

between

Department of Electrical Engineering
KCT's Late G N Sapkal College of Engineering
Anjaneri, Trimbakeshwar Road,
Nashik - 422401

and

Telawne Power Equipment Pvt. Ltd,
R-457, Thane - Belapur Rd, MIDC Industrial Area,
Rabale, Navi Mumbai,
Maharashtra 400701

OBJECTIVES OF THE LINKAGE

The intent of this institute-industry linkage is to bring the industry and academia closer for following purposes:

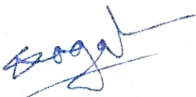
- Integration of industrial visits for enhancing learning outcomes.
- Initiation of Industrial trainings for experiential learnings.
- To expose the students to the realistic expectations and experiences relevant to the kinds of challenges and responsibilities they will encounter in their prospective career.
- To develop a symbiotic relationship with one another for sharing available infrastructures and facilities.
- To forecast the technical manpower required for the industry and have deliberations regarding preparedness of skilled manpower in the institute as industrial workforce.
- To train and update knowledge of stakeholders from either side through exchange programs.
- To undertake joint Research and Development activities.

ACTIVITIES TO BE CONDUCTED

The **Department of Electrical Engineering & Telawne Power Equipment Pvt. Ltd.** hereby agree to cooperate through joint activities like Internship / Field Trip / On the Job Training / Research Projects / Student Exchange / Faculty Exchange for the benefit of students, faculty and industry.

DURATION

Both the parties will organize above activities from 28/07/2017 to 28/07/2020



Prof. Dr. S. B. Bagal
Principal,
Late G. N. Sapkal College of Engineering




28/7/17
Telawne Power Equipment Pvt. Ltd





Kalyani Charitable Trust's

LATE G. N. SAPKAL COLLEGE OF ENGINEERING

Sapkal Knowledge Hub, Kalyani Hills, Anjaneri, Trimbakeshwar Road, Nashik - 422 213. (India)
Tel.: +91 - 2594 - 220168/69/70, Fax : +91 - 2294 - 220174.
E-mail : gns_engineering@sapkalknowledgehub.org | www.sapkalknowledgehub.org



of.(Dr.) Sahebrao B. Bagal
E. (Electronics), Ph.D. (E & TC)
PRINCIPAL

Affiliated to : Savitribai Phule Pune University (ID. No. PU/NA/Engg./152/2009 Ref.No. -CA/6501 Dated-1/11/2009)
Approved By : A.I.C.T.E., New Delhi (F.N: 06/07/MS-Engg/2008/O-17, Dated- 11th June 2009)
Govt. of Maharashtra (No. GEC-2009/(67/09)/T.E.-4, Dated - 15th June 2009.
D.T.E., M.S., Mumbai (No.2/NGC/Engg./Approval/2009/535, Dated - 23rd July 2009)

Ref.No:- KCT'S / LGNSCOE / 2018-19 / 303

Date-10-07-2018

To,
M/S, Telawne Power Equipments Pvt. Ltd.,
R-457, MIDC, Rabal,
Dist- Thane.
Navi Mumbai-400701

Sub- Requesting permission for Industrial visit at Telawne Power Equipments Pvt. Ltd. Thane.

Dear Sir,

This is a request to seek your kind permission for Industrial visit in your esteemed organization. As per our university norms, engineering students are expected to visit prominent industries and companies for an exposure to the latest trends. Consequently, **SE & TE students of the Electrical Engineering Department** of our college, desire to visit your organization.


At this juncture, it is a pleasure for me to introduce to you, our college and department on behalf of the students and faculty. Late G N Sapkal college of Engineering started in 2009 with five branches that are Electrical, Mechanical, Civil, Computer and Electronics & telecommunication as one of the reputed institute in Nasik, Maharashtra. & a Part of "SAPKAL KNOWLEDGE HUB" affiliated to Savitribai Phule Pune university and approved by DTE, Mumbai & AICTE, New Delhi and for more information you can refer our site i.e. www.sapkalknowledgehub.org/lgnscoe. With Reference to above mention subject, we would like to send a batch of 75 students accompanied by 04 staff members to, Telawne power Equipments Pvt.Ltd., MIDC, Rabal, Thane between **21st July 2018**. The list of student and staff is attached to letter for your kind information.

I request you, to kindly accord the **necessary permission** for the above visit and arrange your staff for guiding the students. We assure you that our students will observe the rules & regulations that are prescribed by your organization.

We shall be grateful for a favorable response.

Thanking You.




Yours truly,
Prof. (Dr.) S.B. Bagal
Principal

CORPORATE OFFICE : Sapkal Knowledge Hub, "Parag" 46, Ashwin Sector, Opp. Hotel Sai Palace, Mumbai - Agra Highway, Nashik - 422 009. Ph: +91 - 253 - 2392450 / 51, Fax : +91 - 253 - 2375557. Website : www.sapkalknowledgehub.org

MUMBAI OFFICE : Sapkal knowledge Hub, Unit No. 22, 1st Floor, Shubhada Tower Shopping Center, Sir Pochkanwala Road, Near R.T.O. Office, Worli, Mumbai-400 030. Tel.: +91-22 - 24938914 / 24938915, Fax : +91 - 22 - 24938919.



KALYANI CHARITABLE TRUST'S
LATE G. N. SAPKAL COLLEGE OF ENGINEERING

Kalyani Hill, Anjaneri-Vadholi, Trimbareshwar Road, Dist: Nashik - 422 212 (India)
Tel: +91 - 2594 - 220168/71, Fax: +91 - 2594 - 220174
Website www.sapkalknowledgehub.org, E-mail: gns_engineering@sapkalknowledgehub.com



-: A Report on Industrial visit: -

- ❖ **Title-** Industrial Visit to Telawne Power Equipment Pvt.Ltd.
- ❖ **Objectives of Visit-**
 - i) To understand knowledge of Manufacturing of Transformer.
 - ii) To Understand Assembly of different types of transformers like Power transformers, distribution transformers. instrument transformers.
- ❖ **Overview of visit-**
 - Subject- Electrical Installation Testing & Maintenance
 - Class & Division- TE Electrical Engg.
 - No of students- 40
 - Day & Date-Saturday,28th July 2018
- ❖ **Name & Address of Company -**
 - Telawne power equipment pvt.ltd.
 - R-457, MIDC,Rabal,Dist-Thane
 - Pin Code-422701
- ❖ **Company Information-**
 - This Telawne power equipment pvt ltd.
 - situated at MIDC, Rabal which is
 - at near Belapur, Dist.-Thane.
- ❖ **About Industry:**
 - Established its 1st Group Company M/s. Telawne Cromptek with a land of 800 sq. mt. by Mr. Sudhakar Telawne with vast experience of over 17 years from reputed Transformer manufacturer in Mumbai in Technical & Engineering departments.ME Excellence Award 2014, New Launch for Pad Mounted and Tower Substation, International Exhibitions India International Technical Fair 2013 PLOVDIV, Bulgaria (Russia), Participated in the Exhibition at Power Sri Lanka 2014. Type Tested 5000 and 10000 KVA Oil Distribution Transformer at ERDA.

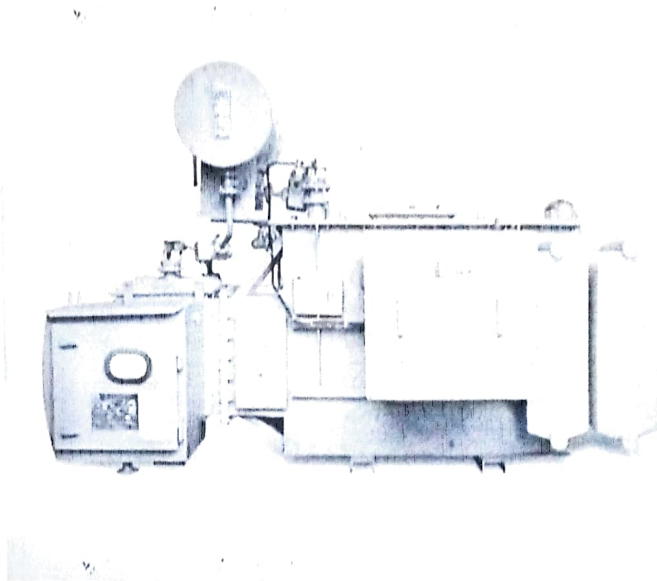


❖ Points Studied in details-

The Industry is an Assembly & Testing of the following major electrical equipment-

- ❖ Oil Immersed Distribution transformers
- ❖ Power Transformer
- ❖ Extra High Voltage Transformer
- ❖ Cast Resin Dry Type Transformer
- ❖ Vacuum pressure Impregnated Dry Type Transformer

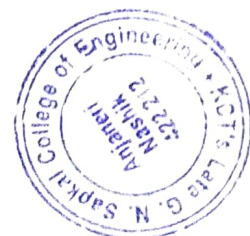
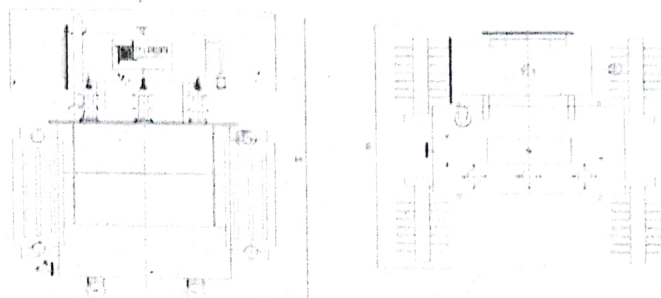
❖ OIL IMMERSED DISTRIBUTION TRANSFORMERS:



➤ Features

- Highest dielectric insulation property to withstand Lightning Impulse.
- Mechanical design to withstand short circuit forces arising during faults.
- Optimum oven heating under vacuum as to achieve desired compression height and maximum insulation resistance (IR) to windings.
- Adequate ducts between layers, coils, discs for maximum oil flow and reduced hot spot temperature.
- Step-lap designed CRGO laminations for lower losses and excitation current.
- Pre-compressed Insulation material for minimal moisture absorption

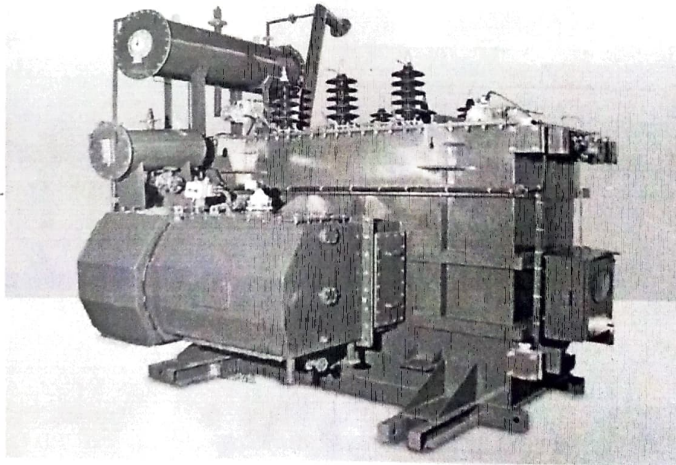
➤ Diagram



➤ Technical Specification

Duty, Type	Outdoor / Indoor, Pole or Ground Mounted
Voltage Class	3.3, 6.6, 11, 22, 33 kV or any specific
No of Phases	1 or 3 Phase
Frequency	50/60 Hz
Vector Group	Dyn1 or Dyn5 or Dyn11 or any specific
Insulating Fluid	PCB FREE Mineral Oil, both inhibited & uninhibited, as per IS/IEC, ASTM D3487 and customer requirement
Class of Insulation	Class A
Tap Changer	Off Circuit or On Load
Tapping Range	$\pm 2.5\% \times 2$ for OCTC or $+ 1.25\% \times 4$ & $- 1.25\% \times 8$ for OLTC or as per customer requirement
Winding Material	Aluminium or Copper with multi paper covering
Applicable Standards	IS 2026, IEC 60076, ANSI, IEEE
Painting	Enamel, Epoxy, Polyurethane or customer specific

❖ POWER TRANSFORMER

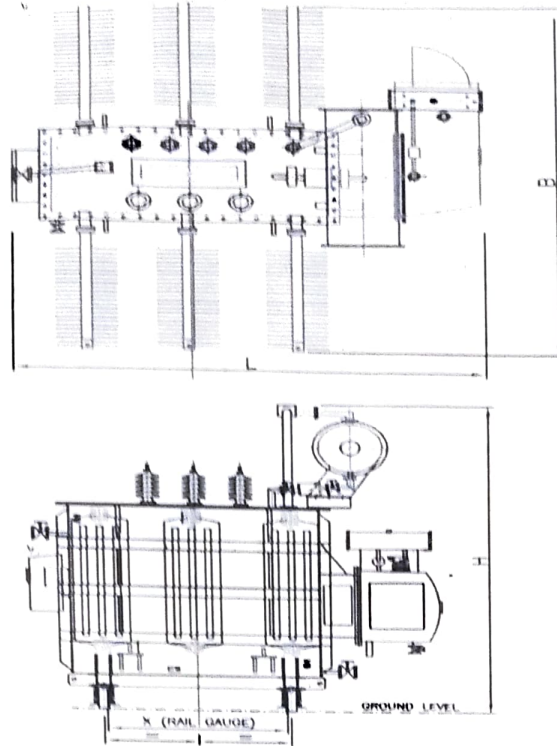


➤ Features

- Highest dielectric insulation property to withstand lightning impulse.
- Mechanical design to withstand short circuit forces arising during faults.
- Optimum oven heating under vacuum as to achieve desired compression height and maximum insulation resistance (IR) to windings.
- Adequate ducts between layers, coils, discs for maximum oil flow and reduced hot spot temperature.



➤ **Diagram**

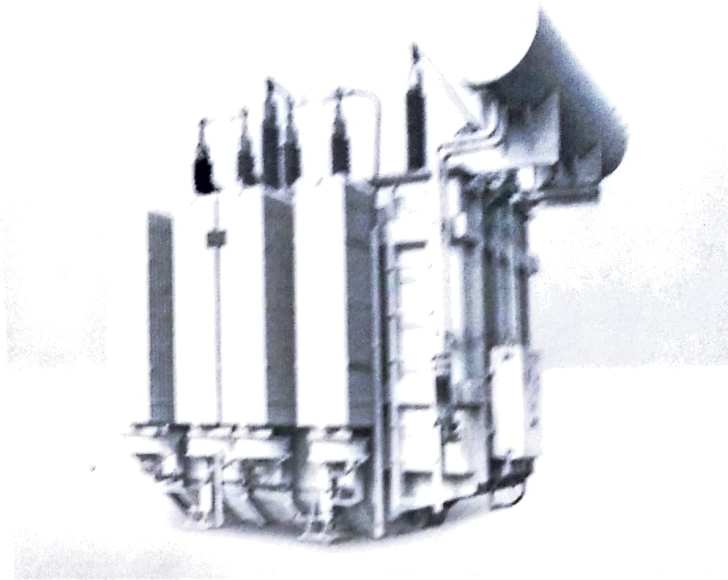


➤ **Technical Specification**

Duty, Type	Outdoor / Indoor
Voltage Class	11, 22, 33, 66 kV or any specific
No of Phases	3 Phase
Frequency	50/60 Hz
Vector Group	Dyn5 or Dyn11 or YNyn0 any specific
Insulating Fluid	PCB FREE Mineral Oil, both inhibited & uninhibited, as per IS/IEC, ASTM D3487
Class of Insulation	Class A
Tap Changer	Off circuit or on load tap changer
Tapping Range	±2.5% X 2 for OCTC or + 1.25% X 4 & - 1.25% X 8 for OLTC or as per customer requirement
Winding Material	Copper with multi paper covering
Applicable Standards	IS 2026, IEC 60076, ANSI, IEEE
Painting	Enamel, Epoxy, Polyurethane or customer specific



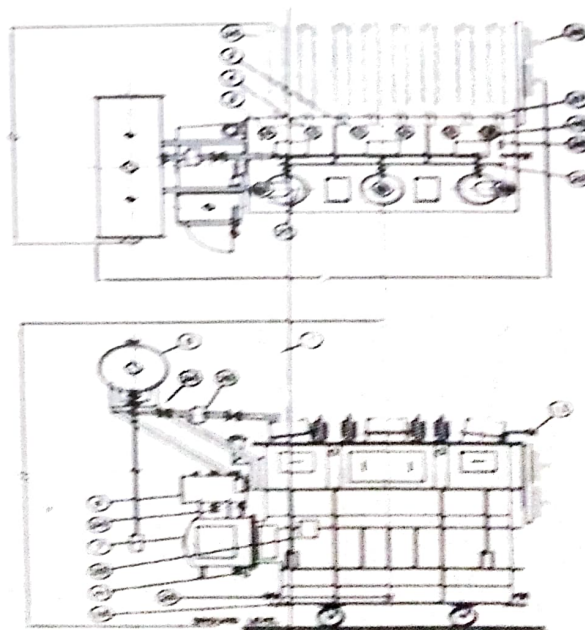
❖ EXTRA HIGH VOLTAGE TRANSFORMER



➤ Features

- Highest Dielectric insulation property to withstand Lightning impulse
- Step lap designed CRGO laminations for lower losses & excitation current.
- Pre-heating of coils under vacuum as to achieve desired compression height & max shrinking of coils.
- Premal wood clamping rings for uniform compression of primary & secondary winding.
- Coil clamping screws for sustaining high mechanical strength due to short circuit forces.
- Adequate ducts between layers, coils, discs for max oil flow & reduced hot spot temperature.

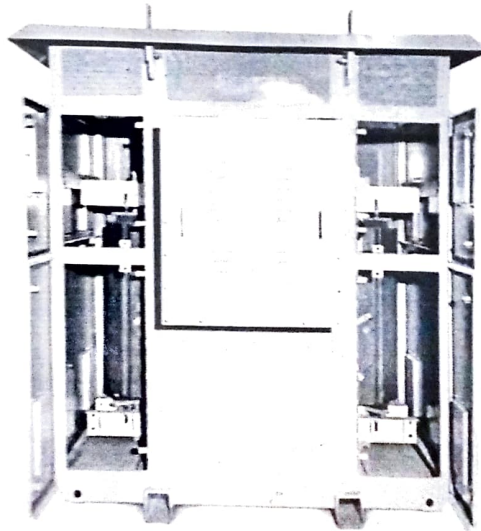
➤ Diagram



➤ **Technical Specification**

Duty, Type	Outdoor / Indoor
Voltage Class	66, 100, 110, 132, 220 kV or any specific
No of Phases	3 Phase
Frequency	50.60 Hz
Vector Group	Dyn5 or Dyn11 or YNyn0 any specific
Insulating Fluid	PCB FREE Mineral Oil, both inhibited & uninhibited, as per IS / IEC, ASTM D3487
Class of Insulation	Class A
Tap Changer	Off Circuit or On load tap Changer
Tapping Range	$\pm 2.5\% \times 2$ for OCTC or $+1.25\% \times 4$ & $-1.25\% \times 8$ for OLTC or as per customer requirement
Winding Material	Copper with multi paper covering
Applicable Standards	IS 2026, IEC 60076, ANSI, IEEE
Painting	Epoxy, Polyurethane or customer specific

❖ **CAST RESIN DRY TYPE TRANSFORMER**



➤ **Features**

- Environment Friendly
- Fire Resistance
- Non-Hygroscopic



➤ **Technical Specification**

Duty, Type	Outdoor / Indoor Ground Mounted Type
Voltage Class	UPTO 33 kV
No of Phases	3 Phase
Frequency	50/60 Hz
Vector Group	Dyn1 or Dyn5 or Dyn11 or any specific
Insulating Fluid	F or H with Temp Rise of 90 or 115 Deg C or as per customer requirement
Class of Insulation	Class A
Tap Changer	Off Circuit or On Load
Tapping Range	+ 2.5% X 2 for OCTC or + 2.5% X 2 & - 2.5% X 6 for OLTC or as per customer requirement
Winding Material	Aluminum or Copper with multi paper covering
Applicable Standards	IS 11171, IEC 60726
Painting	Powder coated with RAL 7032 shade or as per customer requirement

Prof.U.S. Jathar
Industrial Visit Coordinator

Prof.R.N. Bajr
Head of Electrical Department



Date: 27th July 2018

To
Principal,
Late G. N. Sapkal College of Engg.
Anjaneri, Nashik

This is to certify that 40 Third year Electrical Engineering students of Late G. N. Sapkal College of Engineering along with 2 faculty members have visited Telawne Power Equipment Pvt Ltd, Dist-Thane on 28th July 2018 between 10 am to 5 pm. During the visit they have seen Power Equipments, Transformers etc.

This certificate is issued on their request.

Thanking you.

From



Shaila S. Rao
Authorized Signatory
28/7





Electrical Engineering Department

Date: 28 July 2018

Attendance Record for Industrial visit in Telawane Power Equipments, Thane

Sr. no.	Name of Students	Sign	Sr. no.	Name of Students	Sign
01	Kaustubh Kulkarni	K.K.	21	Mayuri Sawanane	Mayuri
02	Rahul Jadhav	R.J.	22	Phone Kiran N.	Phone
03	Riyanka Patil	R.P.	23	Rashikesh Dahale	Rashikesh
04	Visha Kha. Pawar	V.K.P.	24	suryawanshi vaishnavi	Surya
05	Khairnar Rajeshwari	K.R.	25	khane vijay.	Khane
06	Ganesh phare	G.P.	26	Borse Jugal	Borse
07	Yeale Gayatri.S.	Y.G.	27	vishal mahatar	Vishal
08	Dipali Disbhu Patil	D.D.	28	patil mukesh.	M.Patil
09	RAIGORU Anuja	A.R.	29	Godse Rushabh.	Godse
10	Rohan Lokhande	Lokhande	30	kulkarni Rajanil	Rajanil
11	Mohini leadans	M.L.	31	Barnodkar lokesh.	Lokesh
12	Shane Kaibhal	S.K.	32	more siddharth.	More
13	Ekhande Harshada	E.K.H.	33	Jomodera umesh	U.Jomode
14	Shubham Joshi	S.J.	34	Tajombalk mapoj	Tajombalk
15	Ankita Adhav	Ankita			
16	Kalyani Mandekar	Kalyani			
17	Swapnil Thakkar	Swapnil			
18	Aniket Jadhav	Aniket			
19	Sandesh Jugtap	Sandesh			
20	Nitin Patil	Nitin			

Industrial Visit Coordinator



HOD