7TH INTERNATIONAL SEMINAR - GEECO

TECHNOFIT

PRESENTER - MR.T.CHRISTIE (BUSINESS DEVELOPMENT MANAGER)
ABOUT TECHNOFIT

Since its incorporation in 1998, TECHNOFIT - a Bumiputera company, has been actively competing in the open market locally and globally. TECHNOFIT is involved in the important path of developing the nation, concentrating on the development of key economics sector such as infrastructure, power generation, oil and gas and also marine industries. Initially providing boiler services and maintenance to numerous power plants in Malaysia, now TECHNOFIT has expanded its business scope and activities in the complete range of Engineering, Procurement, Construction Installation & Commissioning for Mechanical & Electrical Services in maintenance and erection projects in line with clients requirements and industry demands.

To-date the company has undertaken about 10,000MW industrial Power Plant related projects


Embracing a clear objective of organization and continuous improvement on work execution, each and every personnel shares the same vision and mission of the company and strives to achieve the same goal. Through time, our excellence has been rewarded with various awards from different organizations, clients as well as nation.

“Beyond Clients’ Expectation” is the motto that TECHNOFIT holds in executing all projects. It is aimed to act as a catalyst for growth as it encourages having a vibrant vision, objective and drives everyone to strive for excellence. Furthermore, it also promotes positive spirit of teamwork among all staff in the mission of delivering services beyond the expectation of clients. TECHNOFIT also prioritizes teamwork among project teams as it is vital in ensuring the teams work within timeframe and they would set a benchmark for future projects.
# TECHNOFIT SERVICES

**Plant Maintenance and Services Division**

1. Mechanical Equipment Maintenance, Refurbishment and Replacement
2. Boiler Services
3. Plant Preventative and Corrective Maintenance

**Project Division**

1. Power Plant Erection - Boiler Erection Parts & Non Pressure Parts
2. Oil and Gas Complex - Complete Mechanical Engineering, Procurement, Construction and Commissioning.

**Renewable Energy Solution**


**Fabrication**

1. Steel Fabrication - Piping & Structural

**Principal Products**

1. Air Preheaters - Sales, Consultancy, and Services
2. Boiler Circulation Pump - Sales and Services
3. Heat Exchanger, Condenser and Cleaning Services

**Marine Services, Products and Activities Provider**

1. Rig Support Vessels Services
2. Pitch Propellers Fixing
3. Propeller Repairing
4. CPP Propellers
5. Fly Wheel Repairing
6. Bow Thrusters Services
7. Steel Work, Structural and Piping

**Electrical**

1. Medium & High Voltage Equipment Installation and Testing
2. Turnkey Contractor for Transmission in the range of 132kV, 275kV, 275kV and up to 500kV
TECHNOFIT has experts with vast experience in the entire spectrum of project management and erection of power generation plants. Our dedicated engineering team believes that delivering the best quality solutions is the way to ensure the company’s long term success.

To achieve extraordinary standards and to deliver world class results in each project that we undertake, we challenge our performance history standards for the purpose of continuously elevating our performance.
TECHNOFIT - GEESCO

10 YEARS CELEBRATION

2009 2019
• 350 MW X 2 Unit Kapar Phase 2
• 500 MW X 2 Unit Kapar Phase 3
• 700 MW X 5 Unit Manjung GF1 & Jimah
• 1000 MW X 1 Unit Manjung GF2
PROJECT VALUE FROM 2009 - 2019

- Services
- Spare Part Components
MALAYSIA CONSTRUCTION INDUSTRY EXCELLENCE AWARD (MCIEA) 2013
MANJUNG POWER STATION

- Plant Owner : TNB Janamanjung Sdn Bhd
- Plant Capacity : 2100MW
- Plant Type : 3 X 700MW Coal Fired
- Plant Designer : Alstom

- TNB’s Largest Producer Of Power In Malaysia.
- 1st 700MW Capacity Coal Fired Plant In Malaysia.
- Located in Manjung Perak.
- Complete for 1st Unit Commissioning in 2002
- Unit #3 Commissioning in 2002.
FITNESS FOR PURPOSE

➢ Upgrading System For Better Efficiency Of Boiler Performance Through Regenerative Air Heater System By Improve Heat Transfer & Leakage Reduction.

➢ To Reduce The Pressure Loss Across APH And To Improve The Thermal Performance : Heating Elements Replacement (After 10 Years Of Operation).

➢ To Reduce The Leakage (For Reduced Auxiliary Power Consumption) : Sealing System Improvement.

➢ For Increased Reliability : Pin Rack & Pinion Replacement And Drive System Work.
APPLICATION OF NEW TECH

Introduction Of New Modification:


- Additional Covering Plate For HE Sector Plate To Reduce Ash Accumulation & Reduce Additional Loading On Guide Assy.

- Statics Seal Plate Modification For Better Flow PA To GAS Side.
DESIGN INNOVATION
- Initial Alstom New & Edge Technology Design Of The Plant.

COST EFFECTIVENESS
- After Major Outage ID, FD And PA Fan Current Reduced By 133 Amps.
- FD, ID And PA Fan Motors Are Of 11 KV Capacity.
- Hence Savings For 133 Amps For 6 Months Of Operation Is:

\[-KW = 1.732 \times 11 \times 133 \times 0.85 \times 24 \times 180 = 9,304,539.00\] Units / 6 Months
\* Per Month Saving Units : 1,550,756.50
\* Per Year Saving Units : 18,609,078.00
COST EFFECTIVENESS – ESTIMATION SAVING FOR 1 YEAR
Assuming Power Cost Of RM0.30 Per Unit:

Per Year Saving In RM : 18,609,078.00 X RM0.30
= RM5,582,723.40

SERVICES UTILITIES / AMMENITIES
5 Year Saving In RM : RM5,582,723.40 X 5 Years
= RM27,913,617.00

By 1 Year Period, TNBJ Able Recover The Project Cost
MALAYSIA CONSTRUCTION INDUSTRY EXCELLENCE AWARD (MCIEA) 2013

PROJECT PICTURES:
MALAYSIA CONSTRUCTION INDUSTRY EXCELLENCE AWARD (MCIEA) 2013

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PROJECT PICTURES:
MALAYSIA CONSTRUCTION INDUSTRY EXCELLENCE AWARD (MCIEA) 2013

PROJECT PICTURES:

[Two pictures showing construction work with workers and equipment.]
MALAYSIA CONSTRUCTION INDUSTRY EXCELLENCE AWARD (MCIEA) 2013

PROJECT PICTURES:

[Images of construction workers in a site, wearing hard hats and safety gear, inspecting the interior of a building.]
MALAYSIA CONSTRUCTION INDUSTRY EXCELLENCE AWARD (MCIEA) 2013

PROJECT PICTURES:

[Images of workers wearing protective gear and hard hats in what appears to be a construction site setting.]

TECHNOFIT
MALAYSIA CONSTRUCTION INDUSTRY EXCELLENCE AWARD (MCIEA) 2013

PROJECT PICTURES:
AWARDS & ACCREDITATION

NATIONAL LEVEL

- CIDB - THE MALAYSIAN CONSTRUCTION INDUSTRY EXCELLENCE AWARD 2013 (MCIEA)
  - CATEGORY THE BEST PROJECT AWARD
    - INFRASTRUCTURE PROJECT – SMALL

MALAYSIA CONSTRUCTION INDUSTRY EXCELLENCE AWARD (MCIEA) 2013
GET IN TOUCH

TECHNOFIT

GROUP OF COMPANIES

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