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 - 2594 - 220174
E-mail : gns_engineering@sapkalknowledgehub.org | www.sapkalknowledgehub.org

Affiliated to : Savitribai Phule Pune University (ID. No.PU/NA/Engg./152/2009 Ref.No.-CA/6501 Dated- 18/11/2009)
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)

MEMORANDUM OF UNDERSTANDING BETWEEN

Department of Electrical Engineering
Kalyani Charitable Trust's
Late G N Sapkal College of Engineering
Anjaneri, Nasik -422213 (MS), India.
&
Nasik Transformer Industries,
F-43, MIDC Satpur,Nasik

This Memorandum of Understanding (MoU) is entered into as on 20.04.2022, by and between the Late G N Sapkal College of Engineering Nashik (MS), India and Nasik Transformer Industries Nasik.

The Late G N Sapkal College of Engineering is established in the year 2009 under aegis of Kalyani Charitable Trust's, Mumbai with approval of AICTE and DTE, Government of Maharashtra. The Institute is affiliated to Savitribai Phule. The Late G N Sapkal College of Engineering is committed to serve common masses by disseminating engineering education.

Nashik Transformer Industries are pleased to introduce as an ISO 9001:2015 Certified manufacturer of Power Transformers, Distribution Transformer, LT/HT Fabrications at MIDC, Nashik, exploring entire India. We adopt advanced technology to maintain consistency in product quality. Every batch of product is subjected to series of tests to ensure that they correspond to International standards.

The partners have entered into this MoU because they:

- ✓ RECOGNIZE the mutual interest in the field of industrial training, development and dissemination of knowledge.
- ✓ RECOGNIZE the importance of Industry Institute interaction activity for engineering students.
- ✓ RECOGNIZE the importance of the Industry Partner within its field of expertise.
- ✓ To provide an opportunity to most eligible students for professional work experience through employment, if possible.

This MoU will enable the parties to:

- ➢ FOSTER technical education at undergraduate and post graduate level to make the students, industry ready.
- ✓ STRENGTHEN the theoretical knowledge in industrial practices. An exposure to industrial environment brings about attitudinal change in the students by inculcating managerial principles which cannot be effectively imparted through classroom or laboratory inputs.
- ✓
- ✓ PROVIDE In-plant training to Late G N Sapkal College of Engineering students.

Late G. N. Sapkal College of Engineering * KCT's Anjaneri Nashik 422 212

- ✓ PROVIDE Industry related project to Late G N Sapkal College of Engineering students and an opportunity to learn recent industry practices.
- ✓ ALLOW the Late G N Sapkal College of Engineering Students for industrial visits to enhance the subject related knowledge.
- ✓ EXPLORE any opportunity of campus placement for Late G N Sapkal College of Engineering students.
- ✓ This MOU is signed only in the interest of helping & guiding the Late G N Sapkal College of Engineering students in various development activities & Nasik Transformer Industries will not responsible for any other act of the student of whatsoever kind.
- ✓ To provide an opportunity to most eligible students for professional work experience through employment, if possible.
- ✓ This MOU is valid for 3 Years.

The parties hereby agree to establish collaboration according to terms and conditions set out by Late G N Sapkal College of Engineering and Nasik Transformer Industries, Nasik.

Kalyani Charaitable Trust's **Late G N Sapkal College of Engineering** Anjaneri Nasik (MS), India	Nasik Transformer Industries, Nasik
Signed by: Dr S B Bagal, Principal	**Signed by :** Mr. Rushikesh Sukdev Patharkar
Signature:	**Signature :**
Witness Signature Prof. R N Baji HOD, Electrical Dept.	
Date : 20.04.2022	**Date :** 20.04.2022
Office Seal : Late G. N. Sapkal College of Engineering Anjaneri Nashik 422 212	**Office Seal :** Nashik Transformer Industries F-43, MIDC, SATPUR Nashik

Kalyani Charitable Trust's
Late G. N. Sapkal College of Engineering
Sapkal Knowledge Hub, Kalyani Hills, Anjaneri, Trimbakeshwar Road,
Nashik - 422 212, Maharashtra State, India
Tel: +91-2594-220168/71; Fax: +91-2594-220174
Website: www.sapkalknowledgehub.org;
E-mail: gns_engineering@sapkalknowled

ELECTRICAL ENGINEERING DEPARTMENT

NOTICE

Date: 21-03-2023

All Second & Third Year Students are hereby informed that department has organized Industrial visit at "**Nashik Transformers**" At post Satpur, Nashik on **23 March 2023 at 11:00 AM**. All students should compulsory remain present 15 minute before the visit at company gate with proper college uniform, ID card & Shoes. A Strict action will be taken for those who were absent.

Prof. R.U.Pawar
Industrial Visit i/c

Prof. R. N. Baji
HoD

Prof.(Dr.) S.B.Bagal
Principal

Late G. N. Sapkal College of Engineering
Anjaneri
Nashik
422 212

KALYANI CHARITABLE TRUST'S
LATE G. N. SAPKAL COLLEGE OF ENGINEERING
Kalyani Hills, Anjaneri-Vadholi, Trimbakeshwar 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

ELECTRICAL ENGINEERING DEPARTMENT

-: A Report on Industrial visit: -

- **Title-** Industrial visit at Nashik Transformer Industries, Satpur, Nashik
- **Objectives of Visit-** i) To understand knowledge of transformer working.
  ii) To Understand installation of transformer, parts of transformer, design of transformer, testing of transformer, etc
- **Overview of visit-** Subject- Electrical Machines-1, Computer Aided Design of Electrical machines
  Class & Division- SE & TE Electrical Engg.
  No of students- 42
  Day & Date-Thursday, 23rd March 2023
- **Name & Address of Industry -** Nashik Transformer Industries, Satpur. Dist-Nashik
- **Industry Information-** This Nashik Transformer Industries situated at Satpur MIDC Dist.-Nashik.

About the Visit:

- This visit was arranged as per the university syllabus for the S.E. & T.E. Electrical under the subject of Electrical Machine-I & Computer Aided Design of Electrical machines. This visit was very helpful to the students for the understanding the construction, working & design of Electrical transformer, Current transformer & Potential transform.

G. N. Sapkal College of Engineering, Anjaneri Nashik 422 212

❖ Points Studied in details-

GENERAL FABRICATION STRUCTURE

Meeting the ever increasing demand of Steel structure, we, at Nashik Transformer Industries are pleased to offer an exclusive gamut of Hot Dip Galvanized and fabricated steel structures for electrical and other infrastructures. We offer structures from standard to customized specification requirements in all shapes, sizes and dimensions.

- High load bearing capacity
- Long life and reliability

We are the leading Supplier and Manufacturer of Transformer Fabrication Services such as MS Transformer Tank Fabrication, Transformer Surface Treatment and Transformer Surface Coating from Nashik. Owing to the expertise of our professionals, we are betrothed in offering Transformer Fabrication Service. Our proficient professionals offer these services by using advanced technology in line with industry norms. Furthermore, we render these services to our clients as per their demands in different specifications. Customers can avail these services from us at industry leading prices.

TRANSFOMER MAINTENANCE

Nashik Transformer Industries performs interventions of maintenance and electrical repair on transformers, from the replacement of damaged parts to the renovation of the electrical component. Furthermore, Nashik Transformer Industries provide on-site maintenance on transformers in medium and high voltage. Maintenance can be counted on to maintain the performance quality, reliability and life of the transformers throughout your electric power system by providing complete transformer service solutions.

TRANSFOMER INSTALLATIONS

With a complete understanding of the domain, we are involved in providing Power Transformer & Distribution Transformer Installation Services. These services are rendered by our prestigious clients using the latest technologies and optimum quality transformers that are procured from the most reliable vendors of the market. on In Installation transformers of medium and large coreform design, from the smallest Padmount, to the largest Generator Step-Up with full security, quality and caution.

❖ Points Studied in details-

GENERAL FABRICATION STRUCTURE

Meeting the ever increasing demand of Steel structure, we, at Nashik Transformer Industries are pleased to offer an exclusive gamut of Hot Dip Galvanized and fabricated steel structures for electrical and other infrastructures. We offer structures from standard to customized specification requirements in all shapes, sizes and dimensions.

- High load bearing capacity
- Long life and reliability

We are the leading Supplier and Manufacturer of Transformer Fabrication Services such as MS Transformer Tank Fabrication, Transformer Surface Treatment and Transformer Surface Coating from Nashik. Owing to the expertise of our professionals, we are betrothed in offering Transformer Fabrication Service. Our proficient professionals offer these services by using advanced technology in line with industry norms. Furthermore, we render these services to our clients as per their demands in different specifications. Customers can avail these services from us at industry leading prices.

TRANSFOMER MAINTENANCE

Nashik Transformer Industries performs interventions of maintenance and electrical repair on transformers, from the replacement of damaged parts to the renovation of the electrical component. Furthermore, Nashik Transformer Industries provide on-site maintenance on transformers in medium and high voltage. Maintenance can be counted on to maintain the performance quality, reliability and life of the transformers throughout your electric power system by providing complete transformer service solutions.

TRANSFOMER INSTALLATIONS

With a complete understanding of the domain, we are involved in providing Power Transformer & Distribution Transformer Installation Services. These services are rendered by our prestigious clients using the latest technologies and optimum quality transformers that are procured from the most reliable vendors of the market. on In Installation transformers of medium and large coreform design, from the smallest Padmount, to the largest Generator Step-Up with full security, quality and caution.

TRANSFORMER REPAIRS

Transformers are among the expensive assets used by industries in an electrical system. Usually replacement of transformer costs more than transformers repairing services. To compensate the cost, manufacturers bring the option of remanufacturing or restoring the

transformers. Repair consists of Portable Fault Gas Detector provides a sensitive and effective means for detecting faults in electrical transformers having gas space above the insulating oil.

POWER TRANSFORMER

A power transformer is characterized by inner and outer low voltage winding sections and a high voltage winding section disposed there between. The low voltage windings are comprised of a plurality of pancake coils, and the high voltage winding are comprised of a plurality of conductor strands spirally wound for a plurality of coil layers. A Power transformer is an electrical device that transfers energy between two or more circuits through electromagnetic induction. The low and high voltage winding sections are laterally spaced with the low voltage windings disposed in side-by-side positions and adjacent to the high voltage windings. The high voltage windings have a smaller turn height than the low voltage windings and have conductor strands of smaller gauge than the pancake coils of the low voltage windings.

PRODUCT RANGE:

25KVA to 2000KVA (11,22,&33/0.433KV)

Our all range of various products are tested and approved by ERDA Baroda (NABL APPROVED LABORATORY

APPLICATIONS:

Chemical, Pharmaceuticals, Steel, Textile, Engineering, Plastic, Cement, Refineries, Mining, Captive Power Projects, Hydro Power Projects, Wind Mill Farms, Construction Houses, Pharma, Electrical, Electronics, Renewable Energy, Automobile. A Power transformer is an electrical device that transfers energy between two or more circuits through electromagnetic induction.

FEATURES:

- Power Transformer gives Better distribution of power
- Better distribution of power
- Health & safety engineered into products
- Integrated monitoring & control solutions including smart cooling
- High fire point environmental fluid if beneficial
- Less maintenance

DISTRIBUTION TRANSFORMER

A distribution transformer is a transformer that provides the final voltage transformation in the electric power distribution system, stepping down the voltage used in the distribution lines to the level used by the customer. If mounted on a utility pole, they are called pole-

mount transformers. If the distribution lines are located at ground level or underground, distribution transformers are mounted on concrete pads and locked in steel cases, thus known as pad-mount transformers.

Distribution transformers normally have ratings up to 200 kVA, although some national standards can describe units up to 5000 kVA as distribution transformers. Since distribution transformers are energized for 24 hours a day (even when they don't carry any load), reducing iron losses has an important role in their design. As they usually don't operate at full load, they are designed to have maximum efficiency at lower loads. To have a better efficiency, voltage regulation in these transformers should be kept to a minimum. Hence they are designed to have small leakage reactance.

PRODUCT RANGE:

25KVA to 2000KVA (11, 22, & 33/0.433KV)

Our all range of various products are tested and approved by ERDA Baroda (NABL APPROVED LABORATORY).

APPLICATIONS:

Chemical, Pharmaceuticals, Steel, Textile, Engineering, Plastic, Cement, Refineries, Mining, Captive Power Projects, Hydro Power Projects, Wind Mill Farms, Construction Houses, Pharma, Electrical, Electronics, Renewable Energy, Automobile. A Power transformer is an electrical device that transfers energy between two or more circuits through electromagnetic induction.

FEATURES:

- Primary and secondary terminals or studs
- Steps down the high voltage to low voltage
- Tin-plated high and low voltage bushing terminals to accommodate aluminum or copper conductors.
- Robust construction having excellent short circuit and thermal withstand capabilities.
- Proven technology, effectively improving the quality and reliability of the electrical distribution system.
- Reduced Life cycle costs

Photo 3: Understanding of Transformer Core & Winding Assembly to the students

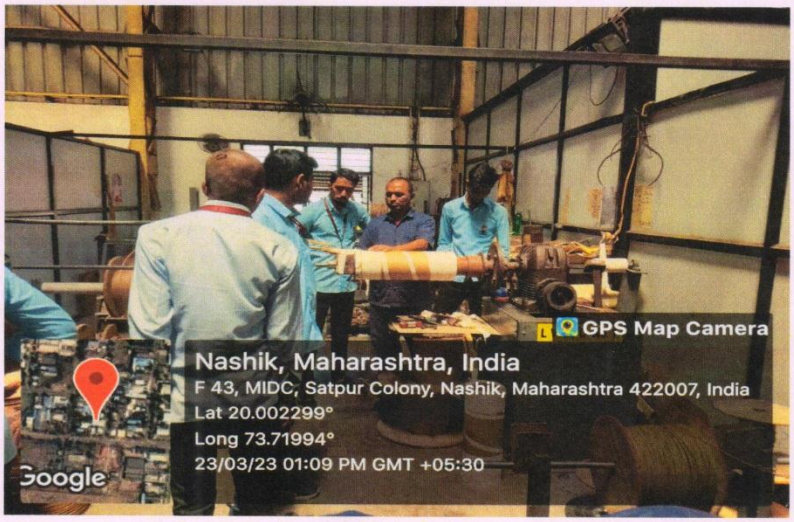

Photo 4:Mr. Shubham Dhondage, Director, NTI explaining of Transformer Winding Assembly to SE & TE Students

❖ **Photo of Visit**

Photo 1: Industrial visit at Nashik Transformer Industries

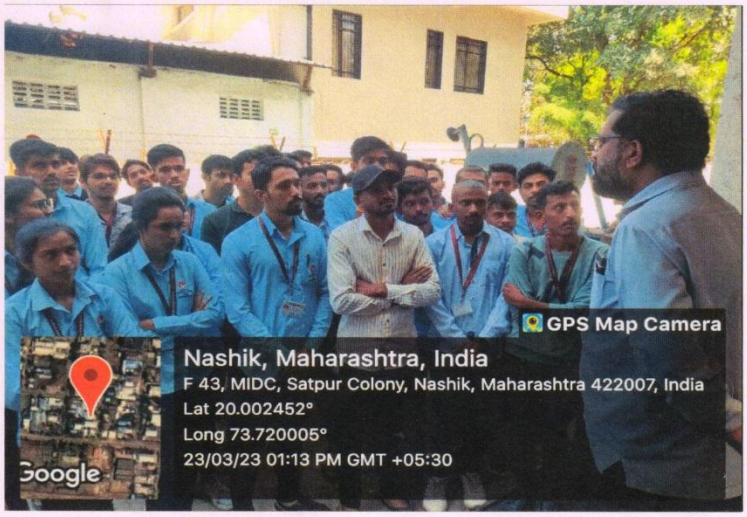

Photo 2: Students understanding theory vs Practical knowledge about transformer in Industry

Photo 5: Types of Core Assembly

Prof. R. U. Pawar
Industrial Visit Coordinator

Prof. R.N. Baji
Head of Electrical Department

Prof. (Dr.) S. B. Bagal
Principal

G. N. Sapkal College of Engineering * KCT's Late G. N. Sapkal
Anjaneri
Nashik
422 212

KALYANI CHARITABLE TRUST'S

LATE G. N. SAPKAL COLLEGE OF ENGINEERING

SAPKAL KNOWLEDGE HUB

Kalyani Hills, Anjaneri-Vadholi, Trimbakeshwar 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

Department of Electrical Engineering

Attendnce sheet

industrial visit at "Nasik Transformers" on 23.03.2023

Sr.No	Name of Student	Class	Sign
1	Pratik Bhandare	B.E	
2	Tejaswini kushade	BE	
3	Pallavi gore	BE	
4	Prashant Chalse	BE	
5	Ritesh Deore	BE	
6	Aditya Dhanware	TE	
7	Kiran Bhare	TE	
8	Amit Tarware	TE	
9	Patil Harshdeep D	B.E	
10	Nikhil Kalal	T.E	
11	Siddhesh Sindhikar	T.E	
12	Gawali khushabu	T.E	
13	Saurabh kulkarni	T.E	
14	~~Sivani~~ Shivani Halde	T.E	
15	Tejas D. Suryawanshi	T.E.	
16	Tejal T. Jadhe	T.E.	
17	~~NIKHIL T. Kakad~~	T.E.	
18	Omkar. S. wadwale	T.E	
19	Nilesh R. Shejwal.	T.E.	
20	Sanket M. Birari	BE	
21	Rushikesh D Sawant	BE	
22	Aniket S Kaluhkhe	BE	
23	Dipali Bokad	BE	
24	Mahendra Zole	TE	
25	Rushikesh Satbhai	BE	
26	Parth vidhate	BE	
27	Nikhil Gite	BE	
28	Ketan Suryawanshi	TE	
29	MAHESH Dangare	BE	
30	Sandeep Pawar	BE	
31	Yash.K.mali	TE	
32	Aaditya chaudhari	TE	
33	shubham karaband	TE	
34	Shubham Yeole	BE	

K.C.T's Late G. N. Sapkal College of Engineering, Anjaneri, Nashik 422 212

Prof.(Dr.) Sahebrao B. Bagal
Principal
Late G. N. Sapkal College of Engineering
Anjaneri, Nashik-422 213.

KALYANI CHARITABLE TRUST'S

LATE G. N. SAPKAL COLLEGE OF ENGINEERING

SAPKAL KNOWLEDGE HUB

Kalyani Hills, Anjaneri-Vadholi, Trimbakeshwar 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

Department of Electrical Engineering

Attendnce sheet

industrial visit at "Nasik Transformers" on 23.03.2023

Sr.No	Name of Student	Class	Sign
1	Shubham Jeole	BE	
2	Dykole mahesh	TE	
3	Shubham Farabmd	TE	
4	Aditya .S. Chaudhari.	TE	
5	Yo Sh. K. Mali.	TE	
6	Rohit .B. Alhat	TE	
7	Darshana Dinesh Jadhav	SE	
8	Ashwini Bapu Borse	SE	
9	Shreyas. S. Gisi	SE	
10	Kaustubh V. Waykol°	TF	
11	Shubham Bhoil	BE	
12	Saif sayyed	BE	
13	pranad Khairnar	BE	
14	Suyash Chide	B.E	
15	AHER . MAHESH . S.	TE	
16	Rohit Jitendra Sonawane	TE	
17	Nikam Anant Shivaji	BE	
18	Chandrakala A. Ratnale	TE	
19	Samruddhi K. Sonawane	TE	
20	Sandesh R. Jadhav	CE	
21	Pranav .V. Potdar.	SE	
22			
23			
24			
25			
26			
27			
28			
29			
30			

Late G. N. Sapkal College of Engineering • Anjaneri Nashik 422 212

Prof.(Dr.) Sahebrao B. Bagal
Principal
Late G. N. Sapkal College of Engineering
Anjaneri, Nashik-422 213.