



## GC MAINTENANCE AND ENGINEERING COMPANY LIMITED



company profile  
**Commit to Success**

22/2 Pakornsongkhraorat Road , Tambon Map Ta Phut  
Amphur Muang Rayong , Rayong 21150 , Thailand



## GC Maintenance and Engineering Company Limited (GCME)

### GCME | Introduction



#### August 4th, 2004 :

GC Maintenance and Engineering Company Limited (GCME) was founded as NPTC Maintenance and Engineering Services Company Limited by collaboration between National Petrochemical Public Company Limited (NPC) and Toyo Thai Corporation Limited (TTCL).

#### November, 2007 :

All TTCL's shareholding in NPTC was liquidated to PTT Public Company Limited (PTT PLC) then changed the name to Alliance Plant Service Company Limited (APS). Shareholder structure as below :

#### June 18th, 2009 :

APS was renamed to PTT Maintenance and Engineering Company Limited (PTTME)

#### July 3rd, 2017 :

All PTT's shareholding in GCME was liquidated to PTT Global Chemical Public Company Limited (GC).

#### December 6th, 2018 :

PTTME was renamed to GC Maintenance and Engineering Company Limited (GCME)

**"A Leader of Maintenance and Engineering  
Solution Provider in ASEAN"**





## Vision

A Leader of Maintenance and Engineering Solution Provider in ASEAN

## Mission

To provide excellence in Maintenance and Engineering services to Valued clients and support Growth of GC Group

## Vision

<b>M</b> : Mastering the Challenge	<b>I</b> : Innovation
<b>E</b> : Employee Dedication	<b>R</b> : Responsibility for Customers & Community
<b>S</b> : Service Excellence	<b>I</b> : Integrity & Ethics
<b>P</b> : Professionalism	<b>T</b> : Teamwork & Knowledge Sharing



# GCME

provides Core Services  
3 Businesses including

**Maintenance Business**  
**Engineering Business**  
**And Plant Inspection Business**

**"A Leader of Maintenance and Engineering Solution Provider in ASEAN"**



Maintenance Business



Engineering Business



Plant Inspection Business

## >> Since 2004

GC Maintenance and Engineering Co.Ltd. or GCME has provided services; Specialist Maintenance, EPC Project Management for Plant and Major equipment and Plant inspection to support valued client needs and focus on creating value added to production plant; Petrochemical, Polymer, Utility and Power.



# Plant Inspection Business



>> On Plant Inspection Business, we provide Professional Analysis with Advanced Technology to prevent Plant Equipment Failure from Deterioration and advise how to expand Equipment Life Cycle including:

## Advanced NDT Service

- Pulsed Eddy Current (PEC)
- Acoustic Emission Testing (AE)
- Tube Inspection (RFT/ECT/IRIS)
- Phased Array Ultrasonic Testing (PAUT)
- Rope access inspection

## Inspection Consulting

- Corrosion Control
- Root Cause Failure Analysis
- Inspection Training

## Inspection Management and Execution Service

- Risk-Based Inspection (RBI)
- Conventional NDT
- QA/QC inspector

## Integration Condition Monitoring Service

- Vibration analysis
- IR thermography
- Integration condition monitoring
- Multi-channel vibration diagnostic
- Piping vibration analysis
- Penetrant Testing (PT)

# GCME

## Plant Inspection Business Advanced NDT Service

To offer value added inspection solutions by using the state of the art technologies to ensure reliable plant operation and save overall maintenance costs.

### Pulsed Eddy Current (PEC)

- Detecting flaws and corrosion in
- ferrous materials typically hidden
- under layers of coating, fireproofing,
- or insulation.



### Acoustic Emission Testing (AE)

- To obtain information about corrosion activity
- or even leakage of the tank floor without
- empty the tank.

GCME

### Tube Inspection (RFT/ECT/IRIS)

- Determine the integrity of heat exchanger tubing and detect the damage before failure occurs



### Phased Array Ultrasonic Testing (PAUT)

- Provide advanced ultrasonic technique used for flaw detection

### Rope access inspection

- Provide safe work position at height or in difficult access area in various industries such as offshore and industrial plants.

# Plant Inspection Business Inspection Consulting

# GCME

To solve and enhance the integrity and reliability of your plants.

### Service:

#### 1. Corrosion Control

- Recommend tools (e.g., protective coatings and cathodic protection) to control corrosion.
- Predict failure modes affecting both equipment and piping systems in the forms of corrosion loops and manuals.



#### 2. Root Cause Failure Analysis

- Find out the root cause of failure and recommend the solutions.

#### 3. Inspection Training

- Provide certified trainers to share knowledge and experience regarding inspection.





# Inspection Management and Execution Service

## Service:

### 1. Risk-Based Inspection (RBI)

- Optimize inspection plan based on knowledge of the risk of failure of equipment.

### 2. Conventional NDT

- Provide Non-Destructive Testing (NDT) to meet your inspection needs :Visual Inspection, Penetrant Testing Magnetic Particle Testing, Ultrasonic Testing Hardness Testing, Borescope, Thermoscan, Ferrite Content, Painting and coating Ultrasonic Thickness Measurement

### 3. QA/QC inspector

- Provide QA/QC inspector to control quality follow international codes & standards.



To ensure stationary equipment integrity and plant reliability from our experience in petrochemical industries both on-stream inspection and shutdown periods.



Integration Condition

## Monitoring

Service



GCME

**Monitor** the health of your machinery by identifying the condition prior to machine failure, resulting in less downtime and increased plant reliability.

## Service:

### 1. Vibration analysis

- Collect machine vibration data and analyze to identify and prevent the equipment breakdown.

### 2. IR thermography

- Collect thermography data and analysis for rotating and electrical equipment.

### 3. Integration condition monitoring

- Integrated condition monitoring result to analysis condition of rotating machine.

### 4. Multi-channel vibration diagnostic

- Transient analysis for turbo machinery startup, coast down, and production state monitoring.

### 5. Piping vibration analysis

- Identify piping vibration severity and provide solutions to mitigate the vibration problem.

### 6. Penetrant Testing (PT)

- To examine condition of rotating part.



Main Resource of GCME is Specialist which has Expertise on Work System and Certified by Integration Management System (IMS), ISO 10006.

We also have Workshop Facilities, Tools and Equipment with High Technology.

## Main Resource of GCME



# GCME



## GCME concentrates



to provide Service Excellence in order to create Plant Production Efficiency with our Experience in Maintenance and Engineering in Plant Owner and expand to be a Leader in ASEAN.





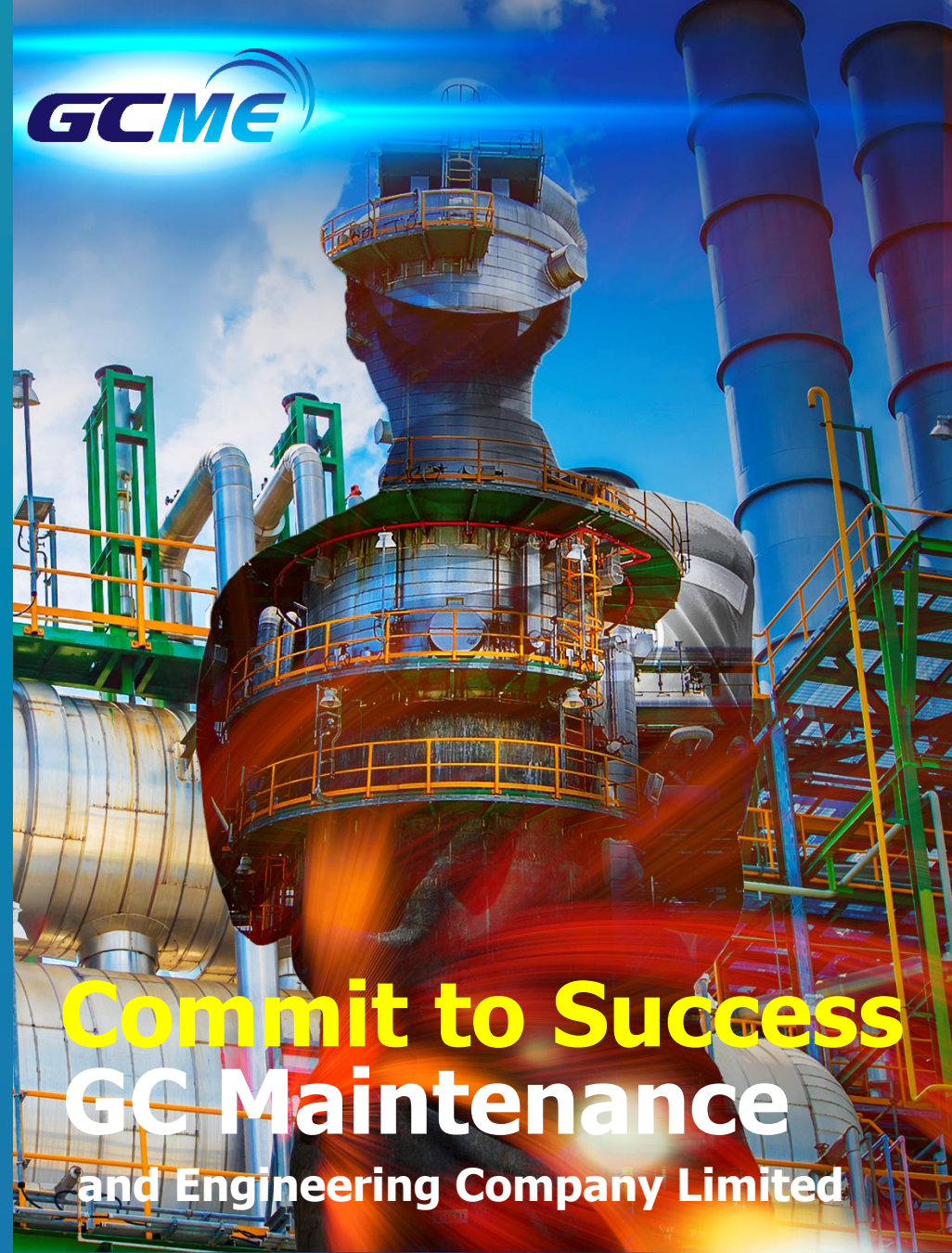


## GC Maintenance and Engineering Company Limited



### Contact us

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**Thank you**

