HUAWAN

Huawan New Energy Co., Ltd

Empowering The Grid, Serving Customers, Advancing Society

Message From Genaral Manager

MESSAGE FROM THE GENERAL MANAGER

Dear Valued Partners, Clients, and Friends,

I would like to extend my heartfelt gratitude to all our partners and customers for your unwavering support and collaboration since our establishment in 2016.

What began as a modest factory equipped with fundamental tools has transformed into one of the leading enterprises in the manufacturing of electrical equipment and the construction of electricity works in Anhui, China.

We proudly embrace our business motto: "Empowering the Grid, Serving Customers, Advancing Society." The name Huawan, which means "Anhui" in Chinese, signifies our commitment to our roots in a province known for its rich cultural heritage and exceptional talent. It is our aspiration to deliver quality products to customers worldwide while honoring the legacy of our hometown.

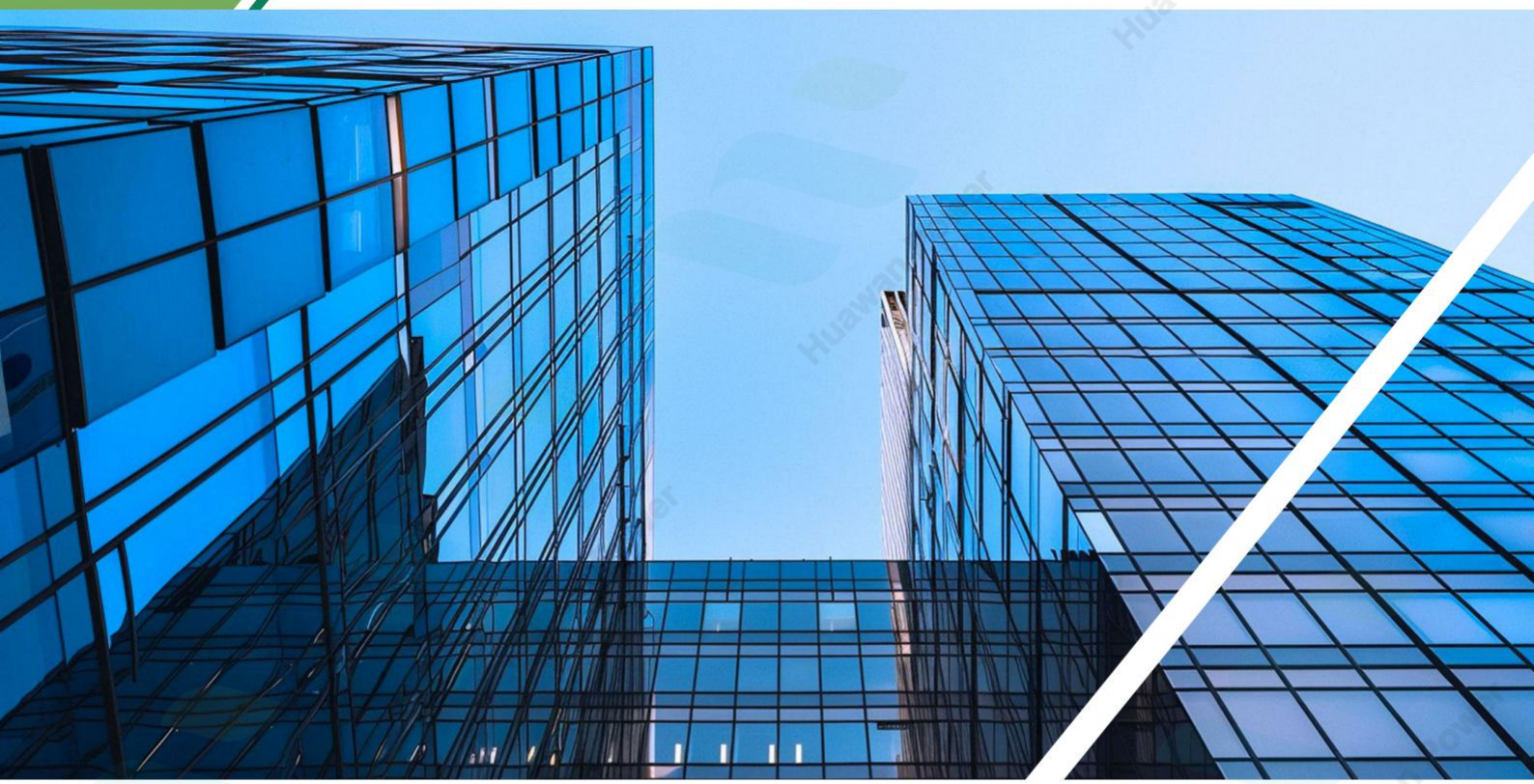
At Huawan, we are dedicated to providing our customers with high-quality products distinguished by performance, stability, and sustainability. Our experienced and skilled team is committed to offering comprehensive service, competitive pricing, timely delivery, and reliable warranty support.

We deeply appreciate the trust you place in us, and we are grateful for your continued partnership as we strive for mutual success.

Sincerely,

Jinhua Geng
General Manager
Huawan New Energy Co., Ltd

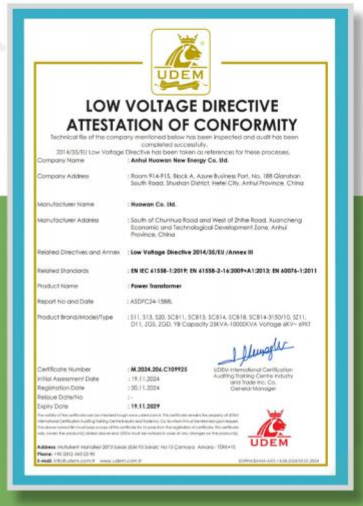
General Production



Total Staff is over 100, including:

15 SENIOR ENGINEERS | **70** TECHNICAL WORKERS

Quality Certificates



TÜVRheinland®

Precisely Right.

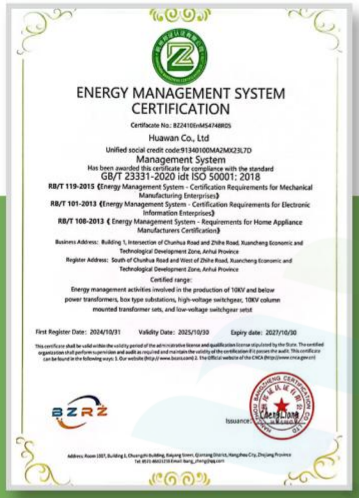
TÜV Rheinland Certification

It is an internationally recognized accreditation issued by TÜV Rheinland Group, a leading global provider of technical, safety, and quality services. This certification validates compliance with industry-specific standards, regulations, and performance criteria, ensuring products, systems, or services meet rigorous safety, reliability, and sustainability requirements.

CE Certification

Our transformers are CE-certified, adhering to IEC 61558-1:2019, EN 61558-2-16:2009+A1:2013, and EN 60076-1:2011. These standards ensure electrical safety, thermal management, insulation integrity, and reliability. CE certification guarantees compliance with EU regulations for safety, EMC, and sustainability, enabling unrestricted market access across the EEA and reflecting our commitment to quality and user safety.

CE



ISO 50001:2018 Energy Management Certification

ISO 50001:2018 certification, an internationally recognized standard for Energy Management Systems (EnMS),

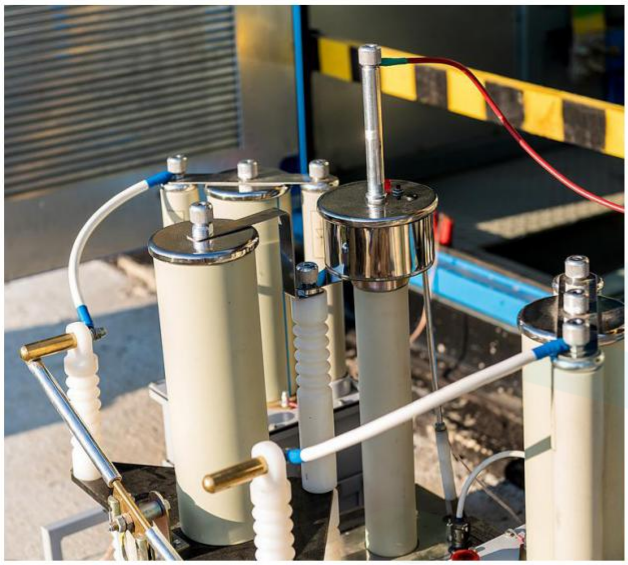
This certification underscores our commitment to sustainable energy practices and operational excellence. By implementing ISO 50001, we have established a robust framework to systematically optimize energy efficiency, reduce consumption, and minimize carbon emissions across . Our efforts align with global sustainability goals, including the Paris Agreement, and demonstrate measurable progress through data-driven monitoring, technological innovation, and employee engagement.

Environmental Management According To ISO14001

Huawan has taken a leadership role in implementing the environmental management system ISO 14001-2015. This initiative underscores our commitment to responsibly serving our customers, communities, and society at large. Huawan is dedicated to delivering high-quality technical products that prioritize environmental sustainability.

Production Technology

Determining that quality is the most important factor in competition,Huawan has focused on investing in modern production technology from the very beginning. From production machines, testing equipment to important input materials, world-class machinery manufacturers import. At the same time, a team of highly trained and experienced engineers and skilled labourers are always being trained by industry experts to continuously improve their skills and quality.

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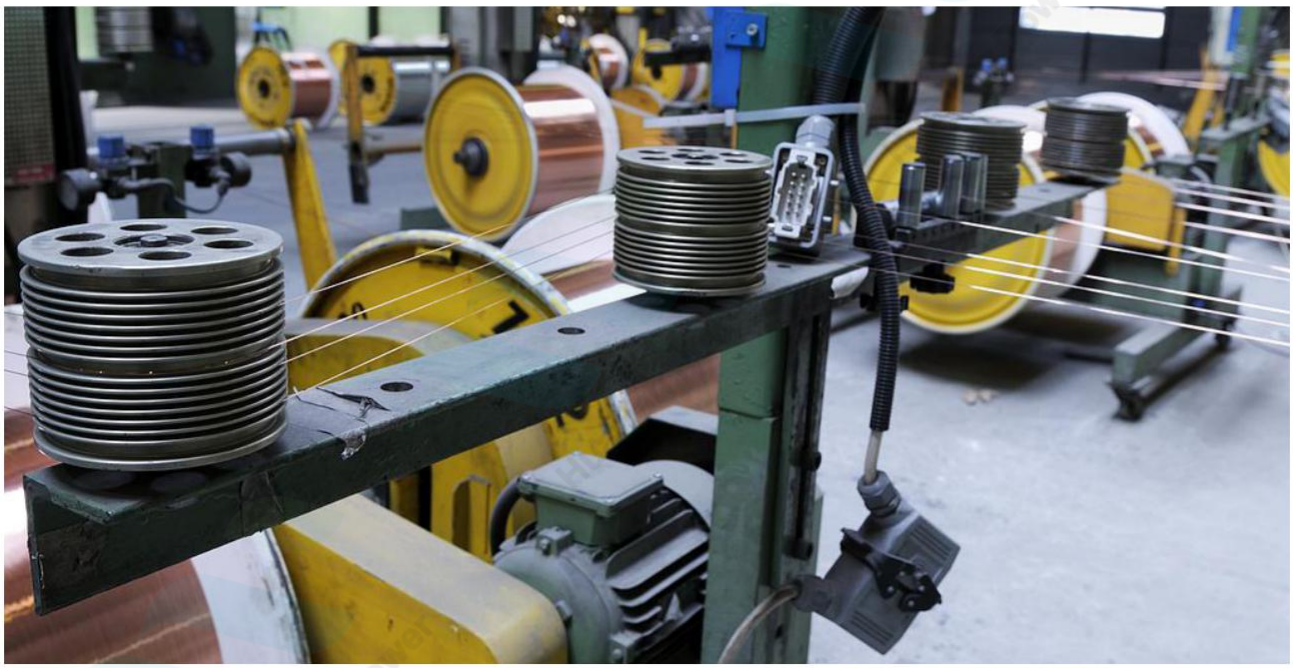
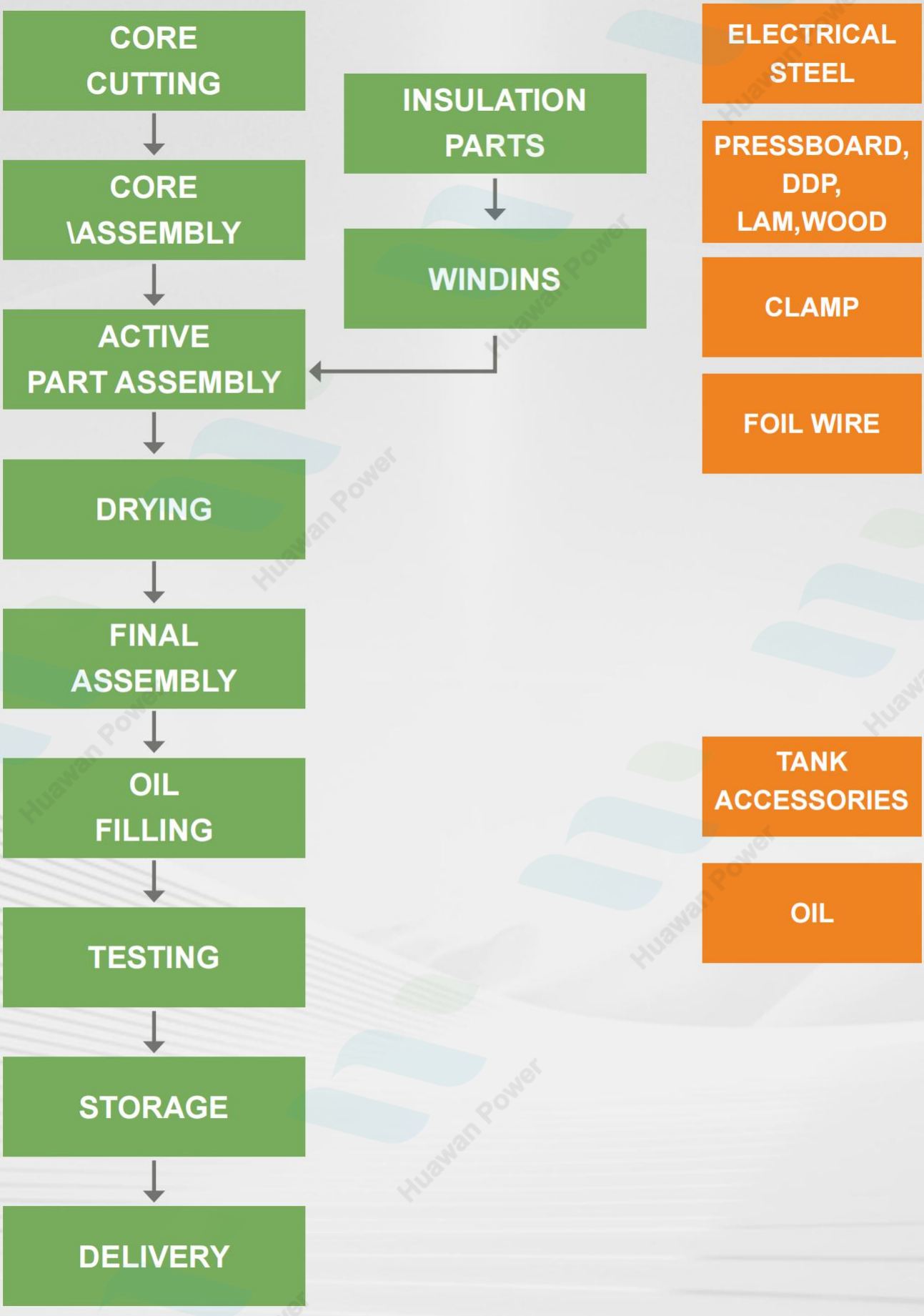


Quality Control Process

QUALITY MANAGEMENT SYSTEM
ISO 9001:2015

High Performance Transformers by Huawan

Huawan New Energy is an experienced transformer manufacturer, offering oil-filled and dry type transformers, as well as services for complete life-cycle support, including replacement parts and components.


CORE CUTTING
CORE \ASSEMBLY
ACTIVE PART ASSEMBLY
DRYING
FINAL ASSEMBLY
OIL FILLING
TESTING
STORAGE
DELIVERY
INSULATION PARTS
WINDINS
ELECTRICAL STEEL
PRESSBOARD, DDP, LAM,WOOD
CLAMP
FOIL WIRE
TANK ACCESSORIES
OIL

High Quality Input Materials

Copper

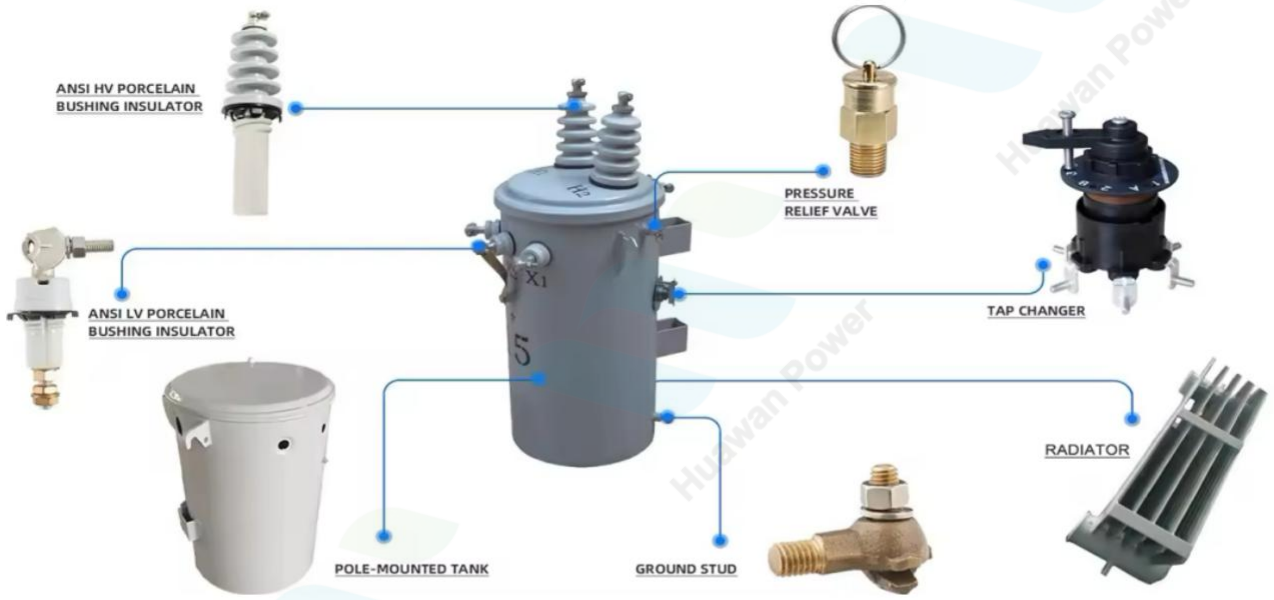
Copper Wire

Electrical Insulation Paper

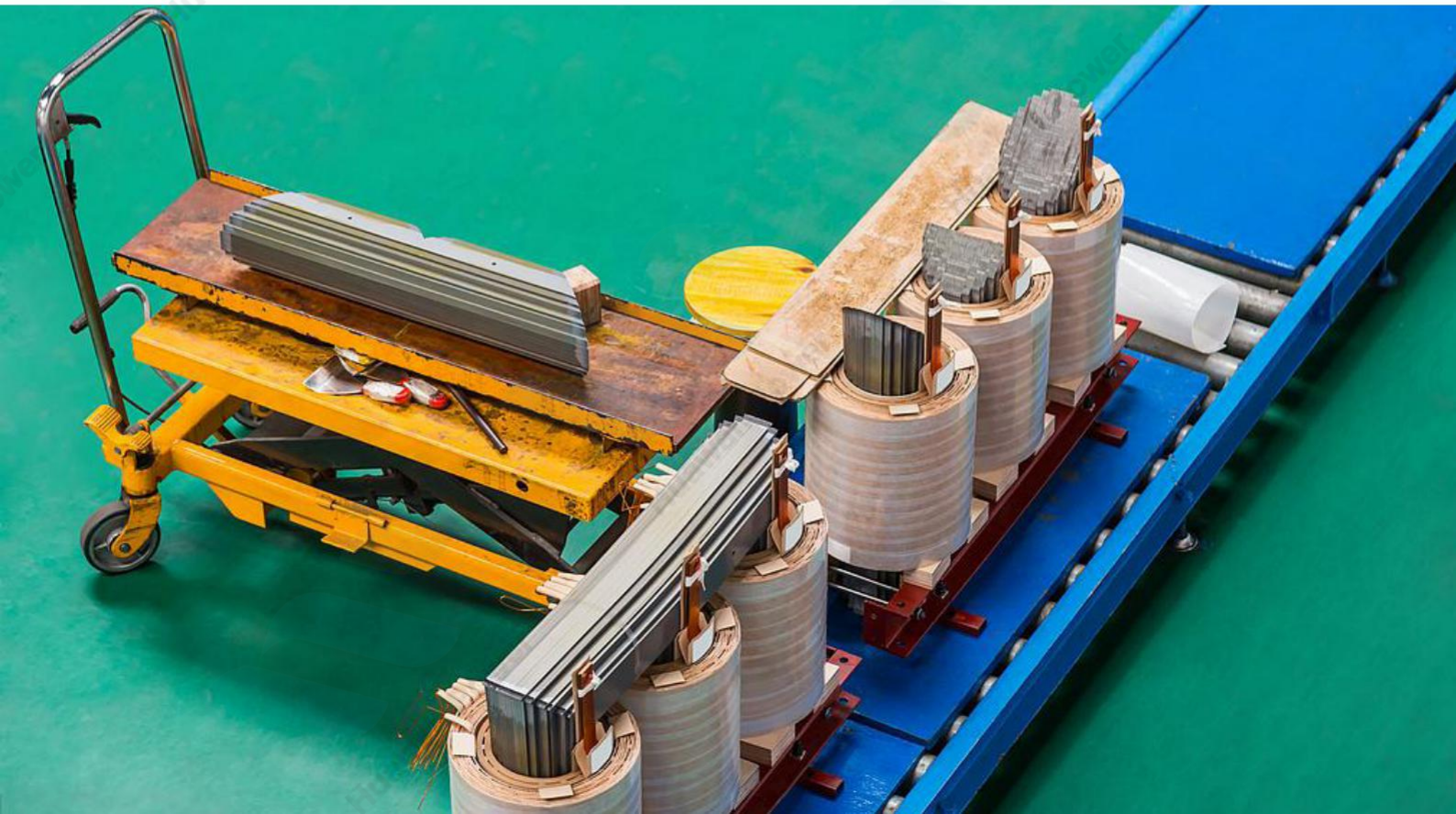
Pressure Relief Valve (PRV)

Electrical Insulation Paper

Pressure Relief Valve (PRV)


ANSI HV PORCELAIN BUSHING INSULATOR
PRESSURE RELIEF VALVE
ANSI LV PORCELAIN BUSHING INSULATOR
TAP CHANGER
POLE-MOUNTED TANK
GROUND STUD
RADIATOR


LV Porcelain Bushing Insulator
winding Temperature Indicator
HV Porcelain Bushing Insulator
Oil Level Indicator
Radiator
Transformer Wheel
Breather with Silica Gel
Tap Changer
Thermometer (with pocket)
Oil Temperature Indicator
Pressure Relief Device



Three Phase Padmount Transformer

- Our Huawan New Energy transformers are proud to be high quality products,meeting the needs of numerous customers and accompanying the development of our customers and society.Huawan transformers are present in many large andsmall projects across the country from important projects such as hydropower,airports,commercial centers,defense projects.

DESIGN

HV Bushing Config:
1. Dead front or live front
2. Loop feed or radial feed

Fluid Options:
1. Type II Mineral Oil
2. Envirotemp™ FR3™

Standard Gauge/Accessory Package:
1. Pressure relief valve
2. Pressure vacuum gauge
3. Liquid temp & level gauges
4. Drain & sample valve
5. Adjustment taps

Switch Options:
1. 2 Position LBOR Switch
2. 4 Position LBOR Switch (V-blade or T-blade)
3. (3) 2 Position LBOR Switches

Fusing Options:
Bayonets w/ isolation links or CLFs

Construction:
1. 5-legged core
2. Rectangular wound copper or aluminum windings
3. Carbon reinforced or stainless steel tank
4. Steel divider between HV and LV cabinets
5. Penta-head captive bolt

Optional Design Features & Accessories:
1. Gauges w/ Contacts
2. External drain and sample valve
3. Electrostatic Shielding
4. K-Factor Design
5. Step-up Design
6. Surge-Arresters

- Pad-Mounted Transformers are oil-filled units for underground distribution in commercial areas like shopping centers and schools. They come in live front and dead front types, suitable for loop and radial feeds, with aluminum or copper windings. Benefits include high efficiency, low loss, compact size, and cost-effectiveness. These transformers are ideal for public areas, offering a visually appealing design without needing protective fencing. Sizes range from 75 to 5000 kVA, with options up to 20,000 kVA.

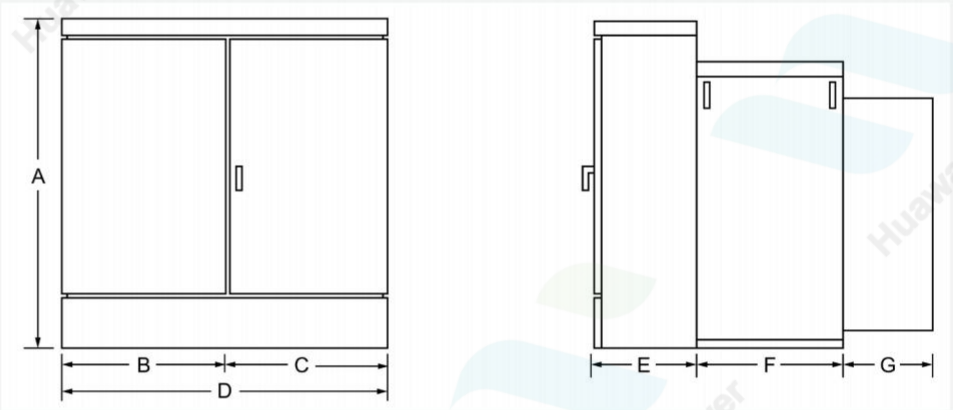
Available Ratings

Sizes (kVA)	45, 75, 112.5, 150, 225, 300, 500, 750, 1000, 1250, 1500, 1750, 2000, 2250, 2500, 2750 3000, 3750, 5000
Frequency	60 Hz or 50 Hz
Cooling Class	ONAN or KNAN
Temp Rise	55°C, 65°C, 55/65°C
Voltages	Available in Δ or Y configuration
600V	208
	240
	416
	480
	600
2.5~5kv	2400
	4160
	4800
15kv	12000
	12470
	13200
	13800
	14400
25kv	20780
	21600
	22900
	24940
	26400
35kv	33000
	34500

Approximate Transformer Dimensions

kVA	A	B	C	D	E	F	G	Gallons	Weight (Lbs)
300	59″	29.5″	22″	51.5″	20.5″	24″	10″	196	4,056
500	59″	33″	26.5″	59.5″	24″	26.5″	10″	210	5,023
750	73″	36″	29″	65″	24″	26.5″	10″	358	7,664
1000	73″	36″	29″	65″	24″	27″	10″	354	8,530
1500	73″	36″	35.5″	71.5″	24″	33.5″	10″	410	10,782
2000	75″	39.5″	28″	67.5″	24″	35″	27″	433	12,490
2500	78″	39.5″	35.5″	75.5″	24″	37.5″	22.5″	545	14,246
3000	84″	30.5″	32″	62.5″	24″	37.5″	38″	550	14,014
3750	75″	50.5″	30″	80.5″	25.5″	42″	38″	730	17,758

Padmount Transformer Outline



Three Phase Maddox Padmount Transformer

Common Accessories

1. Bayonet Fuses

2. Loadbreak Switch

3.Tap-changer

4. Bushings

5. Parking Stand

6. Gauges

Single Phase Padmount Transformer

- Primary Voltage Ratings: 34.5kV/19.92kV, 24.94kV/14.4kV, 13.8kV/7.957kV, 13.2kV/7.62kV, 12.47kV/7.2kV or others
- Secondary Voltage Ratings: 120/240V, 240/480V, 347V, 600V or others
- H.V. TAP RANGE: ±2×2.5% or others
- Capacity:15-250kVA
- CONNECTION TYPE: Delta/Wye
- TYPE: Loop feed/Radial feed
- BIL: 30-150V
- Standards: ANSI, IEEE, DOE, CSA, NEMA, UL
- Application: Residential Areas, Hotels, Single Family Houses, Parks, Underground Distribution Systems
- The single-phase pad-mounted transformer rated capacity is 15-250 kVA. Single-phase Pad-mounted Transformer is generally used in places where single-phase power is required for civil use, such as household appliances, etc., and its capacity is relatively smaller than a three-phase pad-mounted transformer.

Single phase Pad mounted Transformer Specification

Rating (kVa)	High voltage(kV)	No Load Loss	On load Loss	Height (mm)	Depth (mm)	Width (mm)	Oil Weight (kg)	Total Weight(kg)
15	34.5/19.92 13.8/8 13.2/7.6 12.47/7.2 or others	50	195	840	740	610	45	294
25		80	290	840	740	610	68	362
37.5		106	360	840	760	610	75	476
50		135	500	840	810	610	93	553
75		190	650	840	860	610	132	672
100		280	1010	910	1200	965	230	714
167		435	1530	1000	1200	965	265	913
250		550	2230	1250	1300	1430	325	1106

Pole Mounted Transformer

Pole Mounted Transformer Ratings

- Pole-mounted transformer ratings vary based on the number of phases and the power requirements of the electrical distribution system. Below are optimized and unique power and voltage ratings for both single-phase and three-phase pole-mounted transformers:
- Single-phase pole-mounted transformer power ratings:

  10 kVA,25 kVA,37.5 kVA, 50 kVA, 100 kVA, 167 kVA, 250 kVA, 333 kVA
- Single-phase pole-mounted transformer voltage ratings:

  2400V, 7200V, 124 70V , 7620V, 13200V, 7957V, 13800V, 19920V, 34500V, 27600V.
- Three-phase pole-mounted transformer power ratings:

  25kVA, 45kVA, 63kVA, 100kVA, 200kVA,315kVA,400kVA and 500kVA.
- Three-phase pole-mounted transformer primary nominal voltage ratings:

  Primary nominal voltage rating from 11kV to 33kV.

Liquid-filled pole-mounted transformers are designed to meet IEEE standards and DOE efficiency regulations. They are ideal for single-phase and three-phase distribution in utility applications. These transformers are essential in suburban and rural power infrastructure, providing reliable power distribution when mounted on sturdy poles.

Capacity (KVA)	High Voltage (V)	Tapping Ranges	Low Voltage (V)	Loss (W)		Dimension (mm)			DOE2016 Efficiency
				No-load Loss (W)	On-load Loss (W)	W	D	H	
15	2400 4160 7200 7620 12000 12470 13200 13800 14400 19920 24940 34500	±2x2.5%	110 120 208 240 277 347 415 416 480 600 690	60 80 100 120 130 150	330 370 450 620 850 1150	520 560 610 635 754 770 795	565 590 625 975 840 965 890	905 935 935 1035 1035 1135 1135	98.82
25									98.95
37.5									99.05
50									99.11
75									99.19
100									99.25
167									99.33
250									99.39
333									99.43
500									99.49

Dry Type Transformer

- Dry-type transformers are a safe, eco-friendly alternative to oil-filled units, especially in populated or sensitive areas. They prevent fire and oil spill risks, are recyclable, and cost less to own due to lower installation and maintenance costs. Huawan offers a full range of dry-type transformers up to 35kV, meeting IEC and ANSI standards. These transformers are designed for high performance in extreme conditions, require minimal maintenance, and are made following ISO 9001 standards. Advanced design and manufacturing ensure high quality and reliability.

Table of SCB12 series dry type transformer parmeters

Rated Qwer (kva)	Short-circuit impedance(%)	No-load loss(w)	load loss(w)	Transformer dimensions(mm)	Shell dimensions(mm)	Rail gauge(mm)
				W*D*H	W*D*H	d1*d2
30	4	150	760	780×500×628	1400×1200×2200	300×400
50	4	215	1070	850X700×706	1400×1200×2200	400×600
80	4	295	1480	890X800×796	1400×1200×2200	400×700
100	4	320	1690	900×900×856	1400×1200×2200	400×800
125	4	375	1980	920×900×876	1400×1200×2200	400×800
160	4	430	2280	930×900×916	1400×1200×2200	400×800
200	4	495	2710	940×950×986	1400×1200×2200	450×850
250	4	575	2960	950×950×1057	1400×1200×2200	450×850
315	4	705	3730	1000×1000×971	1700×1300×2200	660×900
400	4	785	4280	1020×1000×1016	1700×1300×2200	660×900
500	4	930	5230	1140×1050×1049	1700×1300×2200	660×950
630	6	1040	6400	1230×1100×1086	1900×1400×2200	560×1000
800	6	1215	7460	1300×1100×1045	1900×1400×2200	320×1000
1000	6	1415	8760	1400×1100×1105	1900×1400×2200	820×1000
1250	6	1670	10370	1420×1200×1200	1900×1400×2200	820×1100
1600	6	1960	12580	1460×1200×1268	2200×1700×2200	820×1100
2000	6	2440	15560	1560×1200X1330	2200×1700×2200	320×1100
2500	6	2880	18450	1660×1300×1463	2200×1700×2200	820×1200

Table of SCB14 series dry type transformer parmeters

Rated Qwer (kva)	Short-circuit impedance(%)	No-load loss(w)	load loss(w)	Transformer dimensions(mm)	Shell dimensions(mm)	Rail gauge(mm)
				W*D*H	W*D*H	d1*d2
30	4	130	685	810×500×638	1400×1200×2200	300×400
50	4	185	965	880×700×786	1400×1200×2200	400×600
80	4	250	1330	910×800×808	1400×1200×2200	400×700
100	4	270	1520	930×900×856	1400×1200×2200	400×800
125	4	320	1780	930×900×866	1400×1200×2200	400×800
160	4	365	2050	960×900×936	1400×1200×2200	400×800
200	4	420	2440	970×950×956	1400×1200×2200	450×850
250	4	490	2665	980×950×1003	1400×1200×2200	450×850
315	4	600	3355	1040×1000×1016	1700×1300×2200	560×900
400	4	665	3850	1060X1000X1026	1700×1300×2200	660×900
500	4	790	4705	1170×1050×1026	1700×1300×2200	660×950
630	6	885	5760	1280×1100×1051	1900×1400×2200	660×1000
800	6	1035	6715	1330×1100×1085	1900×1400×2200	820×1000
1000	6	1205	7885	1390×1100×1155	1900×1400×2200	820×1000
1250	6	1420	9335	1440×1200×1230	1900×1400×2200	820×1100
1600	6	1665	11320	1530×1200×1301	2200×1700×2200	820×1100
2000	6	2075	14005	1620×1200×1396	2200×1700×2200	820×1100
2500	6	2450	16605	1690×1300×1508	2200×1700×2200	820×1200

Distribution Transformer

- Huawan provides a wide range of reliable, durable, and efficient distribution transformers for utility, industrial, and commercial use. These transformers, including liquid-filled and dry-type models, meet strict international standards. They are crucial for converting high-voltage electricity to lower voltages suitable for end-users, with primary voltages typically under 35 kV.

Model number	Rated capacity (kVA)	Join group label	High tension	Tapping range	Low pressure	No-load loss (W)	Load loss(W)	No-load current(%)	Short circuit impedance(%)	Gauge(mm)
S11-M-30	30	Yyn0 or Dyn11	6 6.5 10 10.5 11 20 30	±5% or ±2×2.5%	0.4	90	600	2.3	4	400*500
S11-M-50	50					120	870	2		400*500
S11-M-63	63					140	1040	1.9		450*500
S11-M-80	80					180	1250	1.9		450*500
S11-M-100	100					200	1500	1.8		450*500
S11-M-125	125					240	1800	1.7		500*500
S11-M-160	160					280	2200	1.6		500*500
S11-M-200	200					340	2600	1.5		500*500
S11-M-250	250					400	3050	1.4		550*500
S11-M-315	315					470	3650	1.4		550*500
S11-M-400	400					560	4300	1.3		550*600
S11-M-500	500					680	5100	1.2		550*600
S11-M-630	630					840	6200	0.9	4.5	660*660
S11-M-800	800					980	7500	0.8		660*820
S11-M-1000	1000					1150	10300	0.7		660*820
S11-M-1250	1250					1360	12800	0.6		820*820
S11-M-1600	1600					1640	14500	0.6		820*820
S11-M-2000	2000					1950	18500	0.5	0.5	

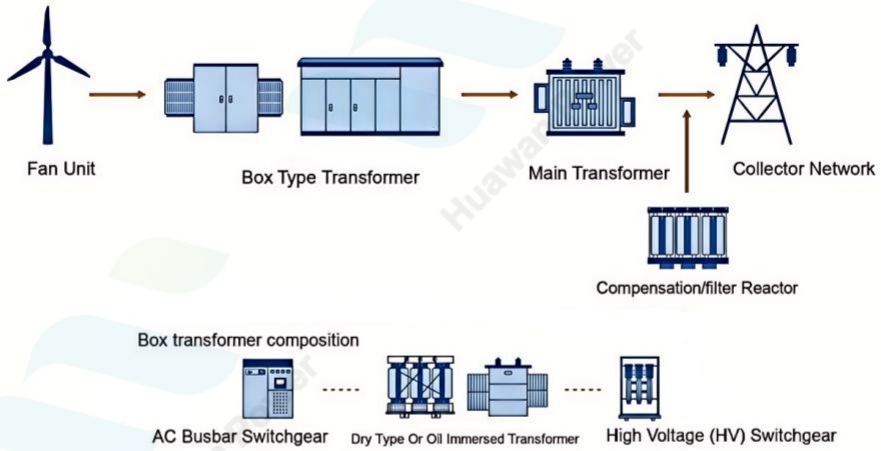
Substation Transformer

Substation transformers, liquid-filled units, are vital for commercial and industrial power distribution. Built to IEEE standards, they use mineral oil, silicone oil, or less flammable seed oil. Available in sizes from 225 kVA to 50MVA, they handle primary voltages up to 69 kV and secondary voltages up to 35 kV. Huawan substation transformers are suitable for new and retrofit projects across various industries.

Wind power system composition:

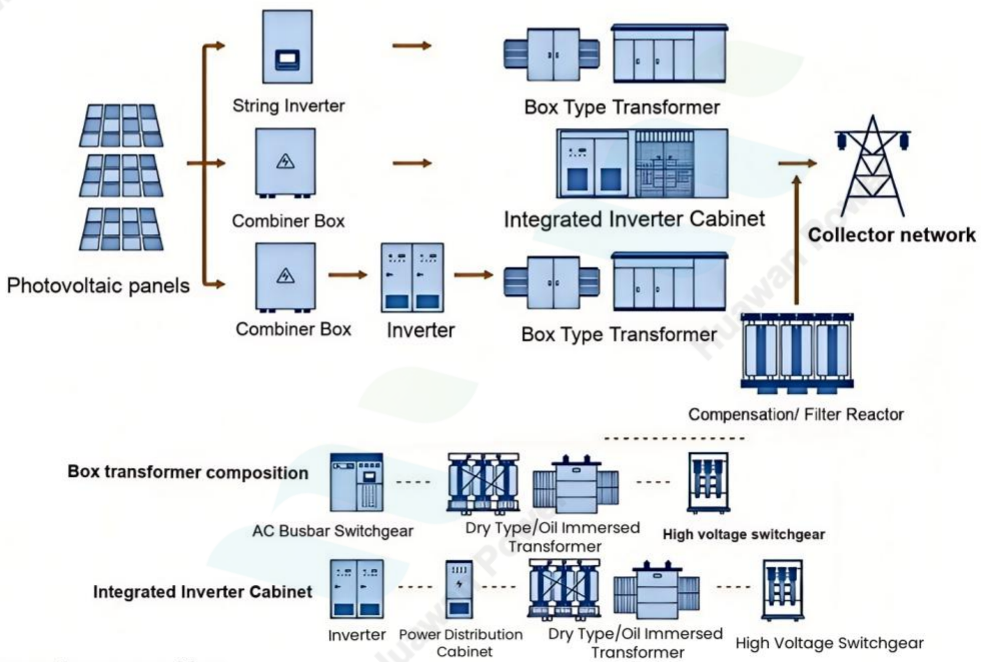
The new energy wind power system mainly consists of several components :

Fan unit → AC Switch Cabinet (including on-site data collection) → Step-up transformer → High-Voltage Switch → Compensation/filter Reactor → Grid Connection



Photovoltaic system composition:

The new energy photovoltaic system mainly consists of several components: photovoltaic components → string inverter/central (distributed) inverter → AC switch cabinet (including on-site data collection) → step-up transformer → high-voltage switch → compensation/filter reactor → grid connection



Wind power system composition:

The new energy wind power system mainly consists of several components:

Wind Turbine Cluster → AC Switchgear (with Local Data Acquisition) → Step-up Transformer → High Voltage (HV) Switchgear → Compensation/Filter Reactor → Grid Connection

Special Transformer

- Dry Type Rectifier Transformer 200kVA - 2500kVA: Power conversion, including rectification, inversion, and frequency conversion, is essential in industrial applications. Rectification, the most common mode, uses rectifier equipment connected to the AC grid to provide DC power. Rectifier transformers are widely used in the electrochemical industry for processes like electrolysis to produce metals, chlorine, alkali, hydrogen, and oxygen.

1. Furnace transformer

Designed for industrial electric arc and induction furnaces, our furnace transformers ensure stable power supply under extreme thermal conditions. Featuring high short-circuit resistance, precision voltage regulation, and forced cooling systems, they maximize energy efficiency (up to 99%) while reducing downtime. Customizable for 11kV-132kV inputs and outputs up to 200MVA. Ideal for steelmaking, metal smelting, and glass manufacturing. Compliant with IEC 60076 & IEEE C57.12 standards.

2.Mining Transformer

Explosion-proof mining transformers are engineered for hazardous underground environments. Compact, corrosion-resistant enclosures (IP67-rated) protect against dust, moisture, and methane gas. With ±5% voltage fluctuation tolerance and 3-winding designs, they support heavy machinery like crushers and conveyor systems. Operating range: 3.3kV-36kV, 50kVA-25MVA. Certified for ATEX Zone 1 and MSHA safety requirements. Ideal for coal, mineral, and tunneling operations.

3.Rectifier Transformer

Optimized for DC power conversion, these transformers feature dual secondary windings and harmonic suppression for 12/24-pulse rectification. Low-loss silicon steel cores and thermally stabilized insulation ensure 98% efficiency in harsh conditions. Configurable for 33kV-400kV inputs and DC outputs up to 300kA. Widely used in electrolysis, aluminum refining, and metro traction systems. Meets ANSI/IEEE C57.18.1 and EN 61378-1 specifications.

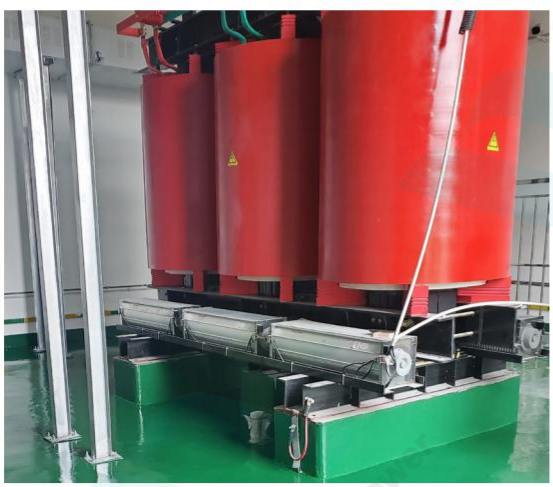
Application

Solar Photovoltaic System Solution

Our Solar Transformer substation is vital for centralized photovoltaic power plants. It efficiently converts and distributes solar energy, ensuring stable operation and reliable power transmission, enhancing the overall performance of the solar photovoltaic system solution.

Power Transmission Distribution Solutions

Our Distribution Transformers are essential for Power Transmission Distribution Solutions. They efficiently convert voltage, ensuring stable and reliable power delivery to meet various demands.



Industrial Commercial Power Solutions

Our Dry Type Transformers are the backbone of Industrial & Commercial Power Solutions. They efficiently convert voltage, ensuring stable and reliable power supply for various equipment and facilities, meeting the demanding power requirements of industries and commercial buildings. With high performance and durability, our transformers enhance the efficiency and safety of power systems, providing a robust and dependable power solution for diverse applications.

Transformer Solutions For Utilities

Our transformers provide reliable solutions for utilities. As electricity demand rises, our products efficiently handle increased loads, replacing aging transformers to ensure stable power supply, reduce outage risks, and minimize economic losses, offering a robust infrastructure for utilities to meet growing demands.

Data Center IT Power Solutions

Our Dry type Transformers are essential in Data Center IT Power Solutions. They provide safe, reliable, and efficient voltage conversion, ensuring stable power supply for IT equipment. With low maintenance and environmental friendliness, they are ideal for data centers.

Oil Gas Industry Power Solutions

Our Oil immersed Transformers are ideal for Oil & Gas Industry Power Solutions. They provide excellent voltage conversion and power transmission, ensuring stable and reliable operation in harsh environments. With good heat dissipation and insulation performance, they are designed to meet the demanding requirements of oil and gas applications.

Renewable Power Plant

The main Power Transformer in renewable energy generation plays a crucial role. It is responsible for voltage transformation, converting the low voltage generated by solar panels or wind turbines to a higher voltage suitable for long-distance transmission and grid connection. This helps to reduce energy loss during transmission and improve the efficiency of the entire power system. Additionally, the transformer ensures the stability and reliability of the power supply, protecting the equipment and the grid from potential damage caused by voltage fluctuations and electrical faults.

EPC services of Huawan New Energy

We have China's national second-level power engineering general contracting qualification, specializing in providing EPC services for power transmission, substations and new energy projects. The team has hundreds of professional technicians and 15 years of experience, providing integrated solutions from design to maintenance. Contact us for reliable power engineering services.

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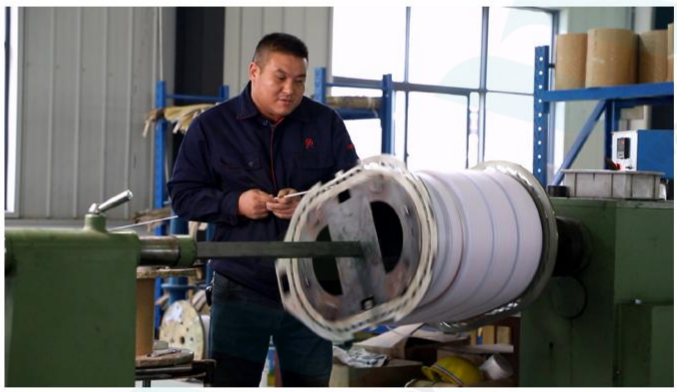
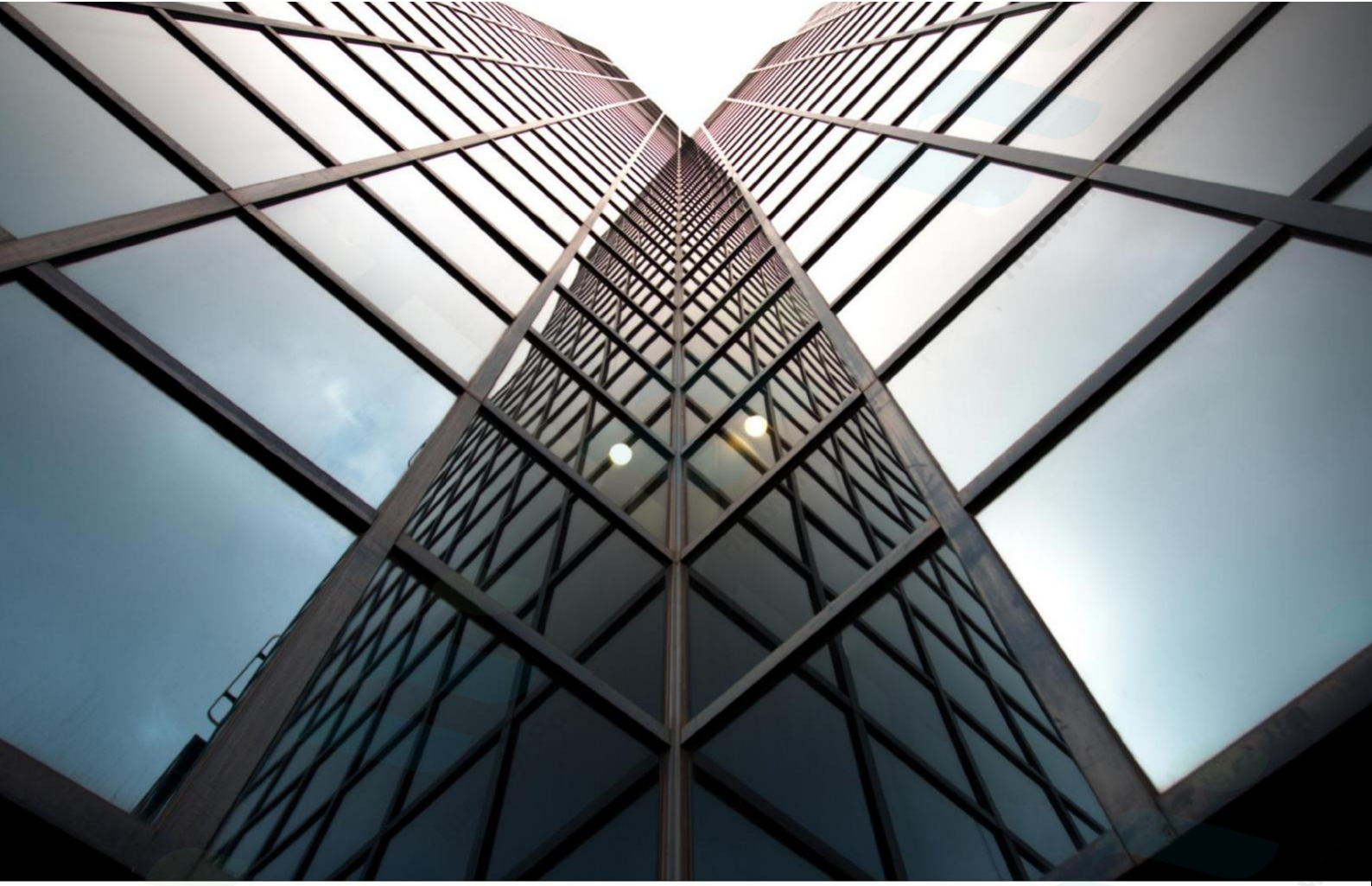


Our portfolio allows utilities, industries, renewable power plant, and infrastructure sectors to maximize return on transformer assets by ensuring high reliability and optimized performance while lowering life-cycle costs and environmental impact.



EMPOWERING THE GRID SERVING CUSTOMERS ADVANCING SOCIETY

At Huawan, we highly value every opportunity to collaborate and serve our esteemed customers. With a strong foundation in technology and extensive experience, we are committed to providing our partners and customers with products of the highest quality, ensuring that we remain a trusted companion in your journey of integration and development.

Delivering Consistent Quality Is Fundamental To Building And Maintaining Our Customers' Trust.

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