

UTTAM[®]

POWER AND DISTRIBUTION TRANSFORMERS



Building Lasting Relationships



ISO 9001:2015
BUREAU VERITAS
Certification



IS 1180 : Part 1 : 2014

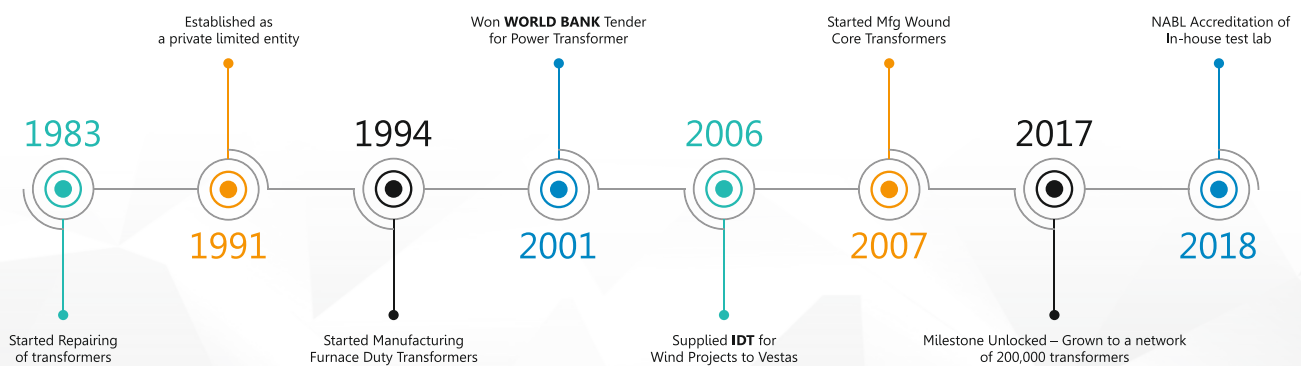


CM/L - 8400030206

INSTALLED CAPACITY

5000 MVA

PER ANNUM





UTTAM (BHARAT) ELECTRICALS PVT. LTD. is a professionally managed ISO 9001:2015 Certified Company located in Jaipur (India). The company manufactures Power and Distribution transformers upto 20000 KVA, 33 KV class, Single as well as Three Phase, having an annual turnover above Rs. 100 crores (USD 17 million). The company has an installed capacity of 1500 MVA per annum in its manufacturing units spread over an area of 21000sqm.

Summarising Our Success

42+

Years in Operation

25,430+

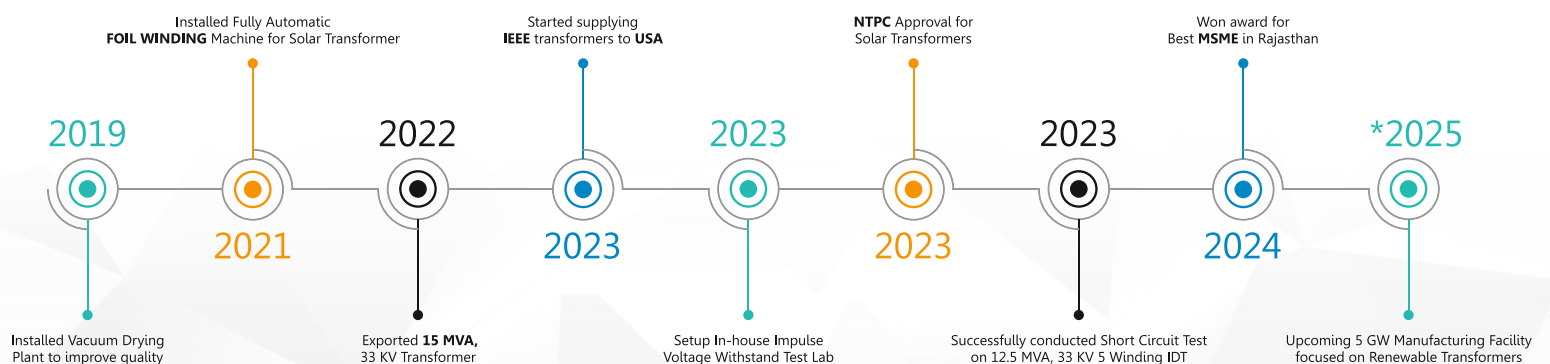
Number Of Clients

24+

Presence In Countries

231K+

Quantity Manufactured



MANUFACTURING PROCESS



WINDING

The windings are manufactured in house using various kinds of Pneumatic, automatic and semiautomatic winding machines. They are designed to optimize Thermal, Mechanical and Electrical stresses depending upon the current & voltage requirements. They can be of (a) Spiral Type, (b) Cross-Over Type, (c) Helical Type, (d) Continuous Disc Type. The coils are made from Paper Covered or Synthetic Enameled copper or aluminum conductors of EC Grade.

CORE ASSEMBLY

The transformers are built with fully annealed, Cold Rolled Grain Oriented Laminations (CRGO). Fully mitred designs and Step-Lap Construction are used to insure low losses/ low magnetic current and low noise levels.



CORE COIL ASSEMBLY

The wound coils are assembled with the core as per design and drawings. Stringent quality checks are conducted at all stages and quality records are maintained before making the final connections to tapping switch/ OLTC, ratio test and other preliminary tests are conducted to ensure the accuracy of all electrical parameters.



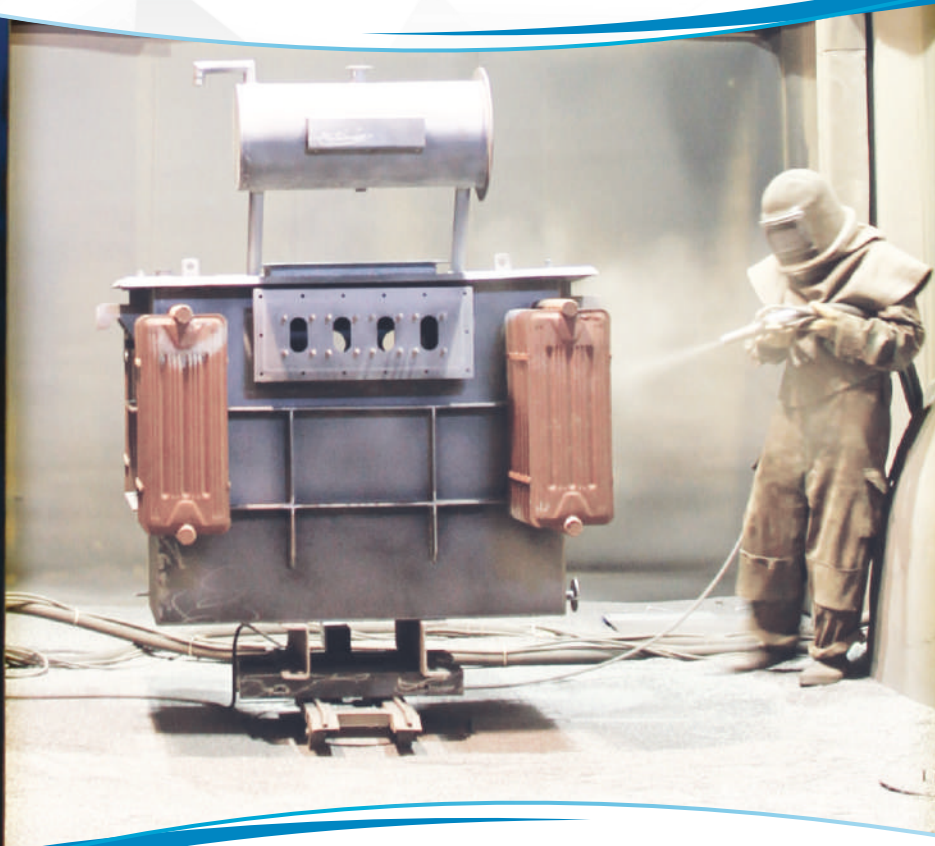
BENEFITS OF USING A VACUUM OVEN

De-hydration of CCAs in vacuum drying oven helps with quick drying & high polarisation and absorption index for longer life of insulation and therefore the transformer.



SHOT BLASTING

The fabricated tanks are checked and tested for leakage before clearing for shot blasting and painting. Each tank is subject to thorough cleaning and removal of rust, scale & grease by shot blasting before being painted.



PAINTING

The inside walls are painted with two coats of oil and heat resistant paint while outer surface is painted with epoxy based zinc chromate primer and two coats of epoxy based anti-corrosive paint or as per customer's requirement.

The paint mist produced by paint spray operation is carried downwards by suction effect created by partial vacuum thus reducing health and explosion hazards.



TRANSFORMER OIL FILTRATION

Transformer oil goes through a process of heating and vacuum cycles to remove the moisture content. Degassing of Oil is also done to remove the dissolved gas before the oil is filled to the tanks.



TANKING

Fully dried core coil assembly is lowered inside suitably designed & fabricated mild steel tanks. Fresh filtered superior quality transformer oil is filled to the tank. The connections to LV & HV terminals are made as per design & drawing and all relevant fittings are attached/mounted before the transformer is sent for testing.



TESTING

Each transformer is subjected to all the routine tests as recommended by IS : 2026, IS : 1180 (Part-1) 2014, IEEE and IEC 60076 (if required). On specific agreement, transformers can also be subjected to certain type tests/special purpose tests such as impulse voltage withstand Test Tan Delta & Capacitance Measurement Test, Noise Level Test, Zero Phase Sequence Test, Polarization Index Test etc. Purchaser may depute his representative to witness these tests.



POWER TRANSFORMERS



POWER TRANSFORMERS

At UTTAM we manufacture Three Phase Power Transformers Stack Core Type – Copper wound, outdoor/ indoor type, Step Down/ Step Up Transformers, connection options of Delta & Star Type as per Vector group ref. Dyn11/Ynd11 etc, with rating range of 1000 KVA to **20000 KVA**. UTTAM make power transformers have been installed at coal fields, power projects, housing projects, national level business houses, and individual manufacturing units.

FEATURES:

- Available in Stack core
- Modern manufacturing techniques ensuring quality of product
- Robust build designed to withstand electric impulses, thermal and dynamic stress
- Designs through **Computer Aided Design (CAD)** Software System
- Trouble free performance
- Customized design and specification demands
- After sales maintenance and spare parts services

GENERAL SPECIFICATIONS

Ratings	Three Phase CRGO - Upto 20000 KVA
Applicable Standards	IS, IEC, ANSI, JIS, DIN, BS Etc.
Cooling	ONAN, ONAF
Insulating Fluid	Mineral Oil to specification
Frequency	50 Hz, 60 Hz
Primary voltage	Upto 33000 V
Secondary Voltage	22000, 11000 , 6600, 3300 V (Other Voltages as required)
Winding material	Copper
Taping range	Off circuit and On load tap changers as per customer specification



INVERTER DUTY TRANSFORMERS

SOLAR / WIND / BESS / FURNACE / ELECTROLYSER APPLICATION

At UTTAM we manufacture Three Phase Inverter/Solar / Wind / BESS / Furnace / Electrolyser Application Duty Transformers Stack Core Type - Copper/Aluminium wound, outdoor/ indoor type, Step Down/ Step Up transformers, connection options of Delta & Star Type as per Vector group ref. Dyn11, Dyn11y11, Dyn11y11y11y11 or Ynd11, Ynd11d11, Ynd11d11d11d11, Dd0 etc, with rating range upto 20000 kVA. UTTAM make Inverter/Converter Duty Transformers have been installed at various Wind & Solar farms and Furnace projects.

FEATURES:

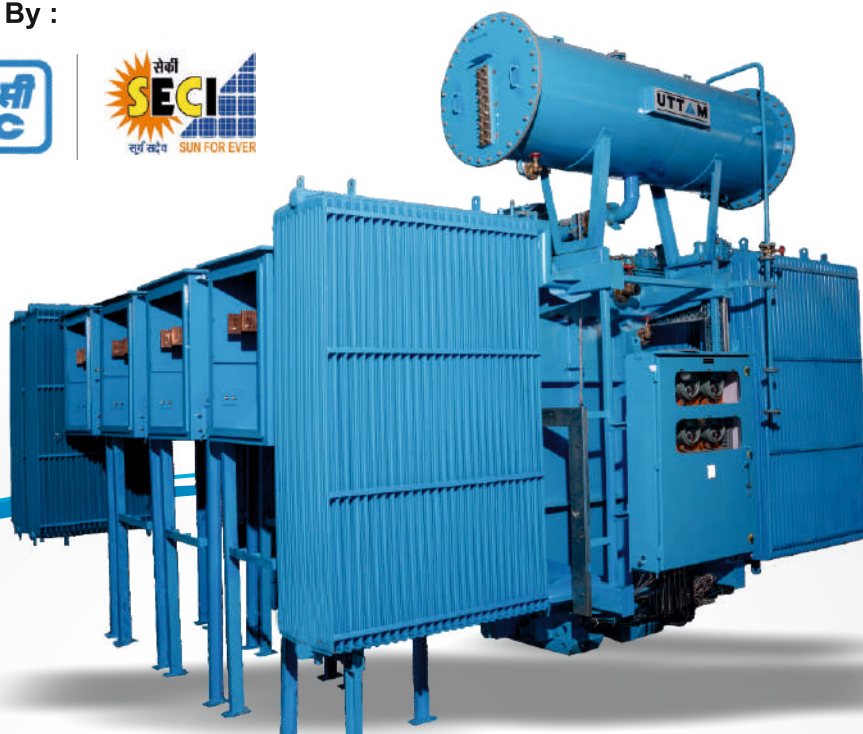
- Available in Stack core
- Modern manufacturing techniques ensuring quality of product
- Robust build designed to withstand electric impulses, thermal and dynamic stress
- Designs through **Computer Aided Design (CAD)** Software System
- Trouble free performance
- Customized design and specification demands
- After sales maintenance and spare parts services
- These Transformers have been TYPE TESTED at ERDA / CPRI

12.5 MVA
5 Winding
Aluminium
Transformers Type
Tested

GENERAL SPECIFICATIONS

Ratings	Three Phase CRGO - Upto 20000 KVA
Applicable Standards	IS, IEC, ANSI, JIS, DIN, BS Etc.
Cooling	ONAN, ONAF
Insulating Fluid	Mineral Oil to specification
Frequency	50 Hz, 60 Hz
Primary voltage	Upto 33000 V
Secondary Voltage	360, 380, 400, 420, 575, 600, 660, 690, 750, 800, 850, 1000 V, etc (Other Voltages as required)
Winding material	Copper/Aluminium
Taping range	Off circuit and On load tap changers as per customer specification

Approved By :



OUR INSTALLATIONS



3.0 MVA Inverter Duty Transformer 33/0.690kV for Wind Application



7.8 MVA Inverter Duty Transformer 0.660-0.660/33kV for Solar application

SPECIAL TRANSFORMERS

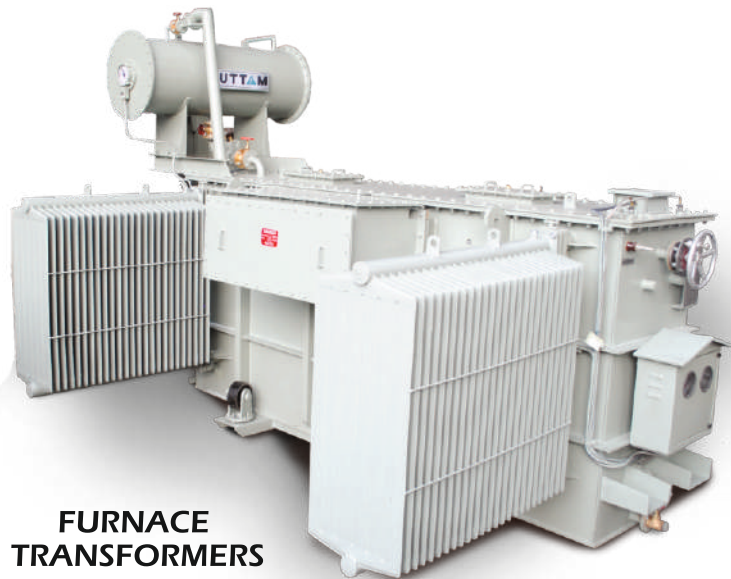
At UTTAM, in compliance with our R&D work and dedication to provide customised services, we always work towards satisfying the demands of our customers. Over the period, we have manufactured and supplied special and different kinds of transformers that have a very niche demand.

TYPES

Such transformers that have been manufactured successfully are:

- Induction **Furnace** Duty Transformers - upto **24 Pulse**
- Transformers with Dual Outputs (Three Winding Transformers)
- Step-up Transformers for **Solar/ Wind** Turbine application
- Transformers suitable for Dual Input Voltages (eg 11 & 33 kVA, 22 & 11 kVA, 11 & 6.6 kVA, etc.)
- **Hermetically Sealed** type Transformers, with Corrugated Radiator Panels
- Earthing Transformers
- Completely Self Protected (CSP) type Transformers
- Auto Transformers
- Isolation Transformers
- Scott Connected Transformers (for converting three-phase to two-phase supplies)
- Transformers for testing purposes, such as – high voltage testing transformers, Induced Over-Voltage testing transformers, etc.

We are always eager to implement any specific technical requirement of the customer in our designs for their optimum utility.



**FURNACE
TRANSFORMERS**

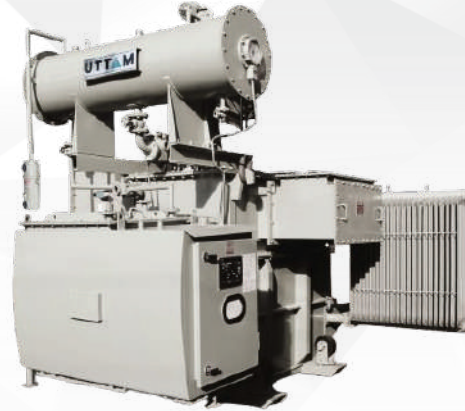


**HERMETICALLY SEALED
TRANSFORMERS**

THREE PHASE DISTRIBUTION TRANSFORMERS

Distribution transformers are normally located at a service drop, wires run from a utility pole or underground power lines to a customer's premises. They are often used for the power supply of facilities outside settlements, such as isolated houses, farmyards or pumping stations at voltages below 30kV.

UTTAM make three phase distribution transformers are available in stack core / **wound core** upto 160kVA and stack core upto 3000kVA. They are made available in aluminium / copper as per requirement. On demand higher rating can also be offered.

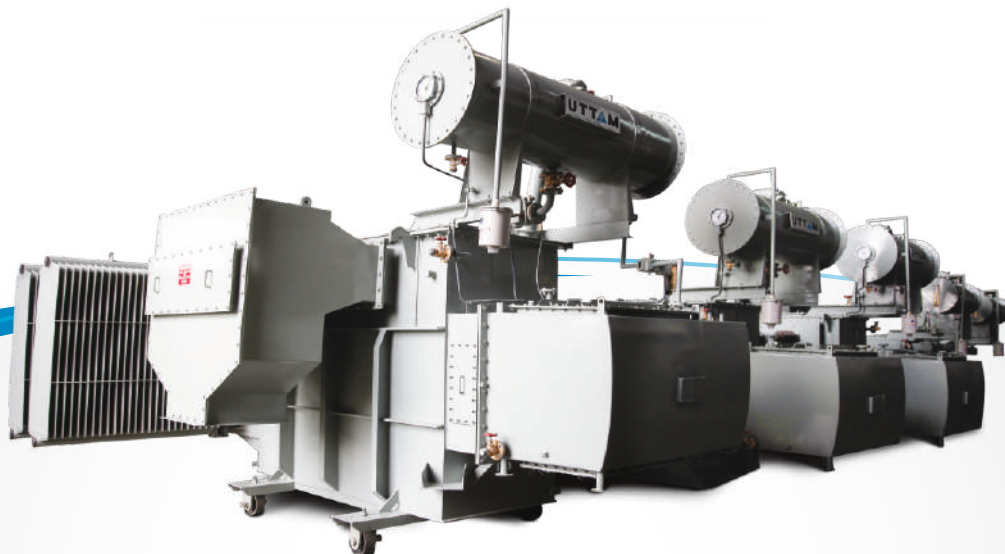


FEATURES:

- Standardized designs for quick delivery
- Available in Wound core as well as Stack core
- Modern manufacturing techniques ensuring quality of product
- Robust build designed to withstand electric impulses, thermal and dynamic stress
- Designs through **Computer Aided Design (CAD)** Software System
- Trouble free performance
- Customized design and specification demands

TECHNICAL SPECIFICATION

Ratings	CRGO Stack - Upto 5000 KVA (higher rating can also be offered) AMORPHOUS Core - upto 500 KVA
Applicable Standards	IS, REC, CBIP, IEC, ANSI, JIS, BS etc.
Cooling	ON AN
Insulating Fluid	Mineral Oil to specification
Frequency	50 Hz, 60 Hz
Primary voltage	Upto 33 kV
Secondary Voltage	415, 433 V (Other Voltages as required)
Winding material	Copper (upto 3000 kVA) / Aluminium (upto 800 kVA)
Taping range	± 5% in steps of 2.5% (Other tapings as required)



IEEE Transformers : Single Phase Pole Mount Transformer

Single Phase Pole-Mount Transformers from Uttam Bharat are designed to deliver reliable and efficient power distribution for residential, commercial, and industrial applications. Built with robust construction and high-performance standards, these transformers are suitable for underground distribution systems, offering a compact and tamper-resistant design.



Fittings:

- » Lightning Arrester
- » 3 Piece Protective Cap
- » Arrester Bracket Guard
- » Ground Connector
- » HV Bushing BirdGuard
- » HV Bushing Porcelain
- » Internal Fault Detector
- » LV Bushing Porcelain
- » Internal Circuit Breaker
- » Internal HV Expulsion Fuses

Single Phase Pole Mount Transformer				
Transformer Type	kVA Ratings	High Voltage	Low Voltage	BIL
Conventional	10 – 100	2.4 – 19.9 kV	600V (Max)	150 kV (Max)
Completely Self Protected (CSP)	10 – 100	2.4 – 19.9 kV	600V (Max)	150 kV (Max)

Single Phase Pad Mount Transformer

Uttam Bharat’s Single Phase Pad Mounted Transformers are designed to provide reliable and efficient electrical power distribution for residential, commercial, and industrial applications. Engineered for durability, these transformers are suitable for outdoor installation, ensuring consistent performance in various environmental conditions.



Fittings:

- » HV Bushings Well
- » HV Load Break Bushing Insert
- » LV Bushing
- » CLF Fuse
- » CLF Fuse Holder
- » Dual Sensing Fuse
- » Bayonet Fuse Holder
- » Bayonet Drip Shield
- » Ground Lug
- » Padlock Receptor Assembly (HJ)
- » Padlock Bolting Assemble (HJ)
- » Pressure Relief Device

Single Phase Pad Mount Transformer

Transformer Type	kVA Ratings	High Voltage	Low Voltage	BIL
Type 1	25 – 100	2.4 – 19.9 kV	600V (Max)	150 kV (Max)
Type 2	25 – 100	2.4 – 19.9 kV	600V (Max)	150 kV (Max)

Three Phase Pad Mount Transformer

Three Phase Pad-Mount Transformers from Uttam Bharat are engineered to provide dependable and efficient power distribution for a wide range of commercial, industrial, and utility applications. With their rugged construction and high-performance standards, these transformers are ideal for underground distribution systems, ensuring a compact, tamper-resistant solution that can handle the demands of modern power networks.



Fittings:

- » Tap Changer
- » Grounding Bushing
- » HV Bushing Well
- » HV Load break Bushing Insert
- » Parking Stand
- » Grounding Lug
- » Oil Level Gauge
- » Pressure Relief Valve
- » Thermometer
- » LV Bushing
- » Drain Valve



SERVICES & REPAIRS

We provide **no-fuss after sales service**. On receiving information about any trouble in the transformer, our team of expert mechanics is promptly deputed. Our services comprise of:

Minor Site Repairs – our technicians are capable of checking transformers at site for collection of oil sample for testing, checking of insulation resistance, rectification of minor leakages, replacement of defective terminals, paint correction, silicagel breather replacement etc.

Reconditioning or Overhauling – our technicians replace gaskets, broken bushings and accessories, purify or replace the oil, repaint the transformer. The complete transformer is fully tested and only then it is released.



DESIGN & PRODUCT DEVELOPMENT

Our inhouse design department has engineering experts with more than **35 years experience** in design and preparation of drawings. Our designs are carefully prepared on **AutoCAD** and our customized design software to meet stringent requirements of the prevailing standards and specific requirements of the customer. Basic aim is to ensure long trouble free service. Special care is taken to keep the losses low and to maintain better Power Factor when running at no load.



QUALITY

At UTTAM, each individual is responsible for delivering the **right quality of output**. This is facilitated by:

- Clearly defining the responsibilities and authorities
- Properly identifying the critical processes, process owners and process measures
- Periodically analyzing critical data, information and process results
- Planning effective corrective and preventive actions

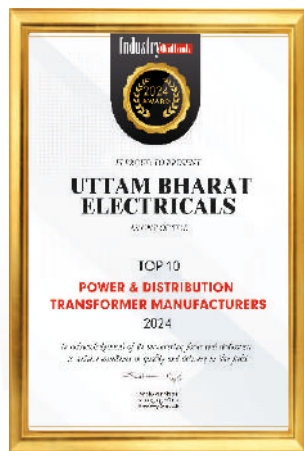
The quality control process begins with the receipt of the requirements from customers and ends with delivering the goods and services to them, exactly as per their requirements. This process covers all the conventional aspects in product realization such as:

- Development & selection of reliable vendors
- Ensuring timely availability of proper resources
- Provision of effective training
- Verification of material, processes, and sub – assemblies
- Testing and inspection of the finished product

“ Quality is never an accident; it is always the result of high intention, sincere effort, intelligent direction and skillful execution; it represents the wise choice of many alternatives. ”



AWARDS & CERTIFICATES



TESTIMONIAL



*We have been using their products for several years now, and the **quality** has always been **top-notch**. Superb **aftersales support** ensures that we are never left in the lurch, providing peace of mind and confidence in every transaction."*

—One of our UAE client



“

Uttam Bharat's transformers are built to last with **minimum maintenance** requirements, ensuring **Breakdown free life cycle** of your project that reduce operational costs. We've seen a remarkable increase in **efficiency and performance**, which has directly translated to **35% more profit** from our solar projects.

Our Unique Offerings For Your Convenience



Quick Deliveries



Annual Energy Savings



Project Cost Savings



Prompt Service Guarantee



Annual Maintenance Contract



Free Support During Installation



Free Health Check-Up



Free Service After Purchase



OUR REPUTED CLIENTS



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