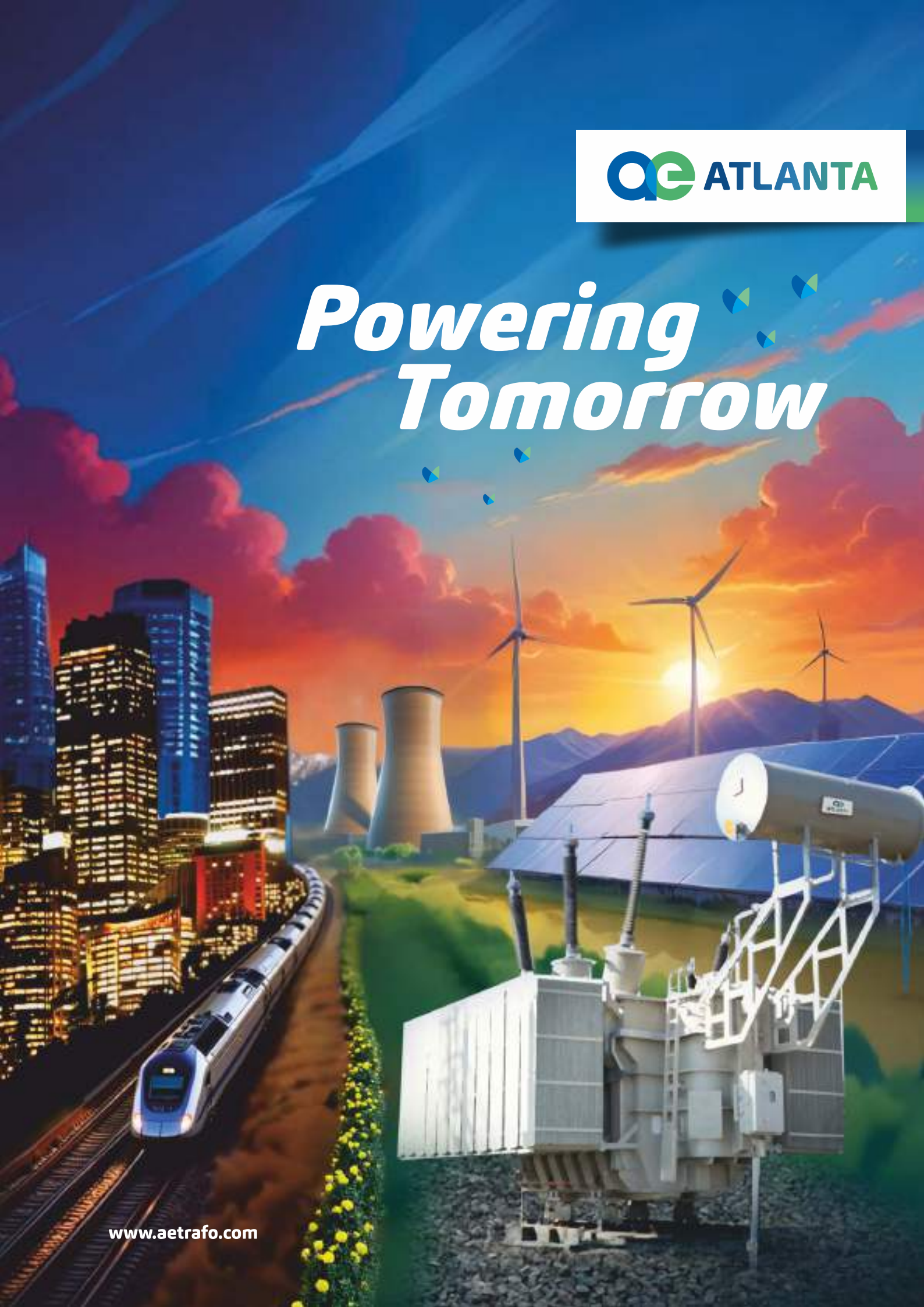




Powering Tomorrow



www.aetrafo.com



About Us

With over three decades of expertise in transformer manufacturing, ATLANTA Electricals is a trusted name in the power sector, delivering high-performance transformers up to the 220 kV class. As one of India's leading manufacturers, our diverse portfolio includes Power, Auto, and Inverter Duty Transformers, designed to meet the evolving demands of the energy landscape.

Our operations are anchored in four state-of-the-art manufacturing facilities—two in Anand, Gujarat, one in Bengaluru, Karnataka, and one in Vadod, Gujarat - spanning a total area of 500,000+ sq. ft. With an aggregate manufacturing capacity of 47,280 MVA, we stand among the largest transformer manufacturers in India.

Committed to quality, safety, and sustainability, all our facilities adhere to ISO 9001:2015, ISO 14001:2015, and ISO 45001:2018 standards. Our products comply with the latest IS and IEC regulations, ensuring uncompromising reliability and performance.

ATLANTA serves an expansive customer base across 19 states and three union territories, playing a pivotal role in strengthening India's

power infrastructure. We have successfully supplied 4,000 transformers, totaling 78,000 MVA, to state and national electricity grids, private sector giants, and prominent renewable energy projects. Our distinguished clientele includes Gujarat Energy Transmission Corporation Limited (GETCO), Adani Green Energy Limited, Tata Power, and SMS India, among 208 esteemed partners.

At ATLANTA Electricals, we don't just manufacture transformers; we drive energy transformation, delivering innovative solutions for a sustainable and electrified future.

Delivering a Power-Packed Product Range



Power

Transformers

up to 160 MVA,
220 kV ⚡



Inverter Duty

Transformers

up to 18.5 MVA,
33 kV ⚡



Special Duty

Transformers

up to 50 MVA,
132 kV ⚡



Auto Transformers

up to 200 MVA,
220 kV ⚡



Furnace Transformers

up to 50 MVA,
66 kV ⚡



Robust manufacturing setup & Streamlined Manufacturing Processes



Winding



Core



Core Coil Assembly & Connection

Windings are made from electrical grade copper and aluminum wires, strips and sheets. It involves winding the conductors over collapsible formers with stringent dimensions as per the design. We can produce windings with PICC, Bunched and CTC conductors. Our workforce is highly skilled in making all types of windings like Disc, Helical, Layer and Foil winding.

We use windings of Aluminum foil for inverter duty transformers. Each winding is processed in Vacuum Ovens to remove the moisture from the insulating material and then pressed to achieve the desired dimensions.

We have 45 Horizontal winding machines, 7 Vertical winding machines placed in airconditioned / positive air pressure & dust control environment and 4 Vacuum drying ovens for coil sizing.

Max weight carrying capacity 20 MT.

Transformer cores are made of silicon steel which is cold rolled for orientation of grains to provide high permeability, low losses and high stacking factor. CRGO strips of various thicknesses from 0.20 mm to 0.30 mm are used to build the core. Our cores are built with Step lap - mitered design to ensure low losses and compactness.

We have 12 Core 3 & 5 Limb Core Building Fixture

Max weight handling capacity 150 MT

In this process, the yoke of the core is removed, and windings are placed to encircle the core limbs. While inserting the coils around the core limbs, care is taken to ensure that the sharp or pointed edges of the core strips do not damage the conductor's insulation. Once the windings are in place, the yoke is again put in place, for completing the electrical circuit of the active part of the transformer. Windings are inserted into core legs to make this assembly followed by various electrical connections using copper cables and flats.

We have 20 working stations to make to assemble Core & Winding.

Upto 10 M long assembly platform.



The presence of moisture in the active part of the transformer is detrimental to the performance and life of the transformer. Removal of moisture from the core coil assembly is a vital process. We use Vapor phase drying vacuum autoclaves for removing the moisture from the active part. Depending on the quantum of insulation material, active parts are dried from a period of 48 hours to 72 hours.

We have 4 Vapor Phase Drying ovens where CCAs are processed for the optimal removal of moisture.

Max capacity of VDPs upto 500 kW.



Dried core coil assemblies from the Vapor Phase Drying ovens are lowered into the tanks for housing the active part. This process requires experienced and skilled manpower to complete the tanking process in a duration which avoids re-ingress of moisture into the active part. The HV & LV connections of the active part are brought out using bushings for external connection to the grid cables and the tank is closed airtight. This is followed by mounting other protective and monitoring accessories.

We have 12 tanking workstations where dried CCAs are tanked & Transformer Oil is filled under vacuum to ensure removal of gases and moisture.



Fully assembled jobs undergo various tests as per relevant IS / IEC standards. To maintain the transparency of our materials, workmanship and product being offered, we invariably invite customers to witness the tests to their satisfaction. Our products also undergo any special or type tests as desired by the customers. On successful completion of the FAT, we obtain the dispatch clearance from the customer and assist them in transportation to the desired site/location

We have 7 fully equipped test labs.

Power & Auto Transformer for High voltage Transmission

Power Transformer

⚡ up to 160 MVA, 220 kV

A power transformer is a static device that efficiently transfers electrical energy between circuits without changing the frequency, using electromagnetic induction. Various types, such as step-up, step-down, single-phase, and three-phase Transformers caters to different electrical system requirements. These are used in sectors like power generation, transmission, and distribution, power transformers also provide specific voltage levels for diverse applications.

Auto Transformer

⚡ up to 200 MVA, 220 kV


An auto transformer is a type of transformer that uses a single circuit for both the primary and secondary windings. An auto transformer has a direct electrical connection between the primary and secondary circuits. The voltage can be adjusted by changing the number of turns between the input and output taps. These transformers are used in many applications, including power-supply boost converters, computers, medical equipment, remote control equipment, and telecommunication equipment.



Transformers for Renewable Energy Sector



Inverter Duty Transformers

 up to 18.5 MVA 33 kV

They are used to transfer electrical energy without changing the frequency and are suitable for solar and wind applications. They are specialised, high-efficiency transformers with robust construction, high overload capability, reduced noise and vibration levels, designed for applications like solar power plants, wind farms, VFDs and renewable energy systems.





Furnace Duty Transformers



up to 50 MVA 66 kV

Steel Making Industries has a demand for transformers that have to deliver energy to various type of smelting furnace. Basically, these are same as system transformers except that LV voltages of furnace transformers are very low and in the order of only several hundred volts. Depending upon the MVA rating of the transformer, LV currents could be as high as 75 Kilo Amps. These transformers also require large voltage regulation range on low voltage side depending upon functionality of the furnace. To achieve the above parameters, demands for special attention. We design and supply a variety of furnace transformers, offering up to 24 pulses with multiple windings, reaching capacities of 50 MVA and 66 kV Class. Our heavy-duty transformers are rigorously tested to perform under challenging conditions, ensuring stability despite fluctuations in current and voltage.





Special Duty Transformers



up to 50 MVA & 132 kV

Special Duty Transformers require careful consideration of design parameters such as flux density, current density, short-circuit withstand capacity, and thermal performance under varying load conditions. The technical specifications for these transformers present significant design challenges. Types of Special Duty Transformers include Short Circuit Testing Transformers, Rectifier Transformers, Green Transformers and High Voltage Testing Transformers, each with specific requirements that must be addressed to ensure efficient and reliable operation.



Green Power Transformers offer a new alternative for customers who want to preserve the environment by providing a lower carbon footprint, reduced pollution risk and optimised life cycle costs due to less maintenance. Other advantages include reduced ageing, lower noise levels and increased fire safety.

Our Ester Oil Transformers are substitutes for conventional petroleum-based oil. Plants such as soya, sunflower and rapeseed are the sources of natural ester oil, which serves as a substitute for mineral oil.

Quality by Design



Quality by Design & Innovation

We engineer tailored transformer solutions through continuous innovation and rigorous validation. Our in-house design team develops advanced transformer designs, validated through comprehensive short-circuit and type tests to ensure superior performance.

Uncompromising Quality Standards

- **Premium Materials:** Use of Prime Quality CRGO (BIS Certified), thermal upgraded paper, and Nomex insulation for high-temperature and special-duty applications.
- **Enhanced Mechanical Strength:** CTC conductors minimize stray losses and withstand high mechanical forces.
- **Precision Engineering:** Advanced crimping processes ensure optimal conductor tightness.
- **Stringent Quality Checks:** Multi-stage internal quality inspections guarantee reliability.

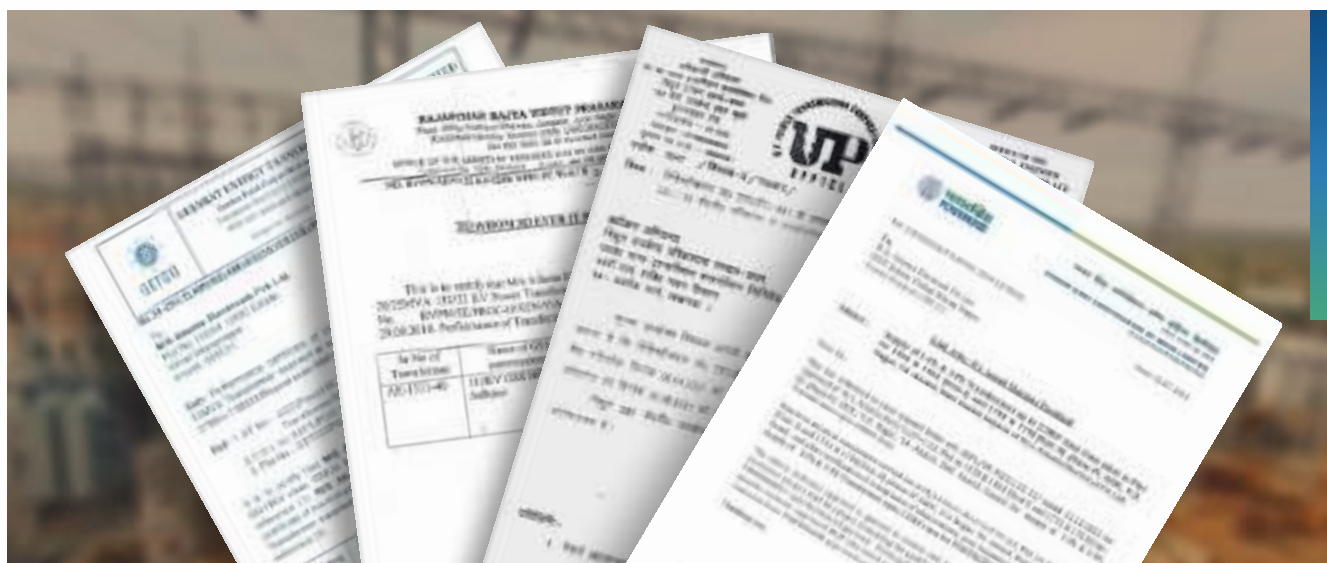
Leak-Proof Design: High-durability nitrile gaskets prevent oil leaks.

Innovation & Advanced Technologies

We integrate cutting-edge technologies to enhance transformer performance, including:

- Fiber optic sensors for hotspot temperature monitoring
- RIP bushings & Dry-Type Plug-in Cables
- Online Dissolved Gas Analysers & Drying Systems
- Power Transformer Monitoring Systems
- Ester Oil Transformers & Eco-friendly Solutions
- Nitrogen Injection Fire Prevention Systems

Our Clients, Our Driving Force



30 years of building a trusted and high-quality brand.

208 customers (21 public sector undertakings, 187 private sector players).

Key customers span across special purpose transformers, transmission, and renewables sectors.

Supplies to **19 state utilities, three union territory utilities,** and **various industry customers.**

Serves industries such as transmission, steel, dairies, solar, textile, construction, and infrastructure.

Approved by PGCIL and the Ministry of Railways, unlocking new market opportunities.

Expanding into emerging markets like the northeast and export territories.

Notable customers include GETCO (state transmission), Adani Green Energy, TATA Power, O2 Power (renewable energy), and EPC firms like Shyama Power, ABN Towers, and SMS India.



Setting Benchmarks of Excellence



ATLANTA ELECTRICALS LIMITED

(Formerly known as ATLANTA ELECTRICALS PVT. LTD.)

CIN No. U31110GJ1988PLC011648

Corporate Office & Anand Plant

Plot No. 1503/4, GIDC Estate,
Vithal Udyognagar,
Anand - 388121, Gujarat, India

Bengaluru Plant

Plot No. 1, KIADB Industrial Area,
Bashettihalli, Doddaballapura,
Bengaluru - 561203, Karnataka, India

+91 269 223 5023
sales@aetrafo.com
www.aetrafo.com



E-brochure