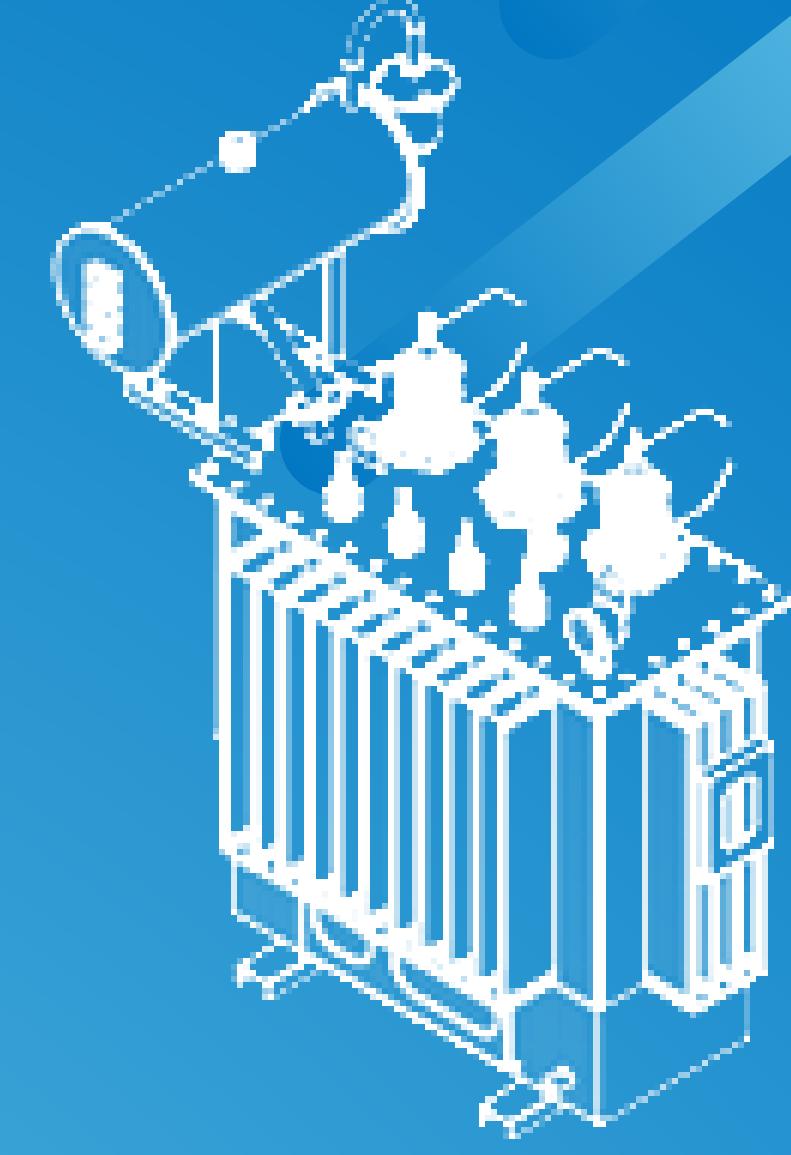
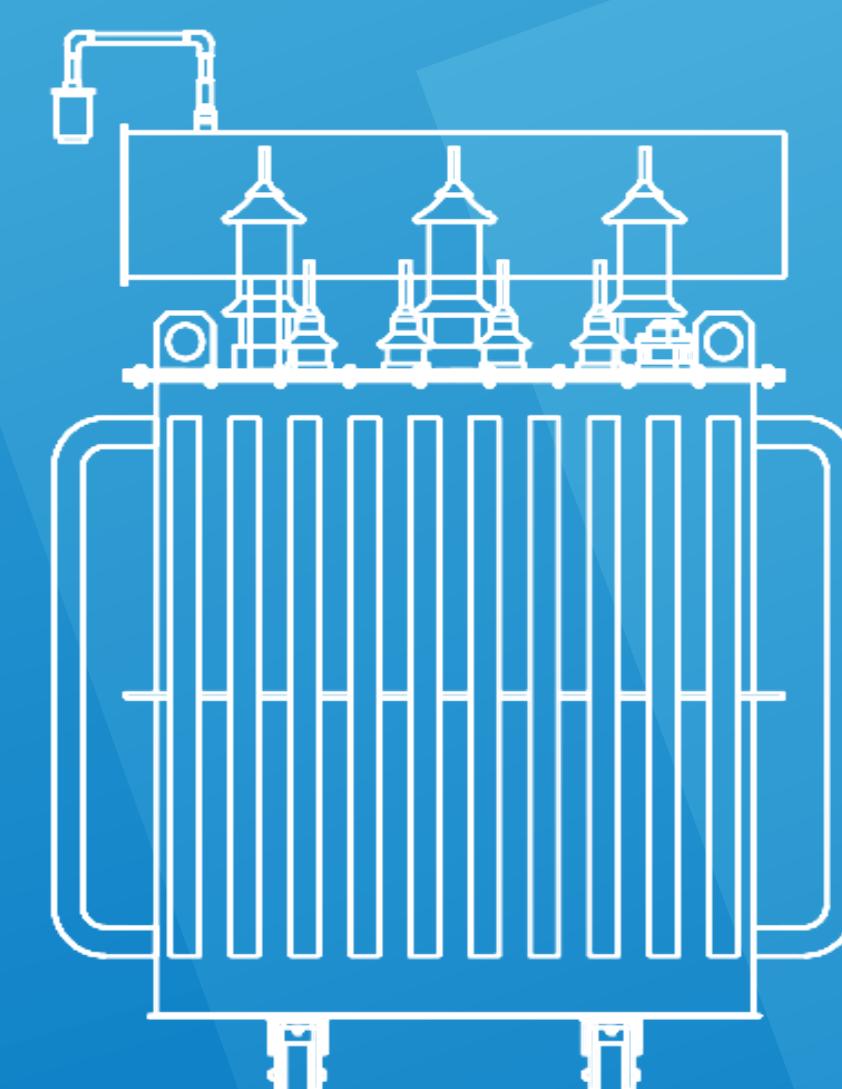
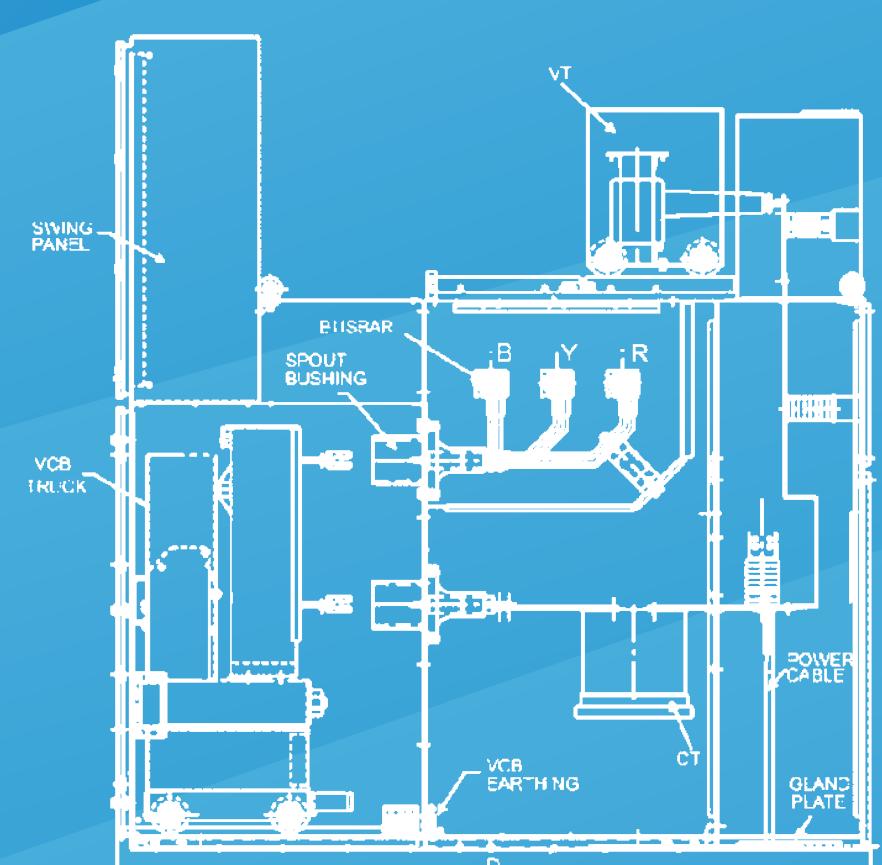
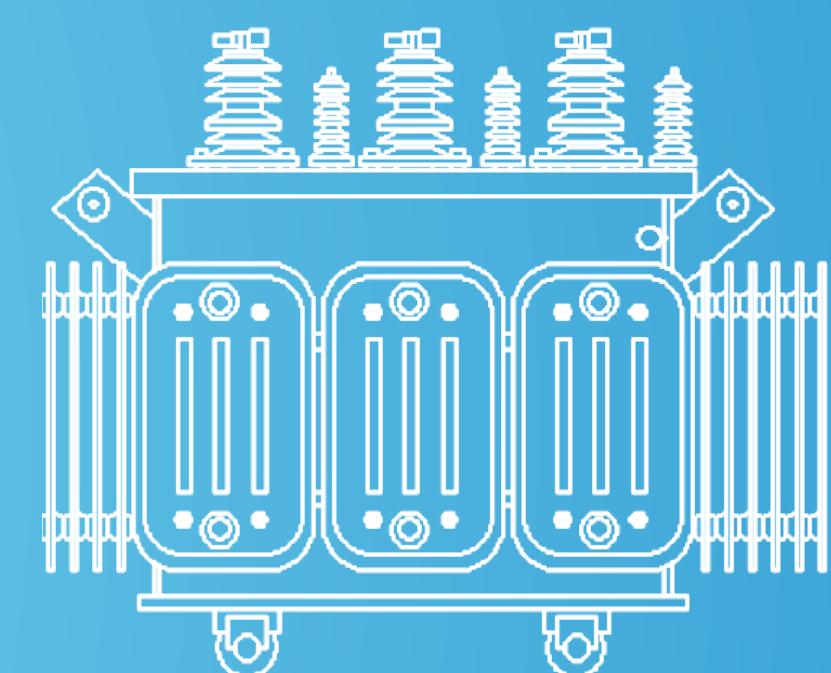
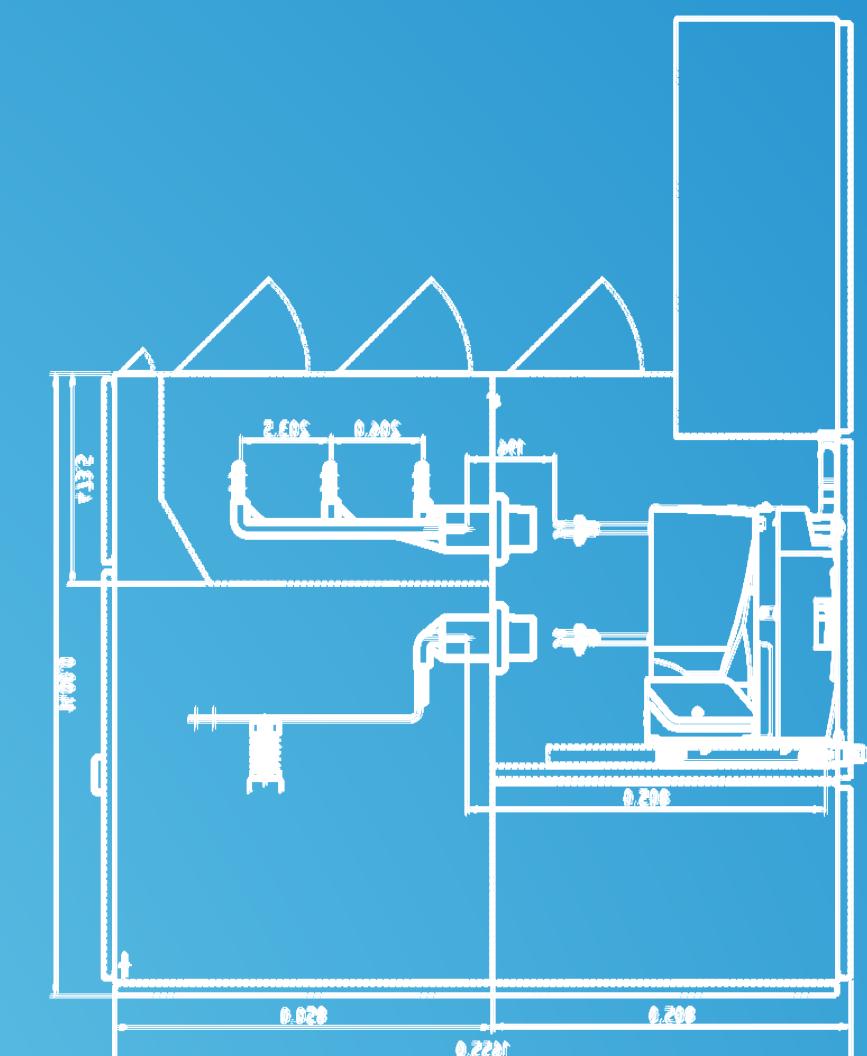


ELLEN GROUP

Distribution Transformers HT and LT Switchgear



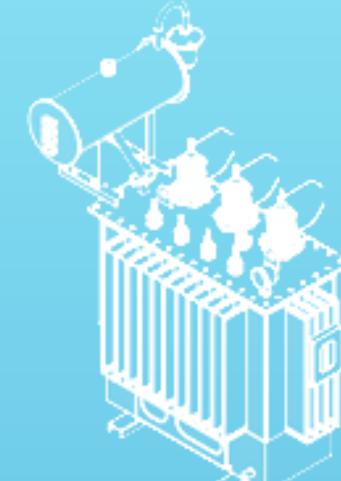
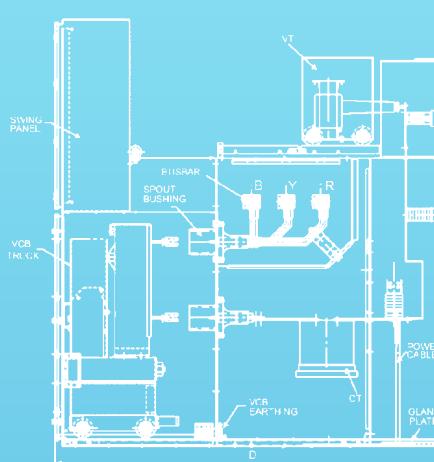
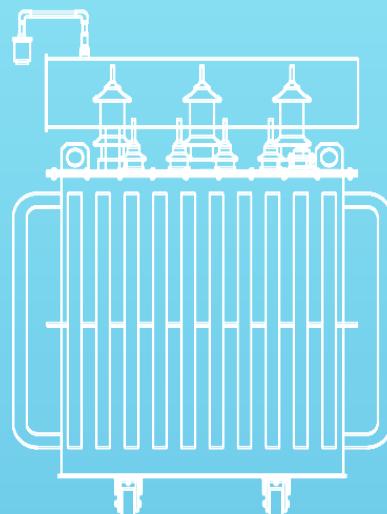
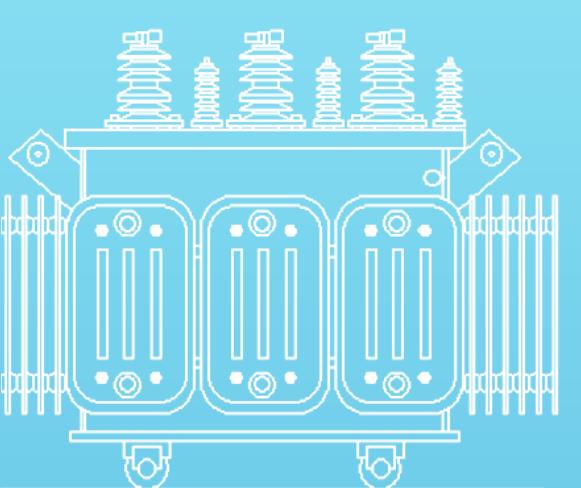
“TRANSFORMING POWER DISTRIBUTION”



www.elen.co.in | mail: info@elen.co.in

AN ISO 9001: 2015 Company

ELEN ENGINEERING | ELENTRIC INDUSTRIES PVT. LTD.



Note from the Managing Director

Dear Valued Partners and Stakeholders,

It is with great pride and enthusiasm that I share with you the remarkable journey of **Elen Group**, a journey marked by unwavering commitment to excellence, innovation, and sustainable energy solutions. Comprising of "**Elen Engineering**" and "**Ellectric Industries Pvt. Ltd.**" (**EIPL**), we specialize in offering the **complete package** encompassing Transformer, HT, and LT switchgear.

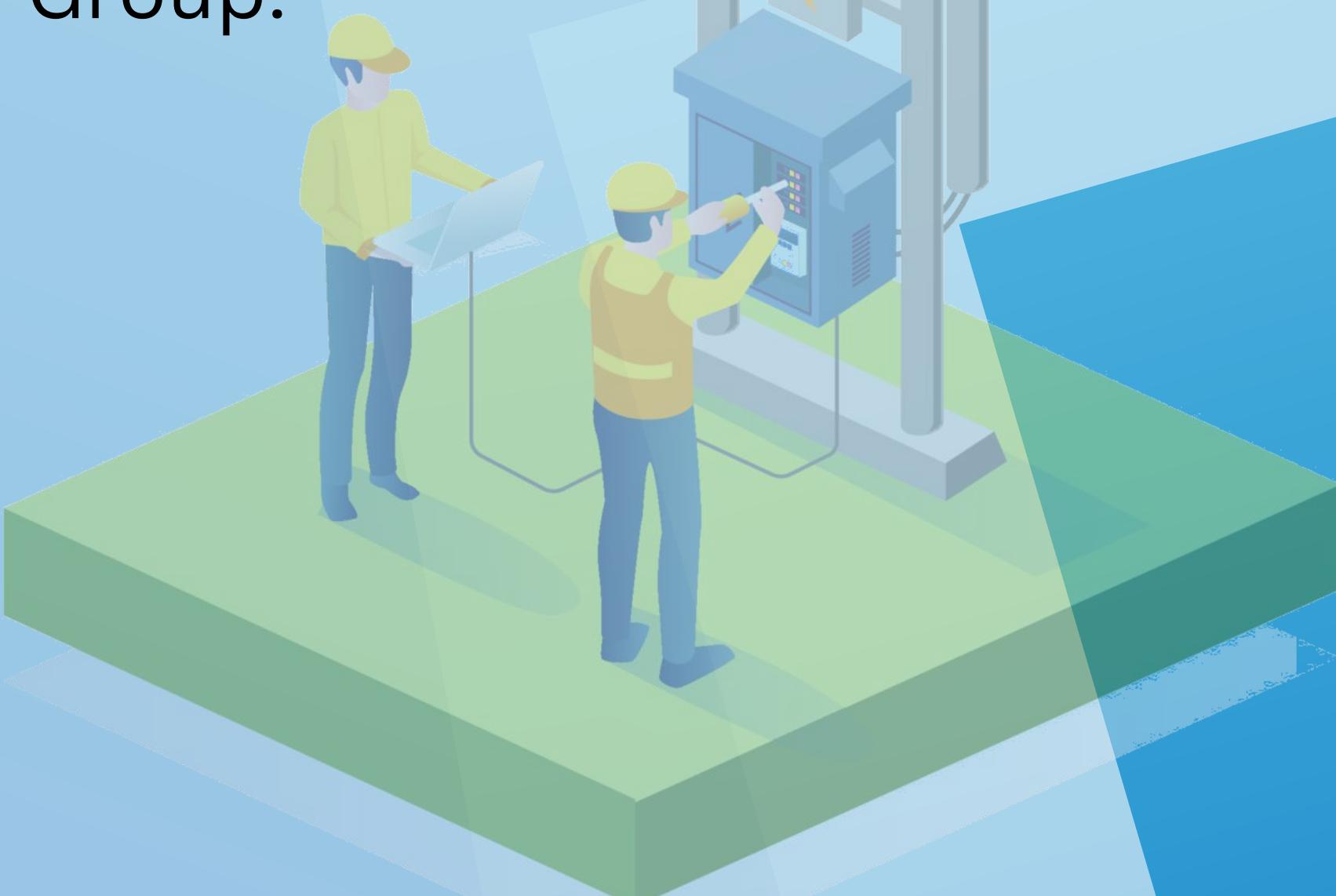
Elen Engineering: At Elen Engineering, our focus lies in the precision manufacturing of distribution transformers, with a specialization in units of up to 2.5 MVA, 33/11/.433 kV. A decade of expertise have positioned us as leaders in the field, delivering solutions that meet the highest quality standards. We take pride in contributing to the nation's key industries, particularly in power and distribution, through our long-term strategic plans.

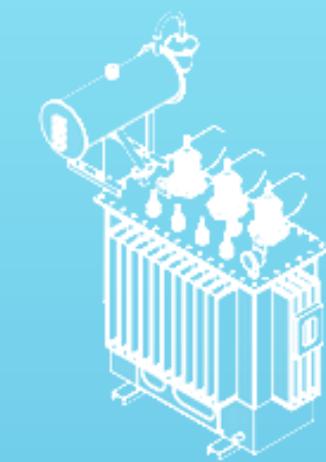
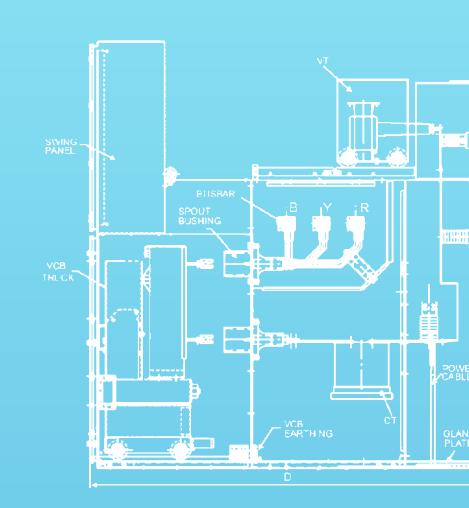
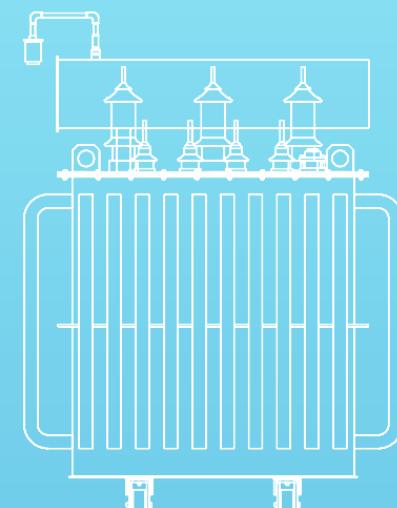
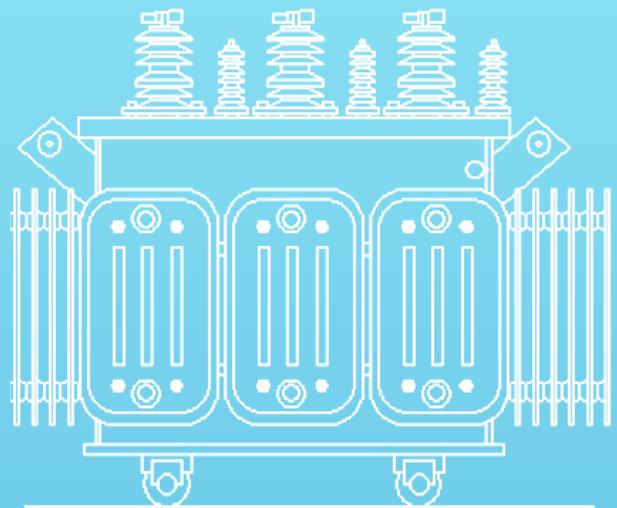
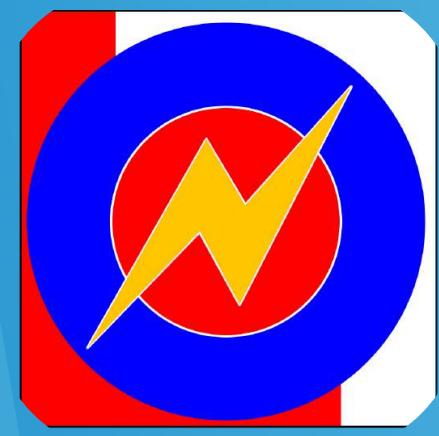
Ellectric Industries Pvt. Ltd. (EIPL): EIPL, our dynamic counterpart, specializes in the manufacturing of High Tension (HT) and Low Tension (LT) switchgear. I am delighted to announce that EIPL has achieved a significant milestone by becoming a Core Component Partner (CCP) of Schneider Electric, a testament to our commitment to excellence and industry collaboration. Our HT panels, with specifications up to 11 kV, 1250A, and 26.3 kA, exemplify our dedication to providing cutting-edge solutions.

Looking Ahead: As we move forward, Elen Group is poised to continue its legacy of excellence and innovation. We invite you to explore our premium products and experience the reliability and efficiency that define Elen Group.

Thank you for being part of our journey.

Warm regards,
Geetartha Geetam Sarma





Mission and Vision

At Elen Group, we are driven by a focused set of objectives:

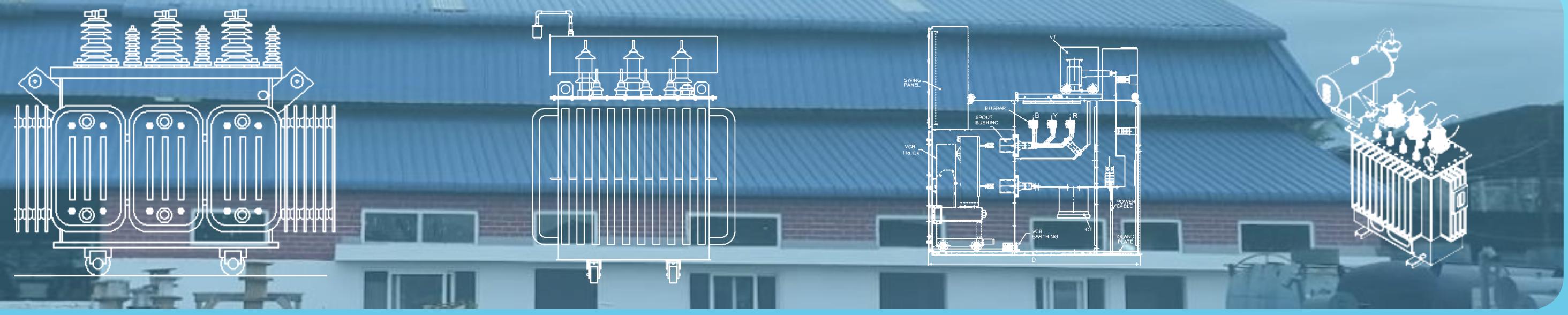
- **Competitive Pricing and Quality:** Maintain competitive pricing while consistently enhancing product quality through rigorous testing.
- **Timely Delivery Assurance:** Uphold a commitment to prompt deliveries, ensuring a seamless experience for our clients.
- **Environmental Stewardship:** Prioritize eco-friendly practices and technologies to minimize our ecological footprint and contribute to a sustainable future.
- **After Sales Service:** Provide exceptional after-sales service, ensuring ongoing support and satisfaction for our valued customers.
- **Employee Involvement:** Foster a culture of involvement and cooperation among our employees through effective communication and regular training sessions.

These succinct objectives encapsulate our dedication to excellence, efficiency, environmental responsibility, employee well-being, and superior customer satisfaction.





**ELEN
GROUP**



9 Years of
Experience

8+ States

5000+ Transformers

MILESTONES

- **2015:** Established Elen Engineering (Repairing Transformers upto 1 MVA)
- **2015:** ISO 9001:2015 Certificate
- **2019:** BIS License for manufacturing DIltribution Transformers upto 200 kVA
- **2021:** BIS License for manufacturing Distribution Transformers upto 2.5 MVA, 11 kV, Level-2
- **2022:** BIS License for manufacturing Distribution Transformers upto 2.5 MVA, 33 kV, Level-2
- **2023:** Established EIPL (Elentric Industries Pvt. Ltd.) for manufacturing MV Switchgears upto 11kV in collabortaion with Schneider Electric
- **2023:** Type test passed at CPRI Bhopal and NSIC Kolkata for 11kV, 1250A, 26.3kA for 3 sec.
- **2024:** Commercial production of 11kV HT Switchgear



Transformer Production

The manufacturing process in **Elen Engineering** is accomplished through the following stages:

- Design
- Fabrication
- Coil Winding
- Core Assembly
- Core-Coil Assembly
- Boxup
- Routine Test



1. DESIGN

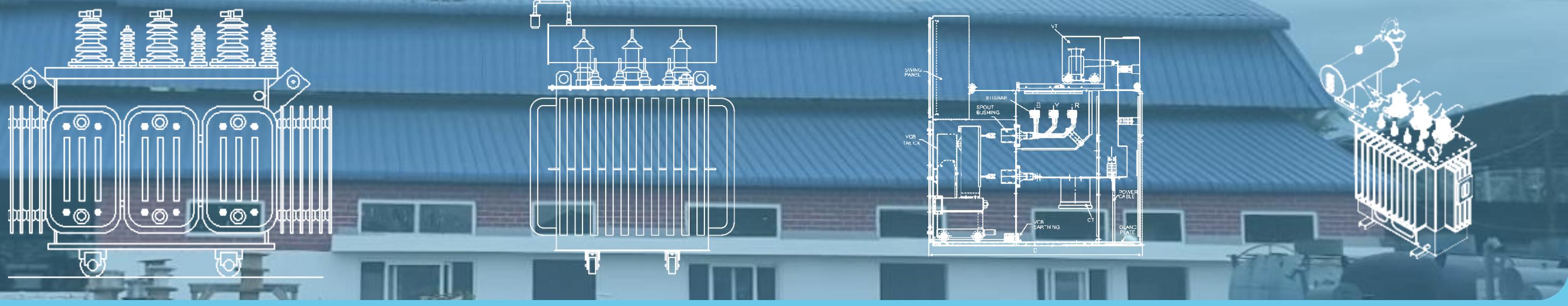
The design phase is meticulously crafted by our highly skilled in-house transformer designer team, ensuring that each product meets and exceeds client specifications. Our team tailors solutions to unique requirements, combining expertise with innovative design solutions.

Technical Specification (Max. Design)

Rating	2500 kVA, 50 Hz
Rated Voltage at No Load HV/LV	33000/433 V
Rated Current HV/LV	43.73/3333.43 A
No of phases	3
Cooling Type	ONAN
Temperature rise oil/winding	40/45 °C
Percentage impedance	6.25%
Vector group	Dyn11
Material	Copper
Max. loss @50% / @100% load at 75 °C	6342.5 / 18812.5 W
Basic insulation level of HV	70 kV _{rms} / 170 kV _p
Basic insulation level of LV	3 kV _{rms}



**ELEN
GROUP**



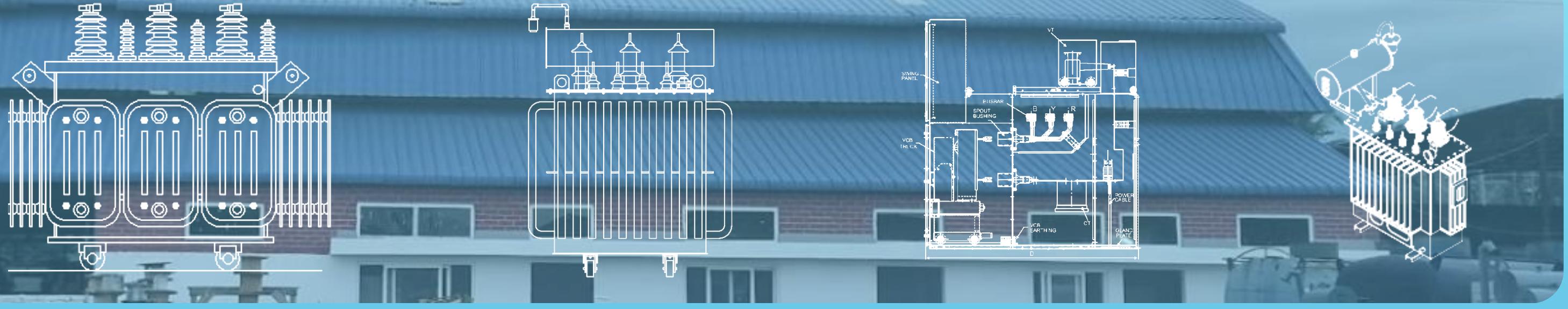
2. FABRICATION

Covering a total of 30,000 sq ft (Excluding switchgear manufacturing unit) our facility is one of the largest in the North East region. It utilizes state-of-the-art machinery, including hydraulic shearing, sheet bending, busbar bending, drilling, MIG welding, plasma cutting, and rolling, we manufacture high-quality tanks and associated parts. Our spray painting is done by strictly adhering to IS, providing a smooth finish.





**ELEN
GROUP**



3. COIL WINDING

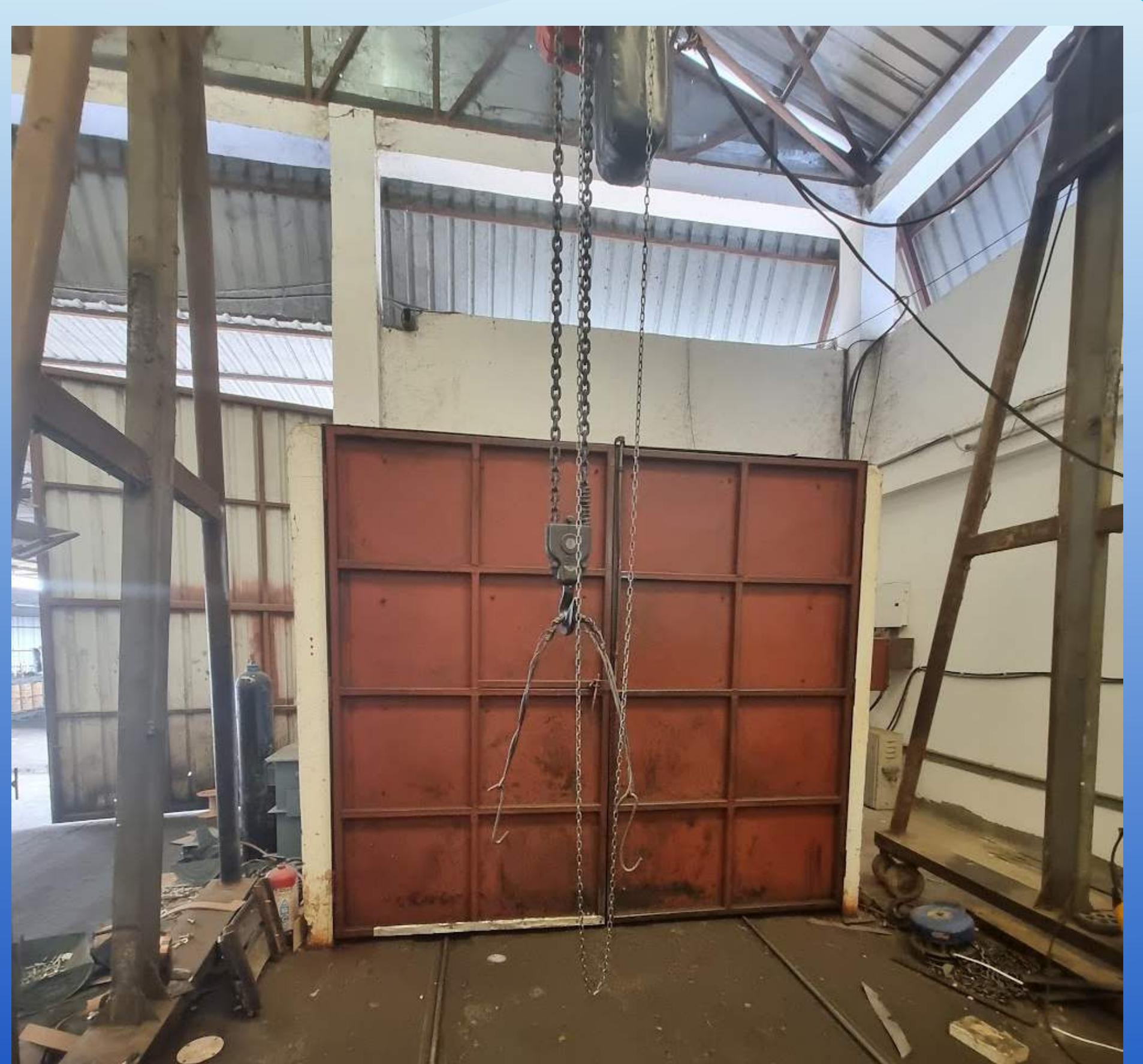
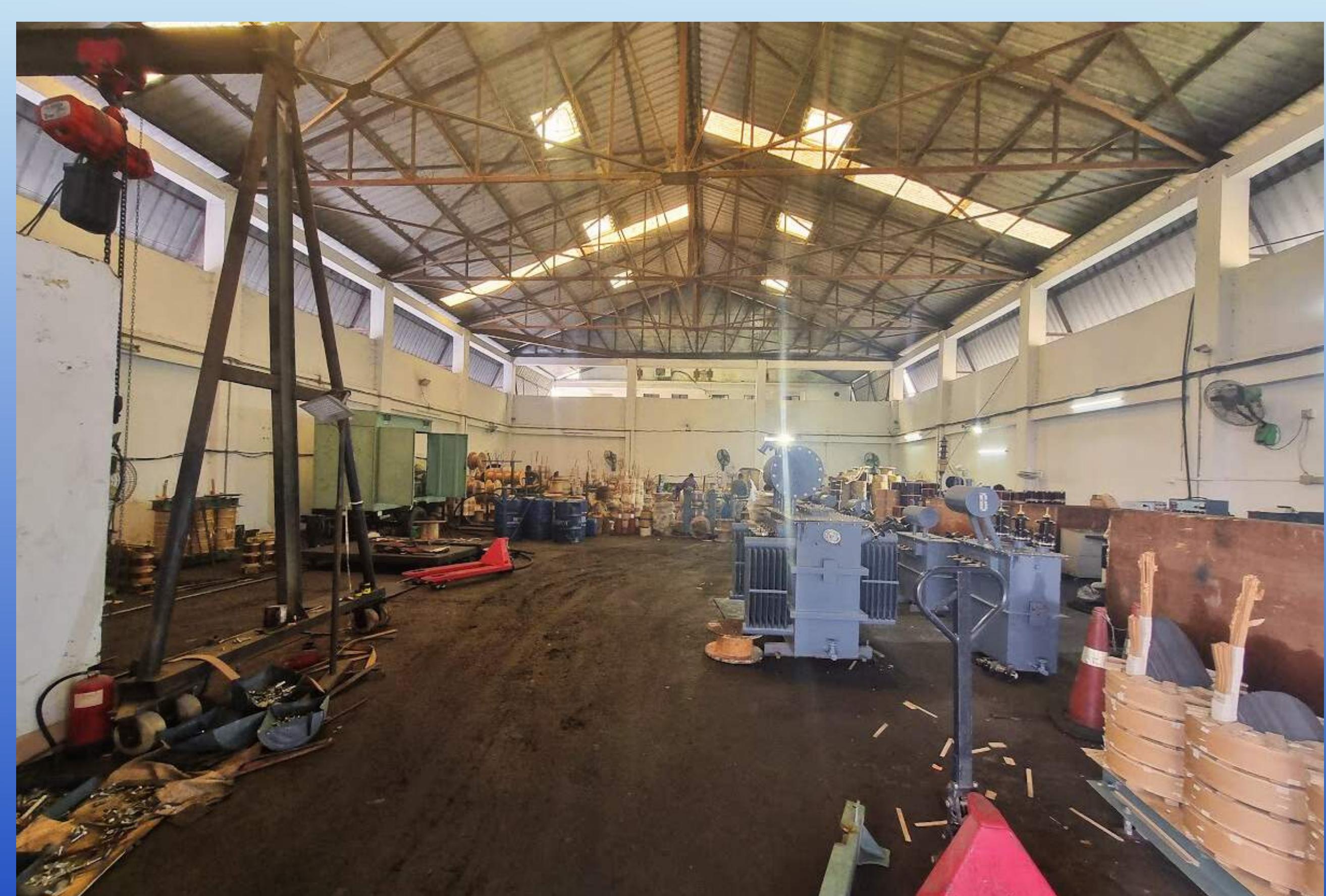
The coil winding process is executed with millimeter precision using advanced winding machines, ensuring the creation of coils that meet the highest standards of quality.

4. CORE COIL ASSEMBLY

Following assembly, the core-coil unit undergoes moisture removal in a specialized heat chamber, maintaining temperatures between 90-110 degrees Celsius. Intermediate testing, aligned with IS standards, is conducted to monitor the health of the coils, ensuring optimal performance.

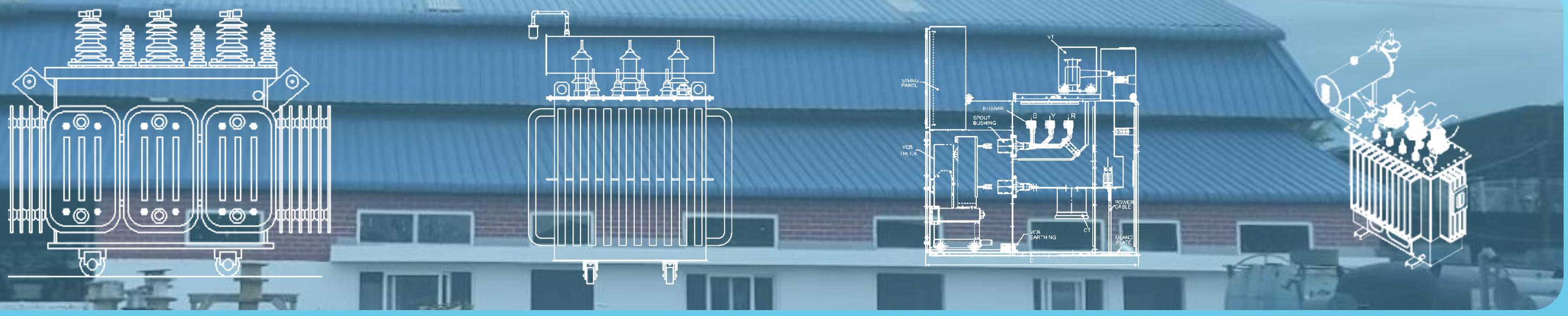
5. BOX UP

All components are meticulously assembled in the boxup stage. We utilize mineral oil conforming to IS 335:2013 standards for transformer oil. The assembled transformers then undergo rigorous testing, guaranteeing the highest level of quality and performance.





**ELEN
GROUP**

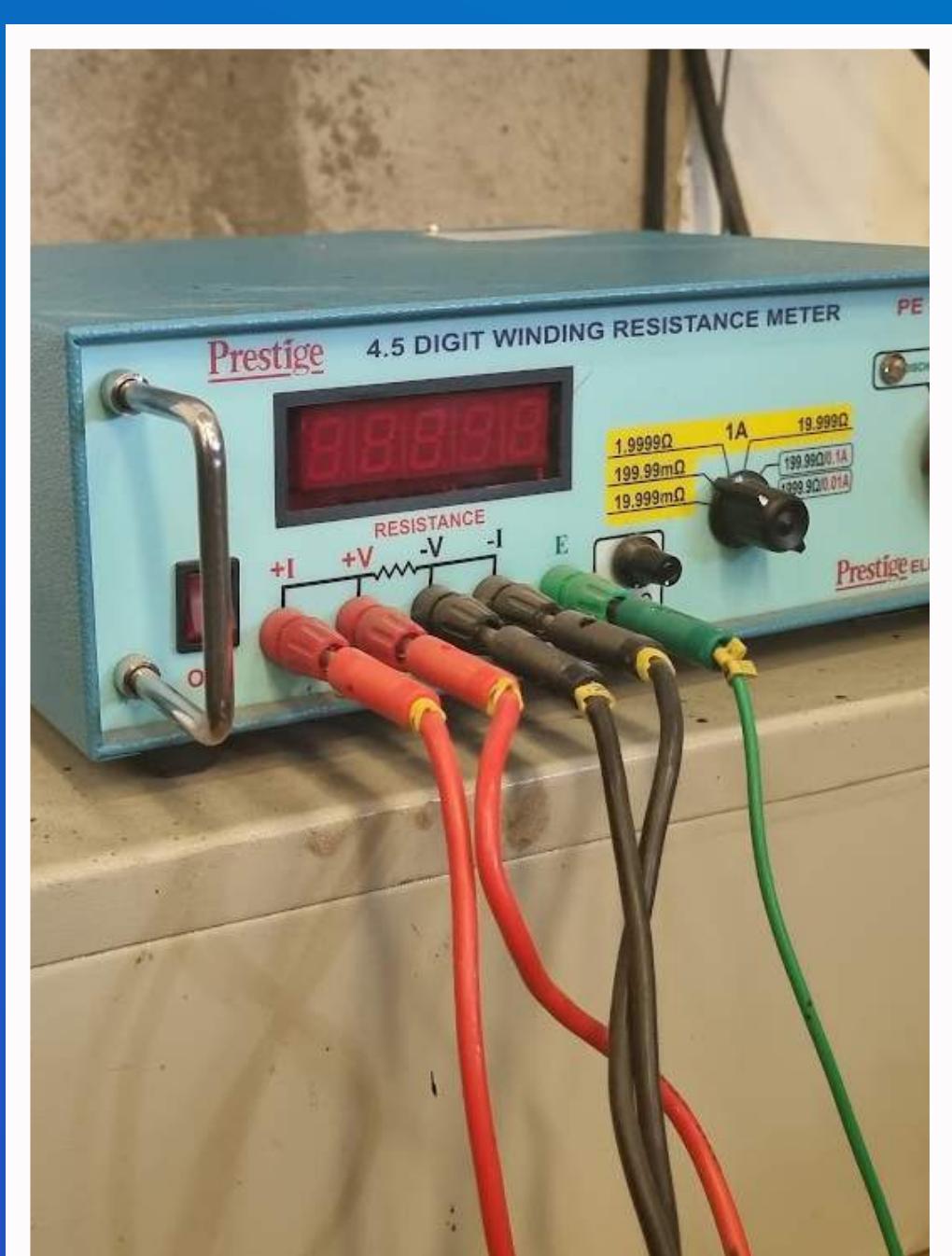
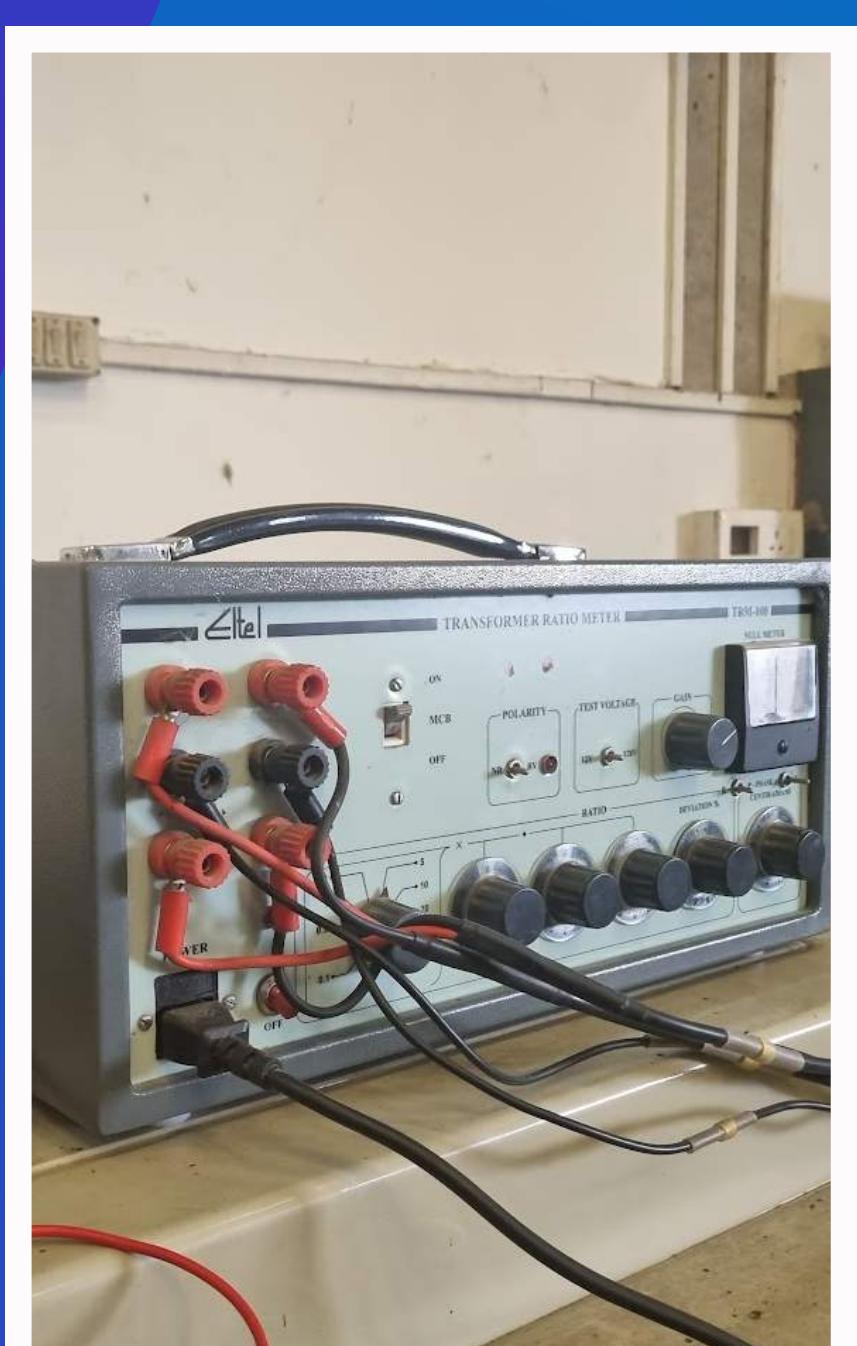
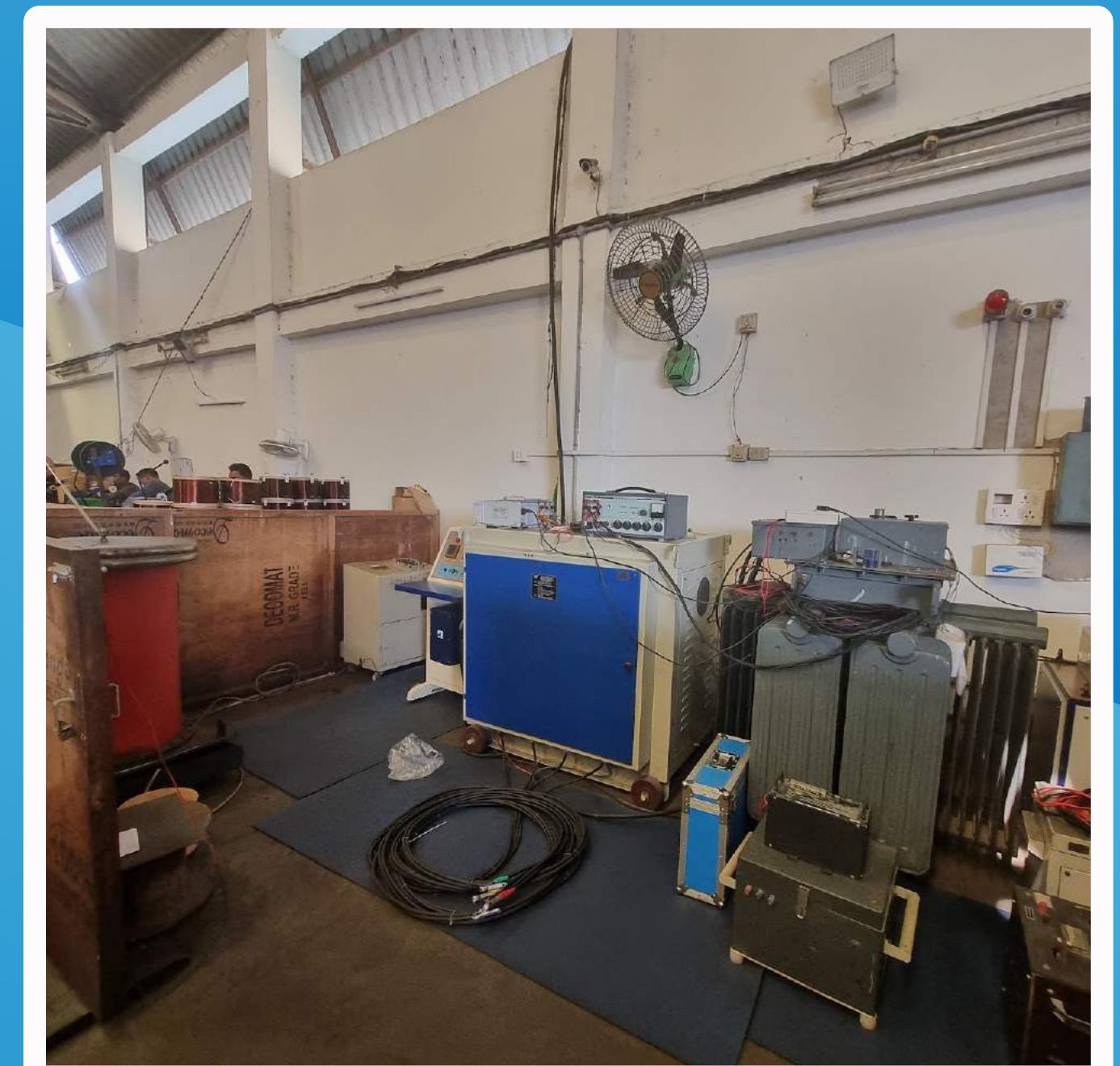


6. ROUTINE TEST

Before reaching our clients, each transformer undergoes thorough routine testing as per IS 2026 and IS 1180. This ensures that our products not only meet but exceed industry benchmarks, delivering reliable and high-performance solutions.

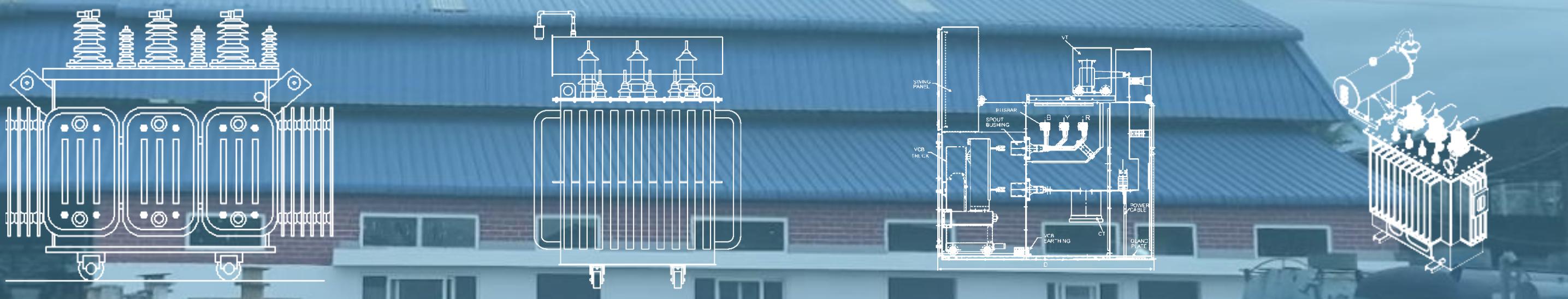
Tests Performed

- Winding Resistance
- Voltage Ratio
- Polarity & Vector Group
- Short Circuit Impedance
- No Load Losses & Current
- Load Losses
- Insulation Resistance
- BDV Of Transformer Oil
- Induce Over Voltage Withstand Test
- Separate Source Ac Voltage Withstand Test
- Special Tests – Temperature Rise, Tank Vacuum & Pressure Test.





**ELEN
GROUP**



TYPE TEST CERTIFICATE



TC-6229

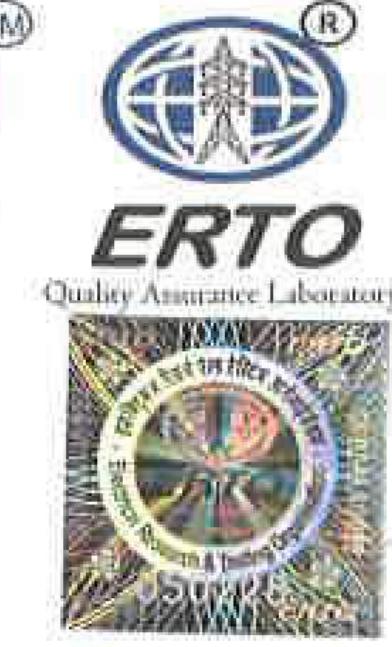
Electrical Research & Testing Organisation™

Plot No.747, B/h Gurukrupa Farm, Manjusar Village, Savli Vadodara Main Road, Vadodara; Gujarat; India. 391775.

Mobile: +91-8866009021 / +91-9998009021.

E-mail: service@erto.in, accounts@erto.in, sr.patel@erto.in; erto@erto.in

Website: www.erto.in



TEST REPORT

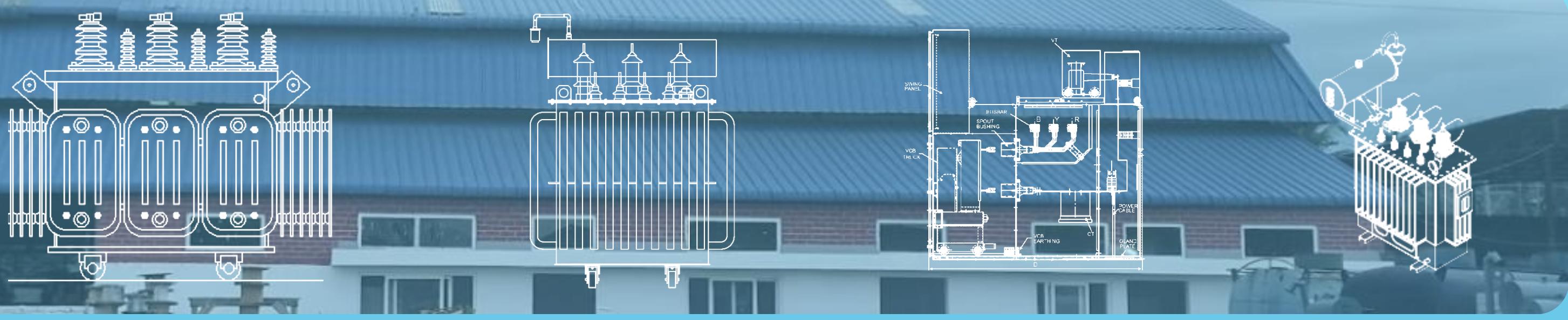
Report No	: ERTO/TRP/2122/0644
ULR No.	: TC622922000000010F
Date of issue	: 05/01/2022
Total number of pages	: 25
Customer's name	: ELEN ENGINEERING
Address	: Kendukuchi Chowk, Dharapur, Palasbari Road, Bhattapara (Garal) Ghy-17
Customer's reference & date	: EE/2020-21/ERTO/TESTING/001, Dt. 21/12/2021
Test specification	
-Standard	: As per IS 1180 (Part 1):2014 with 1,2,3,4 amendment
-Test procedure	: As per IS 1180 (Part 1):2014 with 1,2,3,4 amendment
-Non-standard test method	: N/A
ERTO sample ID no.	: ERTO-0799
Test performed at	: ERTO lab
Name of test sample	: 2500 kVA, Distribution Transformer
Make	: ELEN ENGINEERING
Rating	: 2500 kVA
Technical specification of test sample	: As per page 2.
Test performed	: As per page 5.
Any other details specified by customer	: BIS QR Code Number – 100000155658
Date of receipt of test sample	: 27/12/2021
Condition on Receipt	: Good
Date(s) of performance of test(s)	: 31/12/2021 to 04/01/2022
List of Enclosures	
-Test sample photo	: As per page 3.
-Rating plate photo	: As per page 4.
-Drawings (As submitted by customer)	: 1) EE/2500/33/NP SHT. 1/1 2) EE/2500/33/GA SHEET Sh 1/1
Remarks	:
	1) The sample conforms to the requirements of above mentioned standard for the test nos. 2, 5, 6 & 8 to 14. 2) The observations of the test nos. 1, 3, 4 & 7 are as per page 6 to 9.
Prepared By	
Checked By (A.B. Parmar)	
Approved By (S.B. Diwan) (HOL)	
Notes:	<ol style="list-style-type: none"> This report relates only to the particular sample tested. Only the tests asked by the customer have been carried out. This report cannot be reproduced in part under any circumstances. Publication of this report requires prior permission in writing from Technical Director, ERTO. In case of any dispute, ERTO will be the exclusive jurisdiction & shall be construed as where the cause has arisen.
Caution:	ERTO is not responsible for the authenticity of photocopied or reproduced test reports. ERTO provides support to customers for verification of the authenticity of test reports issued by ERTO.

UPTO INCLUDING 2500 kVA, 33/.433kV

TE - A 057578



**ELEN
GROUP**

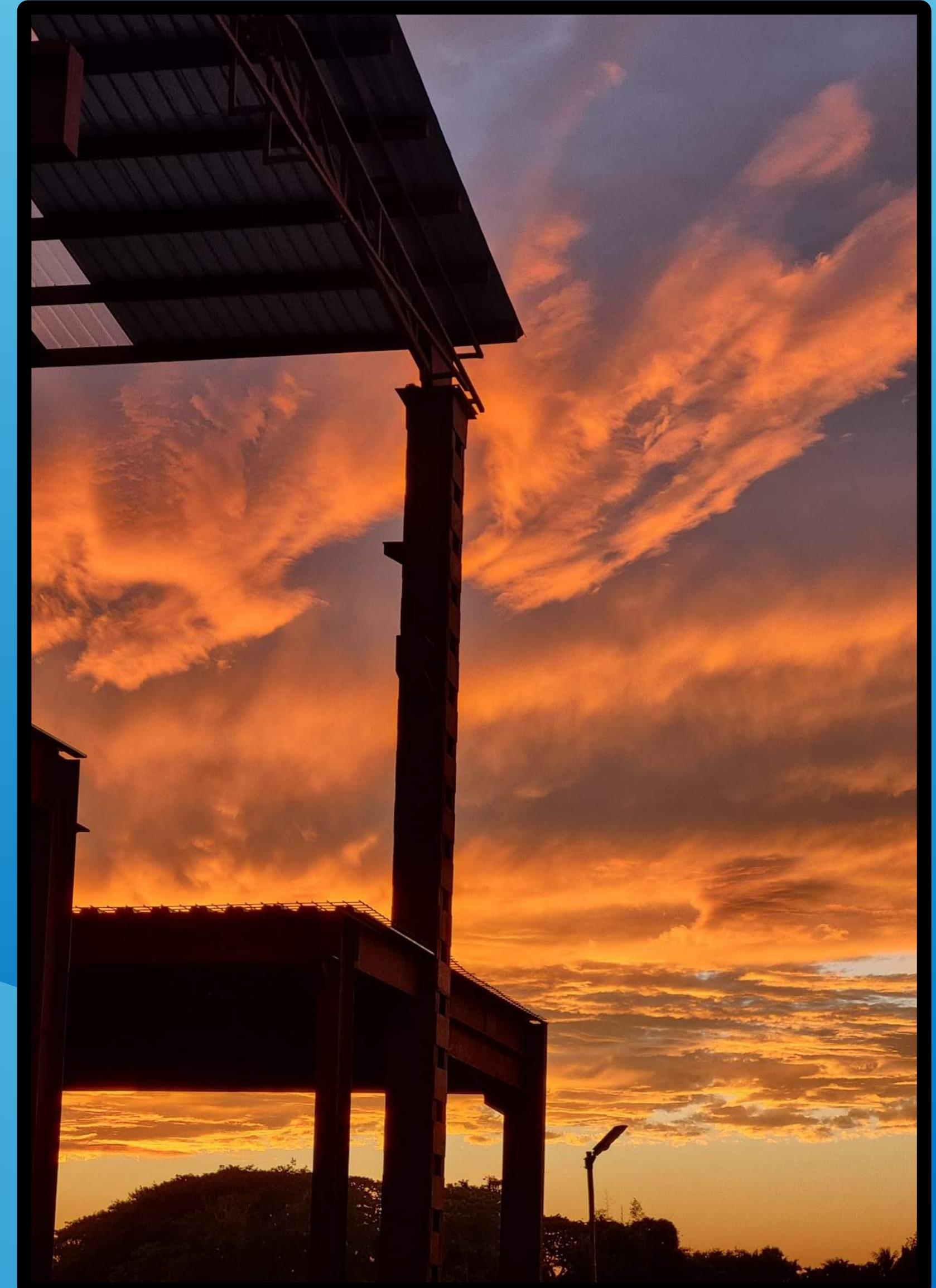
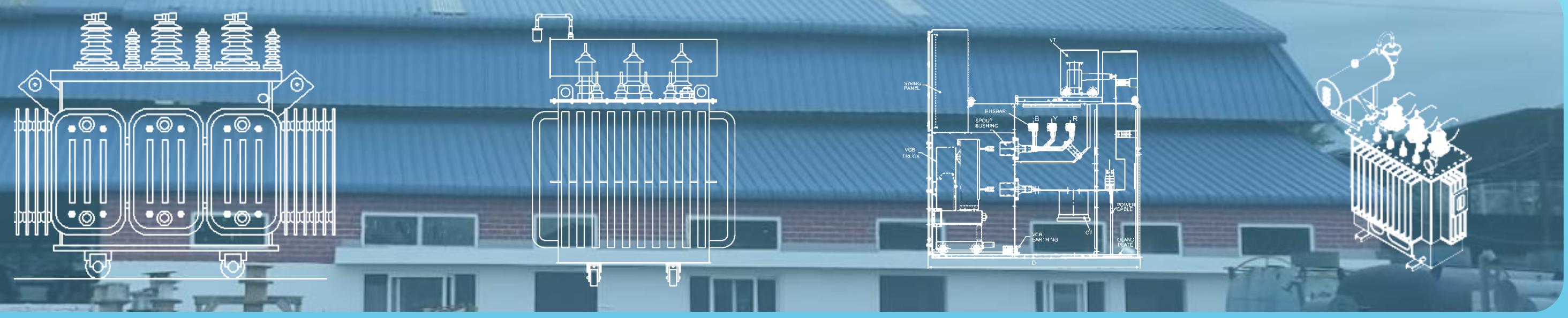


SOME SNAPSHOTS





**ELEN
GROUP**





**ELEN
GROUP**

**ELENTRIC INDUSTRIES
PRIVATE LIMITED**

Certified
MV Component
Panel Builder

Schneider
Electric

Switchgear Production

The manufacturing process in **E IPL** is accomplished through the following stages:

- Design
- Fabrication
- Instrument Chamber Wiring
- Mechanical Assembly
- Routine Test



The design phase is meticulously crafted by our highly skilled in-house switchgear designer team, starting from customer's requirements, and taking to electrical and mechanical drawing in 2D and 3D.

A highly skilled Application Engineering team further optimizes the offer through scrutiny.

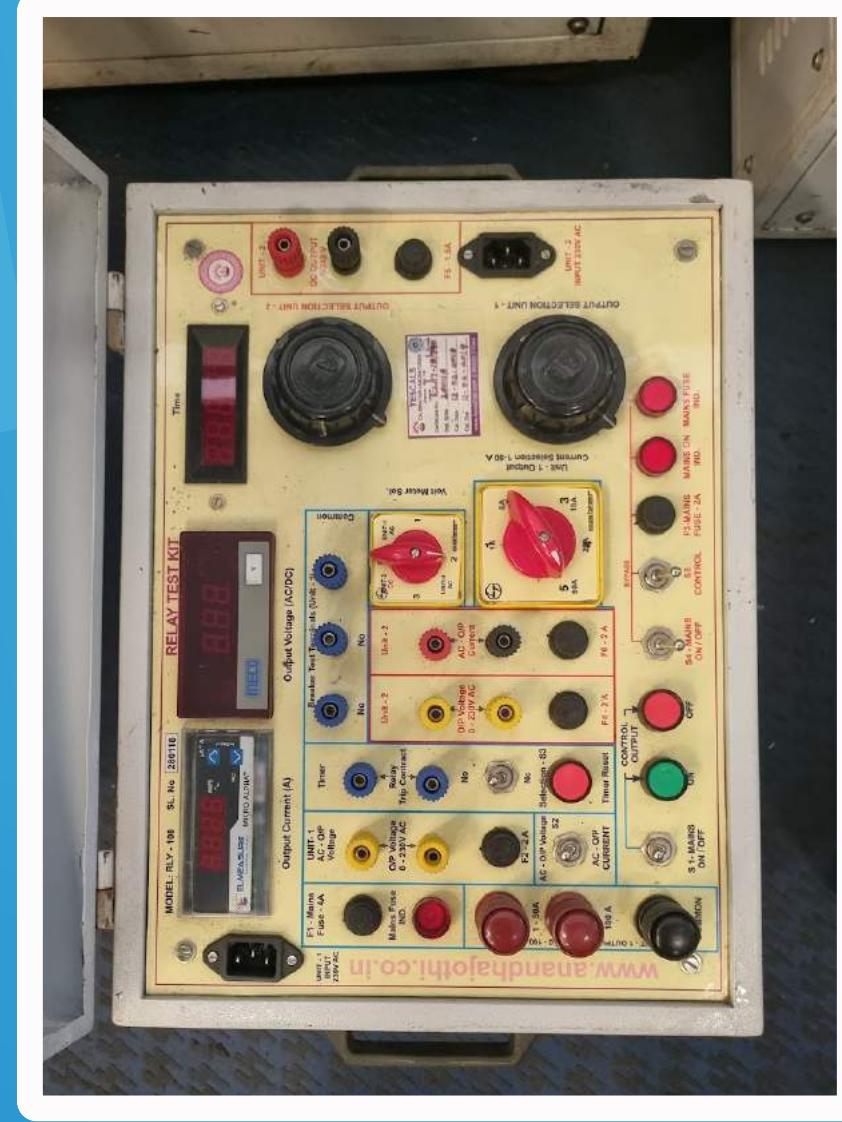
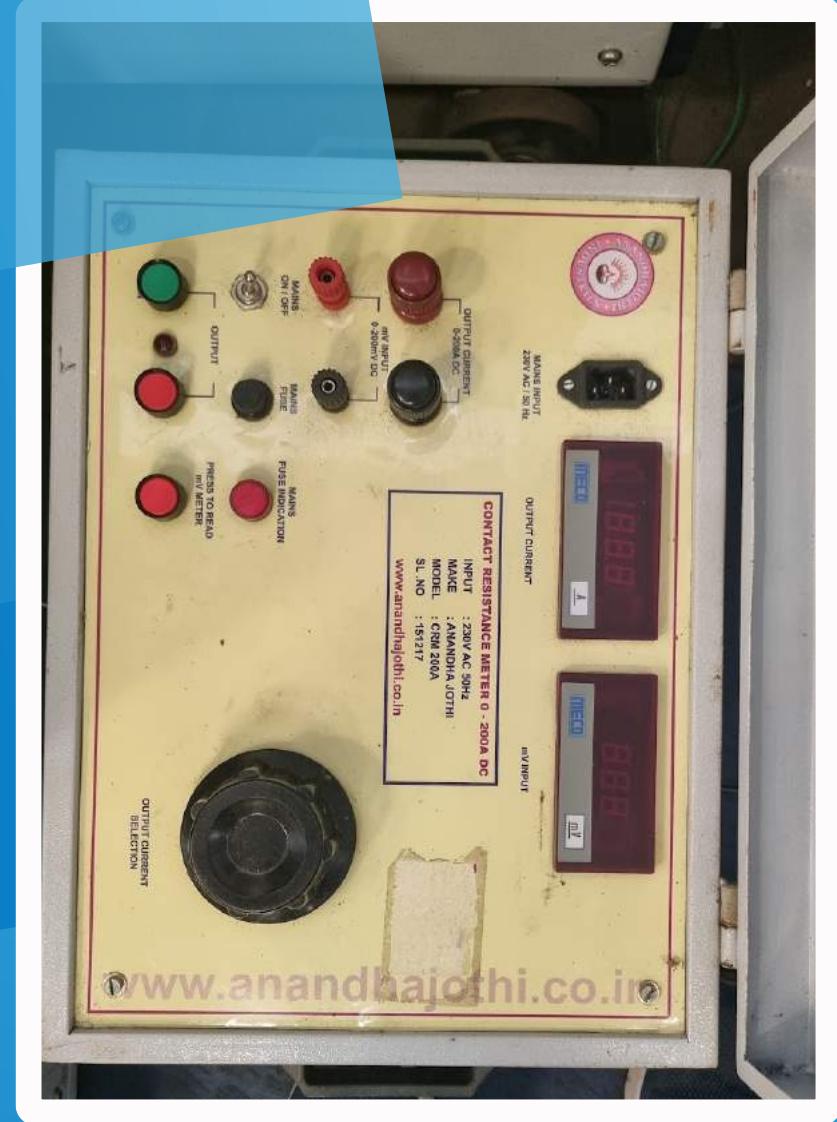
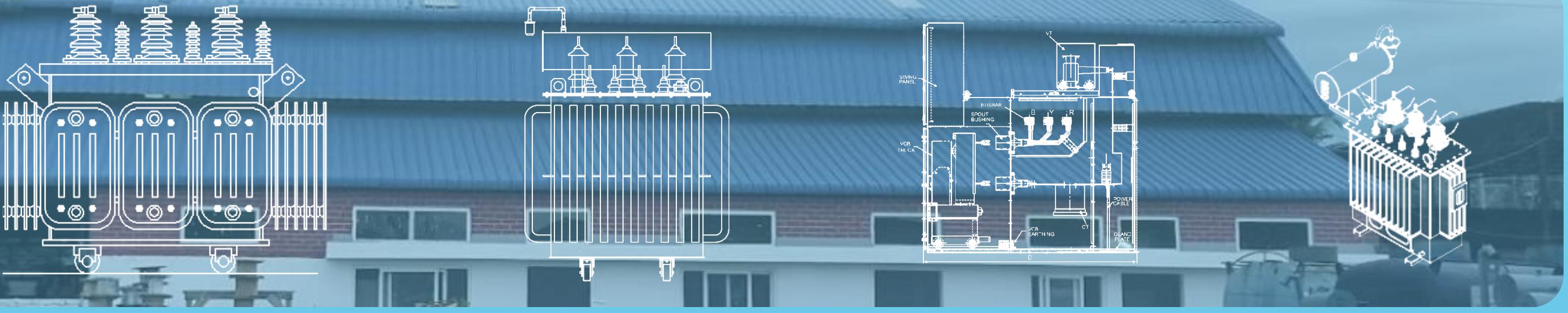
E IPL has 10000 sq. ft. area dedicated to Fabrication, Assembly, and Testing of Panels. We are equipped with modern machinaries for sheet cutting, bending, and busbaring.

Technical Specifications

Rated Voltage	11 kV
Basic insulation level	12/28/72 kVp
Rated Current	1250A
Fault level	26.3 kA for 3 sec
Degree of protection	IP54
Breaker Make and Model	Schneider, EasyPact EXE



**ELEN
GROUP**



ROUTINE TESTS

- Insulation test (Megger)
- Power Frequency Withstand Voltage Test
- Measurement of Contact Resistance
- Verification of Continuity and operation of Auxiliary Circuit
- Busbar Conductivity Test
- Circuit Breaker Time Interval Measurement
- Primary Injection
- Secondary Injection
- CT Polarity Test
- Powder Coating Quality Test

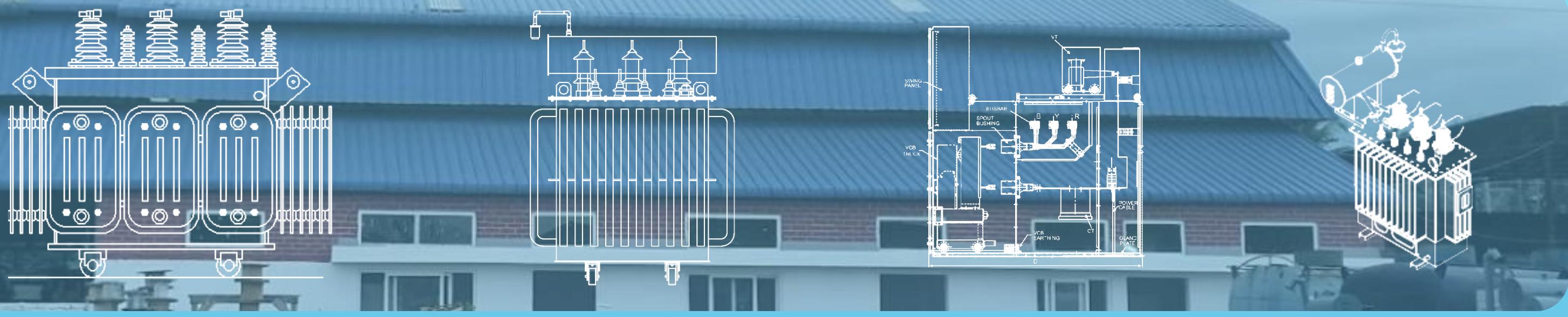
TYPE TESTS

Our panels are partially type tested (PTT). The following tests have been performed and passed so far (CPRI, BHOPAL and NSIC, Kolkata).

1. Short Term Current and Peak Current Withstand Test
2. Ingress Protection
3. Temperature Rise
4. Dry Power Frequency Voltage Withstand
5. Lightning Impulse Voltage Withstand



**ELEN
GROUP**



TYPE TEST CERTIFICATE



एन एस आई सी

NSIC

TESTING LABORATORY
NSIC TECHNICAL SERVICES CENTRE
THE NATIONAL SMALL INDUSTRIES CORPORATION LIMITED
(A Government of India Enterprise)
ELECTRICAL TESTING LABORATORY
Balitikuri, Howrah (W.B.) - 711 113, Phone: (033)- 2955 8607



TC-5137

TEST REPORT

REPORT NO. & DATE	NTSC(H)/EHV/2022-23/7842 Dt. 19.01.2023	SHEET NO. 1 OF 3
JOB ORDER NO.	7/06/05944 dt.13.01.2023	
SAMPLE CODE NO.	5944	
TEST REPORT ISSUED TO	M/s Elentric Industries Pvt. Ltd. Kendukuchi Chowk, Dharapur Palasbari Road, Bhatta Para(Garai),Guwahati-781017,Assam.	
CUSTOMER'S REF. NO.	Nil. dtd.13.01.2023	
DESCRIPTION OF SAMPLE / EQUIPMENT TESTED	12 KV,1250A 26.3KA VCB Panel for Impulse & High Voltage Type Testing	
DRAWING NO.	ELENTRIC/22-23/LIV+HV-VCB/NSIC/GA REV.00 (Sheet-1 of 2 & 2 of 2), PROTOTYPE VCB REV.00, NHA2095802 REV.07	
IDENTIFICATION	ELENTRIC/AIS/23/001	
QUANTITY	One no.	
NATURE OF TEST	1. Dry Power Frequency Voltage Withstand 2. Lightning Impulse Voltage Withstand.	
TEST SPECIFICATION	IEC: 62271-200 : 2011 and IEC: 62271-1: 2017.	
DATE OF SAMPLE RECEIPT	04.01.2023	
DATE(S) OF TEST	17.01.2023 & 18.01.2023	
DEVIATIONS, IF ANY	Nil.	
ENCLOSURE	Ceritified Drawing : 03 sheets Ref. Drawing: 01 sheet Annexure - I : 01 sheet.	
MAJOR EQUIPMENTS USED	1. Lightning Impulse Voltage Generator. 2. High Voltage Power Frequency Test Set.	
TEST WITNESSED BY	Mr. A. Chattopadhyay, Representative of M/s Elentric Industries Pvt. Ltd, Assam.	

Nitin
Prepared by
NITIN RAJ
Dy. Manager (Tech.)

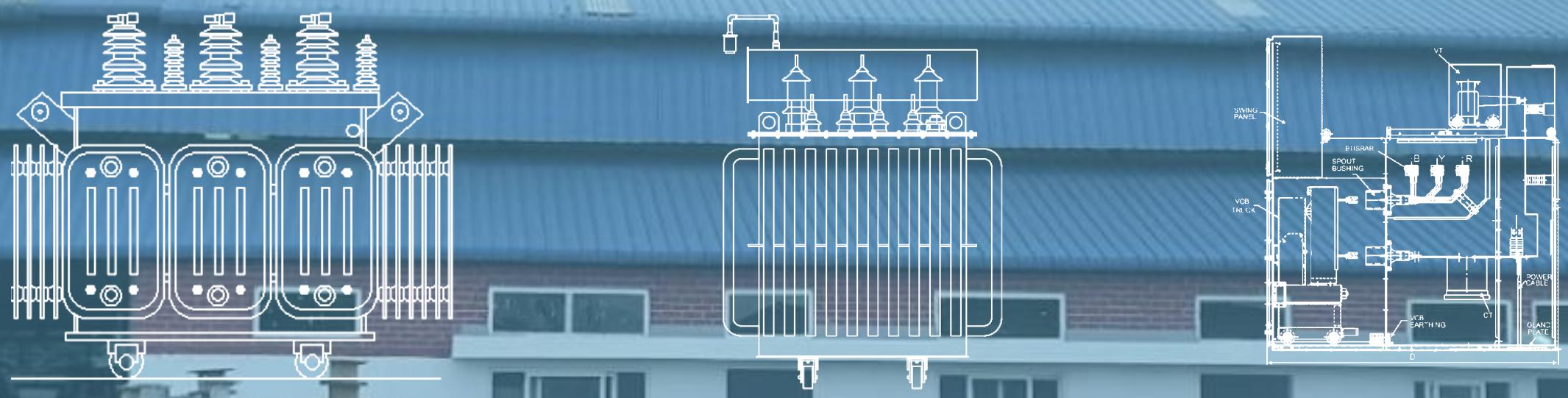
Issued by
RAJIB CHANDA
Chief Manager

- This report relates to the particular sample(s) tested under stated condition.
- This report cannot be reproduced in part without the written permission of Laboratory In-Charge, NTSC, Howrah.
- Any anomaly/discrepancy in this report should be brought to notice within 45 days from the date of issue.

Dry power frequency and Lightning
Impulse voltage withstand test



**ELEN
GROUP**



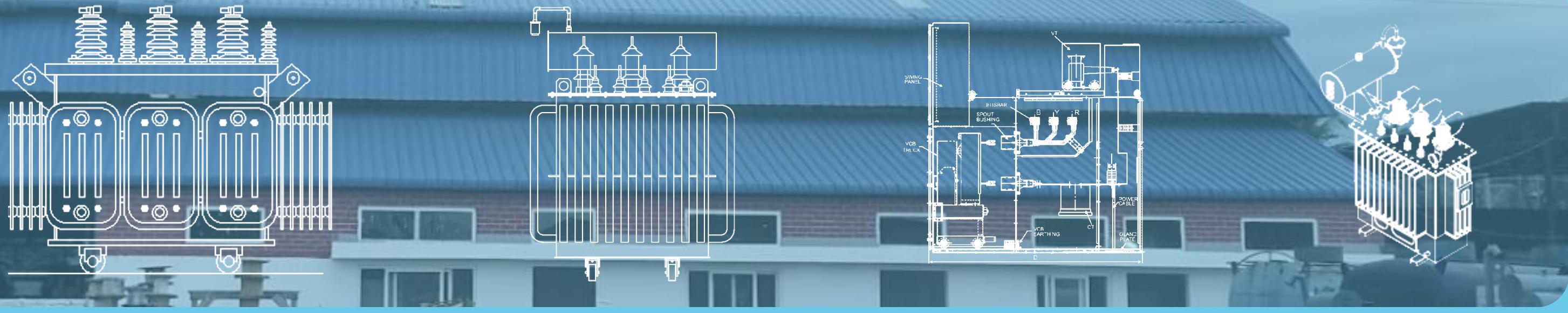
TYPE TEST CERTIFICATE

TEST REPORT		
REPORT NO. & DATE	NTSC(H)/EHV/2022-23/7841 Dt. 19.01.2023	SHEET NO. 1 OF 3
JOB ORDER NO.	7/06/05944 dt.13.01.2023	
SAMPLE CODE NO.	5944	
TEST REPORT ISSUED TO	M/s Elentric Industries Pvt. Ltd. Kendukuchi Chowk, Dharapur Palasbari Road, Bhatta Para(Garai), Guwahati-781017, Assam.	
CUSTOMER'S REF. NO.	Nil. dtd.13.01.2023	
DESCRIPTION OF SAMPLE / EQUIPMENT TESTED	12 KV, 1250A 26.3KA VCB Panel for Temp. Rise Type Testing	
DRAWING NO.	ELENTRIC/22-23/TEMP RISE-VCB/NSIC/GA REV.00 (Sheet-1 of 3, 2 of 3 & 3 of 3), PROTOTYPE VCB REV.00, NHA2095802 REV.07	
IDENTIFICATION	ELENTRIC/AIS/23/001 & 002	
QUANTITY	One no.	
NATURE OF TEST	Temperature Rise Test.	
TEST SPECIFICATION	IEC: 62271-200: 2011 and IEC: 62271-1: 2017.	
DATE OF SAMPLE RECEIPT	04.01.2023	
DATE(S) OF TEST	13.01.2023, 16.01.2023 & 17.01.2023	
DEVIATIONS, IF ANY	Nil.	
ENCLOSURE	Certificate drawing : 03 sheets Ref. drawing: 02 sheets	
MAJOR EQUIPMENTS USED	1. Millivolt Drop Test Set 2. Temperature Rise Test Set.	
TEST WITNESSED BY	Mr. A. Chattopadhyay, Representative of M/s Elentric Industries Pvt. Ltd, Assam.	
<i>Nitin Raj</i> Prepared by NITIN RAJ Dy. Manager (Tech.)		<i>Rajib Chanda</i> Issued by RAJIB CHANDA Chief Manager
This report relates to the particular sample(s) tested under stated condition. This report cannot be reproduced in part without the written permission of Laboratory In-Charge, NTSC, Howrah. Any anomaly/discrepancy in this report should be brought to notice within 45 days from the date of issue.		

Temperature Rise Test



**ELEN
GROUP**



TYPE TEST CERTIFICATE

CENTRAL POWER RESEARCH INSTITUTE

TEST REPORT



CPRI

Test Report Number : CPRIBPLSTNBMISC23T0267 Date: 25 October 2023

Name and Address of the Customer : Elentric Industries Private Limited, Kendukuchi Lower Primary School, Guwahati, Elen Engineering, Bhattapara, Dharapur Palasbari Road, Kendukuchi Chowk, Garai, Kamrup Metropolitan, Assam – 781017

Name and Address of the Manufacturer : Elentric Industries Private Limited, Kendukuchi Lower Primary School, Guwahati, Elen Engineering, Bhattapara, Dharapur Palasbari Road, Kendukuchi Chowk, Garai, Kamrup Metropolitan, Assam – 781017

Particulars of Sample(s) Tested : 12 KV, 1250Amp, 26.3kA/3 sec. VCB Panel

Condition of sample(s) on receipt : New

Type : Elentric-11KV-Indoor-VCB Panel-EASYPACT-EXE

Description of test sample : Refer sheet 2 of 6

Serial Number(s) : Panel-Elentric/AIS/23/001

Number of Sample(s) Tested : One

Date(s) of Test(s) : 19 July 2023

CPRI sample code number(s) : STNBMISC23S1536(Panel), STNBMISC23S1537(VCB)

Details of sealing(s) of sample(s) : Nil

Particulars of test(s) conducted : Short time withstand current and peak withstand current tests

Test(s) in accordance with : As per customer's requirement & procedure generally followed and as per Cl. 7.6 (a) of IEC 62271-200, 2021

Standard/specification : Nil

Sampling Plan : Nil

Customer's Requirement : Test to be conducted on main circuit only

Deviations, if any : Test was conducted on main circuit only

Name of the witnessing persons

Customer's Representatives : Mr. Samsul Huda, Mr. Sazid Islam

Other than Customer's Representatives : Nil

Test subcontracted with and address of the laboratory : Nil

Documents constituting this report (in words)

Number of Sheet(s) : Six

Number of Oscillogram(s) : One

Number of Graph(s) : Nil

Number of Photograph(s) : One

Number of Test Circuit Diagram(s) : One

Number of Drawing(s) : Nine

(Prabakaran T)
Test Engineer

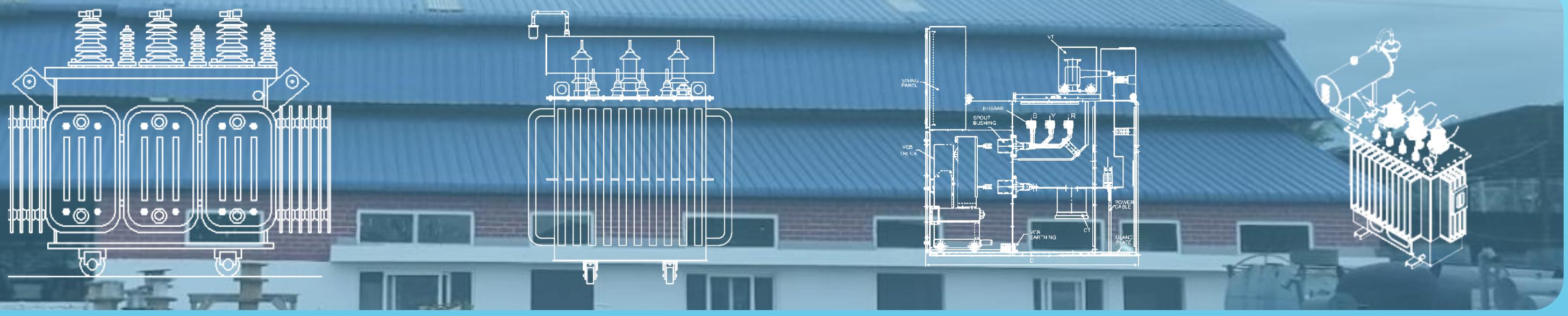


(Himangshu Roy)
Head of Division
Reviewed and Authorized by

Short Term Current and Peak Current
Withstand Test



**ELEN
GROUP**



TYPE TEST CERTIFICATE

CENTRAL POWER RESEARCH INSTITUTE



CPRI

Test Report Number	:	CPRIBPLSTNC23T0295	Date: 17 October 2023
Name and Address of the Customer	:	M/s. Elentric Industries Pvt. Ltd., Kendukuchi Chowk, Palasbari Road, Bhatta Para, Guwahati-781 017, Assam.	
Name and Address of the Manufacturer	:	M/s. Elentric Industries Pvt. Ltd., Kendukuchi Chowk, Palasbari Road, Bhatta Para, Guwahati-781 017, Assam. VCB Manufacturer: M/s. Schneider Electric	
Particulars of sample tested	:	12kV, 1250A, 20.3kA/03 secs, VCB Panel along with VCB	
Type	:	Elentric-11kV, Indoor VCB Panel-Easy Pact-EXE	
Description of test sample	:	12kV, 1250A, 20.3kA/03 secs, VCB Panel along with VCB	
Serial Number	:	Panel: Elentric/AIS/23/002 & VCB 10-2022-W11-1-0007	
Number of samples tested	:	One set	
Date(s) of Test(s)	:	24 July 2023	
CPRI Sample code Number(s).	:	STNC23S0264 (Panel), STNBMISC2351537 (VCB)	
Particulars of tests conducted	:	Degree of Protection IP-5X(Category-II)	
Test in accordance with	:	IEC 60529:2013	
Standard/specification	:		
Sampling Plan	:	Nil	
Customer's Requirement	:	Nil	
Deviations, if any	:	Nil	
Name of the witnessing persons	:		
Customer's representative	:	Shri. Samsul Huda, M/s. Elentric Industries Pvt. Ltd. Shri. Sazid Islam, M/s. Elentric Industries Pvt. Ltd.	
Other than customer's representative	:	Nil	
Test subcontracted with address of the laboratory	:	None	
Documents constituting this report (in words)	:		
Number of Sheets	:	Six	
Number of Oscillogram(s)	:	Nil	
Number of Graph(s)	:	Nil	
Number of Photograph(s)	:	Two	
Number of Test Circuit Diagram(s)	:	Nil	
Number of Drawing(s)	:	Five	

(K.V. Gangadhar Reddy)
Test Engineer

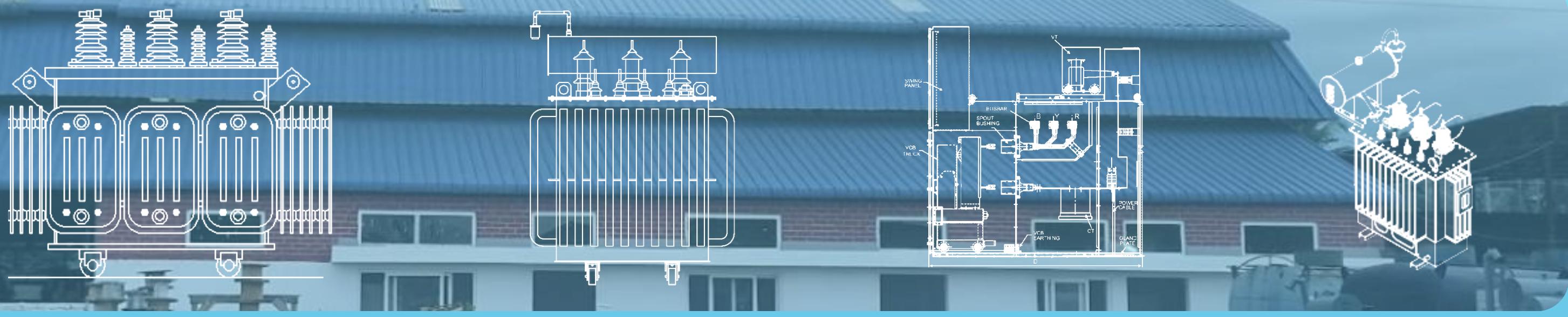


(Sarita Dongre)
Head of Division
Reviewed and Authorized By

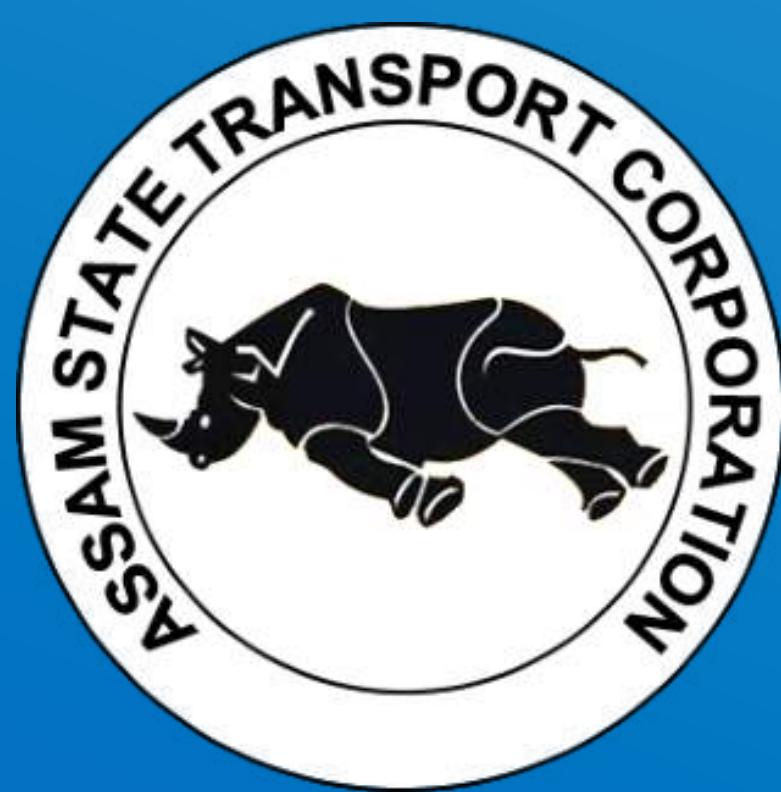
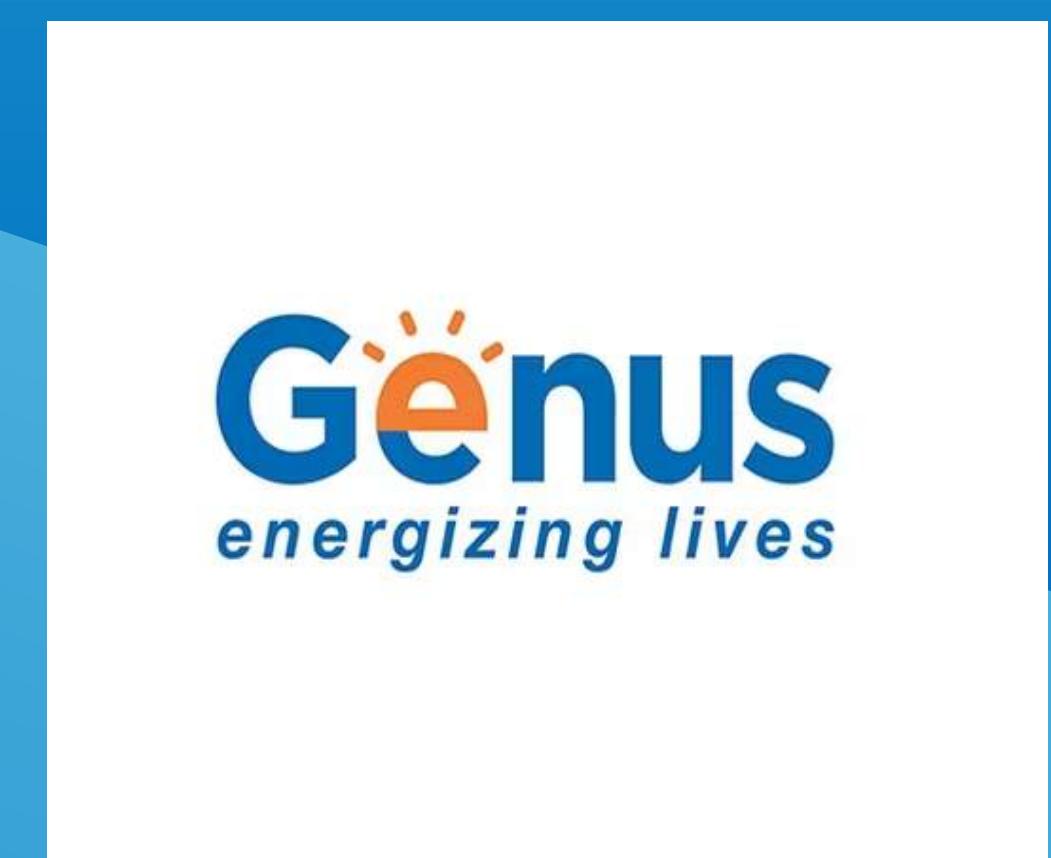
Ingression Protection Test



**ELEN
GROUP**

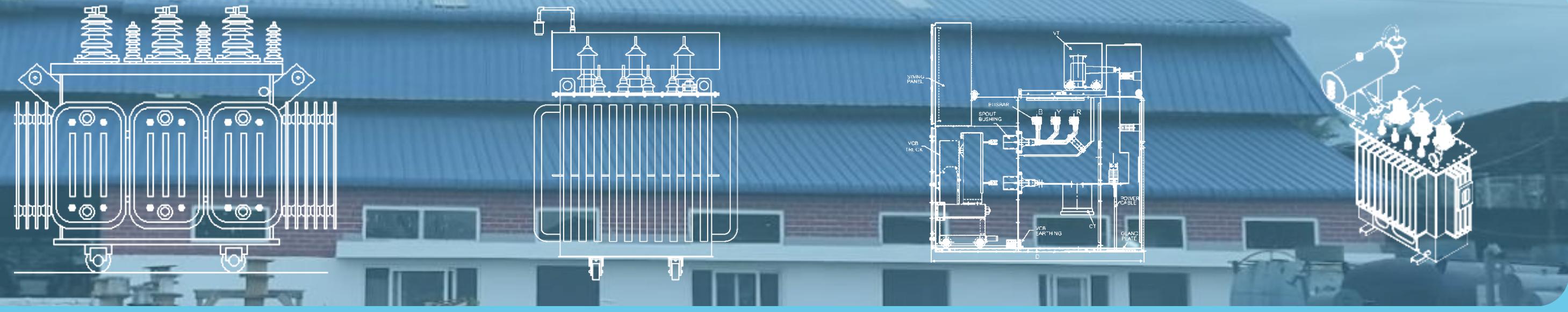


Our Clientele





**ELEN
GROUP**



After Sales

At Elen Group, our commitment to customer satisfaction extends beyond the point of purchase. Our After Sales Service is a cornerstone of our dedication to excellence.

Our service team, comprised of skilled technicians and support staff, stands ready to address any inquiries, provide technical assistance, and ensure the seamless operation of our transformers.



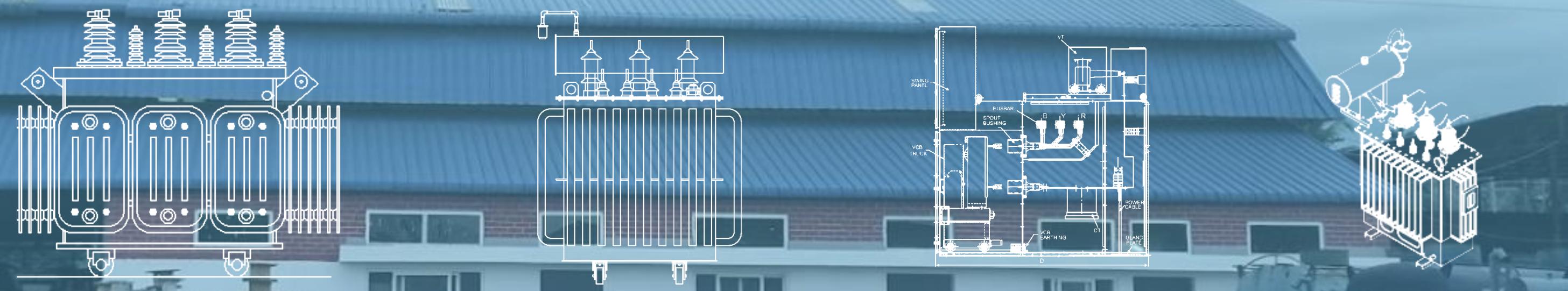
We believe that the true measure of a company's commitment lies in its after-sales support, and at Elen Group, we strive to exceed expectations, fostering lasting relationships with our valued clients by ensuring the continued performance and satisfaction with our products. Your peace of mind is our priority, and our after-sales service is a testament to our unwavering commitment to your success.

Applicable Standards

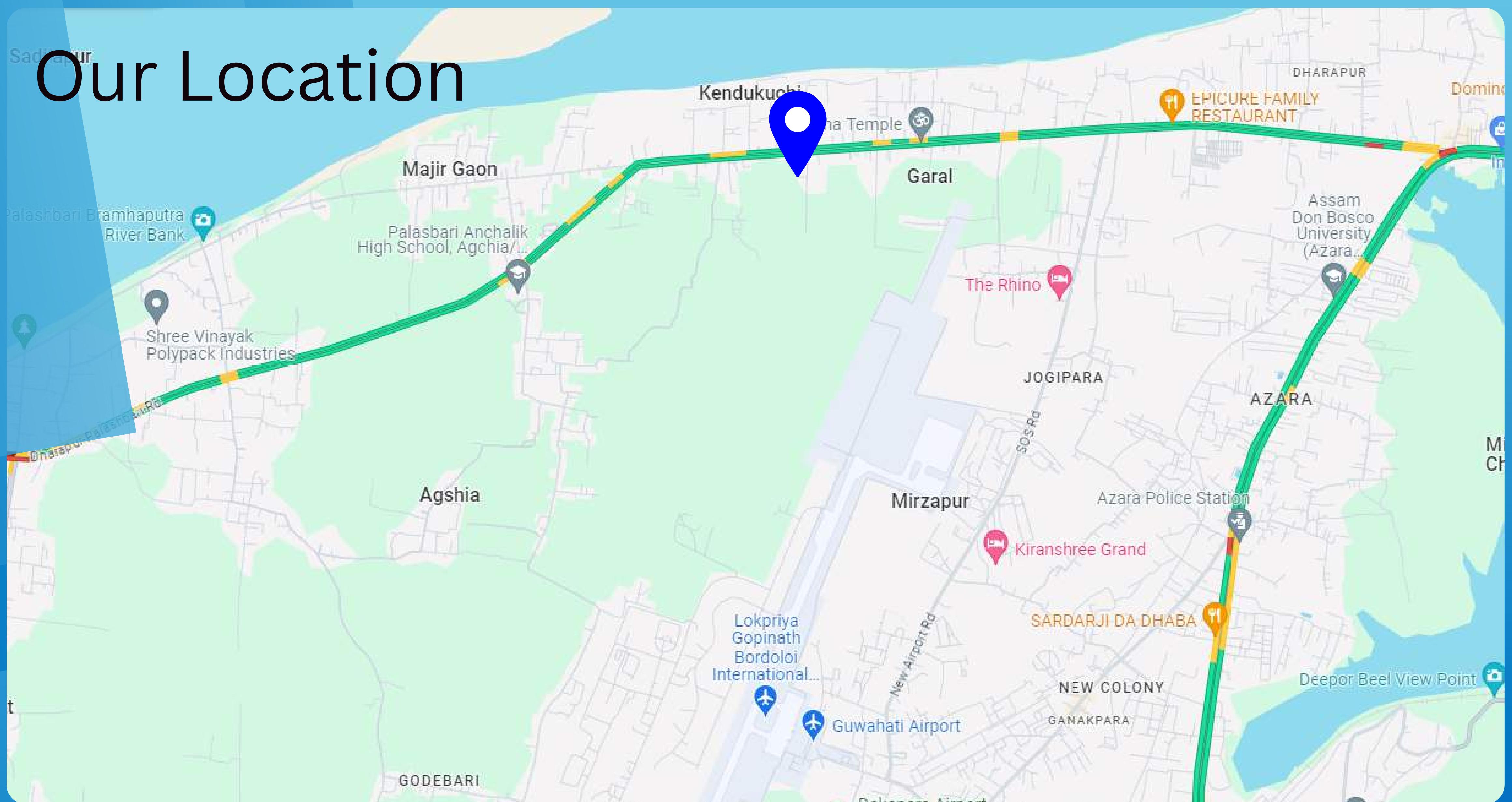
- IS 2026
- IS 1180
- IS 10028
- IS 4146
- IS 4201
- IS 2689:1989
- IS 60947
- IEC 61439
- IEE 142-2007
- IS 2309:1989
- IEC 62271
- IS 13118



**ELEN
GROUP**



Our Location



Mode of Communication

- **LGBI AIRPORT : 7 KM**
- **KAMAKHYA RAILWAY STATION : 11 KM**
- **GUWAHATI RAILWAY STATION : 18 KM**
- **PANDU PORT : 12 KM**
- **ISBT : 18 KM**

Contact Us

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