TSTY 天晟电气

COMPANY PROFILE

TSTY Electric CO.,Ltd.

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Fax: 0375-7215018
E-mail: Info@tstyelectric.com
Web: www.tstytransformer.com www.tstynice.com www.tstyelectric.com

Factory Address: Jiaxian Industrial Cluster, Henan Province
Zhengzhou Office Address: Room 1119, Block D, Jianzheng Oriental Center, Zhengzhou
Shanghai Office Address: S1-3203,BFC Bund Financial Center Huangpu District,Shanghai

平顶山天晟电气有限公司
TSTY Electric Co.,Ltd.

About Us

250,000 m²
Total Floorspace

180
Invention Patents

30+year
Industrial Experience

TSTY Electric Co., Ltd., established in 1995, has its headquarters in the Economic Development Zone of Jia County, Henan Province. As a digitally intelligent management enterprise, it integrates the R&D, production, sales, installation and services of power equipment. With technological innovation as its core driving force, TSTY is committed to building a comprehensive industrial ecosystem.

At present, TSTY's main products include: 10kV, 35kV and 110kV liquid (oil)-immersed transformers; 10kV and 35kV epoxy cast-resin dry-type transformers; amorphous alloy liquid (oil)-immersed distribution transformers; amorphous alloy dry-type distribution transformers; high/low-voltage compact substations (YB series); combined transformers (ZGS series); new energy compact substations (available in European, American and Chinese standards); energy storage converter & boosting integrated units (available in European, American and Chinese standards); integrated energy storage cabinets; compact substations; charging-pile substations; and complete sets of electrical equipment. All products have obtained a range of international authoritative certifications, such as IEC, CQC, SGS, CE and GOST, which ensures their adaptability to the requirements of different regional markets.

The company has invested RMB 300 million in upgrading its intelligent production lines, while building 5G+ digital intelligent workshops and establishing a fully digitalized production system. This initiative has boosted production efficiency by 50% and increased the product qualification rate to 99.9%, laying a solid foundation for the expansion of its global business.

TSTY Electric has identified Africa as its core overseas strategic stronghold, while also expanding its presence into emerging markets such as the Middle East, Europe, South America, and Central Asia. To date, its products have reached over 80 countries worldwide. Backed by a sales agency network and localized teams in more than 20 countries, TSTY ensures rapid responses to customer needs and the delivery of efficient services. Additionally, the company has established cross-border highway transportation channels, which not only guarantee on-time deliveries but also further enhance the overall customer experience.

Looking ahead, TSTY will continue to uphold its corporate spirit of "Integrity, Innovation, Unity, and Progress," actively respond to the national strategy for developing new-quality productive forces, and remain deeply committed to the power equipment sector. TSTY is dedicated to building a world-class modern enterprise and contributing Chinese strength to the development of the global energy industry.



CORPORATE CULTURE

Corporate Mission

Let green energy change the world

Corporate Vision

To become a world-class manufacturer of electrical equipment.

Enterprise Spirit

- Integrity
- Innovation
- Unity
- Progress.

DEVELOPMENT HISTORY

Integrity

1995
The predecessor of TSTY — Henan Tianlai Electric — was established, marking the beginning of its initial exploration and development in the power equipment industry.

2011
The company has undergone large-scale expansion and has grown into a high-tech enterprise that integrates R&D, production, sales, and installation of power equipments.

2013
Became Vice President Unit of Henan Transformer Association and was awarded as an AAA Credit Enterprise in the same year.

2014
Established the Henan Province Triangular Energy saving Transformer Engineering Technology Research Center.

2015
Recognized as a National High-Tech Enterprise and passed the State Grid paperless certification.

Innovation

2017
Successfully completed corporate restructuring and was officially renamed TSTY.

2018
Became Vice President Unit of Henan Electrical Engineering Association and the first enterprise selected for the Pingdingshan Patent Navigation Project.

2019
Led the construction of the Central Plains Electric City Project and officially launched the Tiansheng Intelligent Workshop Project.

2020
Ranked among the Top 100 Private Enterprises in Henan and recognized as Henan Provincial Enterprise Technology Center.

2021
Recognized as a “Specialized, Refined, Distinctive and Innovative” Enterprise in Henan, a Provincial Industrial Design Center, and a Provincial Technology Innovation Demonstration Enterprise.

2022
Awarded Henan Quality Benchmark, Henan Intelligent Workshop, and launched the first 5G digital smart factory in Henan’s electrical industry.

2023-2024
The first intelligent transformer production base in Henan transformer industry was put into operation, with 12 branches established. National green manufacturing benchmark enterprise.
TSTY’s products have already been exported to more than 80 countries

Unity

Progress

TSTY

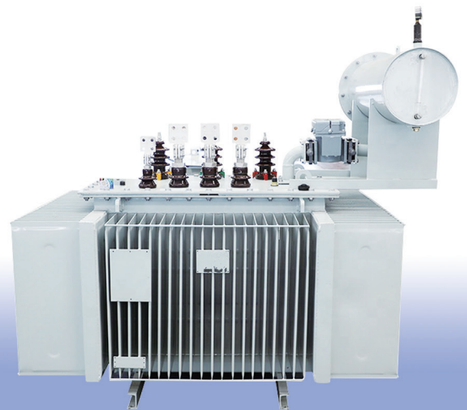
BUSINESS SEGMENTS

TRANSFORMER SERIES

6kV, 10kV, 11kV, 15kV, 20kV, 22kV, 35kV, 66kV, 110kV, 220kV oil immersed transformers
10kV,35kV epoxy cast dry-type transformers; amorphous alloy oil immersed distribution transformers; amorphous alloy dry-type distribution transformers









SUBSTATION TRANSFORMER SERIES

YB Prefabricated Substation, ZGS Pad-Mounted Transformer, Prefabricated Intelligent Substation







NEW ENERGY COMPACT SUBSTATIONS





Photovoltaic Compact Substation, Wind Power Prefabricated Substation, Huashi Compact Substation
Energy Storage Converter & Step-up Integrated Unit (Huashi Type, American Type, European Type)
Containerized Prefabricated Substation

HIGH & LOW VOLTAGE SWITCHGEAR SERIES





SF6 Gas-Insulated Ring Main Unit (RMU), GGD Low Voltage Switchgear
Schneider BlokSeT Active Low Voltage Switchboard, HXGN-12 Series High Voltage Switchgear
KYN28A-24(Z) Metal switchgea Panel, KYN61-40.5 Metal Enclosed Medium Voltage Switchgear
MNS Low Voltage Switchgear, GCS Low Voltage Switchgear

ENERGY STORAGE SERIES








Industrial & Commercial Energy Storage:1000kWh Industrial & Commercial Energy Storage System, 100kW / 200kW / 215kW
Energy Storage Systems
Residential Energy Storage Systems
Large Containerized Energy Storage Systems

FACTORY DISPLAY

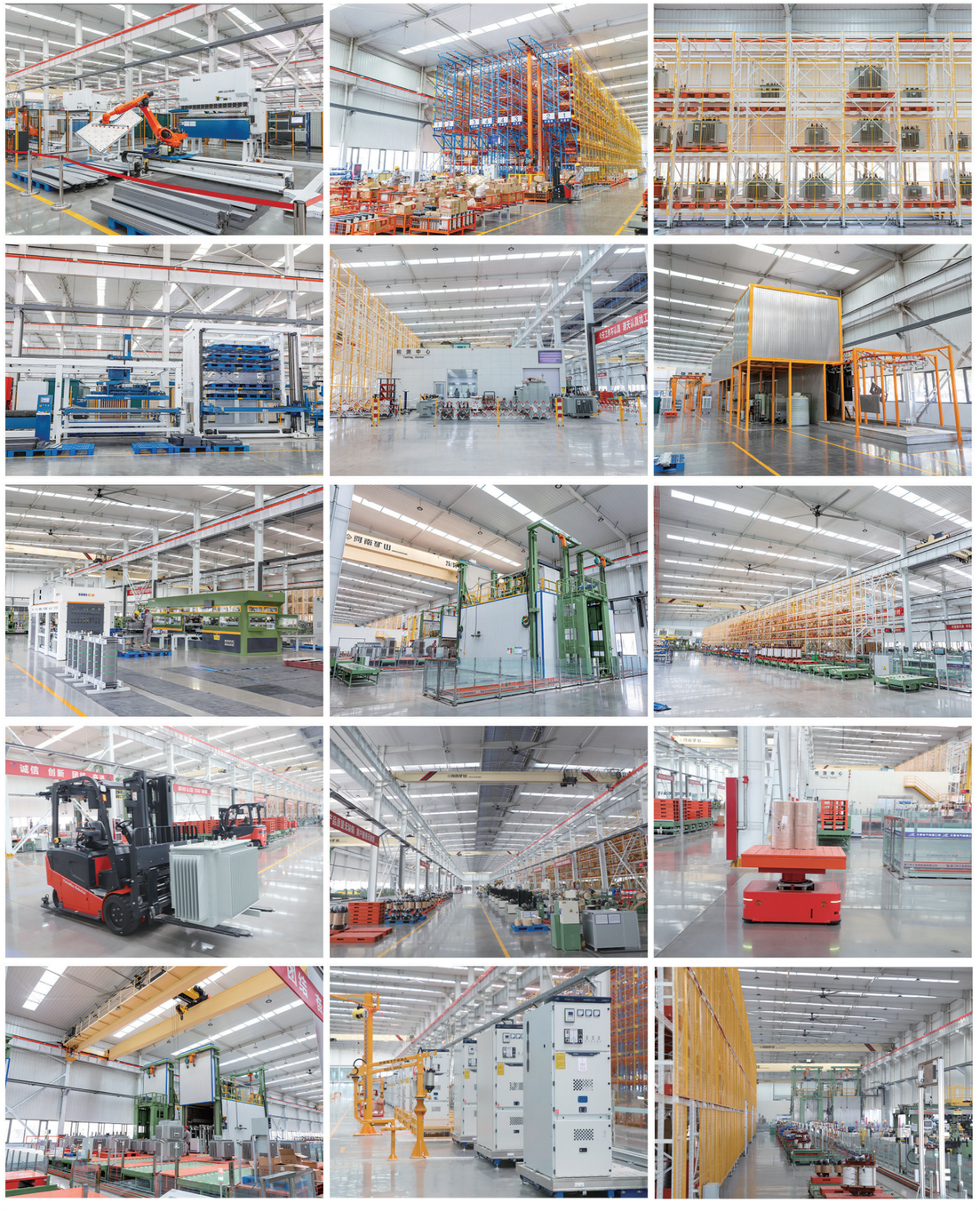








WORKSHOP INTELLIGENT EQUIPMENTS



TRANSFORMERS












SWITCHGEARS AND SUBSTATION TRANSFORMERS











R&D STRENGTH



180+
Domestic and international patents

200+
R&D experts and engineers

30+
Top research institutes

CORE R&D DIRECTIONS

Energy-storage substations, Electronic transformers, Loss-free transformers Intelligent self-maintenance switchgear, New energy generation transformers, etc.

Eco-friendly products include: nitrogen transformers and anti-harmonic transformers, contributing to energy structure optimization.











TSTY

CERTIFICATION

ENTERPRISE QUALIFICATION

- ISO 9001 QMS
- GB/T 23331 Energy Management System
- CCC SGS
- Utility Patent 158
- ISO 45001 OHSMS
- ISO 14001 Environmental Management System
- CE IEC
- GOST
- EAC











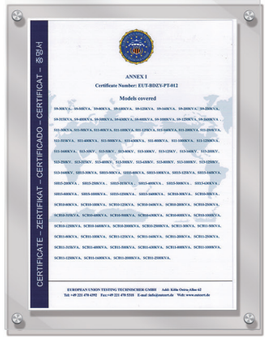






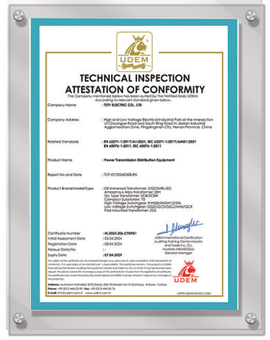


















Company Profile

























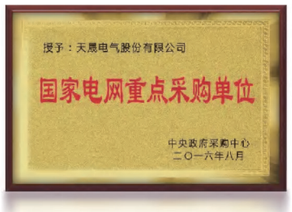


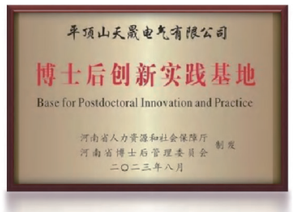


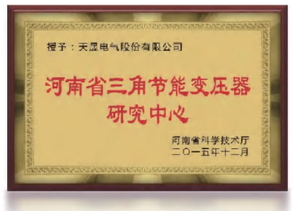

高新技术企业
证书


国家知识产权优势企业
国家知识产权局
2023年11月-2026年10月


平顶山天晟电气有限公司
国家绿色工厂
中华人民共和国工业和信息化部
二〇二三年十二月


授予：天晟电气股份有限公司
国家电网重点采购单位
中央政府采购中心
二〇一六年八月


平顶山天晟电气有限公司
博士后创新实践基地
Base for Postdoctoral Innovation and Practice
河南省人力资源和社会保障厅
河南省博士后管理委员会
制发
二〇二三年八月


授予：天晟电气股份有限公司
河南省三角节能变压器
研究中心
河南省科学技术厅
二〇一五年十二月


河南省企业技术中心
河南省发展和改革委员会
二〇二〇年十月


天晟电气股份有限公司
河南省“专精特新”中小企业
河南省工业和信息化厅中小企业服务局
二〇二四年五月

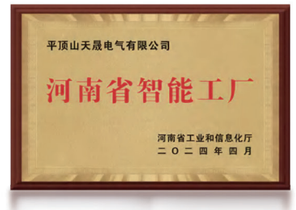

授予：天晟电气股份有限公司
省级工业设计中心
河南省工业和信息化厅
二〇二一年六月

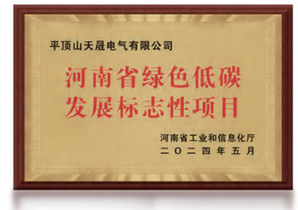

授予：天晟电气股份有限公司
2018年度河南电工行业质量领跑者
诚信单位


平顶山天晟电气有限公司
工程技术研究中心
平顶山科技局
二〇一五年十二月


河南省质量标杆企业
河南省工业和信息化委员会
二〇二二年六月


2024
平顶山企业50强
平顶山市企业联合会
平顶山市企业家协会
平顶山学院经济管理学院
河南物华律师事务所
2024年5月


平顶山天晟电气有限公司
河南省智能工厂
河南省工业和信息化厅
二〇二四年四月


平顶山天晟电气有限公司
河南省绿色低碳
发展标志性项目
河南省工业和信息化厅
二〇二四年五月


授予：平顶山天晟电气有限公司
河南省中小企业
数字化转型标杆
河南省工业和信息化厅
二〇二四年五月


河南省电工行业协会
天晟电气股份有限公司
副会长单位
Vice chairman unit


授予：平顶山天晟电气有限公司
河南省绿色制造
公共服务平台
河南省工业和信息化厅
二〇二四年四月


平顶山天晟电气有限公司
河南省绿色供应链
管理示范企业
河南省工业和信息化厅
二〇二四年五月


河南省电工行业协会
团体标准制定单位


河南省电工行业协会
团体标准制定单位


授予：2023年度平顶山市生态环境保护工作
先进单位
平顶山市生态环境保护委员会办公室
二〇二四年三月

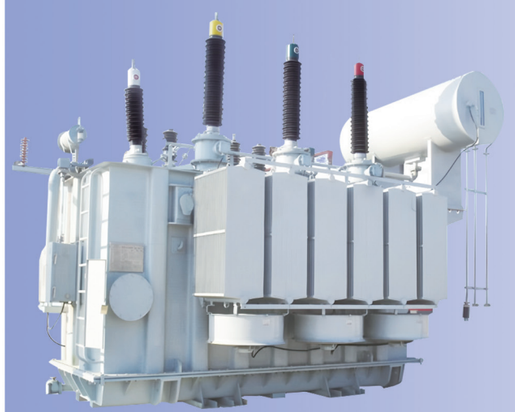

授予：天晟电气股份有限公司
先进民营企业
中华全国总工会
二〇一七年六月


荣誉证书
天晟电气股份有限公司：
荣获2019年度平顶山市
市长质量奖。

TSTY

PRODUCTS

TRANSFORMER SERIES



110kV

Oil-Immersed Transformer

Product Introduction

The 110kV energy-efficient oil-immersed transformer produced by our company features low loss, low noise, low temperature rise, high reliability, core-lifting-free design, and leak-free structure. This product is widely applicable to power plants, substations, wind power and photovoltaic stations, as well as large-scale mining and petrochemical enterprises.



10kV/11kV/15kV/20kV/22kV

Oil-Immersed Transformer

Product Introduction

Our company's oil-immersed transformer series has become a leader in the field of power supply due to its excellent performance, safety and stability, as well as durability. The product suitable for voltage ranges from 6kV to 66kV, with a capacity ranging from 15kVA to 31500kVA, meeting the needs of various scenarios.

220kV

Oil-Immersed Transformer

Product Introduction

The 220kV oil-immersed transformer is extensively used in State Grid projects, large industrial enterprises and energy power stations, providing strong and reliable power support for urban power supply, industrial production, and energy transmission.



33kV/35kV

Oil-Immersed Transformer

Product Introduction

33kV/35kV voltage lines have significant advantages in power transmission and distribution, and are suitable for medium distance and medium load scenarios especially in urban power supply, industrial areas or rural power grids.



S-SERIES OIL-IMMERSED TRANSFORMER

Product Introduction

S Series New-Material Oil-Immersed Transformers

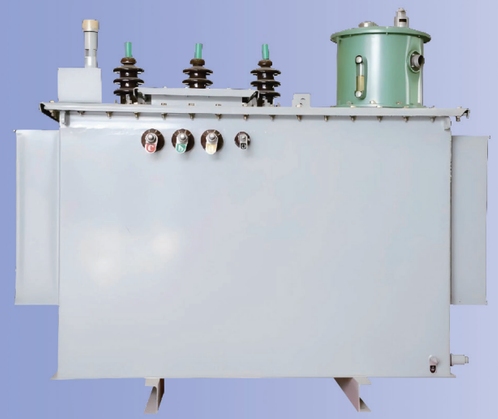
Our oil-immersed transformers are classified by performance into the S9, S11, S13, S20, S22, SBH15, SBH21, and SBH25 series, covering voltage levels from 6kV, 10kV, 11kV, 15kV, 20kV, 22kV, 35kV, 66kV, and capacities from 25kVA to 31, 500kVA. These transformers are widely applicable in power grids, industrial and mining enterprises construction projects, oil fields and agricultural areas

Product Features

High efficiency, High strength, Short circuit resistance, Safe operation
Low loss, Low noise, Long life, Advanced performance, Intelligent
Unattended operation, Remote control, Telemetry

Applicable fields

Factories, Outdoor box-type substations etc.



SZ-On-load

Capacitance Regulating Transformer

Product Introduction

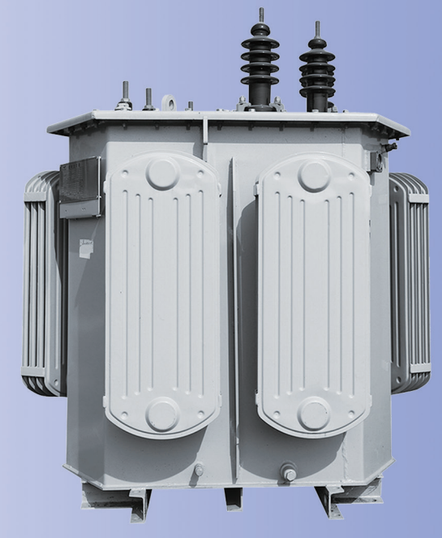
This product is used to monitor voltage and current on the low-voltage side of the transformer, featuring easy operation, low maintenance costs, minimal no-load loss, and excellent energy-saving and environmental performance, making it widely suitable for industrial and mining enterprises, rural areas, and power grid transformation projects.

Amorphous Alloy

Oil-Immersed Distribution Transformer

Product Introduction

Amorphous alloy transformer is a low-loss and high efficiency power transformer with iron-based amorphous metal as the iron core. The iron loss (ie no-load loss) of amorphous alloy transformers is 70-80% lower than that traditional transformers which generally use silicon steel as the core. It is an ideal low-loss energy-saving transformer at present. Because of low losses, amorphous alloy transformers generate less heat. The temperature rise is low and the running performance will be very stable.



DRY-TYPE TRANSFORMER SERIES



6kV/10kV/11kV Dry-Transformer

20kV/22kV Dry-Transformer

33kV/35kV Dry-Transformer

SCB Series Epoxy Resin Cast Dry-Type Power Transformer

According to the performance, the dry-type transformers produced by our company can be divided into SCB10, SCB11, SCB13 and SCB18 series.The voltage levels range from 6.6kV to 35kV, and the capacity spans from 30kVA to 5000 kVA. These products are suitable for important applications such as urban power grids, high-rise buildings, business centers, theaters, hospitals, hotels, tunnels subways, high-speed railways and airports.

Product Features:

- Maintenance-free, low loss, low noise and low temperature rise.
- High short-circuit resistance and excellent flame-retardant ability.
- Fireproof, explosion-proof and pollution-free.
- High temperature resistance, excellent moisture resistance, and safe, reliable operation.



Amorphous Alloy Dry Transformer

Product Features:

1. Low Energy Consumption: The core is made of amorphous alloy material, resulting in low no-load losses and no-load current, equivalent to 30% of that of silicon steel sheets.

2. Strong Corrosion Resistance: The amorphous alloy core is fully encapsulated with resin and high-temperature -resistant silicone, effectively preventing rust and the shedding of amorphous alloy fragments, thereby effectively protecting the core and coil.

3. Low Noise: To reduce operating noise, an optimal operating magnetic flux density was selected during product design. During processing, the core and coil structures were refined, and special noise-reducing materials and processes were employed.

4. Strong Short-Circuit Resistance: The product utilizes a three-phase, three-column structure, with a compact and rational clamping structure for the core and coil.

5. Low Partial Discharge: Using epoxy resin vacuum casting, the product exhibits low temperature rise, long service life, and strong heat dissipation. The temperature control and protection system provided in the product ensures the safe operation of the amorphous alloy dry-type transformer.

SUBSTATION TRANSFORMER SERIES



YB

Prefabricated Substation

Product Introduction

Convenient installation, rapid power supply
Improves power supply quality, reduces losses
Transportation, mining enterprises, Cities

ZGS

Pad-Mounted Transformer

Product Introduction

Reduces losses, improves power supply quality
Remote control, maintenance-free
Used in industrial parks, Commercial centers,
Road lighting





Prefabricated

Intelligent Substation

Product Introduction

Converts low-voltage AC from renewable energy systems into medium-voltage AC for grid connection
Integrates LV switchgear, transformer, RMU, auxiliary power, and other equipment in a steel container, offering a highly integrated grid-access solution for solar and wind power plants.

NEW ENERGY COMPACT SUBSTATIONS

Photovoltaic

Compact Substation

Product Introduction

Sealed Protection: Excellent sealing against wind sand, salt fog, rain, and snow.
Resistance: Multiple enclosure material options for different environments, ensuring strong adaptability.





Wind Power

Pre-installed Substation

Product Introduction

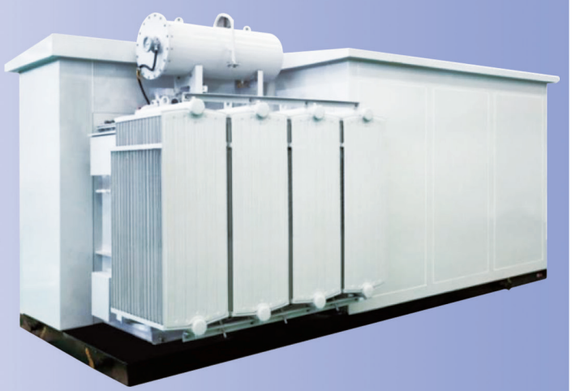
Ventilation: Natural ventilation with insulation forced ventilation starts when ambient temperature approaches 40°C. Triple Protection: Advanced electrostatic spraying process makes the enclosure resistant to rust and fading, with excellent sealing performance.

Huashi

Huashi Compact Substation

Product Introduction

Applied in step-up systems for new energy power generation. Unlike traditional designs, the transformer is placed outside the enclosure, effectively solving heat dissipation issues. Natural air circulation rapidly removes heat. The transformer connects to the enclosure via side outlets and partitions divide the compact substation into high-voltage and low-voltage compartments-making it an ideal solution for renewable energy projects.



ENERGY STORAGE CONVERTER STEP-UP INTEGRATED UNIT

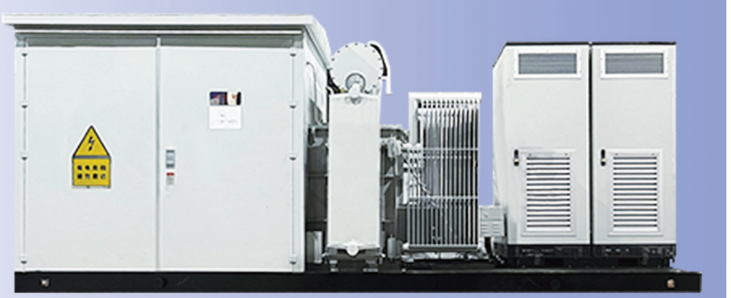
European Type





American Type

Huashi Type



The energy storage converter and step-up integrated system temporarily stores green energy such as solar and wind power in the battery system. When needed, the stored energy is inverted through the energy storage converter and delivered to a three-phase step-up transformer. This system effectively addresses the intermittency and instability of wind and photovoltaic power.

HIGH & LOW VOLTAGE SWITCHGEAR SERIES



SF6

Gas-Insulated Ring Main Unit

Product Introduction

SF6 is a high-voltage switchgear in which all high-voltage live parts are sealed in the gas box, which can completely prevent operators and maintenance personnel from touching high-voltage parts, ensuring the personal safety of maintenance personnel. At the same time, it can prevent harmful substances such as moisture and dust in the external environment from affecting the insulation level and operating life of live parts ensuring reliable operation of the equipment throughout its life cycle. The protection level of the gas box is IP42, and adding a protective shell can meet the requirements of outdoor use. In addition, the cabinet is compact in design and small in size, which is convenient for handling and transportation and can save space.





GGD

Low-Voltage Switchgear

Product Introduction

The GGD switchgear series is primarily used by power users such as power plants, substations, and industrial and mining enterprises. As a key component in AC 50-60Hz power distribution systems, it can accommodate rated operating currents up to 4000 amperes. Its primary purpose is to facilitate the conversion, distribution, and control of electrical energy in power, lighting, and distribution equipment.

Schneider

BlokSeT Active Low Voltage Switchboard



Product Introduction

Schneider BlokSeT Active Low Voltage Switchboard's modular design, intelligent functions and high safety performance make it an ideal choice for modern power systems. BlokSeT complies with international and domestic standards such as IEC, GB/T, and has been certified by the international authoritative laboratory ASEFA. It is widely used in construction, industry, energy and infrastructure meeting the high reliability and intelligent management needs of power systems in different industries.



HXGN-12

Series High Voltage Switchgears

Product Introduction

HXGN-12 Series High Voltage Switchgear refers to the switchgears used in the ring power distribution network. The structure of the switchgear is simple, and the combination of load switch and fuse is commonly used. It has simple structure, small size and low price.

KYN28A-24 (Z)

Metal Clad Switchgear Panel

Product Introduction

KYN28A-24 is a relatively common high-voltage switchgear at present, rated voltage is 24kV. The equipped vacuum circuit breaker is in the middle of the switch cabinet, that is, the circuit breaker is located in the middle of the front cabinet of the switchgear, so the lower space can be saved for the expansion of other schemes or used as a cable room.



ENERGY STORAGE SERIES



1000kWh

Industrial & Commercial Energy Storage System

Product Introduction

An integrated solution combining batteries, BMS, and PCS. It stores electricity during off-peak hours and discharges during peak demand to balance energy costs. Smart monitoring ensures safety and battery life,with air-or liquid-cooling options. Ideal for factories shopping malls, and other commercial facilities, helping reduce costs, improve efficiency, and enhance power stability.

100kW / 200kW / 215kW

Energy Storage Systems

Product Introduction

Designed with a highly integrated concept, combining the battery system, BMS, PCS, EMS, and fire protection. Featuring flexible deployment, these systems provide peak shaving demand management, dynamic capacity expansion, and demand response, meeting diverse energy storage applications.



RESIDENTIAL ENERGY STORAGE SYSTEMS



Residential Off

Grid Energy Storage All-in-One Unit

Product Introduction

Integrates battery storage, inverter, charge controller and monitoring system. Works with PV panels for self-sufficient energy supply and serves as an emergency backup during outages. Suitable for off-grid, power scarce, and unstable grid regions.



Residential Single(Z)

Phase Energy Storage All-in-One Unit

Product Introduction

Compact and user-friendly, integrating battery storage and inverter in one unit. Provides backup supply during grid failures and leverages time-of-use pricing by storing low-cost electricity at night for daytime use, helping households save energy and costs.

Residential Three

Phase Energy Storage All-in-One Unit

Product Introduction

Specifically designed for households with high-power appliances. Combines batteries, inverter, and controller compatible with PV panels for storing excess solar power. Three-phase output supports large electrical loads.



Large Containerized

Energy Storage Systems



Product Introduction

Containerized storage solutions use standardized containers as carriers, offering lower infrastructure costs, smaller footprint shorter construction periods high modularity, and easy transportation and installation. Applicable to thermal, wind and solar power plants, as well as islands, residential communities, schools, research institutes, factories, and large load centers.

GLOBAL MARKET



Response Speed & Coverage

24/7 online support, with 48-hour emergency response worldwide. In overseas markets regional spare parts can be quickly allocated through partner distributors' inventory capabilities.

Full Lifecycle Service System

Pre-Sales: Professional engineering team provides accurate planning and optimal solutions; legal support available for signing international contracts.

In-Sales: Real-time production progress updates, factory inspection and packaging plan confirmation, full monitoring of logistics and transportation.

After-Sales: Free replacement of spare parts within warranty; cost-price supply for out of-warranty parts. Services include installation & commissioning, troubleshooting, regular inspections and maintenance training, supported by a customer return-visit and archival system.

Customer Satisfaction

Each client is assigned a dedicated project manager and supported by a professional service team of over 200 staffs.
Guided by the principle "One-time cooperation, lifelong service", TSTY maintains a customer satisfaction rate above 99%.

COOPERATIVE CLIENTS

SONELGAZ · TEİAŞ · GSE · Kenya Power · ZESCO · CELEC EP HIDROPAUTE · Eskom · ELECTRICIDADE DE MOÇAMBIQUE, E.P. · TCN · NGCP · KAHRAMAA · KEGOC · EVN · ROSSETI · REG · EGAT · GRIDCo · CORPOELEC · PSE · Saudi Electricity Company · TANESCO · senelec · COORDINADOR ELÉCTRICO NACIONAL · AFREC · CFE · 国家电网公司 · 中建六局 · 中建七局 · SINOPEC · 中国铁建 · CHINA TOWER 中国铁塔 · 中国石油 · 中国中铁 · 中煤集团 · 中国航天 · 中船重工 · 中国南方电网

KEY CASES & PROJECTS



Mongolia · Gold Mine Project



Netherands · Mining Projects



Nigeria · ESS Energy Storage Project



Rwanda · Public Utility Office Building Project



Ethiopia · Plastic Factory



Bengal · Glass Factory



Zambia · Rural Power Grid Transformation



Philippines · Shopping Mall Project

KEY CASES & PROJECTS



Aysha Wind Farm In Ethiopia



De Aa Wind Farm In South Africa



Ulangab Wind Power



Hainan Offshore Wind Power Project



Hongkong-Zhuhai-Macao Bridge



The Launching Project Shenzhou 13



Three Gorges Project



Railway Plateau Power Supply
And Distribution Project

CUSTOMER VISITS



SHIPPING CASES

