



PLUTOTECH COMPANY LIMITED

64MOO5 PAHOLYOTHIN ROAD., HUAYBONG, CHALERMPRAKIAT SARABURI 18000, Thailand TEL. +66 36 - 275 353 to 55 FAX. +66 36 - 275 338

Website: www.plutotech.co.th, E-mail: sales@plutotech.co.th

HQ: SARABURI

KHONKAEN

RAYONG

MALAYSIA



















PLUTOTECH Company Presentation



About **PLUTOTECH**

PUTOTECH 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 DERFORMANCE



About Plutotech

We are in electro-mechanical service industry

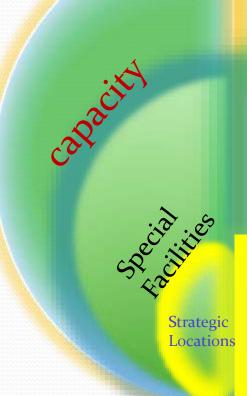
we provide variety <u>maintenance</u>-services, <u>engineering</u>-services and engineering <u>solutions</u>

to our OEMs, industrial plants, powerutilities and large commercial buildings

workshop based and field service based.



About **PLUTOTECH**



3 MAIN SERVICE CENTERS
250 SKILLED TECHNICIANS AND ENGINEERS.

5,000 SQM. WORKSHOP AREAS, 6 x20+4x5 TONS OVERHEAD CRANES (IN 3 STRATEGIC LOCATIONS)

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.

Plutotech-Saraburi Center
Plutotech-Rayong Center
Plutotech-Khonkaen Center
PlutotechMRRD-Malaysia Representative Office

Our-History



Established Plutotech-Rayong-Center

Established Plutotech Malaysia

Established Plutotech-

Khonkaen-Center

2014

2017

2012

Consolidation(share holders) and renamed to

Plutotech

Company limited

2004

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





Repair and Maintenance

Engineering services and solutions

Installation projects

Predictive and condition based. Failure analysis and Resolutions

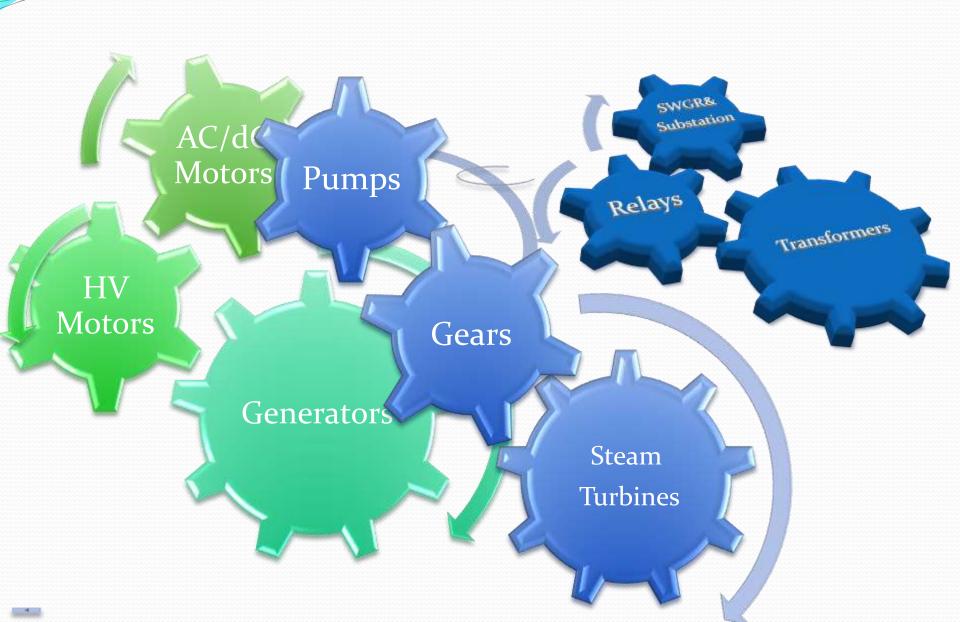
Test & Commissioning

Modification
Upgrading
Rehabilitation

New Supply
Spare parts
Service Contracts

PLUTOTECH services for:





Our customers-segments











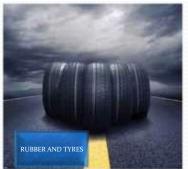
















PUTOTECH- Service Network



KHONKAEN-service center.

 Located on Sirchant Road, Muang, Khonkhaen

SARABURI- Service Center (HQ)

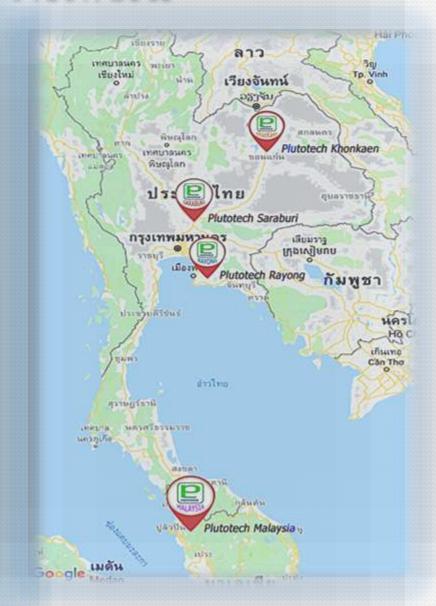
- Located at Phahoyothin Raod, 8Km north of Muang Saraburi,or 110 km north of Bangkok
- It is our excellent and largest capacity for workshop servicing

RAYONG-service center.

 located at Huaypong, Maptaput, Muang, Rayong

PLUTOTECH-MRRD Sdn Bhd. MALAYSIA

Located in Kulim, north of Malaysia





PLUTOTECH. SARABURI WORKSHOP











PLUTOTECH. RAYONG WORKSHOP











PLUTOTECH. KHONKHAEN WORKSHOP











WORKSHOP AREA







MACHINING & MILLING AREAS









MACHINING AREA













WIRE ARC SPRAY - METALLIZATION









MECHANICAL FITTING AREA









MECHANICAL FITTING AREA









HIGH VOLTAGE REWINDING





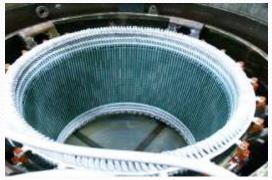






HIGH VOLTAGE COIL REWINDING













ELECTRIC DRY-OUT OVENS





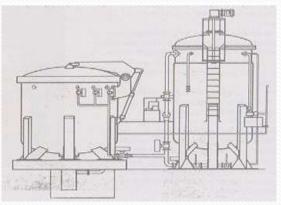
Auxiliary unit = 2x Mainsunit = 4x4x4 M3





VPI (Vacuum Pressure Impregnation) **Plant**





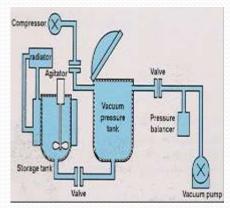


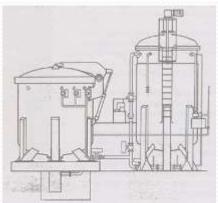






VPI PLANT. Specification





- 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





TESTING STATION



HV 12 KV SURGE COMPARISON TESTER& 12KVdc HIPOT





HV AC HIPOT TESTER 24 KV



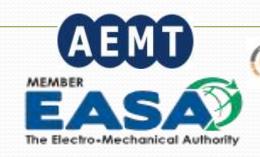


QUALITY SYSTEM

- Follow the EASA Manual for Electrical 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 Scheme for Explosive Atmospheres

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Type of Protection	Flameuroof Evidouse '8' Increased flakely 'V'		
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PLUTOTECH - SERVICE ACTIVITES AND PROCESSES



CUSTOMERS

- 1.WORKSHOP ELECTRICAL ROTATING MACHINE SERVICES
- 3. TRANSFORMER AND SPECIAL ELECTRICAL MACHINE REPAIRS & SERVICES
- 5.STEAM TURBINES, GEARS
 PUMPS AND VALVES SERVICES
- 7.POWER PLANT PROJECT INSTALLATION
- 9.ONSITE SERVICE MAINTENANCE CONTRACTING

- 2. HIGH VOLTAGE COIL FOR MOTORS, GENERATORS MANUFACTURING
- 4.SWITCHGEAR &SUBSTATION AND PROTECTIONS REPAIRS & SERVICES
- 6. TURBINE HYDRAULIC GOVERNOR TEST AND REPAIR (WOODWARD)
 - 8. ELECTRICAL MOTORS & GENERATORS ONSITE OVERHAUL AND REPAIRS
 - 10. PREDICTIVE & CONDITION MONITORING SERVICES

PLUTOTECH ENGINEERING & MANAGEMENT SUPPORTS

PROTECTIVE RELAY. SERVICES



☐ Calibration and Testing

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





☐ Upgrade and Replacement

☐ New Installation





SWITCHGEAR. SERVICES

- ❖ PM and CM
 - Service and Inspections
 - Routine Maintenance and testing; Close-opened time, IR, Contact resistance
 - Repair/Replace electromechanical components



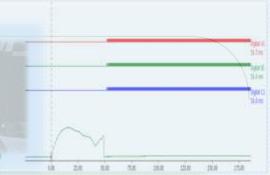




SWITCHGEAR. SERVICES

COMMSSIONING TEST and SPECIAL TEST











- Contact resistance test
- > IR, HIPOT test



Insulation Power Factor Test (tan-delta)

TRANSFORMER. SERVICES



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, Vectorgroup, Insulation power
factor test

TRANSFORMER. SERVICES



- Oil sampling for DGA and Breakdown Test
- Oil Filtration and Purify









DYNAMIC BALANCING M/C











10 tons





GENERATOR. SERVICES

GENERATOR SERVICE AND REPAIRING

- 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





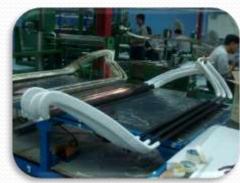




MOTOR. SERVICES

MOTORS-SERVICE AND REPAIRING

- MOTOR running condition analysis
- MOTOR Trouble shooting
- Overhaul
- Rewinding Stator, Rotor
- Mechanical repairing, housing, shaft, sleeve bear
- Electrical testing
- Rotor Dynamic and Field balancing
- Motor protection testing
- Motor installation, alignment and commissionin









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



Design and Engineering power distributions



Switchgear Retrofit Project

MDB & MCC Switchgear design engineering and supply



MV Switchgear supply and installation project