



Wolong Transformers

WOLONG
Power your future

▼ Wolong's Global Presence

Founded in 1984 and headquartered in Shaoxing, Zhejiang, Wolong is a world-leading industrial enterprise committed to providing safe, efficient, intelligent, and green electric drive system solutions to customers in the world.

With the mission of "Drive the future with science and technology, provide inexhaustible power for the world", our company focuses on high-efficiency power drive systems with effective energy utilization. Through the comprehensive application of innovative new materials, technologies and processes, the company has achieved continuous improvement in the energy efficiency of electric drive systems. Further technological innovation into smart energy systems, our products are widely use in fields of industry and agriculture, manufacturing, energy production, mining, construction and transportations. This development is contributing to the green development towards energy saving and mission reduction in various industries. Helping customers to achieve "reducing CO₂ emissions" and "carbon neutrality".

▼ Family of Brands



• **1984**
Company established

• **5.2 billion USD**
Total assets

• **18000**
Employees

• **5**
R&D centers

• **70**
Product series

• **7.15 billion USD**
Group Revenue

• **18**
Industries

• **42**
Global manufacturing plants



Enterprise Profile

▼ **25million kVA**
Annual capacity

500kV

Voltage levels up to

- With nearly seven decades of experience in transformer production
- Our products cover power transformers and distribution transformers of 10kV~500kV voltage level; oil-immersed transformers and dry-type transformers of various insulations; traction transformers, rectifier transformers, and electric furnace transformers for special purposes; various sets of equipment pre-assembled substations for applications in power distribution, AC-DC traction, energy storage, wind power and photovoltaic step up; providing power engineering construction, power intelligent operation and maintenance platform construction and management, and creating safe, environmentally friendly and intelligent power supply systems for customers with product (power equipment) + service (distribution intelligent operation and maintenance) whole life cycle solutions.



● Beijing Huatai Transformers Floor space: 56,666m²



● Yantai Dongyuan Transformers Floor space: 150,000m²

Committed to becoming a pioneer in the power transmission and transformation industry

ISO9001

Quality Management
System Certification

ISO14001

Environmental Management
System Certification

ISO45001

Measurement and Testing
System Certification

- Possess more than one hundred core technologies and patents for power transmission and distribution
- Member of National Transformer Standard Committee
- Transformer standard drafting unit
- Sales network throughout the country and exported to many overseas countries and regions

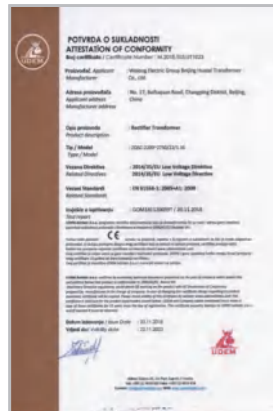
History of development



Certifications and patents



KEMA Certification



CE Certification



CE Certification



Environmental Management System Authentication Certificate



Occupational Health and Safety Management System Authentication Certificate



Occupational Health and Safety Management System Authentication Certificate

Patent Type	Patent Name	Patent No.
Invention	A transformer body compressing device and method	ZL201410707005.8
Invention	Insulation cylinder and transformer	ZL201610067480.2
Invention	Capacitor ring for high-voltage transformers	ZL201611025303.4
Utility Model	A kind of protective insulation angle ring for high-voltage coil lead-out	ZL201120458370.1
Utility Model	Transformer wire structure	ZL201420038290.4
Utility Model	Transformer magnetic shield installation structure	ZL201420038316.5
Utility Model	A resin-insulated transformer for frequency regulation	ZL2022218376226
Utility Model	A kind of three-phase - single-phase transformer and rail transit power supply	ZL202123361908X
Utility Model	A resin-insulated transformer for frequency regulation	ZL2017217504419
Invention	A kind of 110kV three-phase dry-type transformer	ZL2017102658692
Invention	Foil-wound coil and its production method and equipment	ZL2016112455187
Invention	Transformer for testing	ZL2016112447462
Utility Model	Vehicle-mounted mobile pre-assembled traction rectifier substation	ZL2016200247583
Utility Model	A kind of pre-installed traction rectifier substation for mining	ZL2013208887796
Utility Model	A kind of low-noise amorphous alloy dry-type traction rectifier transformer	ZL2013207389204
Utility Model	Resin-insulated amorphous alloy dry type traction rectifier transformer	ZL2013103450053

Major equipment

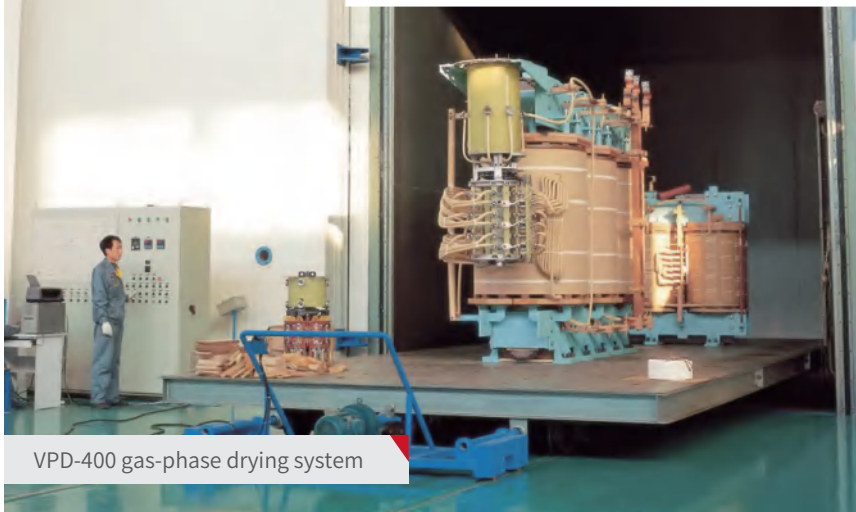




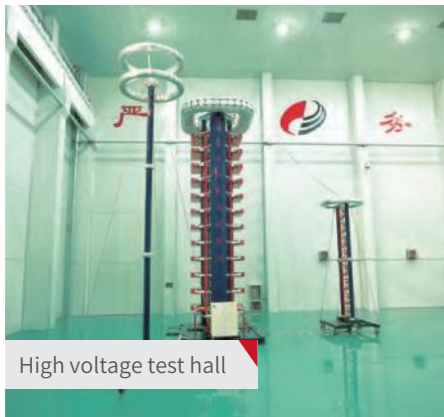
Iron core wire cutting equipment



Iron core stacking and overturning worktable



VPD-400 gas-phase drying system



High voltage test hall



CNC insulation machining center



200T coil press

Oil well transformer

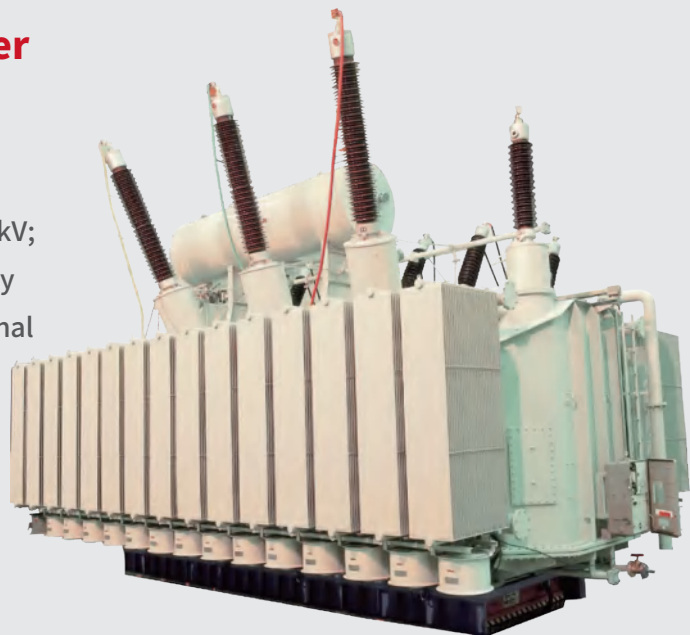
500kV transformer

- Primary voltage: $550/\sqrt{3}$ kV/550kV;
- Secondary voltage: $230/\sqrt{3}$ kV;
- Tertiary voltage: 35kV/63kV/110kV;
- Ultra-high voltage transformer with technical characteristics such as low loss, low noise, no oil leakage, intelligence, convenient installation and maintenance, energy saving and environmental protection.



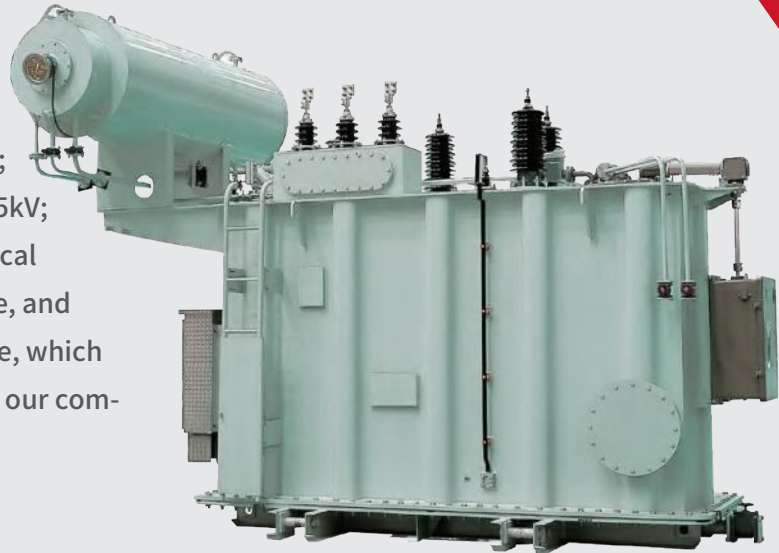
220kV Power Transformer

- Primary voltage: 230kV;
- Secondary voltage: 69KV/110kV;
- Tertiary voltage: 6.6kV/10.5kV/35kV;
- 220kV power transformer is widely used in the main grid of the national power grid. It has the characteristics of reliable structure, low loss, low noise, and superior performance.



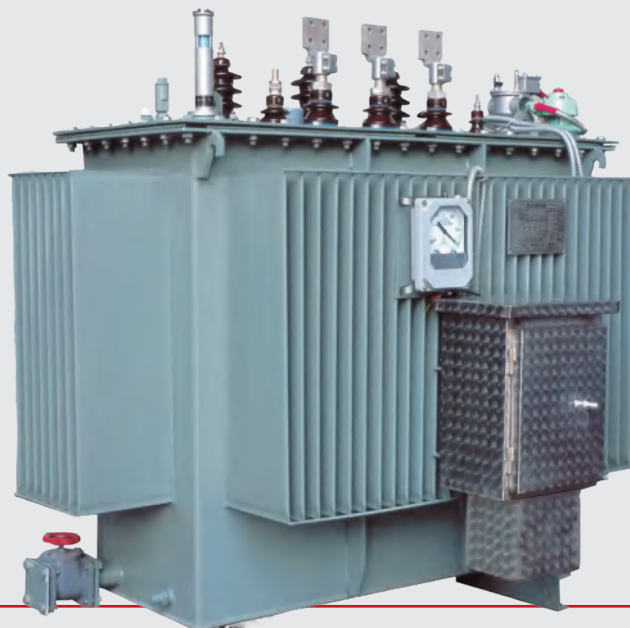
35kV transformer

- Primary voltage: 35kV/110kV;
- Secondary voltage: 10.5kV/35kV;
- 35kV transformer with low local discharge, low loss, low noise, and strong short circuit resistance, which are typical series products of our company.



10kV transformer

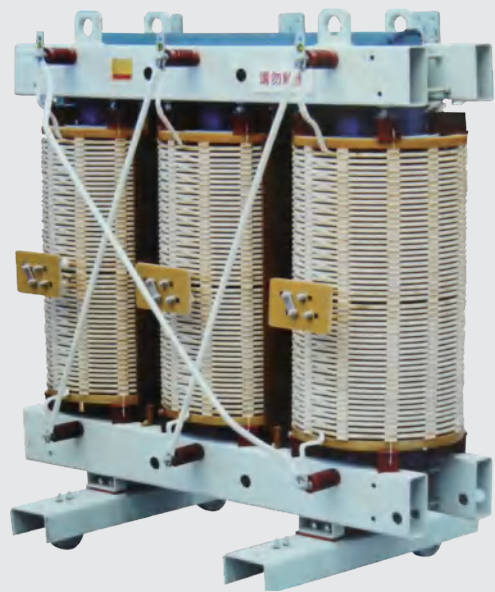
- Primary voltage: 10kV
- Secondary voltage: 0.4kV
- The 10kV 30-1600kva 3-phase oil-immersed power transformer has the characteristics of high performance and high reliability.



▼ Dry-type transformers

Power distribution transformers

- Primary voltage: 6kV/10kV/35kV;
- Secondary voltage: 0.4kV;
- Epoxy resin insulation, NOMEX paper insulation;
- Silicon steel sheet dry-type transformers, amorphous alloy dry-type transformers
- Application: Distribution Terminal



Rectifier transformer

Primary voltage: 6kV/10kV/35kV;
Secondary voltage: 590v/1180V;
Epoxy resin insulation;
Silicon steel sheet dry-type transformer,
amorphous alloy dry-type transformer
Application: rail transit traction power
supply, inverter energy feedback



Power transformer

Primary voltage: 35kV;
Secondary voltage: 10kV;
Epoxy resin insulation;
Application: Power transmission
system, SVG systems, isolating
power grids in order to suppress
high harmonics, realize balance
and compensation



▼ Complete set of equipment

Rectifier unit

- Grid-side voltage AC10kV/20kV/35kV;
- Output voltage DC750V/1500V;
- Including rectifier transformer
Rectifier;
- Application: Urban rail transit
traction DC power supply
system



Pre-assembled box-type substation

- Primary voltage: 36.75kV
- Secondary voltage: 0.69kV/0.8kV/1.14kV
- Application: Mines, factories, oil and gas fields and wind power stations. It replaces the original civil power distribution room and distribution station and becomes a new type of complete set of transformer and distribution device.



Co-Phase power supply device

- Grid side voltage Three-phase AC10kV/20kV/35kV;
- Output voltage Single-phase AC25kV/27.5kV;
- Including phase-shifting transformer, power unit, output reactor, protection system, cooling system, control system;
- Application: Rail transit single-phase AC traction power supply and rail transit locomotive debugging test power supply



▼ Complete set of equipment

Wolong energy storage transformer adopts a three-phase dry-type transformer with double winding to provide low loss, non-excitation voltage regulation and epoxy resin casting maintenance-free power transformer. It is tailor-made for energy storage step up cabin integrated machine, conforms to the standard cabinet size of energy storage, combined with PCS load characteristics design, safety, and energy saving.

Energy storage integrated machine



Transformer	Resin insulated dry type transformer
Capacity (kVA)	1700、2000、2500、3150、3300、3400、3450、3550、4500、5000 (Can be customized according to customer requirements specifications)
Operating ambient temperature	-35°C~65°C (more than 45°C reduction)
Anti-corrosion grade	C3
Insulation grade	Class H or Class F
Rated voltage ratio	AC35 or 36.75 or 37kV / AC0.69kV
High voltage regulation method	Manual off circuit voltage regulation
Tap range	±2×2.5%, meet the requirements of GB 10230.1-2007
Rated frequency	50Hz
Coupling group	Dy11
Transformer structure	High-voltage wire-wound, low-voltage foil-wound
Impedance voltage	6% or 7% or 8%
Cooling method	AN/AF
Overload capacity	Not less than 1.1 times
Lightning surge level	170kV, according to GB/T1094 and GB 311.1
Frequency withstand voltage level (high voltage winding)	70kV, according to GB/T1094 and GB 311.1
Frequency withstand voltage level (low voltage winding)	3kV
Temperature control protector	Automatic operation, can manually start and stop the fan

Depending on the scheme, Wolong shore-based frequency converter power supply system can use dry-type phase-shifting transformers, output isolation transformers, power frequency step-down transformers and other types. The output transformers are usually equipped with several secondary windings of different voltages to meet the frequency of 60Hz power supply. Considering the port application environment, epoxy resin casting transformers are mainly used.

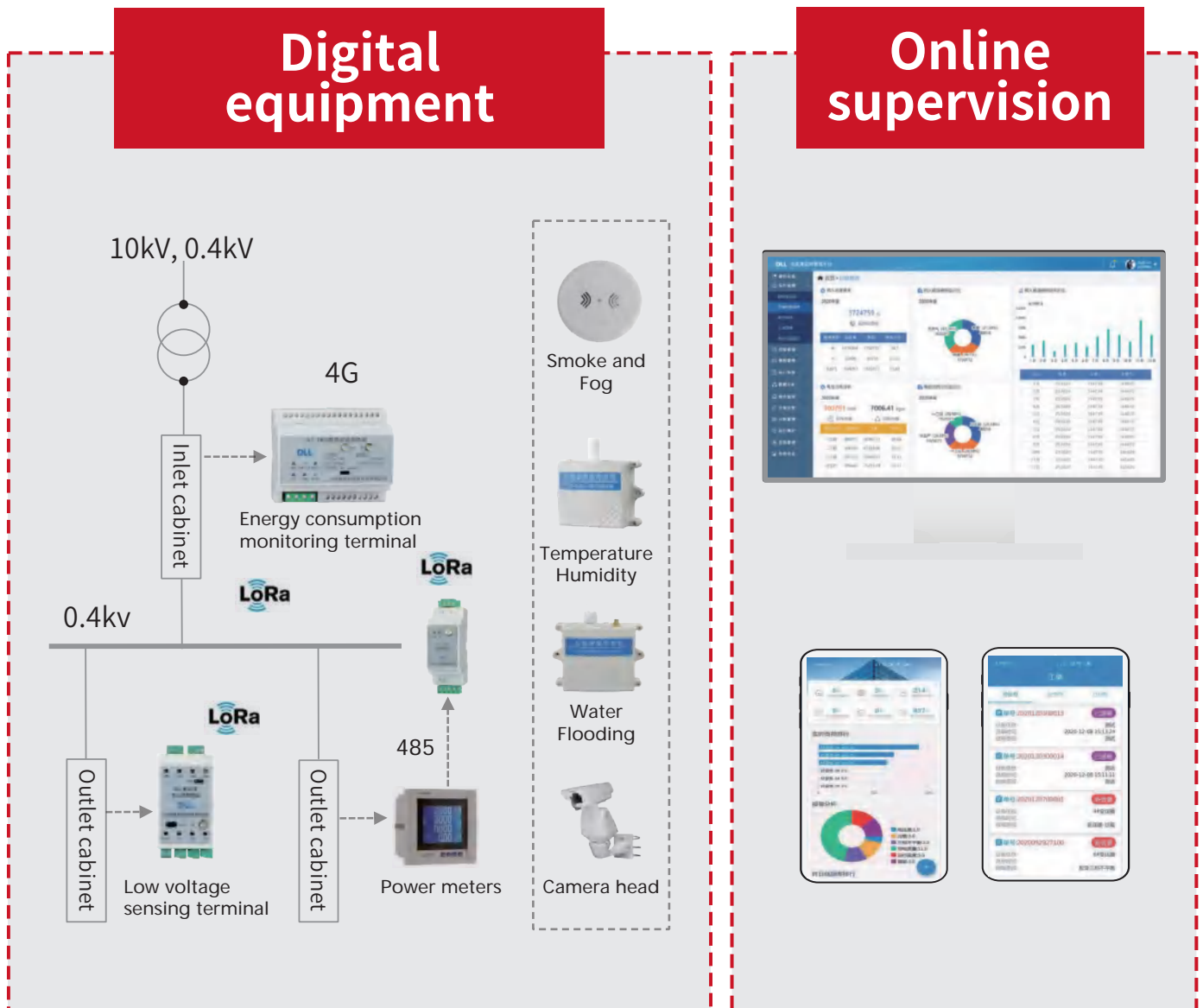
Shore power container



Capacity (kVA)	200-20000kVA
Operating ambient temperature	-5-45°C
Nominal voltage	Primary side 10kV, secondary side 0.69kV phase-shifting transformer 11kV/, 6.6kV/440V isolation transformer
Rated frequency	60 Hz
Insulation grade	Class H
Neutral point wiring method	High-voltage power distribution adopts neutral point through resistance grounding method Low-voltage power distribution adopts IT wiring mode
Tap range	+5— -5%
Overload requirements	1.1 times, 1 minute; 1.5 times, 3 seconds
Impedance voltage	8~9%
Efficiency	≥ 98% phase-shifting transformer ≥ 99% isolation transformer
Wiring group	Dyn11/extension triangle
Local discharge	≤ 10PC
Isolation requirements	Complete electrical isolation is required between the primary side and the secondary side
Lightning surge	Conform to GB/T1094 GB311.1
Insulation grade	Conform to GB/T1094.11
Structure	Dry type, epoxy resin, overall vacuum casting, copper core coil
Cooling method	Forced air cooling
Thermostat	Configuration

Electricity intelligent operation and maintenance-service overview

Through the collection terminal and various sensors in the distribution room, the data is transmitted to the operation and maintenance service system of "Online supervision + Remote duty + Offline service", realize operation and maintenance platform, which monitors the distribution room remotely, centrally, and in "unmanned and less manned" in the distribution room, and improve the safety and economy of operation real-time, and provides offline services such as inspection, testing, and repair for users, so as to build an operation and maintenance.

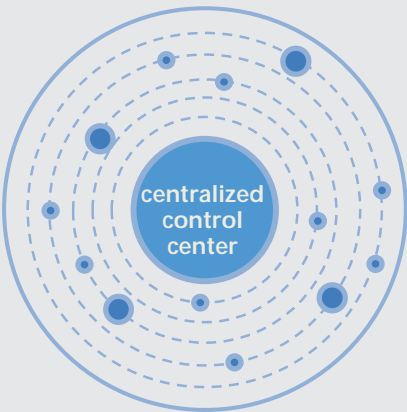


Service for multi-industry energy-using enterprises

Public construction

Commercial complexes, office buildings, hospitals, schools, etc.

Remote monitoring



Offline service



Periodic inspection with electricity



Periodic maintenance test



Equipment maintenance and replacement



Regular cleaning and sweeping



Safety management standard



Fault emergency repair

Industry

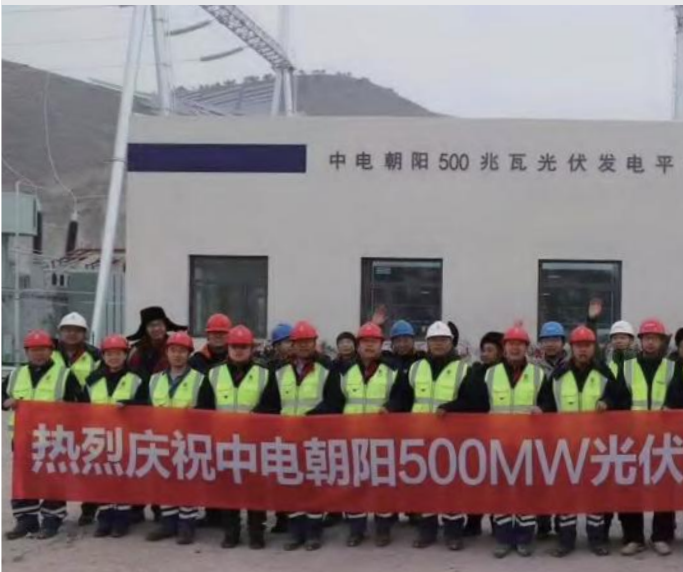
Food, pharmaceutical, chemical, textile, etc.

Domestic References



- ZHSFZ-12500 /35kV Transformer used in Xinjiang Kuqa Green Hydrogen Pilot Project

- SFFZ11-250000/220 kV Transformer used in China Power International Holding (CPIH) 500 MW grid-parity project



Overseas References



- OSFPSZ-250MVA/230kV Transformer used in National Electric Grid of Kyrgyzstan Osh Project

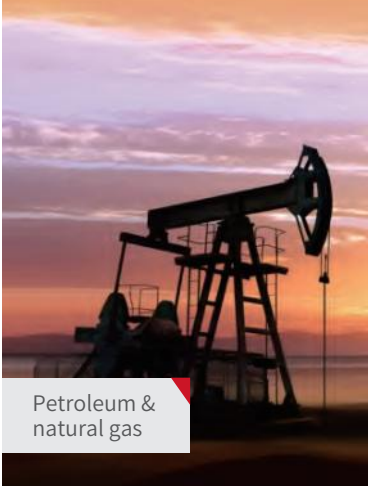
- OSFPSZ-250MVA/230kV Transformer used in National Electric Grid of Kyrgyzstan Bishkek Project



- SZ11-15000/33kV Transformer used in Ethiopia Addis Medium Voltage Transmission and Distribution System Upgrading Project

Application scenario



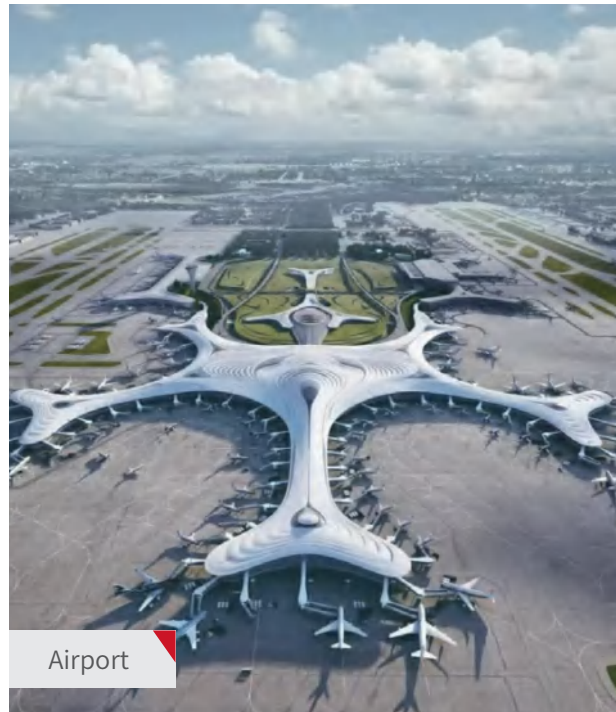


Petroleum & natural gas

Over **14+**
Application scenario



Wind power



Airport



Rail transit



Paper making



PV



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