



HI & LOW VOLTAGE TRANSFORMERS Upto 66 kV Class

sales@volttech.co.in







Table Of Contents

- About Company
- Brand Ethics
- Transformers
- Designing
- Power Transformer
- Distribution Transformer
- Furnace Transformer
- Step Up & Step Down Transformer
- Our Customers



About Company

Volt Tech was founded in 2017 with exemplifies visionary leadership and innovative thinking. The company carries a rich legacy spanning nearly 08 years and has emerged as India's leading power conditioning equipment and transformer Manufacturer and supplier.

Our vision is to carve a distinct and impactful niche in the production and supply of robust power conditioning solutions such as High-capacity Transformers, Servo Stabilizers and various Electrical Products through an efficient network of channel partners in India. Besides, our Company is committed to facilitating the renewable energy goals of industries and economies through research-based and cost-effective solar power solutions.

To successfully analyze the present and future needs of national and international markets and meet their expectations with the most advanced, efficacious, and budget-friendly solutions. Moreover, to continuously add value to Volt Tech's products and services by leveraging innovations, incorporating skills, and adhering to professional ethics.

Brand Ethics



Customer Service Support

Volt Tech believes in maintaining a long-term relationship with our clients by providing dedicated customer service support and ensuring to resolve all our client's queries.



Honesty and Hard work

Volt Tech believes in maintaining a long-term relationship with our clients by providing dedicated customer service support and ensuring to resolve all our client's queries.



Better Quality, Affordable pricing

With our state-of-the-art infrastructure, we deliver world-class products. We provide it at affordable pricing, which has helped us establish industry benchmarks.



Maintaining Stipulated Delivery time

We are known for our quality. We also maintain a stipulated delivery time that has always outperformed our client's expectations and earned an esteemed repute for us.



Valuing Trust, Confidence, and Loyalty

Our brand is based on its belief in valuing trust, confidence, and loyalty shown by our clients and team members. We thrive on these core pillars and proudly steadfast them.



Putting 100% efforts round-theclock and thriving!

Our team works around the clock with utmost diligence to ensure that our clients receive high-quality products. It is for their dedication and efforts that we are continuously thriving in the global market.



TRANSFORMER

Transformers are one of the primary components for the transmission and distribution of electrical energy. Their design results mainly from the range of application, the construction, the rated power and the voltage level. The scope of Transformer types start with Generator Transformers and ends with Distribution Transformers. The transformer can be Single Phase, Double Phase or Three Phase. We are manufacturing Highly efficient low loss star rated transformers in accordance with the latest Indian Standards.

We are manufacturing wide range of Transformers:

- POWER TRANSFORMER
- DISTRIBUTION TRANSFORMER
- ISOLATION TRANSFORMER
- FURNACE TRANSFORMER
- STEP UP & STEP DOWN TRANSFORMER
- COMPACT SUB STATION (CSS)
- PACKAGED SUB STATION (PSS)

Manufacturing Range

- Oil Immersed Type Transformers
- Dry Type Transformers
- Single Phase, Double Phase & Three Phase Type.
- Capacity 25 KVA to 50 MVA (Any special capacity as per requirement)
- Voltage Class 1.1kV, 2.2kV, 3.3kV, 6.6kV, 6.9kV, 11kV, 12.47kV, 13.2kV, 13.8kV, 15kV, 22kV, 25kV, 33kV, 34.5kV, 66kV, 69kV (Any Special Customised Class as per requirement) (Any special capacity as per requirement)

DESIGNING

We are following the relevant and updated Indian Standards namely Latest Amended IS:1180, IS:2026, IS:11171 along with various other applicable Indian Standards as well as International Standards namely IEC 60076 and various other applicable International Standards. We adhered to the Technical Guidelines of IS, ISO, CE, BIS, BEE, ECBC, CBIP, IEC, ANSI, REC, BSI, NES, ASTM, IEEE, EUD, DIN, NEMA, ITMA & IEEMA etc., our manufacturing unit have the up to dated and well-equipped advanced technical bench which is also calibrated as per NABL Guidelines.

TANK____

The construction of Tank can be Conventional Type and Corrugated Type as per the project's requirement. The Conventional Tanks consist of the Main Tank Body, Conservator, Cover and Presses Steel Type Radiators. The tanks are made from MS Steels Plates or Sheets with adequate Stiffeners. The Radiators of CRCA (Cold Rolled Close Annealed) can be mounded as Fixed Type or Detachable Type for the heat dissipation and cooling to keep low oil temperature inside the tank. The Corrugated Tanks are made from CRCA and MS Steels, it also knows as hermitically sealed type construction.

CORE____

The Cold Rolled Grain Oriented (CRGO) Silicon Steel is also knows as Core and the series of Core's Stacked Laminations are called Core Assembly. We use the high grade and low losses material of CRGO like M0, M3, M4, M5, 0.23 or as per IS:3024, BIS & PGCIL's norms, all the electrical characteristics of CRGO are strictly monitored by our design team for superior performance and lower electrical loss.

TESTING_

The Transformers manufactured by us are tested for the quality & performance at our in-house Testing Lab. We perform all the recommended Routine Test, Type Test & Special Test as per, IS:1180, IS:2026, IEC:60076 or as applicable. We have also successfully conducted Type Test & Special Test at NABL's accredited Testing Labs like CPRI, ERDA, ERTO & NTH etc., we also offer the Third Party Inspection as per customer's requirement.

WINDING

We are using the best quality wire and strips of Electrolytic Grade Copper and ECC Grade Aluminum conductors covered inorganic thermally upgraded insulating material like Nomex, DPC, TPC, SE as per requirement of design. These insulations have best mechanical strength and can withstand the temperature upto 220 °C. The winding construction can be Cross Over, Hellical, Disc Type, and Continuous Disc Type. Radial Spacers, Axial Spaces, Cotton Tape, Sleeves, Press Board & Kraft Paper of Electrical Grade are generally used for insulation between Core & HV / LV Coils to provide additional cooling. The use of thermally upgraded insulating material is very important for conductors to allows the windings to withstand conditions of several thermal and mechanical stress.



TRANSFORMER OIL ___

The importance of Oil in a transformer is just like the blood in the human body. For the superior performance we use fresh mineral Oil of Electrical Grade (EHV) which is Tested and Filtered as per IS:335, IEC:60296, BSI:148 & ASTM:D-1473, D-1533 etc. to withstand the Dielectric and Acidic characteristics.



POWER TRANSFORMER

Volt Tech provides Power transformers up to 50 MVA Capacity and up to 66kV Primary/Secondary voltage with Both OffCircuit Tap Changer (OCTC) as well as On-Load Tap Changer (OLTC) along with necessary accessories. Power Transformer are Oil immersed and has a life expectancy of around 30 years. We are manufacturing very cost-effective low energy consumption Power Transformers which also meets the State Electricity Board's requirement. Power Transformers can also be embedded with Nitrogen Infused Fire Protection System (NIFPS) as per Customer Requirement. Power transformers are generally used in transmission network for stepping up or down the voltage level for its transmission from one place to another to minimise the energy losses. It operates mainly during high or peak loads and has maximum efficiency at or near full load

Applications of Power Transformers:

- POWER GENERATION STATION
- SUBSTATIONS
- ELECTRICAL TRANSMISSION SYSTEMS
- MINING
- HYDRO POWER PROJECTS
- SOLAR PROJECTS

- WIND POWER PROJECTS
- CEMENT PLANTS
- STEEL PLANTS
- REFINERIES
- CAPTIVE POWER PROJECTS
- EPC PROJECTS

Our Range:

Capacity: From 1 MVA to 50 MVA.

Voltage Class: 1.1kV, 2.2kV, 3.3kV, 6.6kV, 6.9kV, 11kV, 12.47kV, 13.2kV, 13.8kV, 15kV 22kV, 25kV, 33kV, 34.5kV, 66kV, 69kV (Any Special Customised Class as per requirement)

Cooling: ONAN, ONAF, OFAF, ONWF, OFWF

Tap Changer: OCTC, OLTC



DISTRIBUTION TRANSFORMER

The Distribution Transformer provides the final voltage transformation in the electric power distribution system. Medium and large distribution transformers, installed in substations near to the consumer's side, receive high voltage electric power from the grid, step down its voltage to low voltage i.e. 433/250, 415/240, 400/230, 380/220 Volts and distribute electricity to consumers and lower voltage substations. This is considered one of the most important links in the power distribution network. Servokon provides distribution transformers up to 10 MVA Capacity and up to 66kV Primary/Secondary voltage along with necessary accessories. Our Distribution Transformers are BIS Certified, Star rated, Energy efficient with Low Losses.

Applications of Power Transformers:

- PETRO-CHEMICAL INDUSTRIES
- PHARMACEUTICALS INDUSTRIES
- **TEXTILE INDUSTRIES**
- PLASTIC INDUSTRIES
- MINING INDUSTRIES
- CEMENT INDUSTRIES
- HIGH RISE BUILDINGS
- HIGHWAY CONSTRUCTION PROJECTS

- STEEL INDUSTRIES
- HYDRO POWER PROJECTS
- WIND POWER PROJECTS
- REFINERIES
- REFINERIES
- AUTOMOBILE INDUSTRIES
- COMMERCIAL & RESIDENTIAL TOWERS
- OIL & GAS PLANTS

Our Range:

Capacity: From 25 KVA to 10 MVA.

Voltage Class: 1.1kV, 2.2kV, 3.3kV, 6.6kV, 6.9kV, 11kV, 12.47kV, 13.2kV, 13.8kV, 15kV, 22kV, 25kV 33kV, 34.5kV, 66kV, 69kV (Any

Special Customised Class as per requirement)

Low Voltage Class: 380 V, 400 V, 415 V, 433 V & 440 V (Any

Special Customised Class as per requirement)

Cooling: ONAN

Tap Charger: OCTC, OLTC



FURNACE TRANSFORMER

Induction Furnace has coil constructed from heavy copper tubing. It is designed and tuned to the inverter circuit which applies a medium frequency (generally 500 Hz or 1000 Hz) voltage to the Induction coil. The magnetic field produced by the induction coil induces eddy currents in the charge and heats it. Medium frequency is necessary to enhance the rate of heat generation.

The inverter circuit requires for its operation a D.C. Voltage which is obtained by converting available three phase A.C. Voltage. Transformers which are used for transforming available three phase A.C. voltage to required voltage for converter circuit of the Induction Furnace are referred to as Induction Furnace Transformers. Thus they are essentially Rectifier/ Converter Duty Transformers.

These transformers must be designed to resist the high levels of electrical, thermal and mechanical stress to which they are subject during utilisation.

The furnace transformer thus has special features to handle such high currents as compared to conventional transformers. The electric arc furnace has 3 electrodes connected to the secondary terminals of the furnace transformers. The secondary terminals of the transformers are subject to frequent short circuits during the melting process through the charge and arc. Hence the furnace transformer needs to be specially designed to withstand the frequent short circuits.

Specially designed for:

- ELECTROTHERM FURNACE
- SUBMERGE ARC FURNACE
- LADLE REFINING FURNACE APPLICATIONS.
- INDUCTOTHERM INDUCTION FURNACE
- ELECTRIC ARC FURNACE

Our Range:

Capacity: From 250 KVA to 30 MVA. Voltage Class: 433 V, 3.3 kV, 6.6 kV, 11 kV, 22 kV, 33 kV (Any Special Customised Class as per

requirement).

Low Voltage Class: 400 V, 440V, 500V, 575V, 750V, 800V 1000V

(Any Special Customised Class as per requirement). **Cooling**: ONAN, ONAF, OFAF, ONWF, OFWF.

Tap Changer: OCTC & OLTC



STEP UP & STEP DOWN TRANSFORMER

Volt Tech offers high quality step up and step down transformer that is used to step up or step down the voltage applied to it. The prime difference lies between both is in their primary and secondary voltage. Former has secondary voltage which is greater than its primary voltage. On the contrary, later that is step down transformer works just opposite to the former. Apart from this, the voltage ratio between both primary and secondary decides the turn ratio of the transformer. A single phase transformer of voltage 1 KVA can be easily connected to step up or step down transformer. The insulation is made up of mylar, kraft paper, nomex, varnish or other allied materials that are placed between the turns of wire to protect shorting to one another or to ground. We manufacture the transformer with quality material and ensure its delivery in the stipulated time frame.

Features:

- **△** LONGER OPERATIONAL LIFE OF 20 TO 25 YEARS
- NO MOVING PARTS

- LOW POWER CONSUMPTION
- OUTSTANDING TURNS RATIO
- INSULATION IN BETWEEN THE TURNS OF WIRE TO PREVENT SHORTING

Applications of Step UP & Step Down Transformers:

PRINTING MACHINES

IMPORTED APPLIANCES

IMPORTED MACHINES OPERATING AT 110V

Our Range:

Capacity: Upto 50kVA

Low Voltage Class: 400 V, 440V, 500V, 575V, 750V, 800V

1000V (Any Special Customised Class as per requirement).

Cooling: ONAN, ONAF, OFAF, ONWF, OFWF.

Tap Changer: OCTC & OLTC



...

Our Products

Power Conditioning Segment:

- Servo Voltage Stabilizer
- Online UPS

- CVTs
- Electrical Panels

Power Segment:

- Distribution Transformer
- Power Transformer
- Step Up & Down Transformer
- Isolation Transformer

Renewable Energy Segment:

- Solar Panels
- Solar Inverters

- Solar Charging Controller
- Solar Batteries

Construction Segment:

- Commercial Construction
- Industrial Construction
- Underground Wiring
- Underground Pipelines
- Road Construction
- Bridge Construction
- Railway Track Construction
- Road & Highway Lights



Premium Customers













उत्तर प्रदेश राज्य सड़क परिवहन निगम







Our Customers









































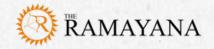




























- +91-8576030010 +91-8887202047 +91-9648730010
- sales@volttech.co.in