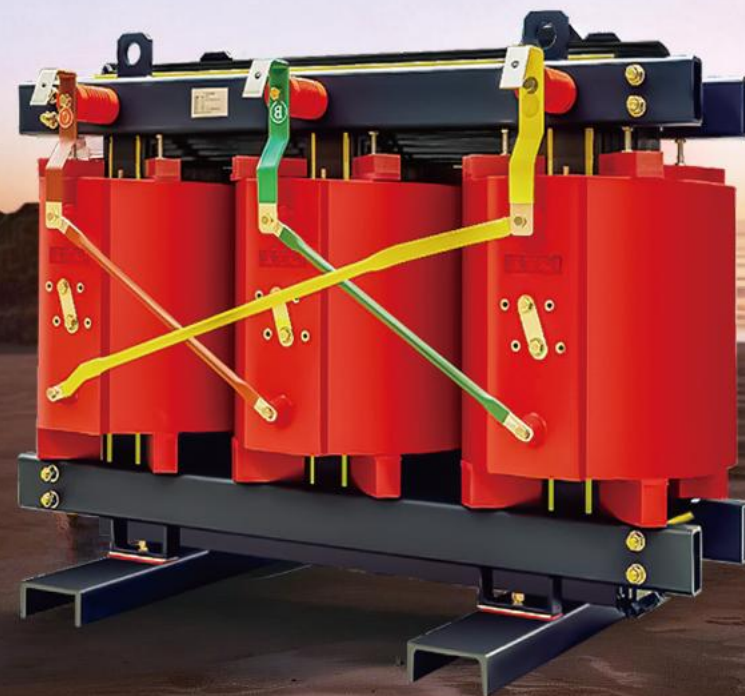


# Dry-type Transformers

SC(B) Series: Epoxy-resin Cast Dry-type Transformers

SG(B) Series: Open Ventilated Dry-type Transformers

10kV/20kV/35kV; 12/14/18 levels



На основе ключевых патентов на сухие трансформаторы и собственной трехмерной облачной платформы, изготовлены по внутренним стандартам, строже государственных. С системой интеллектуального термоконтроля отличаются высокой стабильностью изоляции и устойчивостью к коротким замыканиям. Вся серия сертифицирована по ISO, прошла типовые испытания и сертификат РССС. Доступны модели с защитой от пыли и коррозии, повышенной перегрузочной способностью. Применяются в промышленности, ЖД транспорте, сельских сетях, дата-центрах. Простая эксплуатация и безопасность на всем жизненном цикле.

# Product Description



Ultra-low Consumption Technology

Made of high-quality high-permeability silicon steel, with full miter joints and multi-step stacking technology. No-load loss is optimized beyond national standards, significantly reducing long-term operating energy costs.



Quiet Operation

Featuring nano-paint self-leveling finish, optimized low flux density and structural damping design, the product delivers measured noise below national standards, ideal for noise-sensitive indoor applications.



High Strength & Safety

High-voltage coils adopt fully automatic online mixing with imported German Hedrich vacuum casting equipment. The cast coils are bubble-free, low partial discharge, with stable and reliable electrical performance.



3D Simulation Empowerment

Among the first in China to pass all KEMA tests for E2, C2 and F1. Precision structural optimization via 3D simulation of electric field, temperature field and magnetic field, eliminating local overheating and electric field distortion.



Dual-mode flexible adaptation

Supports dual-mode structural customization, switchable design based on customer scenarios, balancing universal adaptability and personalized needs.



Intelligent Active O&M

Equipped with our unique intelligent transformer solution, real-time operation data collection and fault prediction are realized via the IoT cloud platform. The smart "brain" proactively alerts maintenance needs, reducing unplanned downtime.



Material-saving & Compact Design

Equipped with optional DuPont core technology, the product is 10% smaller in size and uses 10% less material. It greatly improves installation space utilization and reduces transportation and deployment costs.



# SCRBH / SCBH / SGBH Series Amorphous Alloy Dry-Type Transformers

## 10kV/20kV/35kV; Class 15/17/19

As a founder and leader in China's amorphous alloy transformer industry, CEEG has deeply rooted in this field for more than 20 years. Driven by innovation from "explorer to evolver", we lead industrial upgrading and define the future of the sector. Our series products feature dual innovations in materials and structure, making them the preferred choice for a high-efficiency, low-carbon era. They are widely applied in power grid renovation, new energy, national green data centers, major infrastructure projects, delivering long-term stable low-carbon value and operational benefits for customers.



### Product Description



**Save more on electricity**

It boasts an efficiency approximately 15%–30% higher than traditional silicon steel transformers, significantly cutting power costs and energy consumption. A 2500kVA amorphous alloy transformer saves 21,000 kWh of electricity annually, complying with the new GB20052-2024 energy efficiency standard.



**Lower carbon emissions**

Reduce coal by 8.4 tons + offset 21 tons of CO<sub>2</sub> per unit per year. Energy-saving manufacturing with zero wastewater and exhaust. Safe, eco-friendly, flame-retardant, explosion-proof, and pollution-free.



**Smaller & Lighter**

China's first three-phase three-column structure, 20%+ weight reduction, 5%–10% smaller footprint, longer service life.



**No-load loss cut by 70% to 80%**

At 1.4T flux density, the area of the magnetization curve for amorphous ribbon is only 10% that of silicon steel sheet.



**200% overload capacity**

It can fully meet the emergency power supply needs of data centers during sudden high loads and large-power equipment in infrastructure projects.



**Patented Core Technology & Assembly Process**

Exclusive patented iron-core technology. Primary & secondary windings support arbitrary connections (Y/D). Higher mechanical strength. Performance and structure remain unaffected by transportation and vibration.



**Greatly reduces eddy current loss**

Ultra-thin high-resistance, 0.025mm thickness & high resistivity.



# Medium-voltage high-frequency transformer

Medium-voltage high-frequency transformers are the core components of Solid-State Transformers (SST) and Power Electronic Transformers (PET). Focusing on high power density, ultra-high conversion efficiency and high-voltage adaptability, CEEC provides customized R&D and precision manufacturing services for system manufacturers. Based on its technological advantages in high-frequency soft magnetic materials, low-loss winding design, high-efficiency insulation structure and thermal management, CEEC helps customers shorten R&D cycles, reduce costs and improve system performance.



## Product Description



### High-efficiency, high-frequency compact design

Nanocrystalline/amorphous alloy core + low-leakage layered winding. Operating frequency: 400Hz–100kHz. Peak efficiency: 99.8%.Power density:  $\geq 8\text{kW/L}$ . Weight reduced by 30–50%, volume reduced by 40–60% vs power-frequency transformers. Lower overall transport cost by over 25%, shorten deployment cycle by 30%.



### High-Voltage Ready Safe Isolation Guard

Suitable for 6kV–35kV medium voltage, supports Class F/H insulation customization. Verified by lightning impulse and partial discharge tests. Fully sealed structure for harsh environments, building a triple safety barrier.



### Customized For Complete Machine Integration.

Supported by Ansys Maxwell/Flotherm simulations, deeply adapted to topologies (DAB/CHB/MMC), covering 5kW–10MVA power, 0.4kV–35kV voltage and multiple cooling methods.Provides full-process customization, with technical team iterating alongside customers.100% compatible with complete equipment, shortening R&D cycle by over 30%.



### Stable & Durable Prolongs Equipment Lifecycle

High-quality core materials, operating temperature range:  $-40^{\circ}\text{C}$  to  $125^{\circ}\text{C}$ ,shock & vibration resistant,MTBF > 100,000 hours,service life  $\geq 20$  years,annual O&M cost reduced by over 30%.



### Strict quality control ensures stable mass supply

Certified with ISO 9001:2015 & IATF 16949. Full-chain quality control plus 16 factory inspections ensure consistent batch performance.



# Complete product Energy Storage Boosting Converter Integrated Machine

CEEG Energy Storage Boost Converter-Integrated System integrates energy storage batteries, step-up transformers, PCS, LV/HV power distribution and intelligent communication units, delivering a highly integrated energy storage solution. It is ideal for applications demanding high power supply reliability and energy efficiency. With mature technology and reliable performance, over 10,000 units have been delivered worldwide, widely used in new energy generation, water conservancy, pumped storage and microgrids.

## Product Description



### Cost-effective & simplified procurement

Integrated functions, simplified procurement, shorter construction cycle.



### Integrated prefabricated delivery plug-and-play

Pre-assembled & pre-tested, no internal wiring on-site. Compact 20ft high-cube container, easy for overseas shipping. Plug-and-play, saving time and space.



### Sturdy design for harsh environments and optimized cooling

Suitable for high altitude, low temperature, desert. IP65 protection, C5 corrosion resistance. Operating temperature: -30~60°C (derate above 50°C). Full power at 2000m (custom above 2000m).



### Modular design flexible configuration

Flexible parallel operation, scalable capacity, easy and efficient maintenance.



### Efficiency up to 99%

Three-level topology, reduces energy loss during conversion.



### Intelligent control

Real-time monitoring of transformers via high-precision sensors, supporting remote control of HV/LV switches.



# Complete Solution IDC Intelligent Integrated Power Module

CLP Electric's intelligent integrated power module Dianliang Bifang is an innovative power solution for data centers. It offers flexible customization to meet specific project needs. Through technological innovation and scenario-based design, it redefines data center power system standards and supports the green, intelligent development of computing infrastructure.



## Product Description



**Integrated design**

Integrates 10kV power distribution, transformer, UPS and other core equipment to achieve high-density "four-terminal integration". Saves 50% space vs traditional solutions, accommodates more servers in the same area, greatly improving space utilization.



**Efficient construction & operation**

Fast delivery: modular prefabrication shortens construction to 12 days (only 1 week for container mode), labor costs reduced by 40%.



**Intelligent operation & maintenance**

Decoupled UPS design: compatible with multiple brands, hot-swappable maintenance, zero downtime via digital twin platform. AI intelligent monitoring: real-time status tracking, 98% fault prediction accuracy, 99.99% system availability.



**Energy efficiency optimization**

Equipped with amorphous alloy energy-saving transformers, no-load loss reduced by 60%, saving 11,000 kWh per unit yearly. Greatly cuts energy costs, optimizes data center PUE below 1.2, achieving both cost control and green transformation.



**Cost & carbon reduction advantages**

Upfront construction cost reduced by 30%, with continuous TCO optimization. Full-chain carbon footprint management: 8.5 t CO<sub>2</sub>/module annual emission reduction, aligning with green data center trends.



**Technological breakthrough & safety assurance**

Centralized bypass architecture ensures 99.99% system availability, with millisecond-level switching under MW-class loads. Three-tier defense (device-level insulation monitoring, AI predictive maintenance, system-level disaster recovery) builds a comprehensive protection network for secure power supply.





## Complete Solution High & Low Voltage Intelligent Switchgear

CEEG High & Low Voltage Intelligent Switchgear Series integrates our self-developed 3D parametric design system, intelligent interlock technology and high-precision microcomputer integrated protection & monitoring devices. Adopting fully automatic CNC sheet metal processing and IP-grade sealing, it delivers dual advantages: high-voltage "five-prevention interlock + intelligent monitoring" and low-voltage "draw-out structure for easy maintenance + flexible expansion". Compliant with national and international standards, the products are widely applied in power plants, industrial parks, high-rise buildings, data centers and urban grid renovation, safeguarding safe and efficient power distribution with independent intelligent manufacturing capabilities.

## Product Description

### KYN61-40.5kV Indoor AC High Voltage Metal-clad Withdrawable Switchgear

- Indoor integrated power distribution equipment for 3-phase AC 50/60Hz, 40.5kV single busbar sectionalizing system. Used for power reception and distribution in PV power plants, urban power supply, industry and commercial buildings, with circuit control, protection and monitoring.
- The switchgear is equipped with anti-misoperation mechanisms: preventing trolley movement under load, earthing switch closing when energized, and earthing switch closing when circuit breaker is closed.
- Fitted with high-performance withdrawable vacuum circuit breakers, advanced and reliable microcomputer integrated protection and monitoring devices.

### KYN28-12kV AC High-Voltage Metal-Clad Withdrawable Switchgear

- Indoor three-phase AC 50Hz switchgear for receiving and distributing 3-10kV power, with control, protection and monitoring functions.
- It complies with GB3096, DL404, IEC-298 and features five anti-misoperation protections.
- Suitable for power plants, power generation, industrial distribution, substations and high-voltage motor control.

### GCS/GCK/MNS Low Voltage Drawout Switchgear

- Outstanding arc-proof design with full type tests, ensuring operator safety and equipment reliability.
- Advanced withdrawable structure enables drawer replacement without power cutoff, ensuring high continuity and minimizing downtime losses.
- Mechanical and electrical components comply with anti-seismic, anti-vibration and anti-shock requirements.
- Maintenance-free busbars and frame effectively extend service life.
- Modular, compact design saves space and facilitates future upgrades.
- Flexible configurations: side outlet, rear outlet, back-to-back, etc.
- Various digital and intelligent solutions available.



# Complete Solution ZGS, YB, YBF Series HV/LV Prefabricated Substations & Prefabricated Intelligent Substations.

A compact prefabricated power distribution unit integrating high-voltage switchgear, distribution transformers and low-voltage distribution equipment. It combines step-down and low-voltage distribution in a fully enclosed, weatherproof, rust-proof, dust-proof, fireproof, anti-theft, heat-insulated, movable outdoor enclosure (protection class  $\geq$  IP44). Ideal for urban grid construction and renovation, it replaces conventional civil substations and is widely used in mines, enterprises, oil/gas fields and wind farms as a new integrated power transformation and distribution solution.



## Product Description

- The box-type substation consists of three independent compartments: HV, transformer and LV. Internal layout complies with standard design drawings. It adopts natural ventilation, with dehumidification, explosion-proof and anti-condensation measures.
- HV equipment uses ring main units with compact structure, small size, easy installation, high reliability and low maintenance, equipped with complete "five-prevention" interlock. The cabinet is made of cold-rolled or aluminum-zinc coated steel, treated with pickling, phosphating and electrostatic spraying to meet "three-proof" requirements.
- The enclosure uses high-strength, long-service-life materials, coordinated with the environment, and remains corrosion-free for 20 years. Design service life is at least 20 years.
- The double-layer inclined roof provides thermal insulation, bears a load of no less than 2500N/m<sup>2</sup> without water leakage. The overall protection grade is not lower than IP44.
- Prefabricated modular substations adopt non-metallic or container-type enclosures, with standardized design, factory production, pre-commissioning and on-site assembly.



# 04 GLOBAL PROJECT CASES



## Serving top global clients to tackle market challenges and opportunities together

On the global business stage, every top customer represents the industry's cutting-edge and future. We build our service network with a global vision—from customized solutions and rapid worldwide product delivery, to on-site technical support and remote monitoring and maintenance. Our exceptional, borderless service that exceeds expectations has earned widespread praise and trust from top global customers.

## New Energy Power Generation (PV, hydro, biomass, nuclear, wind, etc.)



Zhejiang Xiangshan Changdatu Photovoltaic Project



Jiangsu Yancheng Sinovel Wind Power Project



Pahae Julu Hydropower Project, Indonesia

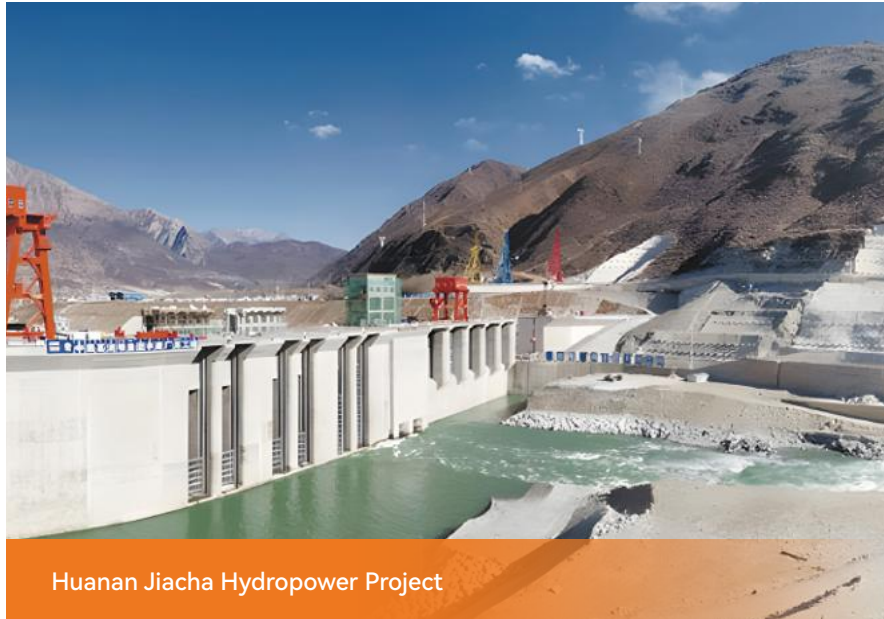




Abaga Wind Farm Project, Xilingol, Inner Mongolia



Guoneng Changyuan Gucheng Photovoltaic Project



Huanan Jiacha Hydropower Project



Thailand Onnut Domestic Waste Incineration Power Generation Project

# Substation Project



Changan Automobile 115kV Substation Project, Thailand



Guoneng Changyuan Gucheng Photovoltaic Project



Shannan Dingli Hongyun Information Center Substation EPC Project



Capacity Expansion & Reconstruction Project of Substation in the 4th Division, Hecdala City



Runyang East Substation Phase II Expansion Project





BYD Thailand Passenger Vehicle Production Base Project



35MVA Main Transformer Project for Lucky Cement, Pakistan



Zhanjiang Chenming Pulp & Paper Co., Ltd.



CEEG (Phase I) GaoShi Centralized Shared Energy Storage Project



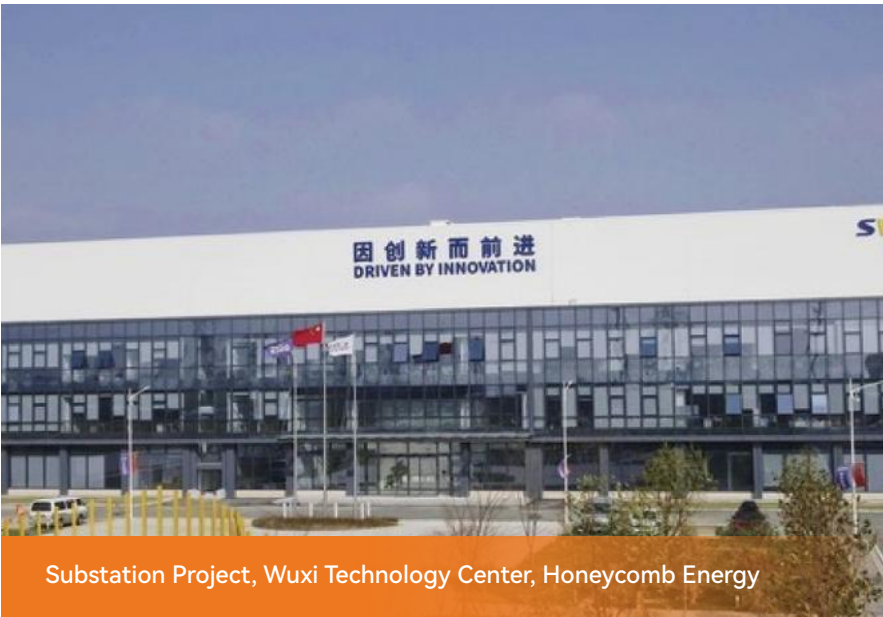
Changyuan Power Jingmen Source-Grid-Load-Storage New Energy Base



Angel Yeast



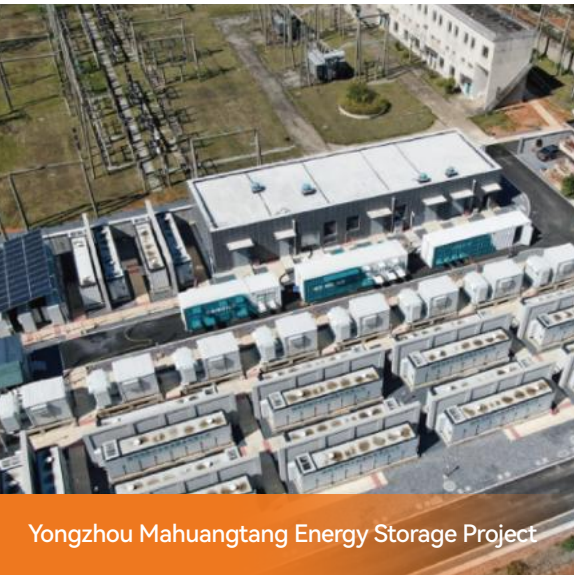
Zhongguan New Energy Technology • Ningxia Mineral Heat Furnace Waste Heat Power Project



Substation Project, Wuxi Technology Center, Honeycomb Energy

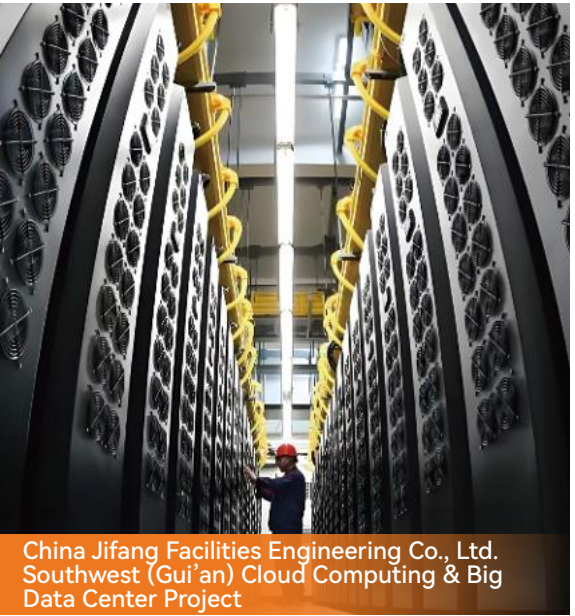


Energy Storage Project





Data Center Project







New Jersey Data Center Project, USA



Nanjing Tencent East China Cloud Computing Base Power Capacity Expansion Project



China Unicom Huailai Data Center



Shenzhen Qianhai Information Hub Tower

## Municipal & Transportation Projects



Olympic Gymnasium Project



Xiaolangdi Water Conservancy Project



Shanghai Expo Park Project

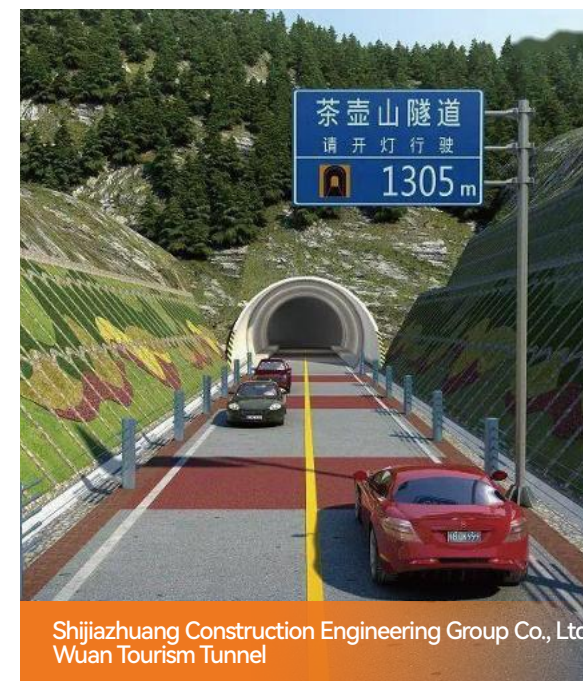


Beijing Chang'an Avenue Lighting Upgrade Project



Jinan Yellow River Tunnel Project







# Petrochemical and Metallurgy





# SERVICE NETWORK

CEEG is dedicated to promoting Chinese brands and expanding its global presence, with an impressive portfolio of over 400,000 transformers operating reliably on the grid. Our innovative products—including transformers, photovoltaic modules, energy storage inverters, and integrated energy storage systems—are successfully sold in more than 150 countries and regions worldwide, spanning Europe, Australia, Southeast Asia, the Middle East, and Africa. CEEG is committed to delivering cutting-edge energy solutions that power a sustainable future!



Asia | Africa | Oceania | Europe | North America | South America

四味  
中电

INTERPRETATION  
OF CEEG

创造力

Creativity

C

创造性的工作  
CREATIVE WORK

CEEG 中电电气

四味  
中电

INTERPRETATION  
OF CEEG

精力/活力

Energy

E

工作上  
必须要有足够精力  
ALWAYS BE ENERGETIC AT WORK

CEEG 中电电气

四味  
中电

INTERPRETATION  
OF CEEG

努力

Effort

E

努力工作  
快乐生活  
TOIL HARD AND LIVE MERRILY

CEEG 中电电气

四味  
中电

INTERPRETATION  
OF CEEG

感恩

Gratitude

G

常怀感恩之心  
人生好运相伴  
GRATITUDE IN HEART, FORTUNE IN LIFE

CEEG 中电电气