

# PLUTOTECH

## COMPANY PROFILE





# About Us

PLUTOTECH is a Thailand based industrial electromechanical service company, established in 2004, Presently our services are covering nationwide and Southeast Asia in several industrial sectors;

Our stand is clear; we make our customers be the champion of their accountability.

**WE EMPOWER PERFORMANCE**







# Vision

**WE MAKE EVERYONE TRUSTS AND  
WINS THE GAME OF PERFORMANCE**

We exist on our experts and creativity  
in our solution and service business  
of electro-mechanical syatems that  
make everyone trust and wins the  
game of performance.







# Mission

Our mission is to provide creative and trusted solutions and services. by our expertise in area of electro-mechanical systems to main industries, power plants, energy electric transportations and utility owners, across the AEC.

WE ARE COMMITTED TO CREATE VALUES,  
HAPPINESS AND MAKE DIFFERENCES  
TO OUR COMMUNITIES AND  
STAKEHOLDERS.







# Quality Policy

เป็นความครบถ้วนสมบูรณ์และถูกต้องตั้งแต่แรก  
เพื่อจริยธรรมและความสุขของลูกค้า  
และผู้มีส่วนร่วมในธุรกิจของเรา

Being complete and being right  
at the first time, ethically  
Customer and Stakeholder  
happiness is our Ultimate Goal!







# PLUTOTECH COMPANY

3 MAIN SERVICE CENTERS

250 SKILLED TECHNICIANS AND ENGINEERS.

5,000 SQM. WORKSHOP AREAS, 6 X20+4X5 TONS OVERHEAD CRANES ( IN 3 STRATEGIC LOCATIONS)

## YEAR 2004



May-2004  
Established Plutotech  
It was called U-Services(Saraburi)  
at the beginning stage  
( after took over ABB Service  
Workshop)

## YEAR 2012



Consolidation  
(share holders) and  
renamed to  
**Plutotech Company  
limited**

ESTABLISHED  
**PLUTOTECH  
KHONKAEN-  
CENTER**

## YEAR 2014



Established  
Plutotech-  
**Rayong-Center**

## YEAR 2017



ESTABLISHED  
**PLUTOTECH MALAYSIA**  
REPRESENTATIVE  
OFFICE



## SPECIAL FACILITIES

- 3m x 6.5 m tank-VPI Plant
- High voltage coil making shop
- Wire Arc Spray & HVOF-Metalizations
- Sand blasting and Glass Bead
- 3x 3 tons, 10 tons and 20 tons Dynamic Balancing Machines.

## SARABURI WORKSHOP





## SPECIAL FACILITIES

- 3m x 6.5 m tank-VPI Plant
- High voltage coil making shop
- Wire Arc Spray & HVOF-Metalizations
- Sand blasting and Glass Bead
- 3x 3 tons, 10 tons and 20 tons Dynamic Balancing Machines.

## RAYONG WORKSHOP





## SPECIAL FACILITIES

- 3m x 6.5 m tank-VPI Plant
- High voltage coil making shop
- Wire Arc Spray & HVOF-Metalizations
- Sand blasting and Glass Bead
- 3x 3 tons, 10 tons and 20 tons Dynamic Balancing Machines.

## KHONKHAEN WORKSHOP





# Services Scope

**Predictive and condition based.  
Failure analysis and Resolutions**

**Repair and Maintenance**

**Engineering services  
and solutions**

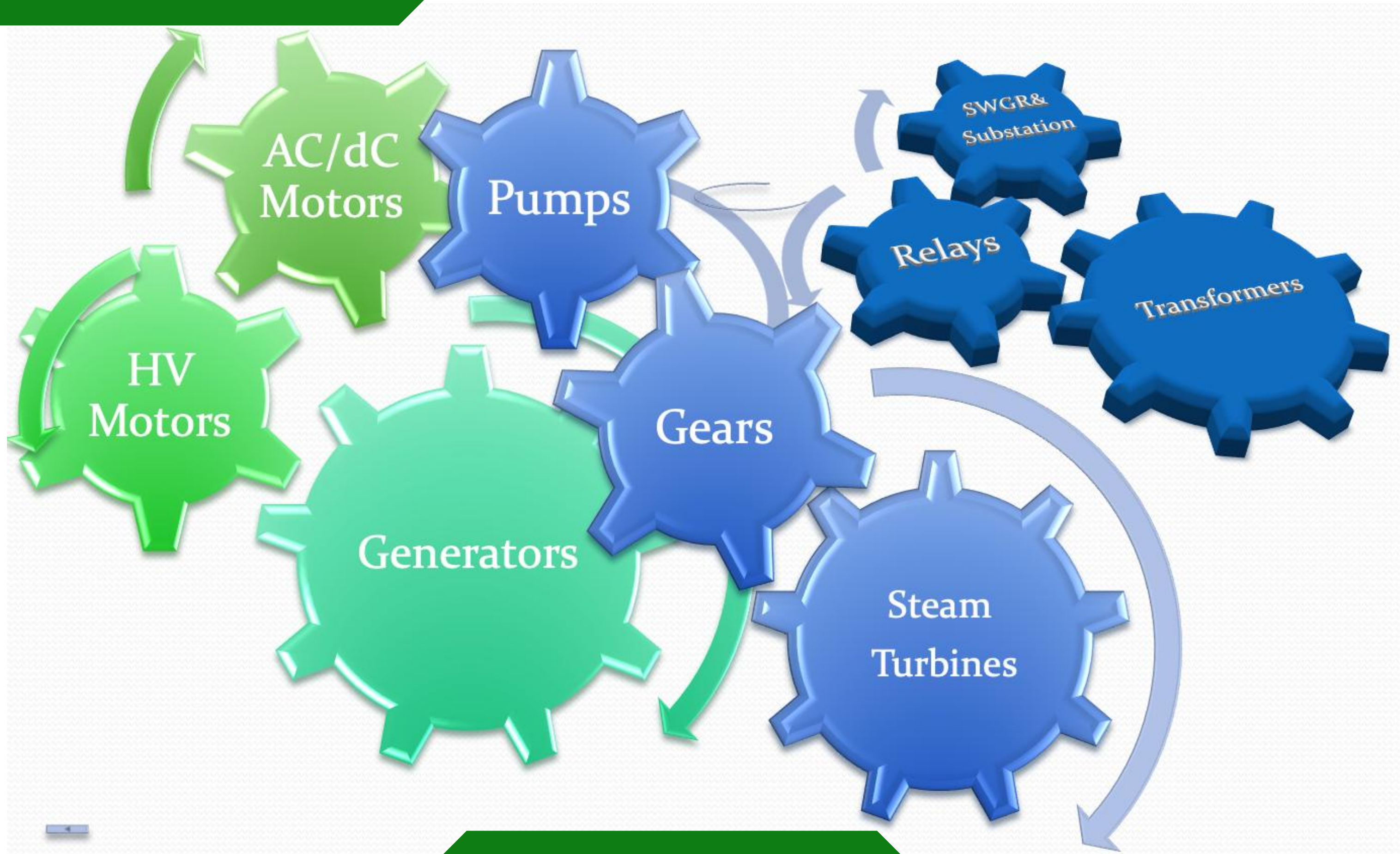
**Installation projects**

**Test & Commissioning**

**Modification  
Upgrading  
Rehabilitation**

**New Supply  
Spare parts  
Service Contracts**



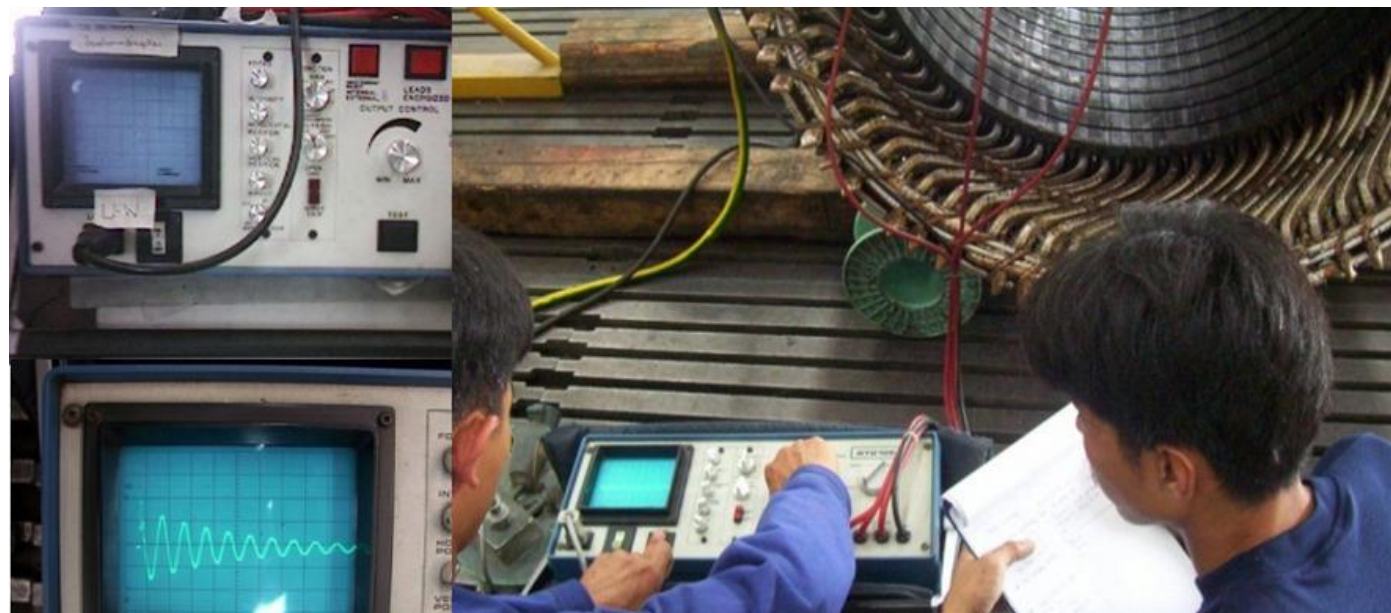




# WORKSHOP AREA TESTING STATION

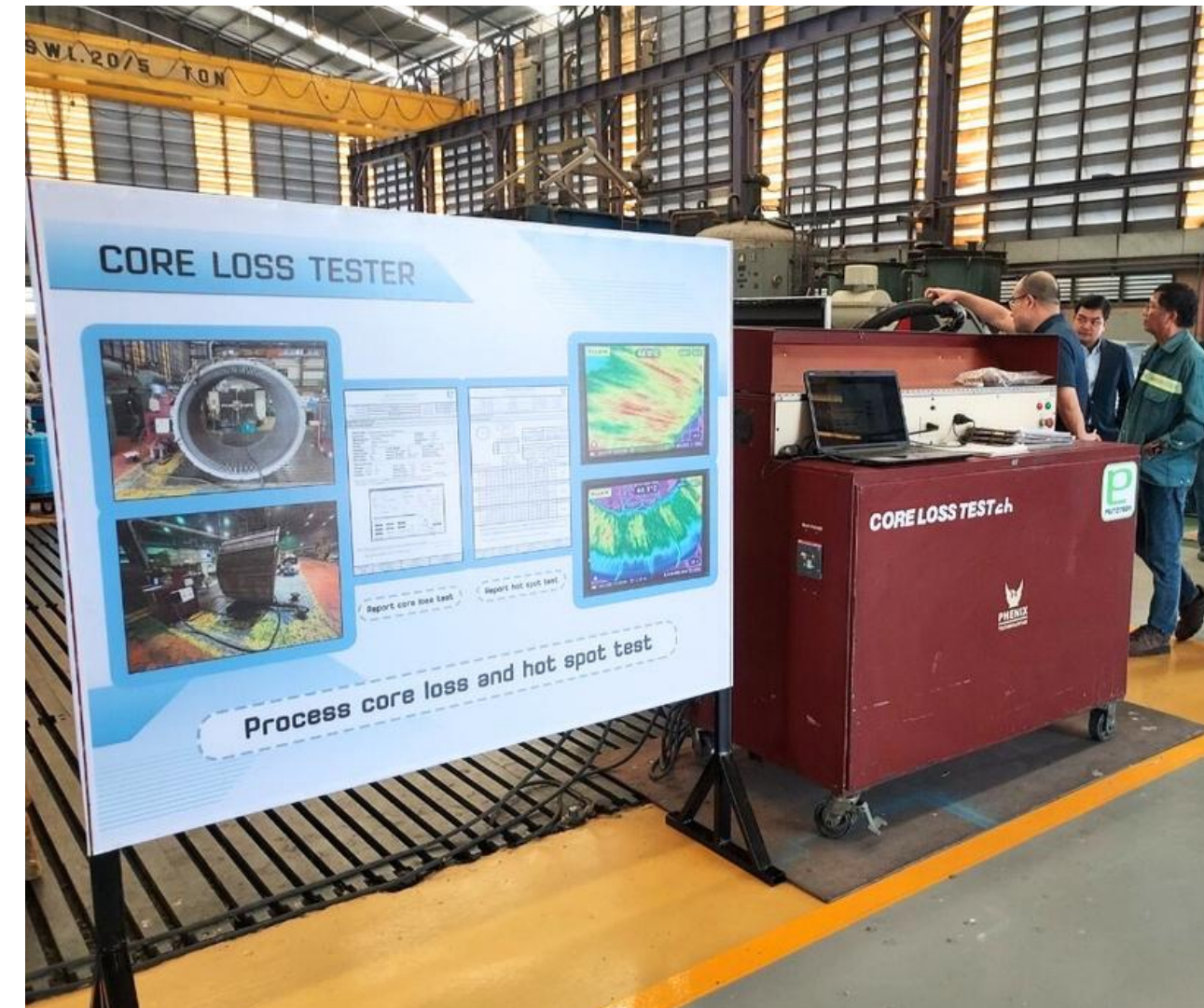


HV 12 KV SURGE COMPARISON TESTER & 12KVDC HIPOT



HV AC HIPOT TESTER 24

KV



CORE LOSS TESTER



# WORKSHOP AREA MECHANICAL FITTING AREA





# WORKSHOP AREA MACHINING & MILLING AREAS





# WORKSHOP AREA

## DYNAMIC BALANCING M/C



3 Tons



10 Tons



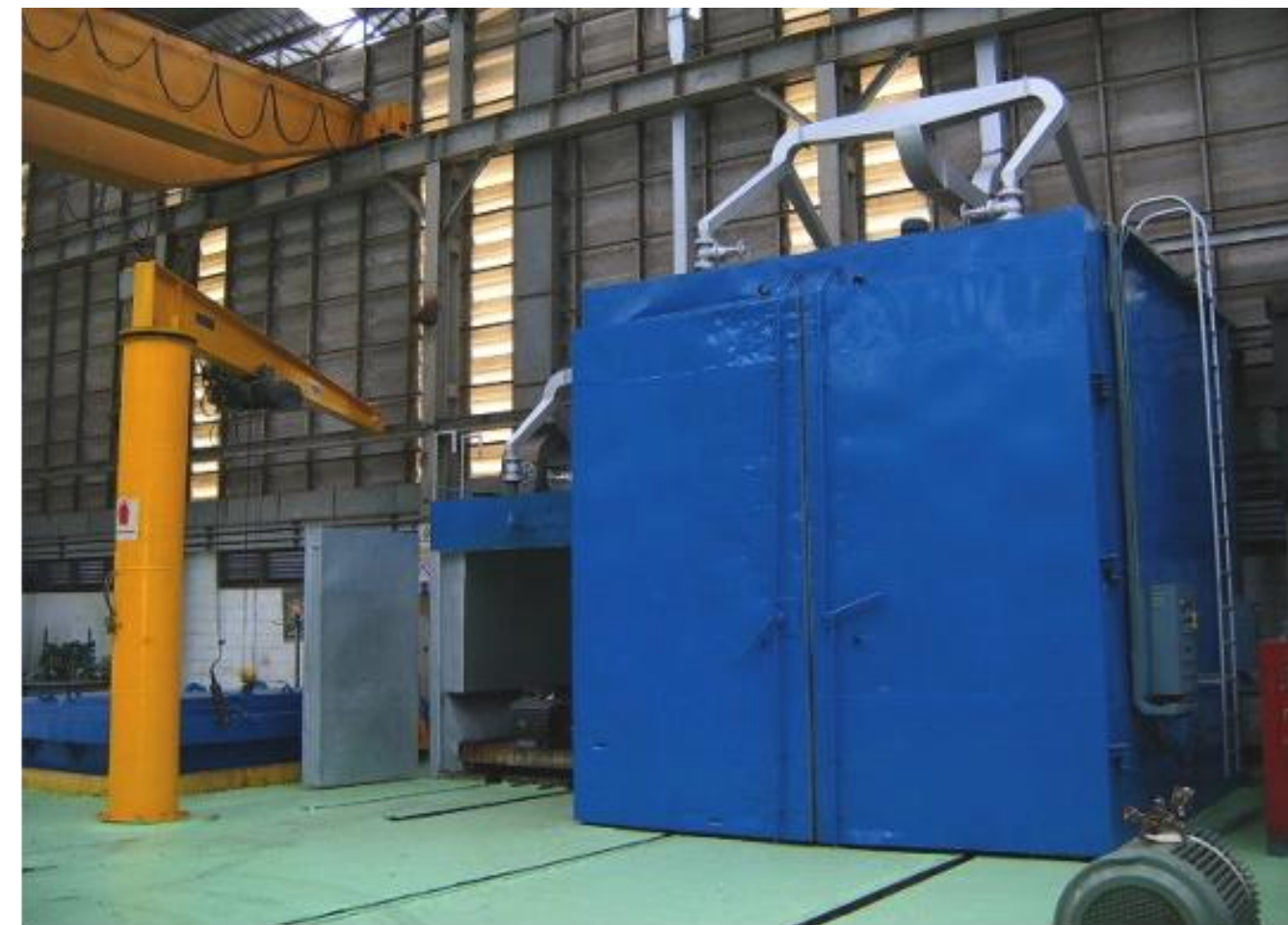
20 Tons



# WORKSHOP AREA ELECTRIC DRY-OUT OVENS



Auxiliary unit = 2x2x2  
M3

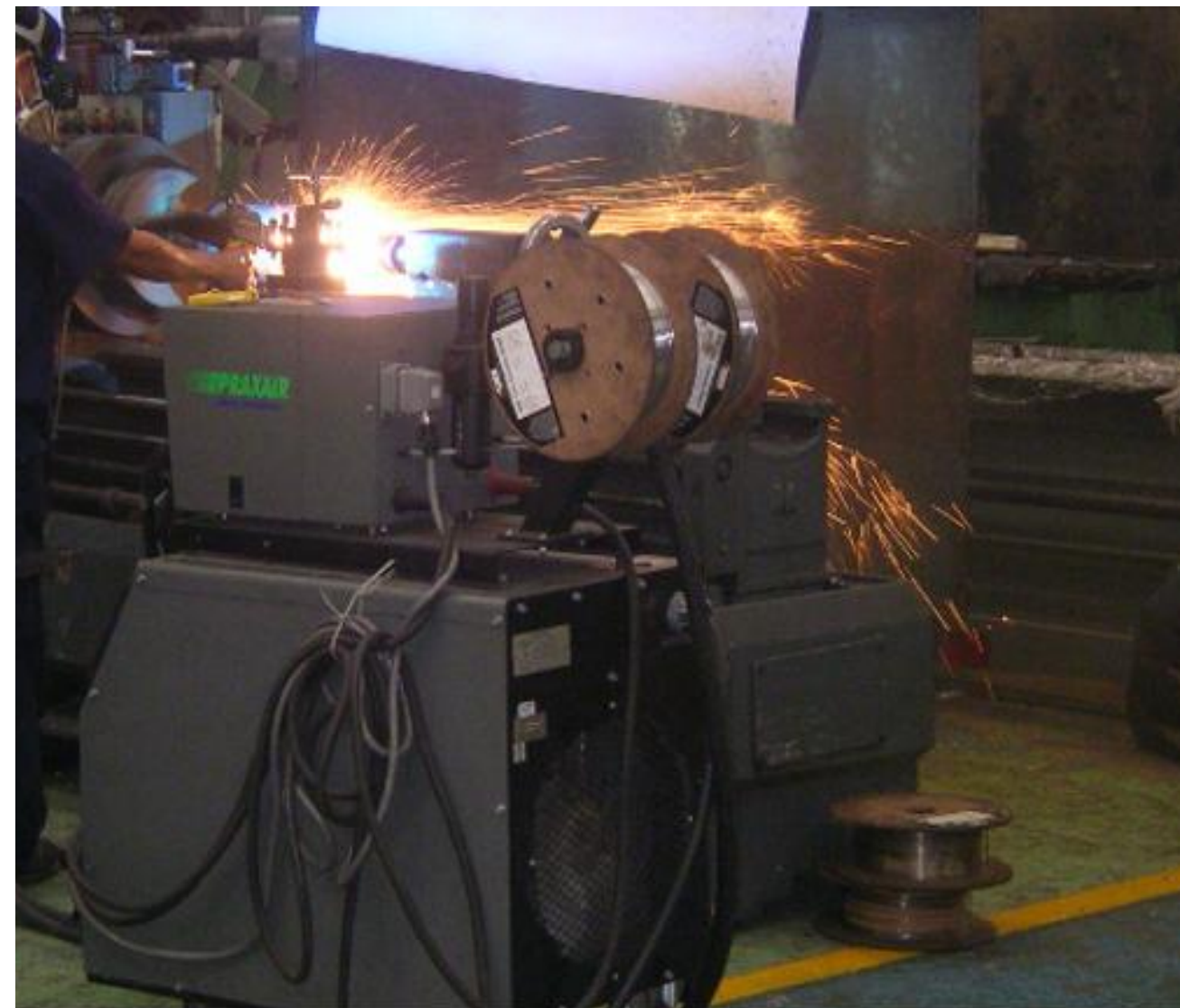


Main unit = 4x4x4  
M3



# WORKSHOP AREA

## WIRE ARC SPRAY - METALLIZATION - LASER WELDING





# WORKSHOP AREA

## HIGH VOLTAGE REWINDING





# WORKSHOP AREA

## LOW VOLTAGE REWINDING

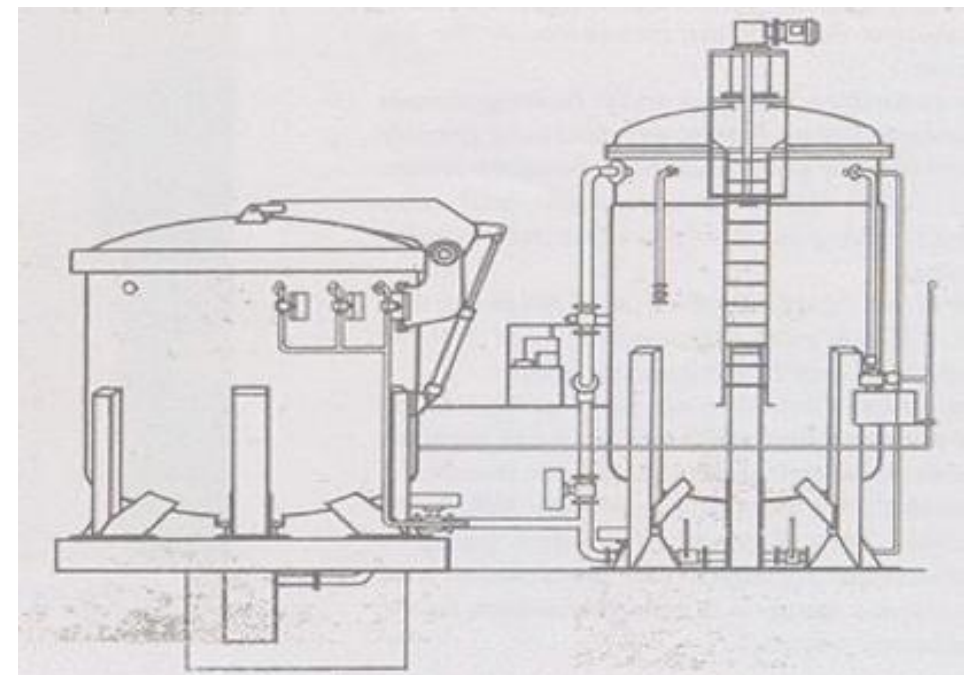


PROGRAMABLE WINDING MACHINE



# WORKSHOP AREA

## VPI(Vacuum Pressure Impregnation) Plant



**IMPREGNATION VACUUM TANK DIAMETER = 3.0 M, DEPTH = 4.5 M**

**RESIN: EPOXY RESIN-EPOXYLITE 578E**

**SINGLE COMPONENT EPOXY RESIN**

**PLANT CYCLE: 3 ALTERNATIVES**

- **LOW VOLTAGE WINDING**
- **HIGH TENSION WINDING**
- **11 KV STATOR WINDING**

**VACUUM PROCESS CAPABILITY: 0.2 MILLI-BAR**

**TANK PROCESS PRESSURE=6 BARS**

**STORAGE TANK CAPACITY: 15,000 LITRES**

**COMMENTS :**

**IT IS THE LARGEST VPI PLANT IN THAILAND AND SOUTH EAST ASIA**



# TOOL AND EQUIPMENT



HIGH FREQUENCY INDUCTION HEATING  
MACHINE



ELECTRICAL  
TOOLS



# QUALITY SYSTEM



• FOLLOW THE EASA MANUAL  
FORELECTRICAL AND MECHANICAL  
MACHINE SERVICE AND REPAIRING

- ISO9001:2015
- ISO45001:2018
- AEMT-STANDARD PRACTICE



Certificate Number TH12/6552





# QUALITY SYSTEM

## CERTIFICATION FOR EXPLOSIVE ATMOSPHERES

IEC EX COC

CERTIFIED SERVICE

FACILITY

**IECEX CoC**  
**Certified Service Facility**

INTERNATIONAL ELECTROTECHNICAL COMMISSION  
IEC Certification System for Explosive Atmospheres  
for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX SIR S0023** Page 1 of 1 Certificate history:  
Status: **Current** Issue No: 1 Issue 1 (2021-12-13)  
Date of Issue: 2021-12-13 Issue 0 (2014-08-21)

Applicant: **Plutotech Company Limited**  
Rayong Branch  
18/18 Charemphattana Road  
Huaypong Muang  
Rayong 21150  
Thailand

Type of Service: **Repair and Overhaul according to IEC 60079-19**

Type of Protection: **Flameproof Enclosure "d", Increased Safety "e", Type of Protection "n"**

Scope of Service: **Repair and overhaul of rotating machines to Ex d, Ex e and Ex n**

Locations covered by this Certificate:

**Plutotech Company Limited**  
Rayong Branch  
18/18 Charemphattana Road  
Huaypong Muang  
Rayong 21150  
Thailand

Facility Audit Report:

GB/SIR/FAR14.0003/00 GB/SIR/FAR14.0003/01 GB/SIR/FAR14.0003/02  
GB/SIR/FAR14.0003/03 GB/SIR/FAR14.0003/04

This certificate is issued as verification that the Service Facility and associated locations were assessed and found to comply with the IECEx Scheme requirements, relating to the type and scope of service listed above. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 03 and Operational Documents as amended.

Approved for issue on behalf of the IECEx Certification Body: **Matthew Fielding**  
Position: **Audits Team Manager**

Signature: (for printed version)  
Date: (for printed version)

1. This certificate and schedule may only be reproduced in full.  
2. This certificate is not transferable and remains the property of the issuing body.  
3. The Status and authenticity of this certificate may be verified by visiting [www.iecex.com](http://www.iecex.com) or use of this QR Code.

Certificate issued by:  
**CSA Group Testing UK Ltd**  
Unit 6, Hawarden Industrial Park  
Hawarden, Deeside CH5 3US  
United Kingdom

**CSA GROUP**



EASA MEMBER







# MOTOR SERVICES

- MOTOR RUNNING CONDITION ANALYSIS
- MOTOR TROUBLE SHOOTING
- OVERHAUL
- REWINDING STATOR, ROTOR
- MECHANICAL REPAIRING, HOUSING, SHAFT, SLEEVE BEARING ELECTRICAL TESTING
- ROTOR DYNAMIC AND FIELD BALANCING
- MOTOR PROTECTION TESTING
- MOTOR INSTALLATION, ALIGNMENT AND COMMISSIONING





# GENERATOR SERVICES

- GENERATOR RUNNING CONDITION ANALYSIS TROUBLE SHOOTING
- GENERATOR OVERHAUL
- REWINDING STATOR, ROTOR, EXCITER MECHANICAL REPAIRING
- COOLING MAINTENANCE AND TESTING ELECTRICAL TESTING
- DYNAMIC AND FIELD BALANCING
- AVR AND GENERATOR PROTECTION TESTING





# STEAM TURBINE SERVICES

- MINOR INSPECTION
- MAJOR OVERHAUL
- ROTOR DYNAMIC BALANCING
- ROTOR RE-BLADING
- SHAFT JOURNAL AND BEARING REPAIRING
- TURBINE VIBRATION ANALYSIS AND TROUBLE SHOOTING
- INSTALLATION AND ALIGNMENT





# ELECRIFICATION SERVICES

- DESIGN AND ENGINEERING POWER DISTRIBUTIONS
- SWITCHGEAR RETROFIT PROJECT
- MDB & MCC SWITCHGEAR DESIGN ENGINEERING AND SUPPLY
- MV SWITCHGEAR SUPPLY AND INSTALLATON SERVICE





# ELECRIFICATION SERVICES

## SWITCHGEAR.

- PM AND CM
- ROUTINE MAINTENANCE AND TESTING; CLOSE-OPENED TIME, IR, CONTACT RESISTANCE
- REPAIR/REPLACE ELECTRO- MECHANICAL COMPONENTS
- COMMISSIONING TEST AND SPECIAL TEST
- FUNCTION AND OPERATING CLOSE-TRIP TEST
- CONTACT RESISTANCE TEST
- IR, HIPOT TEST
- INSULATION POWER FACTOR TEST (TAN-DELTA)





# ELECRIFICATION SERVICES

## TRANSFORMER

POWER AND DISTRIBUTION TRANSFORMER MAINTENANCE,  
SERVICE AND COMMISSIONING-TESTING

- OIL SAMPLING FOR DGA AND BREAKDOWN TEST
- OIL FILTRATION AND PURIFY MAINTENANCE TESTING
- COMPONENT REPAIRING
- ONSITE AND WORKSHOP OVERHAUL
- INSULATION POWER FACTOR AND HIPOT TEST
- COMMISSIONING TEST WINDING AND WINDING
- INSULATION, RATIO, VECTOR- GROUP, INSULATION POWER FACTOR TEST
- OIL SAMPLING FOR DGA AND BREAKDOWN TEST
- OIL FILTRATION AND PURIFY





# ELECRIFICATION SERVICES

## PROTECTIVE RELAY

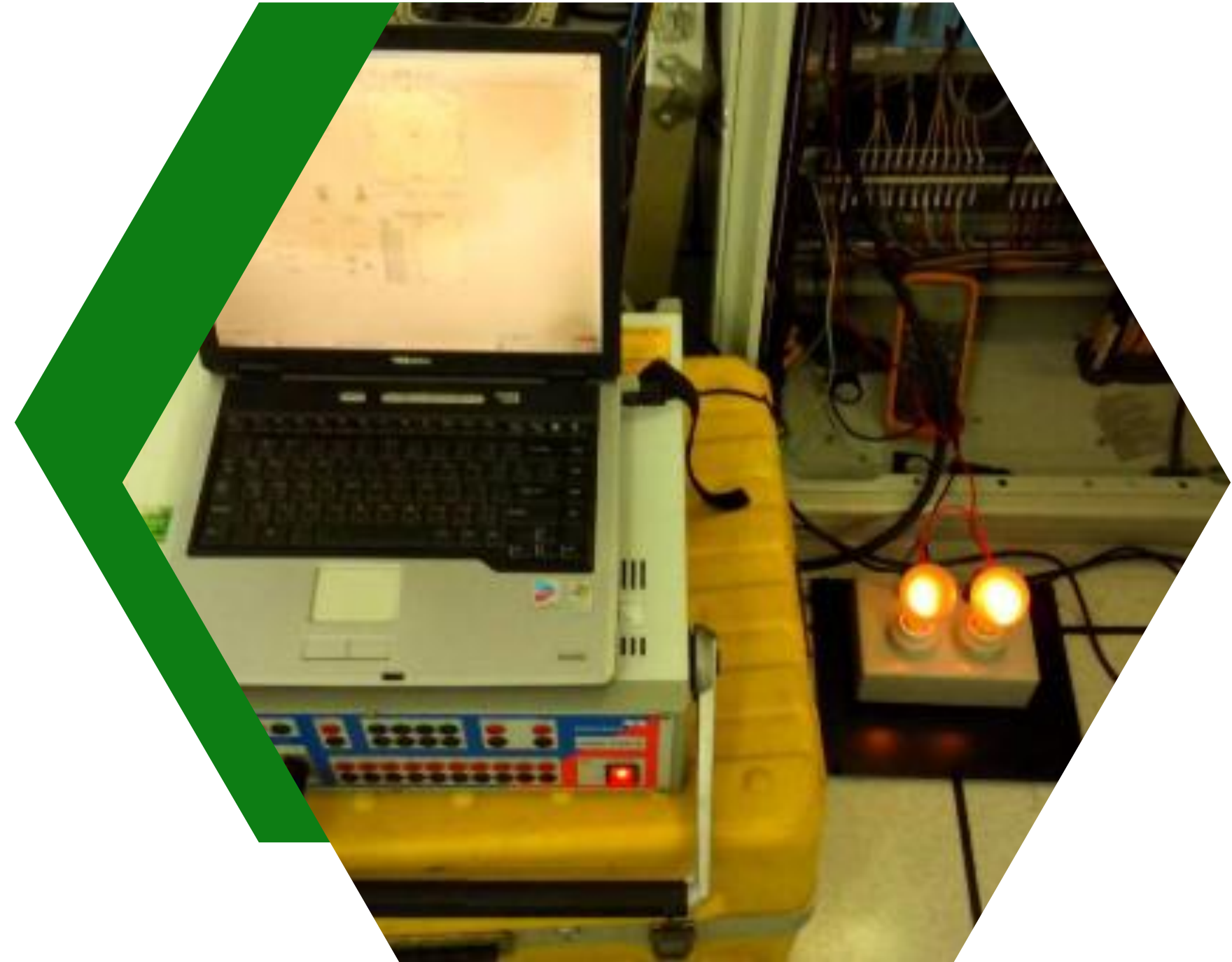
### CALIBRATION AND TESTING

- Characteristic test
- Service setting test
- Trip/alarm function test
- Calibration and repairing

### UPGRADE AND REPLACEMENT

### NEW INSTALLATION

### RELAY CO-ORDINATION









## EFD HF INDUCTION HEATER

ขนาด : กว้างXยาว  
120x150 cm.

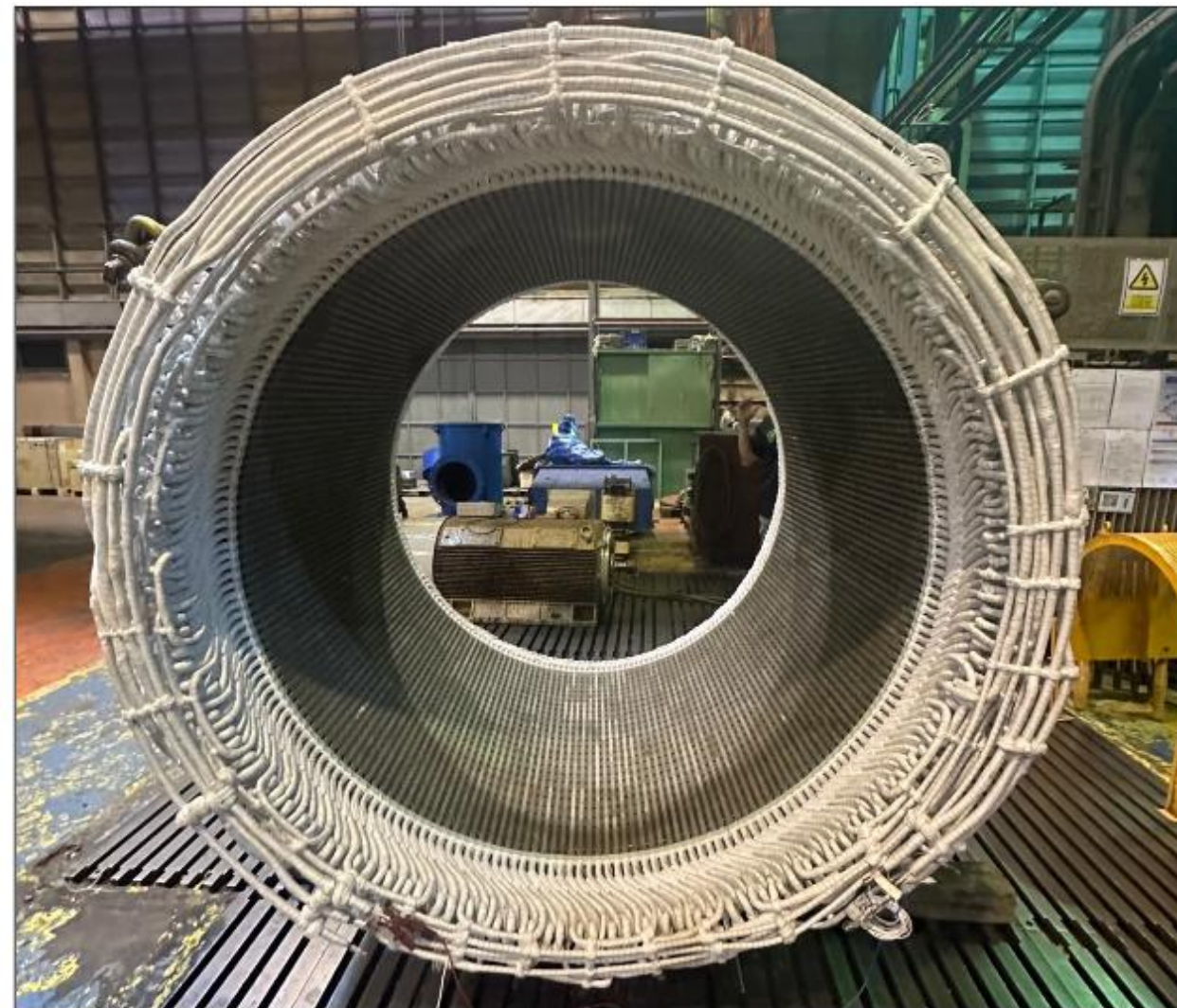


PANJAPOL PULP INDUSTRY PUBLIC COMPANY LIMITED  
Remove bearing



## STATOR COIL PLACEMENT

ขนาด : กว้างXยาว  
120x150 cm.



**MALAKOFF POWER BERHAD**  
After coil placement and Circuit Connection



## MANUFACTURE COIL

ขนาด : กว้างXยาว  
120x150 cm.



**MALAKOFF POWER BERHAD**  
Manufacture coil – Completed coil



## High Voltage Coil&VPI

ขนาด : กว้างXยาว  
125x180 cm.

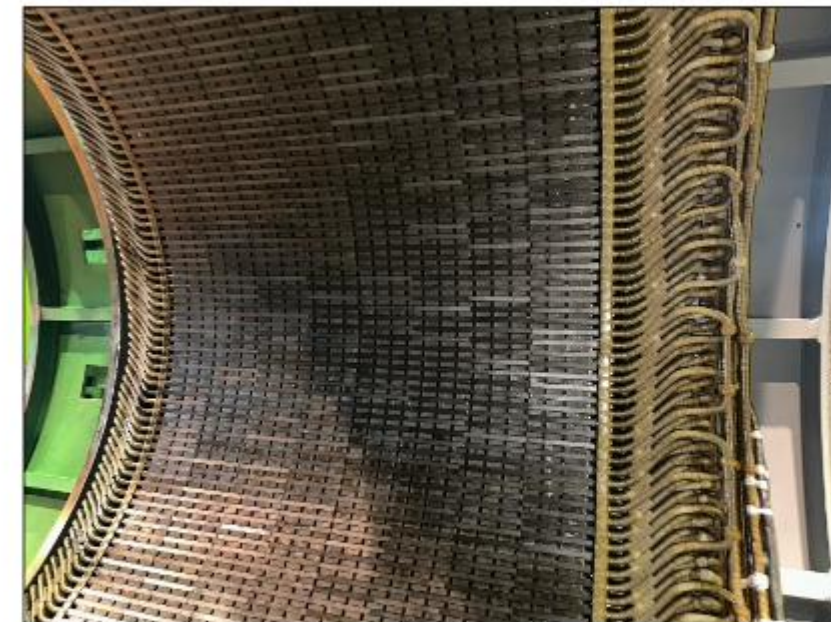


VPI-Plant



## COILS MANUFACTURING PRODUCTS

ขนาด : กว้างXยาว  
120x150 cm.





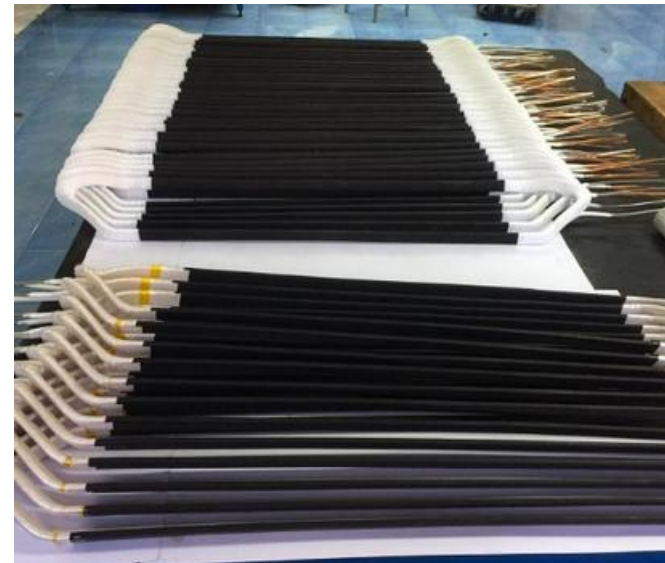
# Reference : Customer





# Some - Reference

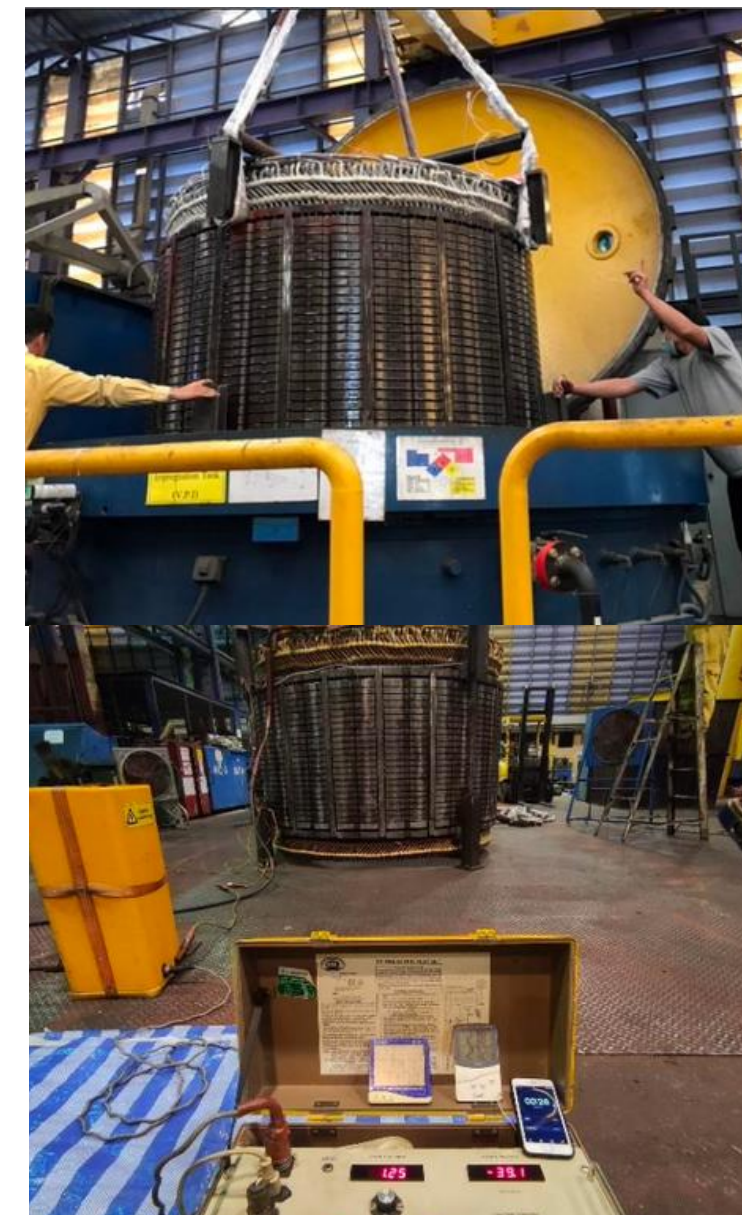
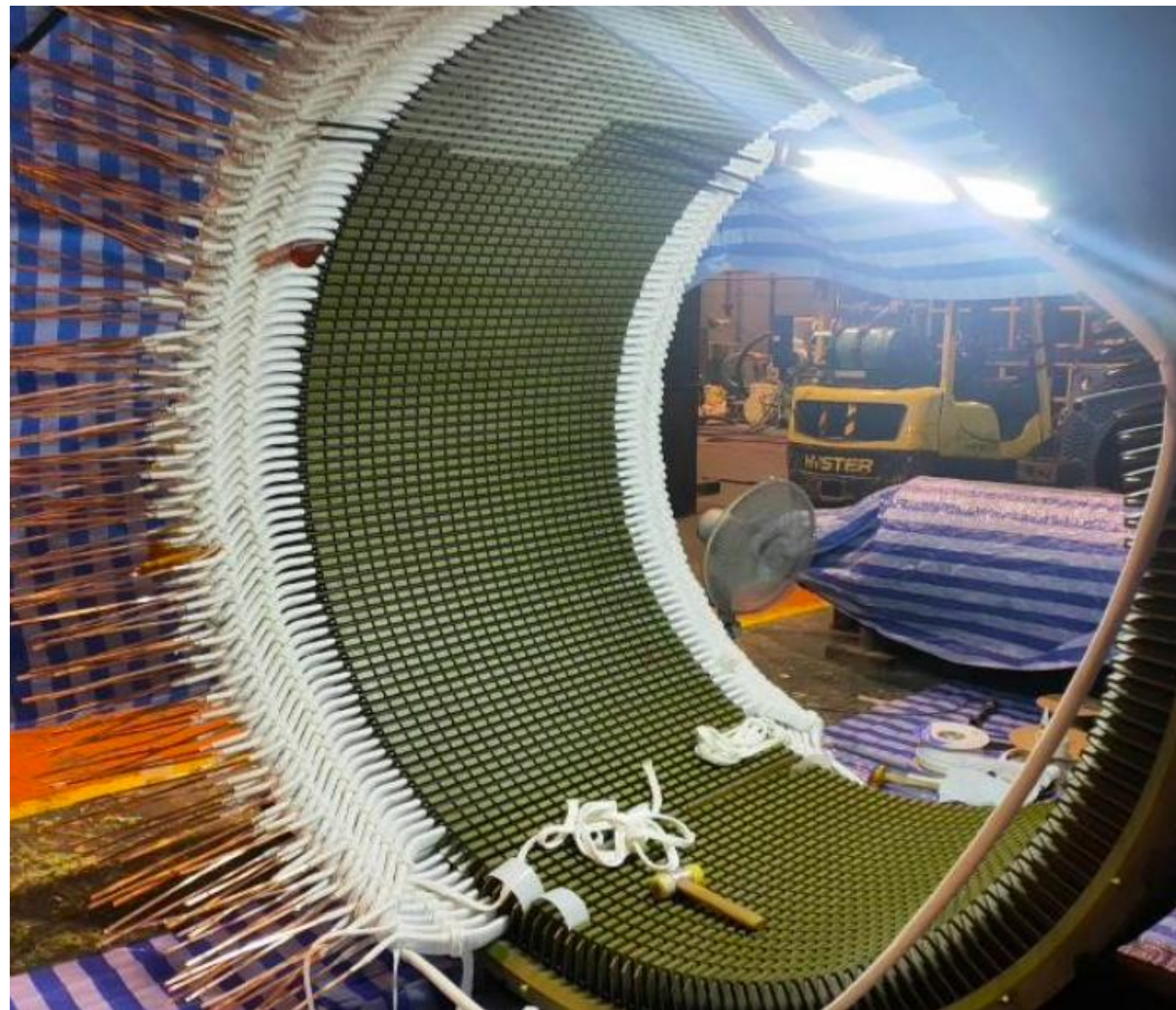
**THE MOTOR STATOR REWINDING AND GLOBAL VPI (YEAR 2022) : 4220KW, 11000V**  
**Plant: Jimah O&M Sdn Bhd. / Jimah Power Plant, Malaysia**





# Reference

**THE MOTOR STATOR REWINDING AND GLOBAL VPI (YEAR 2022): 4150KW, 11000V**  
**Plant: MALAKOFF POWER BERHAD / Tanjung Bin Power Plant, Malaysia**





# Reference

**THE MOTOR STATOR REWINDING AND GLOBAL VPI (YEAR 2023) : 2750KW, 11000V**  
**Plant: MALAKOFF POWER BERHAD / Tanjung Bin 4, Malaysia**





# Reference

**RESTACK & REWIND STATOR (YEAR 2023) : ELIN Motoren: 12000KW, 11000V**  
**Plant : Linde (Thailand) Public Company Limited**





# Reference

**RENEW SHAFT & REWIND STATOR , ROTOR (Y2019) : "ABB" 2100KW.6600V.**  
**Plant : The Siam Cement (Kaeng Khoi) Company Limited**

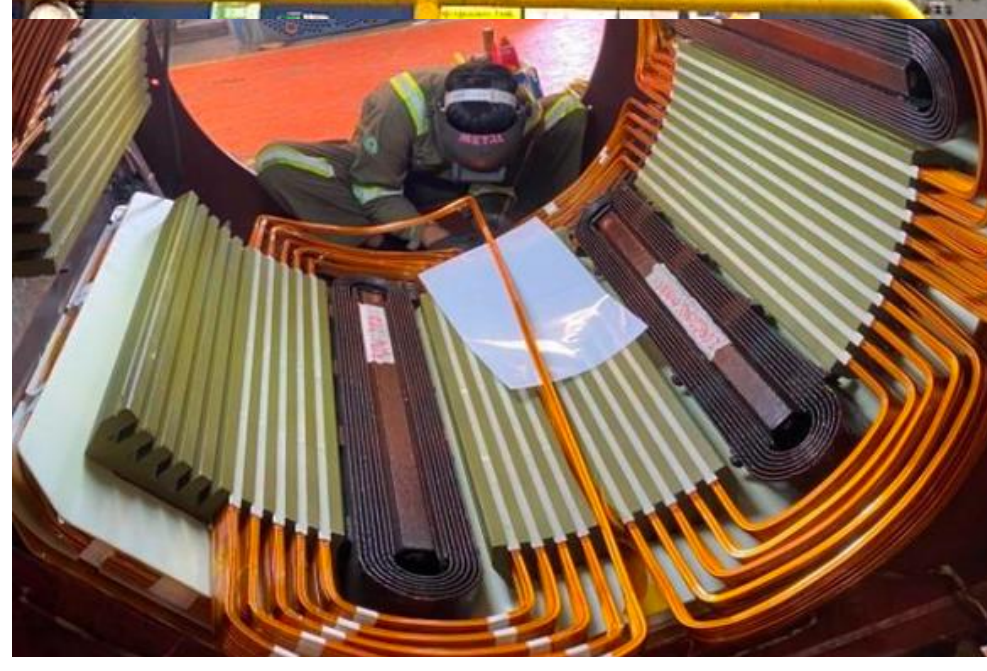




# Reference

**REWIND STATOR DC MOTOR (Y2022) :DC MOTOR 1650KW.**

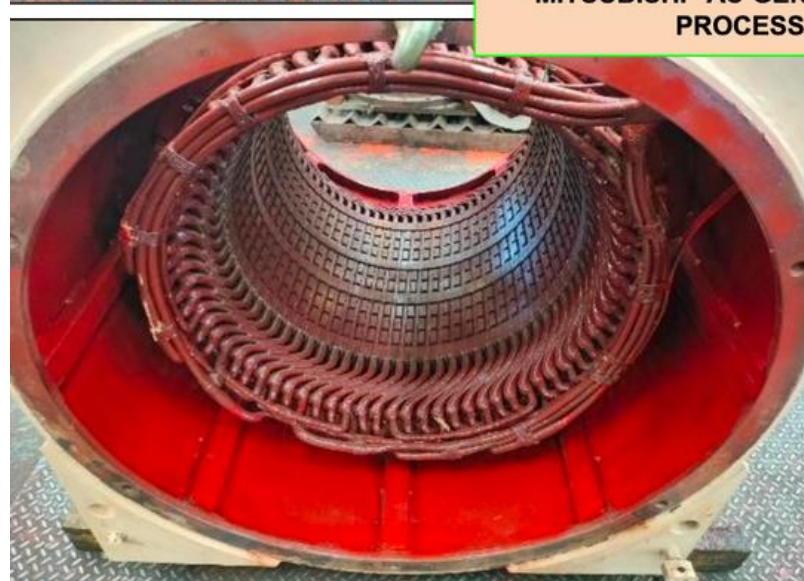
**Plant : POSCO-Thainox Public Company Limited**





# Reference

**AC GENERATOR OVERHAULED (Y2022) : "MITSUBISHI" 750KVA.PRI.3300V**  
**Plant : Mae Sariang hydroelectric power plant project**



"MITSUBISHI" AC GENERATOR OVERHAULED  
PROCESS, YEAR 2022

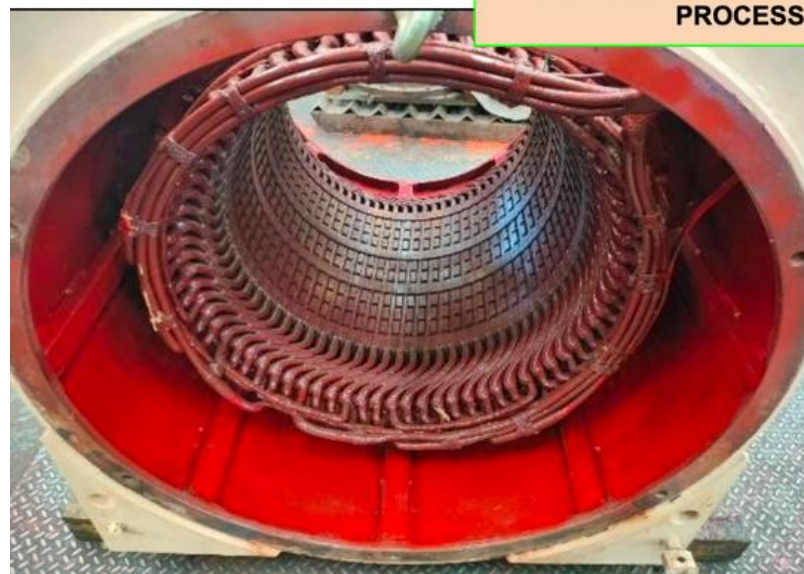


# Reference

**AC GENERATOR OVERHAULED (Y2021) :NEWAGE STAMFORD 540/432KVA/KW., PRI.400V.**  
**Plant : Mae Haad hydroelectric power plant project (Chiang Mai)**



"MITSUBISHI" AC GENERATOR OVERHAULED  
PROCESS, YEAR 2022

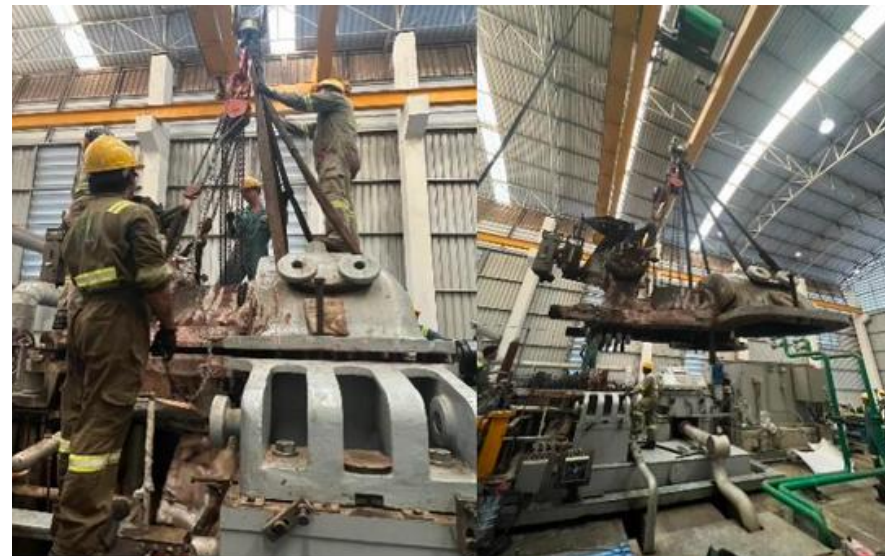




# Reference

**MAJOR OVERHAULED GENERATOR & STEAM TURBINE (YEAR 2023) : 9.9MW**

**Plant:** โรงไฟฟ้าพลังงานสะอาดเถิน





# Reference

**MAJOR OVERHAULED GENERATOR & STEAM TURBINE (YEAR 2023) : 40MW**

**Plant: PANJAPOL PAPER INDUSTRY COMPANY LIMITED**





# Reference

**MAJOR OVERHAULED GENERATOR & STEAM TURBINE (YEAR 2023) : 7.5MW**

**Plant: UNITED PAPER PUBLIC COMPANY LIMITED**





# Reference

**MAJOR OVERHAULED GENERATOR & STEAM TURBINE (YEAR 2022) : 9.9MW**

**Plant:** โรงไฟฟ้าพลังงานสะอาดบ่อพลอย





# Reference

**MAJOR OVERHAULED GENERATOR & EQUIPMENT REPAIR (YEAR 2018) : 12.5MW**  
**Plant: E-SAAN SUGAR INDUSTRY CO.,LTD. (KALASIN)**





# Reference

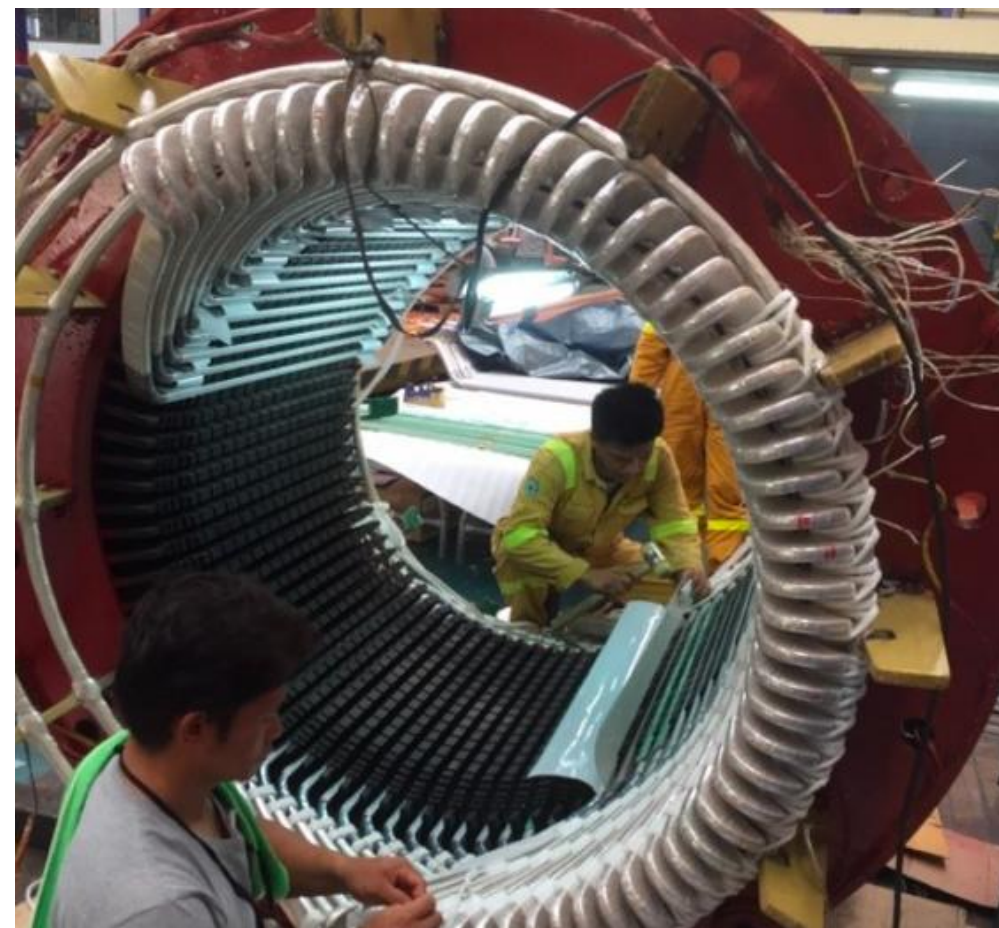
**Overhaul and Replace New Turbine Rotor , Overhaul Reduce Gearbox (YEAR2016) : 10 MW**  
**Plant: Tha Chang Oil Palm**





# Reference

**MAJOR REWIND NEW COIL AND VPI INSULATION SYATEM GENERATOR (Y2017) : 9.9 MW**  
**Plant: ADVANCE POWER CONVERSION CO.,LTD. (SITE: R-EEP )**





# Reference

**MAJOR REWIND NEW COIL AND VPI INSULATION SYSTEM (Y18) : 11.8 MW**

**Plant: UWC AMPHAN BIOMASS COMPANY LIMITED**





# Reference

**RE-INSULATION MAIN ROTOR WINDING OF GENERATOR (Y16) : 10 MW**

**Plant: ABB**







# Contact Us

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