

Main overseas offices have been established



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Sieyuan®

SIEYUAN

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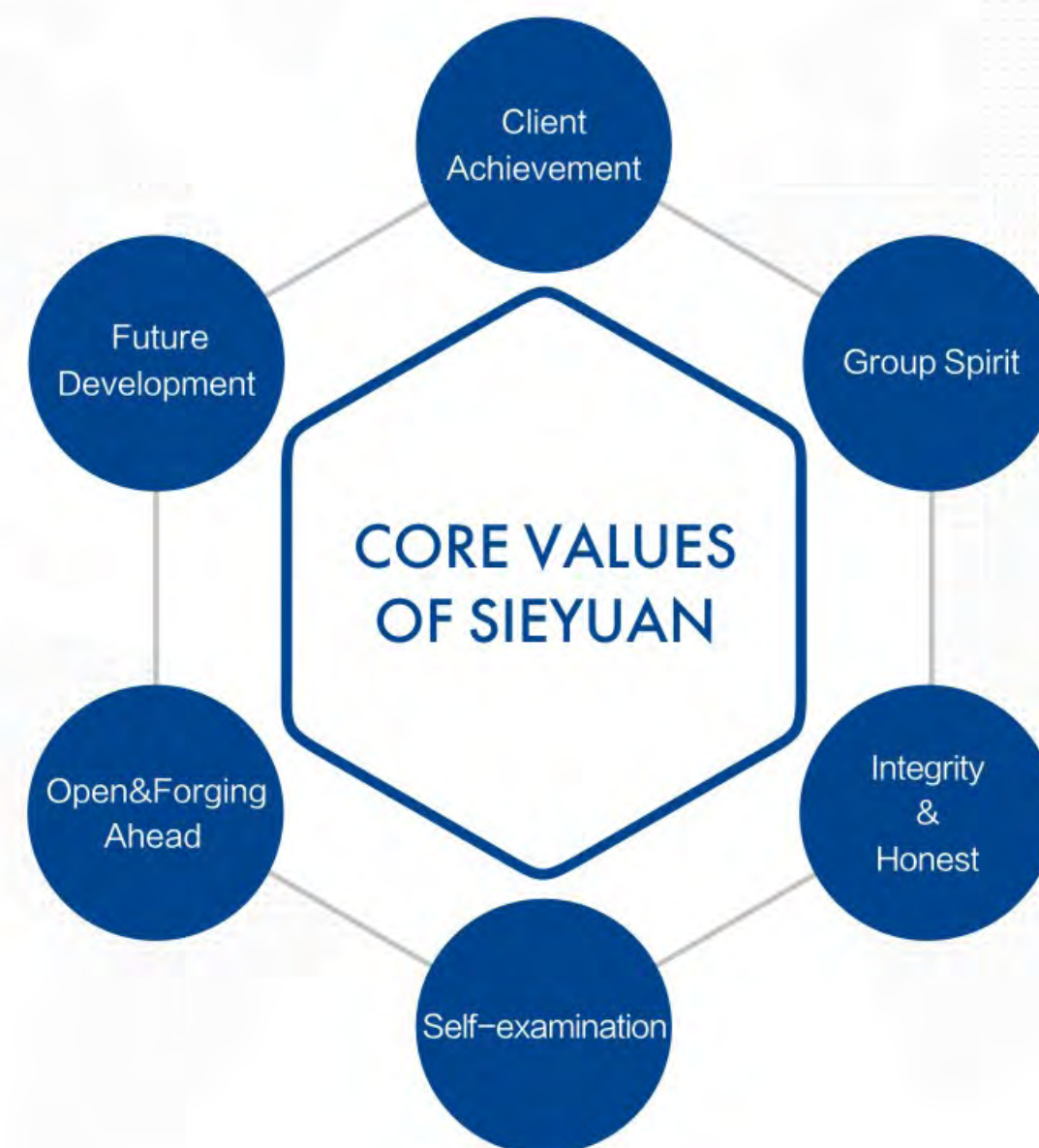
www.syec.com

VISION OF SIEYUAN

Provide first-class electrical equipments and services to global customers, and help them use and maintain the electric power safely, reliably and efficiently.

MISSION OF SIEYUAN

To make power transmission and distribution safer, more controllable and more efficient.



ABOUT SIEYUAN GROUP

Make electric power transmission and distribution safer ,
more controllable more efficient!

COMPANY PROFILE

Sieyuan Electric Co., Ltd. is a well-known public listed company in China (Stock code: 002028) which has been devoting in electric power technology research, equipment manufacturing and project services. By acquisition of several domestic historic Power Transmission & Distribution equipment manufacturers, Sieyuan Electric has developed a wide product range of various specialized fields of Power Transmission & Distribution technology covering both of the primary and the secondary equipments. Sieyuan Electric has been dedicated in manufacturing the relevant electrical equipments for more than 50 years of which have been reaching the leading advanced level in the world.

As a global leading Power Transmission & Distribution Equipments and Engineering company, Sieyuan aims to "make electricity transmission and distribution safer, more controllable and more efficient." Owing to its comprehensive product range and professional engineering design capability, Sieyuan has provided innovative products, solutions and EPC turnkey services to the major power system customers, industrial utilities and power plants for more than 70 countries and regions world widely.

CONSTRUCTION

Sieyuan®

Sieyuan Electric Co., Ltd.

Sieyuan Electric No.1 Subsidiary Company
Shanghai Sieyuan High Voltage Switchgear Co., Ltd.
Jiangsu Rugao High Voltage Electric Apparatus Co., Ltd.
Jiangsu Sieyuan Hertz Instrument Transformer Co., Ltd.
Shanghai Sieyuan Power Capacitor Co., Ltd.
Sieyuan Qingneng Electric & Electronic Co., Ltd.
Shanghai Sieyuan Hongrui Automation Co., Ltd.
Shanghai Sieyuan Transmission& Distribution Engineering Co., Ltd.
Jiangsu Juyuan Electric Co., Ltd.



SIEYUAN ELECTRIC CO.,LTD.

As a global leading Power Transmission & Distribution Equipments and Engineering company

GLOBALIZATION



Global Perspective



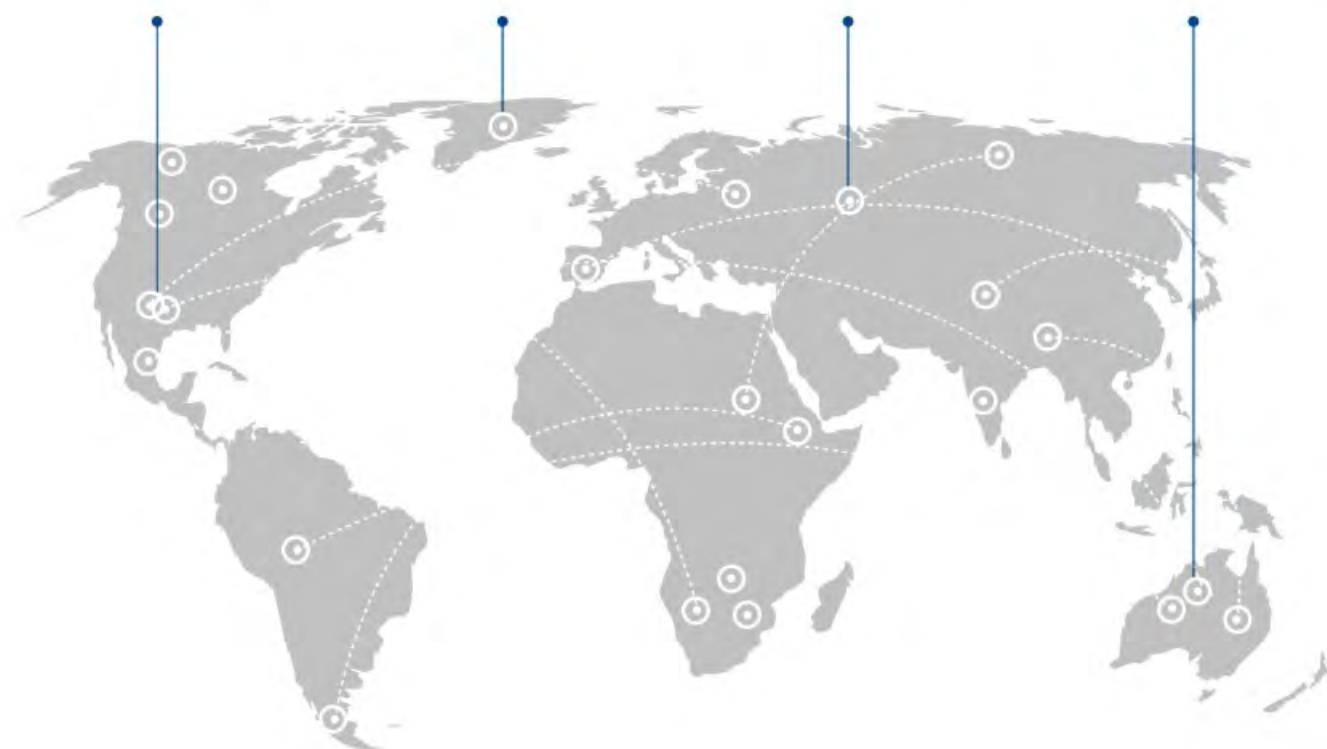
International Talents



Multinational Operations



Worldwide Customers



Success Comes From Professionalism
EPC Contractor For Turn-key Projects
Substation Design And Complete Set Solutions

OUR BUSSINESS

01

Switchgear Products

Up to 500kV GIS
Up to 500kV Circuit breaker
Up to 800kV Disconnecter

02

Coil products

Up to 1000kV Instrument transformer
Up to 66kV Earthing transformer
27.5kV Electrified railway autotransformer
Up to 66kV Arc Suppression Coils
Up to 66kV Shunt/Series Reactors

03

Power Quality Improvement Products

Up to 1000kV Power Capacitor Complete Installation
Static Var Generator
Active Power Filter

04

Control and protection products

Relay protection and Automation with Digital Electric Technology
On-line DGA Equipments for Power Transformer

05

Test equipments

Variety Frequency Serial Resonant High Voltage Testing Equipment
Partial Discharge Live Detection Equipment

06

EPC Project

SCOPE OF ELECTRICAL T&D EQUIPMENTS

As a global leading Power Transmission & Distribution Equipments and Engineering company

THE INVENTION PATENT

Sieyuan has gained more than 200 key patents for invention.



PRODUCT CERTIFICATION

All Products have gotten the international certification.



SYSTEM CERTIFICATION



OHSAS18001:2007

ISO 14001:2015

ISO 9001:2015

UK National
Grid Certificate

PRODUCTION CAPABILITY

SIEYUAN has great mechanical machining capability of processing , epoxy resins setting for insulator , electrochemistry surface treatment ,casting ,welding ,heat treatment ,model manufacturing and assembly.



5000 Square Meter Million Grade Purification GIS Assembly Workshop



SMT Production Line



Germany DMG Precision Machining Production Line



Used Sand Retexture Equipment



Mould Sand Blast Machine



Shot Blast Machine



Leybold Vacuum Impregnation Tank



Germany HÜBERS Vacuum Epoxy Casting Equipment



George Shearing Equipment



Low Pressure Casting Machine



Turnover Molding Machine



Low Pressure Sand Casting Machine



KUKA Full-automatic Welding Robot



Hilton Winding Machine

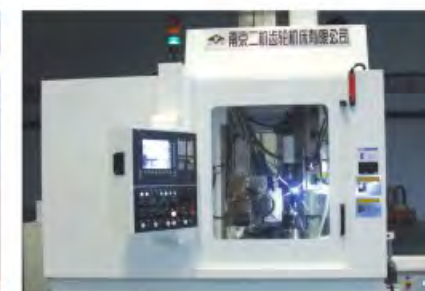


Leybold Vacuum Dry Processing System

www.syec.com



Horizontal Machining Center



Five-axis Gear Hobbing Machine



CNC Automatic Production Line

TEST EQUIPMENT

In order to improve the R&D quality, shorten R&D period and guarantee the product quality, Sieyuan establishes perfect R&D procedures, quality assurance system and measurement system.



GTU-500 Complete Test Equipment



GTU-800 Complete Test Equipment



300kV Power Frequency Test Transformer



600kV Power Frequency Test Transformer



1000kV Power Frequency Test Transformer



3000kV Lightning Impulse Voltage Generator

CORPORATE CITIZENSHIP

The company's Chinese name "sieyuan" comes from an old Chinese saying, which goes "When you drink the water from the well, you should think of the people who dig it." "Sieyuan" means to be thankful to people that made us who we are today, including our clients, staff, suppliers, and the communities in which we operate business.



Photo with Liverpool University Professor Daqing Fang



2007 HUST Scholarship Signing Ceremony



Li Fushou Sieyuan Electric Scholarship



Shanghai Jiaotong University Education Fund



Donation Activities in Sugar Research Mixed Secondary School-Kenya



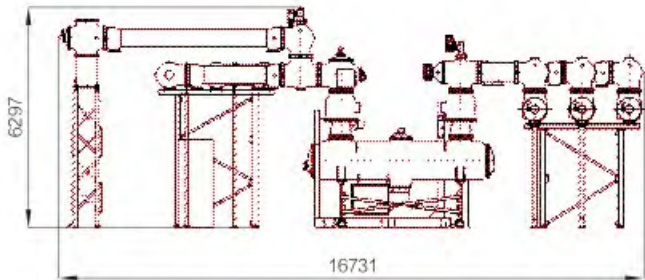
Love Running Donation Activities

MAIN PRODUCT INTRODUCTION

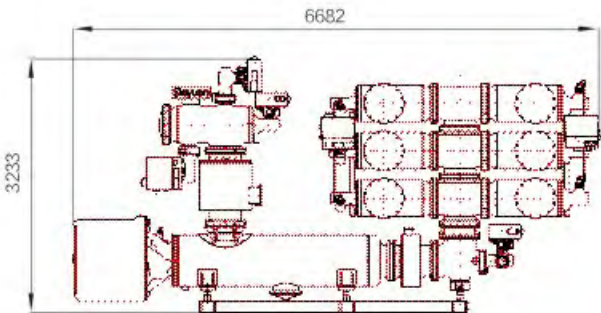
ZF28 TYPE GAS INSULATED SWITCHGEAR



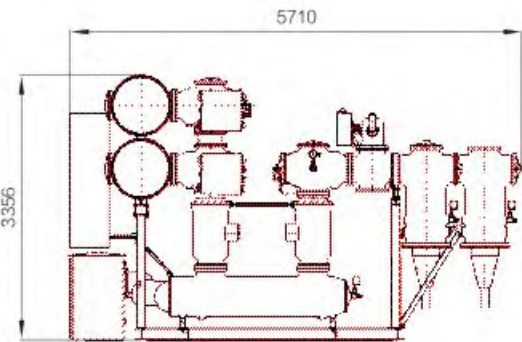
ZF28-550 GIS



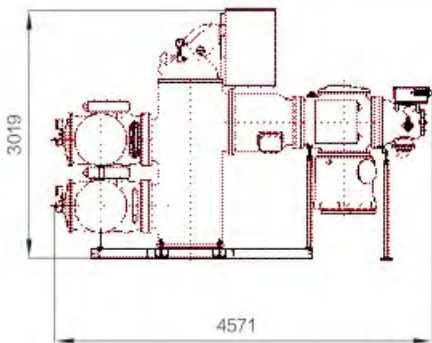
ZF28-420 GIS



ZF28-252 GIS



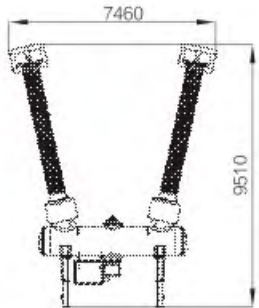
ZF28A-145 GIS



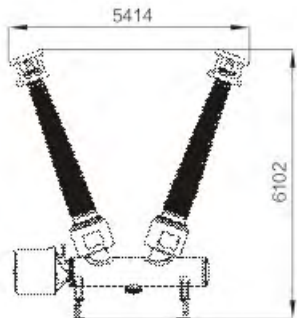
LW58A TYPE DEAD TANK CIRCUIT BREAKER



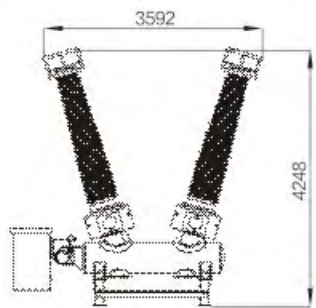
LW58A-550 T-GCB



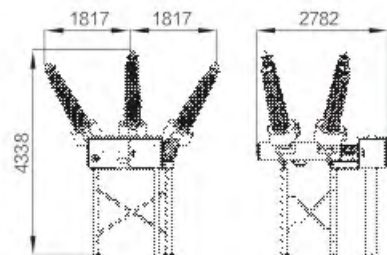
LW58-420T-GCB



LW58A-252 T-GCB



LW58A-126/145 T-GCB



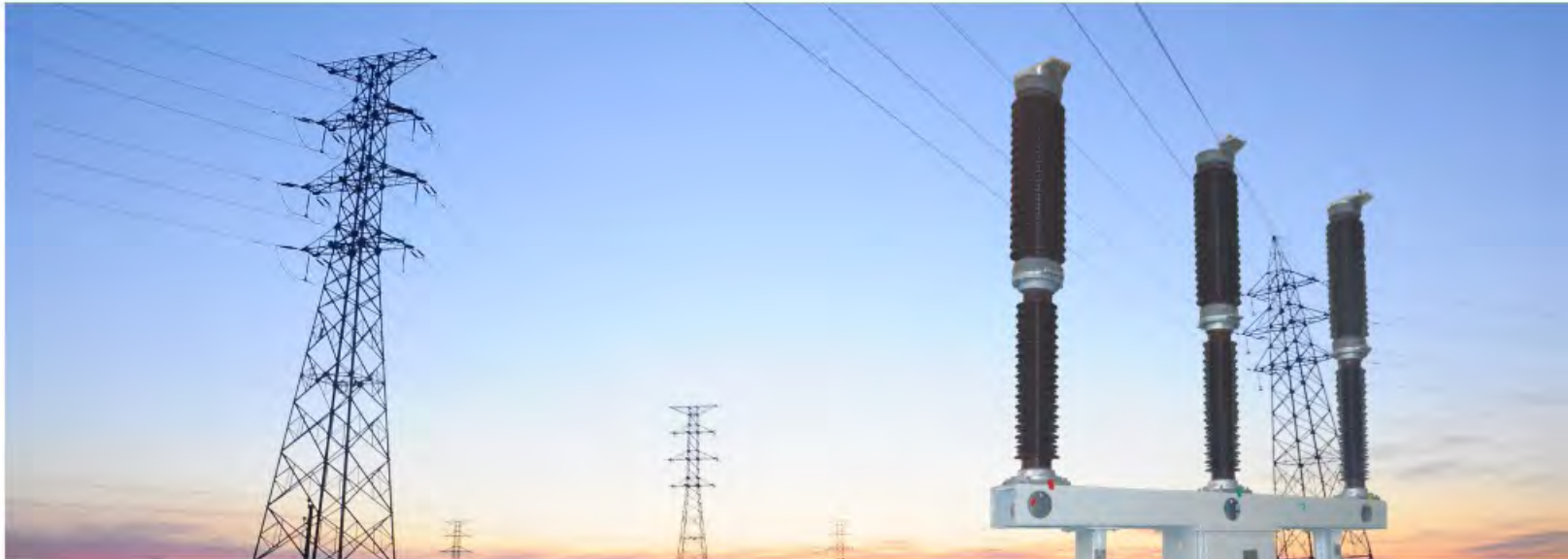
CIRCUIT BREAKER



LW58-252 SF6
Circuit breaker



252kV /126kV
Intelligent Disconnecting
Circuit Breaker



LW36-126/145 SF6
Circuit Breaker



LW36-72.5 SF6
Circuit Breaker



ZW39-40.5(With CT inside)
Vaccum Circuit Breaker



ZW39-40.5
(With CT outside)
Vaccum Circuit Breaker



ZW39-40.5
(Without CT)
Vaccum Circuit Breaker



ZW32-24 Vaccum
Circuit Breaker



LW36-40.5 (With CT outside)
SF6 Circuit Breaker



LW36-40.5 (Without CT)
SF6 Circuit Breaker



FZW28-12 Outdoor
Intelligent Load Switch



ZW20-12 Pole Mounted
IntelligentVaccum Circuit Breaker



ZW32-12 Pole Mounted
Intelligent Vaccum Circuit Breaker



Horizontal kneeDisconnector
(126kV-550kV)



Horizontal Center Break
Disconnector (40.5kV-252kV)



Horizontal Center Break(v-type)
Disconnector (40.5kV-126kV)



Pantograph Disconnector
(126kV-550kV)



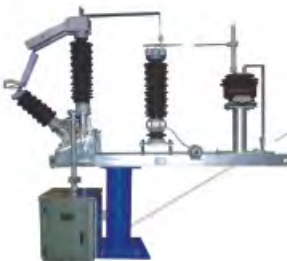
Double Breaker Center Rotation
Disconnector (40.5kV-800kV)



GW4-12 Outdoor Disconnector



GW9-12 Outdoor Disconnector



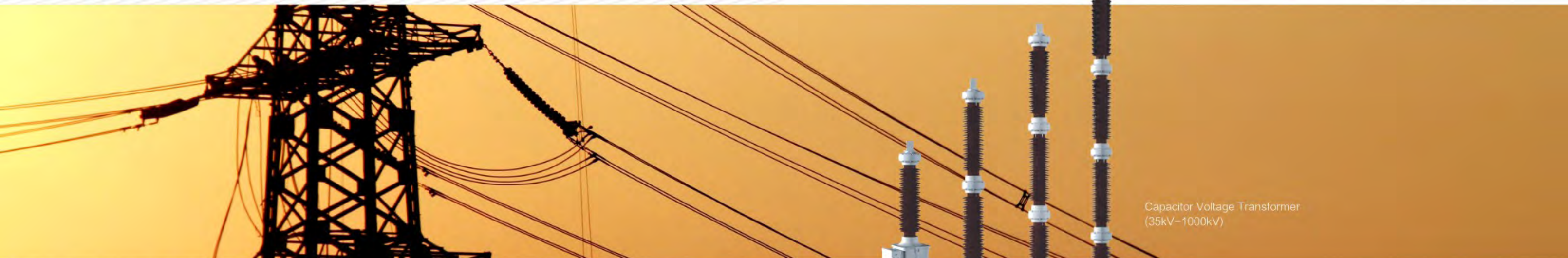
Neutral Point Protection Equipment
For Power Transformer



Semi-pantograph Disconnector
(126kV-550kV)



Earthing Switches
(40.5kV-800kV)



Capacitor Voltage Transformer
(35kV-1000kV)

INSTRUMENT TRANSFORMER



Oil Immersed Inverted Current
Transformer LVB (35kV-500kV)



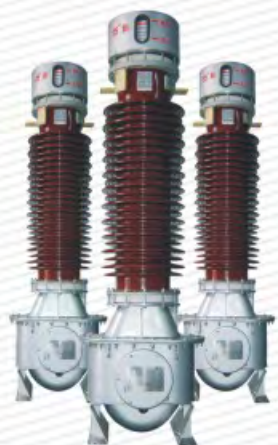
SF6 Insulated Inverted Current
Transformer LVQB (35kV-500kV)



Oil Immersed IVT(35kV-500kV)



Electronic Voltage Transformer
(35kV-1000kV)



Oil Immersed Tank Type Current
Transformer LB (35kV-220kV)



SF6 Insulated Inverted Voltage
Transformer JDQXF (110kV-220kV)



GIS PT (66kV-1000kV)



Optical Current Transformer
(35kV-1000kV)

MAIN PRODUCT INTRODUCTION

POWER CAPACITOR



High voltage shunt, filter, series and direct current capacitor unit

The capacitor device which consisted of capacitor units is widely used in electric, railway, petrochemical and metallurgical field to improve power quality.



Shunt capacitor installation

The shunt capacitor and installations are mainly used in AC power system with voltage at 6kV~1000kV to compensate inductive reactive power, improve power factor and reduce transmission line loss in power system



Filter capacitor installation

DC filter capacitor bank is used in converter station to filter the harmonic generated on DC side when the converter valve is converting, in case of the resonance occurred on DC side.



Series capacitor and installation

The series capacitor and installation is mainly used in the AC long distance power system with voltage at 110kV~1000kV, improve the power quality, reduce the transmission line loss and improve the transmission capacity of power grid.

Cabinet type shunt capacitor and installations

Cabinet type shunt capacitor and installation is installed indoor. It has the characteristics such as graceful appearance, intelligent switch and integrated protection etc. The capacitor stages could be switched automatically according to the system voltage, reactive power and power factor, consequently achieve the optimization of reactive power compensation.



Container type shunt capacitor installation

Container type shunt capacitor and installation, all the electric equipment are installed in full sealed container with air conditioner, compared with the outdoor open rack capacitor and installation, it could save an area of one third, and the operation of equipment is completely not affected by natural climate environment and pollution.



Pole mounted type high voltage automatic reactive power compensation installation

The pole mounted type high voltage automatic reactive power compensation installation is suitable for parallel installation in 6 ~ 10kV distribution line, which can effectively improve the power factor, reduce line loss, improve the terminal voltage and improve the voltage quality.



Assembled capacitor

The assembled capacitor is mainly used for reactive power compensation in 6 ~ 66kV power frequency power system. It is suitable for harsh environment with easy compact structure, environmental adaptability and has the advantage of easy installation, small occupation of area and less operation maintenance.



MAIN PRODUCT INTRODUCTION

POWER REACTOR



BKS Series Oil-immersed Iron-core Shunt Reactor

The reactor is connected in parallel in power supply system to compensate the capacitive power and restrain the power frequency over voltage and operating over-voltage.

Rated voltage: 6kV ~ 66kV

Reactive Power Capacity: 1000 ~ 90000kvar



BKSC Series Epoxy Resin Iron-core Shunt Reactor

The reactor is connected in parallel in power supply system to compensate the capacitive power and restrain the power frequency over voltage and operating over-voltage.

Rated voltage: 6kV ~ 35kV

Reactive Power Capacity: 1000 ~ 15000kvar



CKSC Series Epoxy Resin Iron-core Serial Reactor

The reactor is series connected with the shunt capacitor banks to limit the current impulse and voltage resonance, ensure the reliability and stability of the power supply system.

Rated voltage: 6kV ~ 35kV

Reactive Power Capacity: 50 ~ 1800kvar

ARC SUPPRESSION COIL



Tap-change Peterson Coil

System voltage: 6.3kV ~ 38.5kV

Rated capacity: 100 ~ 3300kVA



Adjustable Capacitive-based Peterson Coil

System voltage: 6.3kV ~ 38.5kV

Rated capacity: 100 ~ 3300kVA



Thyristor Phase-controlled Peterson Coil

System voltage: 6.3kV ~ 38.5kV

Rated capacity: 100 ~ 1200kVA



Peterson Coil Complete with Automatic Tuning and Fault Line Selection for indoor



Peterson Coil Complete with Automatic Tuning and Fault Line Selection for outdoor



Oil-immersed Tap-change Peterson Coil

System Voltage: 6kV ~ 66kV

Rated Capacity: 100 ~ 4400kVA

MAIN PRODUCT INTRODUCTION

SVG

SVG

The basic principle of SVG is to use high power and high frequency electronic devices (such as IGBT) to make up the commutation bridge type circuit, and connect to the grid in parallel through the reactor, by adjusting output voltage amplitude and phase at bridge circuit AC side, or direct controlling of the AC current, make the bridge circuit to absorb or generate required reactive current, achieve the goal of dynamic reactive power compensation and dynamic voltage control.



QNTSC/QNTSVG

QNTSC series LV dynamic compensator adopt thyristor as switching device, realize dynamic reactive power compensation, stabilize voltage and decrease power loss. It overcome the flaws that traditional reactive power compensation device always happen, such as mechanical contact melting, high inrush current etc. By using full numerical intelligent control system and adopting thyristor as switch, it could achieve fast zero-cross switch and better compensation effect for impact load.

QNTSVG is based on QNSVG active compensation theory, combine active compensation and reactive compensation together, form SVG+TSC mixed compensation scheme. By coordinating control, QNSVG mixed dynamic reactive compensator solve the intermittent compensation problem inherent in traditional reactive compensator, avoid discontinuous, differential capacity problem, achieve real-time complete compensation and ensure the power factor is always 1 after compensation.



QNAFP

Qingneng active power filter (QNAFP) is the perfect solution for harmonic management. It adopt the most advanced dynamic real-time tracking compensation to eliminate the harmonic in power system. By real-time detecting current wave caused by nonlinear load, isolate harmonic component, reverse the phase and control the triggering of IGBT, inject the harmonic current with same altitude and opposite direction into the power system, to realize the harmonic elimination function. Besides, APF could also provide reactive current with leading or lagging phase to improve system power factor.



Pole mounted SVG

Pole mounted dynamic reactive power compensation device is the latest generation reactive power compensation & power quality management FACTS device. It is customized and targeted for 10/0.4kV outdoor utility distribution transformer for each province/municipal power bureau. It could perfectly solve the problems exist in the distribution grid, such as voltage unstable, three phase unbalance and low power factor etc.



JP cabinet

Active intelligent integrated power distribution cabinet (active JP cabinet), combine the advanced electronics technology with traditional JP cabinet perfectly, besides 400V distribution JP cabinet function, join the active dynamic compensation device-SVG module, perfectly solve the three phase unbalance, harmonic and reactive power problem.

Active JP cabinet is mainly consisting of four parts: incoming compartment, outgoing compartment, capacitor compartment and metering compartment. Capacitor compartment is mainly consisting of active SVG module, composite switch and reactive capacitor module etc.

MAIN PRODUCT INTRODUCTION



TROM-600 online DGA monitoring system

TROM-600 online DGA monitoring system calculates and analyzes the dissolved gas in insulation oil to discover and diagnose the inner faults of transformers on time using the most mature gas chromatographic technology and fault diagnosis methods recommended by IEC standard.



SSUVcam-H600 Handheld UV Camera

SSUVcam-H600 proceeds full-time nondestructive tests for medium and high voltage electrical equipment in complicated environment, presents real-time display of corona, arc image, and realizes accurate positioning of discharge location. It is an ideal choice for corona detection of overhead transmission lines, insulators, bushings and other electrical equipment in substation.



Portable high-voltage variable-frequency resonance withstanding voltage test apparatus

The Portable high-voltage variable-frequency resonance withstanding voltage test apparatus can be used for AC withstanding voltage test of 220kV or below equipments.



Withstanding voltage test system for (ultra) high voltage power equipment

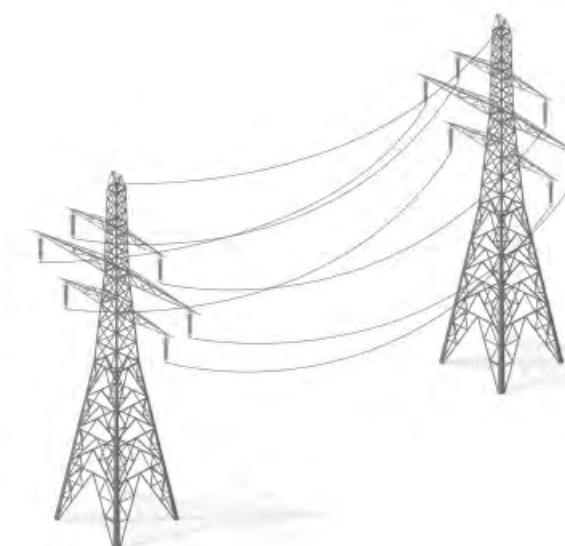
The system is designed for GIS tests featuring high voltage class and low current, and is suitable for AC withstanding voltage tests of GIS and SF6 outdoor switches with a range of voltage classes no more than 1000kV. Compared to conventional withstanding voltage equipment, the product is smaller, lighter, easier to lift and transport. The power capacity needed by the test is not demanding and especially fits for field use.



Transformer induced voltage and partial discharge test equipment

This system is used for induction withstanding voltage and partial discharge tests of a variety of power transformers (no more than 1500MVA/1000KV) with different capacity and voltage tests.

SHR 5000 SUBSTATION AUTOMATION SYSTEM



SUPER5000 substation monitoring system

SUPER 5000 substation monitor & advanced application system realizes local monitor, VQC, integrated anti-misoperation system, intelligent operation order, sequence control, intelligent alarm and failure analysis function. It is suitable for 500kV and below substation.



UD Series relay protection device

UD series protection device is realized by micro-computer, applied to 10kV-220kV and above voltage level substation, it contains the protection of power transformer, line, bus, capacitor and reactor, the functions cover conventional substation, digital substation and intelligent substation.



UDM-500 Series merging unit intelligent terminal

This Merging Unit & Intelligent Terminal product, which named as "UDM-500", can be used in intelligent substations. UDM500 series can precisely control and measure the primary equipment, such as circuit breaker, switch, transformer, etc. UDM500 series can also digitize the information of the primary equipment, and provide various communication interfaces, which comply with the IEC61850 protocol.

SDF SERIES POWER DISTRIBUTION TERMINAL



SDF-601,SDF-602 Feeder terminal unit (FTU)
Mainly installed on the outdoor feeder, with characteristic of high temperature resistance and resistant to low temperature, applied to outdoor adverse environment, executes orders from distribution master station, adjusts and control the distribution equipment, realizes fault location, fault area isolation and non-fault area fast power restoration.



SDF-606 Data transfer unit (DTU)
Mainly installed on the conventional switching station, small outdoor switching station, ring main unit, compact substation, box-type substation, accomplishes the data acquisition and calculation of switch position signal, voltage, current, active power, reactive power, power factor and electric quantity, opens/closes circuit breaker, realizes fault recognition of feeder switch, fault area isolation and non-fault area power restoration.



Distribution Terminal Unit
Mainly installed at the important joints on the distribution over head line and cable. When short circuit fault occurs, this device could send the fault location to the maintenance staff by phone message at the first time, saving the working hours for the maintenance staff to find out the fault, reducing the outage time and range.



EPC/TURNKEY PROJECT

Sieyuan provides reliable and innovative solution for EPC/Turnkey projects. Starting out as a leading manufacturer and contractor of high voltage electrical equipment and substation, Sieyuan has become one of the manufactures and providers of EPC/turnkey solution in the world.

Our manufacturing knowledge sets us apart from other EPC contractors. We manufacture major substation equipment at our own factories. SIEYUAN has the ability to design ,manufacture ,and test individual components ,as well as the proficiency to bring together and systemize the entire substation.

We provide our service from the very beginning to the end . Our aim is to satisfy our customers with our professional service and sincerity.

TYPICAL ACHIEVEMENT



132kV Substation, New Islamabad Airport Project

The New Islamabad Airport Substation Project is one of the national key infrastructure projects in Pakistan.



Kenya Electricity Expansion Project (KEEP)

Supply and Installation of 66kV and 33kV Lines from Ngong, Thika Road, Tana and Kiboko.



Rwanda Scaling-up Energy Access Project (SEAP)

Construction of 110/30kV Rulindo and Gifurwe Substations.

EPC/TURNKEY PROJECT



Kenya 220kV Olkaria-Lessos-Kisumu Transmission Line Project
Construction of 220kV Substation Works (Olkaria, Lessos, Kisumu, Kibos)



Malawi Energy Sector Support Project (ESSP)
Supply and Installation of five New Substations and Extension and Rehabilitation of five Existing Substations



Mocambique Energy Development and Access Project
Design, Supply, Construction and Installation of concerned 110KV Substations



Ghana 225kV Bolgatag-Ougadougou Interconnection Project
Construction of 330/225kV Switchyard at Bolgatanga II Substation

EPC/TURNKEY PROJECT



Olkaria V Geothermal Power Development Project
Engineering, Procurement and Construction(EPC) High Voltage Substation and Transmission Line



Mocambique GIS Project
Design, Supply, Construction and Installation of 66kV GIS Substations



66kV GIS Substation Dangote Oil Refinery Project
Construction of 66kV GIS Substation in Lekki free trade zone, Lagos.



GRIDCO 161KV Transmission Line EPC Project
161KV VOLTA-ACHIMOTA-MALLAM 83KM TRANSMISSION LINE



Cote d'Ivoire - Liberia - Sierra Leone - Guinea Interconnection Project
Design, Supply, Installation and Commissioning of 225kV Substations & associated compensation equipment



Ethiopia Financing Project
Financing, Design, Supply, Construct and Commission of 220kV ADAMA-II Substation



Tanzania 33kV Substations EPC project
Design, Manufacture, construct, install and commission for 33kV Substation

TYPICAL ACHIEVEMENTS



ZF28-252 GIS Running in Brazil



Mexico CFE 1521 115kV GIS Substation



Mexico CFE 237LT 1313 252kV GIS Substation



Mexico CFE 420kV GIS SE 1701 Substation Chimalpa Dos



India TANTRANSCO Guindy 230 110kV GIS Substation Project



Belarus 330kV Substation Project



Uzbekistan Modernization of south-west transmission network(stagell) within 220kV & 110kV Talimarjan Transmission Project



India TALWANDI 3-660MW supercritical coal-fired power station project



The Jindongnan-Nanyang-Jingmen UHV AC transmission project
1000kV Changzhi Substation, Series Compensation capacity: 1503 MVAR
Client: State Grid Corporation of China



220kV Yun Nan-Jinzhong GIS Substation

Design, equipment supply, testing, erection/ installation, site testing and commissioning, and civil work of 220KV GIS Substation
Client: Jinzhong power supply bureau (Yunnan power Company)



ShanghaiMiao-LinYi ± 800kV HVDC Transmission Project

± 800kV Shanghaímiao Substation, DC filter capacitor installation
Client: State Grid Corporation of China



Guangxi Hezhou 500kV Substation Serial Compensation Capacitor Bank

Series Compensation capacity:390 MVAR
Client: China Southern Power Grid

PROJECT ACHIEVEMENTS

We provide customers of electric power, metallurgical, coal mine, railway industries with perfect T&D products and comprehensive solution all over the world.



Shanghai World Expo 220kV
Mengzi Station



Beijing 2008 Olympic Project
Water Park Station



2014 FIFA World Cup, Brazil



Keleta Hydropower Station, Guinea



Three Gorges Hydroelectric
Power Station



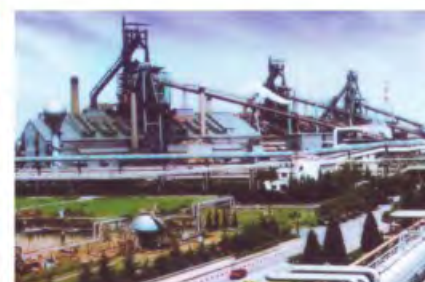
Cote d'Ivoire Subley Hydroelectric
Power Station



Yunnan-Guangzhou ±800kV
UHVDC Transmission Project
Suidong Converter Station



Shenhua Group Shendong Daliuta
Wudangou Coal Project



Zhongpu Steel Iron Co., Ltd. 110kV
Substation

TYPICAL ACHIEVEMENTS



Beijing Future City Station 145kV
GIS Substation



Bewu Village 145kV GIS Substation



220kV Shihezi Oasis Substation



33kV STATCOM Project in Jilin Wind Farm

PROJECT ACHIEVEMENTS



SHR5000 Substation Automation System Running in Hunan Electric Power Company



LVB-550 Oil Immersed Inverting Current Transformer Running in Zhejiang Electric Power Company



BKS-60000/35 Oil Immersed Shunt Reactor Running in Anhui Electric Power Company



STATCOM Running at Shanghai Expo Mengzi Substation



TBB525-301824/524AQW Shunt Capacitor and Installation Running at Yunnan-Guangzhou UHV Converter Station



GW7B-252 Disconnecter Running in Ningxia Electric Power Company



GW7B-252 Running in the Republic of Mongolia



LVQB-550 SF6 Current Transformer Running in Philippines State Power Corporation



LW36-72.5 SF6 Circuit Breaker Running in Madagascar



LW36-40.5 SF6 Circuit Breaker Export to the Republic of Armenia



BKS-15000/11 Oil Immersed Shunt Reactor Export to Sudan State Power Corporation



Russia National Grid Project



SITE SERVICE

