

# TRAFO ELECTRIC P. LTD.





# About Us

- Trafo Electric P. Ltd. started manufacturing Power & Distribution Transformers in 1974.
- Originally known as J B Electricals, the unit's entire production was for BSES( Bombay Suburban Electric Supply, now Reliance Energy Ltd.)
- Trafo had entered into technical and marketing tie-up with M/s.Crompton Greaves In the year 1988.
- Trafo's transformers conform to the latest Indian Standard specification 2026, IEC-76 and BS-171.
- Trafo has been awarded ISO 9001: 2008 Quality Certificate.
- Trafo Electric P. Ltd. is a part of the 52 year old ALLSTATE Group.



# Products & Services

- Trafo manufactures Power and Distribution Transformers with ratings from 25 KVA to 10000 KVA & up to 33 KV. Trafo also specializes in transformers for wind energy applications.
- Other transformers like Auto-Transformers, Lighting Transformers, Dry Type Transformers, Furnace Transformers, Wound Core Type Transformers are manufactured on demand.
- In addition to manufacturing transformer Trafo undertakes field work for the following services:
  - a) Inspection and testing of faulty / malfunctioning transformers at site to ascertain services necessary.
  - b) Filtration of oil at site while the transformer is in running condition.
  - c) Annual rate contract for repair / maintenance of transformers at site.
- Trafo's manufacturing and testing facilities are suitable for manufacture of transformers up to 10000 KVA, 33 KV.





Power & Distribution Transformers









**CORE:** Core is built up from mitred low loss cold rolled, grain oriented steel laminations. Individual stampings are coated on both sides with an insulation material which is both oil and temperature resistant.

The Core limbs are securely bound with heavy duty fibrous glass tapes and the yokes are firmly clamped between steel channels. All cores have mitred joints.

Top & bottom clamps are secured to each other by means of tie rods which serve the dual purpose of securing the windings in place and of transferring the load from the bottom to the top clamps when the core and windings are lifted. This prevents tensile stresses being set up in the core legs which could adversely affect the iron losses.





## Construction

**WINDINGS:** Transformer windings are designed to meet three fundamental requirements such as mechanical, thermal and electrical.

They are cylindrical in shape and are assembled concentrically.

The low tension windings are of the helical type, single or multilayer, using flat copper strips, depending upon the size and current rating of the transformer.

The high tension windings consist of paper covered round conductors. For higher KVA ratings continuous disc windings are used, for lower ratings cross-over type windings are used.

The windings are rigidly supported by pre-compressed press board, dovetailed strips and spacers. Interlayer cooling ducts are provided to ensure that the temperature gradient between windings and oil are maintained and hence the hot spot temperature is minimized and a high life expectancy is achieved.

Insulation between layers and turns is based upon the impulse test level of the voltage class of the winding as specified in IS 2026. Completed Core coil assemblies are dried and pressed to desired dimensions prior to impregnation with transformer oil under vacuum.







The following tests will be carried out on all Transformers. The numbers shown do not necessarily indicate the sequence in which the tests will be carried out. All tests will be in accordance with the. latest revision of IS 2026.

- 1. Measurement of resistances of all windings of each unit.
- 2. Ratio tests at all tap positions.
- 3. Polarity and Vector group tests at normal tap.
- 4. No load loss at rated voltage, rated frequency at normal tap.
- 5. Excitation current measurements at rated voltage, rated frequency at normal tap.
- 6. Impedance and load loss measurement at rated current, at normal tap of each unit.
- 7. Separate Source Voltage withstand test.
- 8. Induced over voltage withstand test.
- 9. Measurement of insulation resistance.
- 10. Dielectric capacity of the transformer oil.





Sr. No.	Ratings (KVA)	Transformer Voltage Ratio (KV)	Name of the Customer	Quantity (Nos)
1	63	11/.433	Hukeri Taluka Elec Soc Ltd., Belgaum	20
2	63	22/.433	BSNL (Telephone), Pune	2
3	100	22/.433	Cummmins India Ltd. Pune	1
4	200	33/.433	HEG Ltd., Bhopal	1
5	250	11/.433	Elegant Engineering, Madras	2
6	400	11/.416	Crompton Greaves Ltd.	1
7	500	11/.433	Thapar Dupont Limited, Goa.	1
8	500	11/.433	Dipak Vegetable Oil India Ltd, Gujarat	1
9	500	6.6/.433	Sunflag Iron & Steel Company	3
10	500	11/.433	T.I. DiamondChains, Madras	1





Sr. No.	Ratings (KVA)	Transformer Voltage Ratio (KV)	Name of the Customer	Quantity (Nos)
11	500	11/.433	Greaves Foseco, Jammu	1
12	500	11/.416	Didan Constructions, Shillong	1
13	500	11/.433	Lakme Ltd.	1
14	500	11/.433	Stated Vanaspati, Assam	1
15	500	11/.433	Indian Lead Ltd. Thane	1
16	500	11/.433	Baroda Dist. Co.op Milk Ltd, Baroda	1
17	500	11/.433	National Telecom of India Ltd., Nasik	1
18	630	11/.433	Samir Electricals, Pune	2
19	630	11/.433	Goeffrey Manner Co Ltd., Nasik	1
20	750	11/.433	Alfa Laval India Ltd., Pune	2





Sr. No.	Ratings (KVA)	Transformer Voltage Ratio (KV)	Name of the Customer	Quantity (Nos)
21	750	11/.433	Hyderabad Ind Ltd	1
22	750	11/.433	Delhi University	1
23	750	11/.433	Vijay Traders, Delhi	2
24	750	6.6/.433	Vindhya Builders, Calcutta	2
25	750	33/.415	Synthetics & Chemicals, U.P.	1
26	750	33/.433	Shogun Organics Limited, Pune	1
27	950	22/.69400	NEG Micon (I) Pvt. Ltd., Chennai	27
28	1000	11/.433	Rawal Electricals, Delhi	3
29	1000	6.6/.433	Ballarpur Industries Limited	1
30	1000	22/.440	Zenith Tin Works Ltd	1





Sr. No.	Ratings (KVA)	Transformer Voltage Ratio (KV)	Name of the Customer	Quantity (Nos)
31	1000	11/.433	Ring Gears Limited, Nasik	3
32	1000	11/.433	Shrikrishna Petro Yarn Ltd, Silvassa	1
33	1000	6.6/.433	Continental Construction Co., Bombay	1
34	1000	11/.433	Kirti Dal Mills Ltd., Latur	1
35	1500	11/.433	Ugar Sugars Ltd., Hubli	1
36	1500	11/.433	Kirti Foods Ltd., Latur	1
37	1250	33/.69/.400	NEG Micon (I) Pvt. Ltd., Chennai	10
38	2500	33/.433	Kirti Oil Mill Ltd., Latur	1
39	3150	33/6.6(OLTC)	Mahati Electrics, Pune	2





### Certificates



#### Certificate of Compliance INTEGRATED QUALITY CERTIFICATION PVT. LTD.

hereby certifies that the quality management system of

Trafo Electric Pvt. Ltd.

Office: 901, Maker Chamber V, Nariman Point, Mumbai – 400 021, Maharashtra, INDIA. Works: Plot No. 34, D II, Block, Telco Road, MIDC, Chinchwad, Pune - 411019, Maharashtra, INDIA. has been assessed and conforms to the quality management system standard

ISO 9001:2008

Scope:Design, Manufacture, Supply and Service of Power and Distribution Transformers

EA/NACE Code : 19/31.10 Exclusion(s) : NIL Certificate Number : QMS/AS-C1712 Last Issue date : None Issue date : 31.01.2010 Expiry date : 30.01.2013 Attachment(s) : None

C.S. Venkatesh Murthy Executive Director

This certificate is valid subject to periodic surveillance audits of the quality management systems within the above defined scope as per the agreed contract terms and conditions. The organisation shall provide written notification to Integrated Quality Certification Pvt. Ltd. of any significant changes which have impact on the scope of this certificate of compliance.

> To check the validity of this certificate please contact: Platinum City, G/13/03, Site # 02, Next to CMTI, HMT Road, Yeshwanthpur Post, Bangalore - 560 022, INDIA, Tel: +91(80) 41172752, 41277353 Fax; +91(80) 41280347 Email: iqcorporate#iqcglobal.com Website: www.iqcglobal.com





## Company Overview

#### **FACTORY**

Trafo's manufacturing facilities at MIDC, Chinchwad near Pune, spread across 30,000 sq.ft., is equipped with all modern manufacturing machinery's and testing instruments required for production of transformers under IS-2026/IEC-76.





#### TRANSFORMERS

Trafo's Transformers under-production at their factory at MIDC





### Company Overview

#### **AN INSIDE VIEW**

An inside view of Trafo's manufacturing facilities at MIDC, Chinchwad near Pune, which is equipped with all modern manufacturing machineries and testing instruments.





#### **TESTING ROOM**

Trafo's Transformers gets tested in our fully equipped Testing Room, under different quality standards before delivering them to our clients.







#### **TRANSFORMERS UNDER-PRODUCTION**

Trafo's Transformers under-production at MIDC factory.





#### TRANSFORMER INSTALLED

One of Trafo's 315 KVA/ 11 KV Transformer has got successfully installed at our client's location





## Factory







# Corporate Office









### **CORPORATE OFFICE :**

901, Maker Chambers V, Nariman Point, Mumbai - 400 021, India. **Telephone Nos.:** 91-22- 6628 80 00-99 **Fax :** 91-22 - 2204 4944 **Email:** info@trafo.in or info@allstate.in Web Url : http://www.trafo.in

### **FACTORY:**

Plot No. 34, D — 11 Block, MIDC, Telco Road, Chinchwad, Pune - 411 019 **Tel:** (9520) 2747 0646, 2447 1542 **Telefax:** (9520) 2747 1552



