

# Qualitech Engineering & Construction Co., Ltd.









#### QTEC has been operated since 1991

# Qualitech Engineering & Construction Co., Ltd. (QTEC) is a Construction Company providing services of

- Mechanical Works Fabrication Installation, Piping systems, Structural Steel, Storage Tank & Pressure Vessels, Plate Works, Pipeline, Equipment Installation
- Civil Works
- © Electrical & Instrumentation, HVAC and Utilities Systems





#### **AREA OF SERVICES**

- Oil and Gas
- Refinery
- Petrochemical
- Energy & Power Plant
- Water and Waste Treatment Plant
- Environmental Protection
- Industrial Plants, Facilities and Warehouses



#### ACCREDITATION AND SYSTEMS

**QTEC** is certified ISO 9001:2015 that ensure International Standards for Quality Assurance and Control.

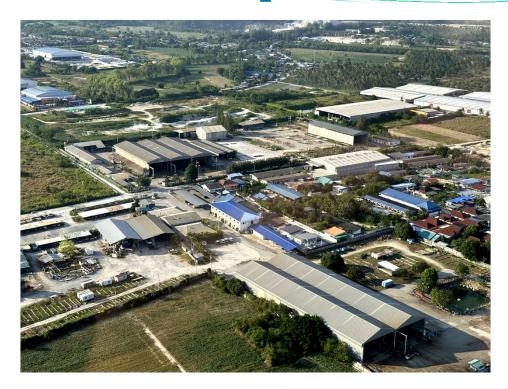
**Project Management** is using computerized tools;

- Primavera Contractor/ MS. Project: for scheduling
- Excel and Access: for Progress monitoring and Material Control
- AutoCAD and X-Steel: for Shop Drawings
- Barcode for Material Control System

**Safety: QTEC** has been striving under the lead of International Company to reach International Standard level.

# Factory / Fabrication Shop





RAYONG Facility (Area)		
Total Area	212,800	m <sup>2</sup>
Office	2,000	m <sup>2</sup>
Warehouse	1,800	m <sup>2</sup>
<b>Fabrication Shop</b>	15,000	m <sup>2</sup>
Lay - Down Yard	183,300	m <sup>2</sup>
Blast /Paint Shop	3,320	m <sup>2</sup>
Others	7,380	m <sup>2</sup>

RAYONG Facility (Number of Shops)		
Fabrication	10	Shop
Detail Part Shop	1	Shop
Blasting	1	Shop
Painting	2	Shop
Warehouse	4	Shop
Maintenance	1	Shop



## **HUMAN RESOURCES**

Management	5
Project Managers and Engineers	30
Construction Supervisors	50
QC / Technicians / Draftsman	60
Finance and Accounting Staff	15
Procurement and Material Control Staff	20
Other Administrative and Support Staff	60
Foremen and Direct Workers	1,500



#### **SERVICES CAPACITY for 1 Year**

#### **MECHANICAL WORKS**

<b>Equipment Installation</b>	5,000	Tons
Vessels and Tanks Fabrication and Erection	500	Tons
Steel Structures Fabrication and Erection	7,000	Tons
Piping Works	500,000	Di



# Major Projects YEAR 2020 - 2025

Steel Structure of BUN 3 Phase 1F Project	Thai Nippon Steel Engineering & Construction Corporation LTD./PTTEP	82.5 MB
Provision EPCI for Bualuang Phase 5 Produced Water Debottlenecking (MEDCO5 Project)	Thai Nippon Steel Engineering & Construction Corporation LTD./MEDCO	20 MB
Steel Structure of BUN 3 Phase 1E Project	Thai Nippon Steel Engineering & Construction Corporation LTD./PTTEP	105 MB
Steel Structure, Piping and Equipment Installation Work (Process Building 2) for Thai Ethoxylate I-Care EPC Project	GC Maintenance and Engineering Company Limited/TEX	118 MB
Recovery Heat from HA Column and Benzene Product Project & Sulfolane Improvement Project at GC 5	GC Maintenance and Engineering Company Limited/GC	19 MB
Sakura Project (Mechanical Work)	GC Maintenance and Engineering Company Limited/Viny Thai	595 MB
MTP PG Expansion Project	DOW Chemical Thailand Limited	115 MB
PTTLNG Nong Fab LNG & Fuel Gas Skid Fabrication Project	Sensia/ITS/SPCC/PTTLNG	56 MB



## Major Projects YEAR 2020 - 2025

EAGLE Project (Structure Steel, Piping Work and Equipment Installation Work)	Purac (Thailand) Limited (Corbion)	972 MB
PTTLNG Map Ta Phut Modification for Interconnecting Pipeline Project (EPCC)	PTTLNG Company Limited	305 MB
OLEFINS 3 T/A 2021 at GC11 (Piping and Mechanical Package)	PTT Global Chemical Public Company Limited (GC)	20 MB
Renew Dehydrogenation Reactor Project	IRPC Public Company Limited.	27 MB
MTP CT1 Site Demolition	ROHM and HAAS Chemical (Thailand) Ltd. (DOW Group)	34.5 MB
MLGC (DOW)	Carbide Chemical (Thailand) Ltd. (DOW Group)	65 MB
Thai Oil CFP (Piping Spool Fabrication)	Sinopec Engineering Group (Thailand) Co., Ltd./Thai Oil	80 MB
Main Steel Structure Services(Top Side) for PTTEP Project	Thai Nippon Steel Engineering & Construction Corporation LTD.	144 MB
PTTGC GC3 T/A 2020	PTT Global Chemical Public Company Limited (GC)	45 MB



## Major Projects YEAR 2015 - 2019

Mixed C4 GC7	GC Maintenance and Engineering Co., Ltd.	50 MB
Dow Chemical Group Small Project	DOW Chemical Thailand Limited	52 MB
Improving Refinery Energy Efficiency GC6 (Pinch Project)	PTT Global Chemical Public Company Limited (GC)	218 MB
GC Oxyrane Propylene Oxide Project	Samsung Engineering(Thailand) Co., Ltd.	58.5 MB
FCC Reliability Improvement Project	Star Petroleum Refining PCL.	103 MB
NGD WHA # 4 Gas Pipeline & M/R Station (EPCC)	Gulf Energy Development Co., Ltd.	191 MB
DOW Chang Project	DOW Chemical Co., Ltd.	165 MB
NGD WHA # 2 Gas Pipeline & M/R Station (EPCC)	Gulf Energy Development Co., Ltd.	151.5 MB
IRPC Turn Around 2016	IRPC Public Company Limited	155 MB
UHV Unit 52 PRS MOV's (IRPC)	GS Engineering & Construction Corporation	38 MB
Bent Steel LACC EP Project (USA) and Upper F104 & F106 (RAPID)	CBI (Thailand) Ltd.	70 MB



# Major Projects YEAR 2015 - 2019

DPEX Project (TPE) Mechanical and Piping Works	ThyssenKrupp Industrial Solution (Thailand) Ltd.	347 MB
THEP Project Mechanical and Piping Works	BASF Chemcat (Thailand) Limited	110 MB
LCNG Station Project (Civil, Piping, Mechanical and E & I Works)	PTT Company Limited	50.8 MB
SE Loading Station	Dow Chemical Thailand Ltd.	70 MB
Thai MMA C-1400 Improvement Project	Thai MMA Co., Ltd. (SCG Group)	15.7 MB
PPC & PPE Project (IRPC) Reactor Modification, Warehouse & U/G Piping Works	SINOPEC Engineering Group (Thailand) Co., Ltd.	28 MB
ARDB Aromatic II (PTTGC) Piping Tie-in Work	PTT Maintenance and Engineering Co., Ltd.	21.5 MB
Gas Pipeline & Metering and Regulation Station (EPCC)	Bowin Clean Energy Limited	71.3 MB



### Major Projects YEAR 2015 - 2019

Mechanical Services to ESSO SRIRACHA REFINERY	Esso (Thailand) Public Company Limited	58 MB
VGOHT Recovery (IRPC) Piping & Mechanical Work	IRPC Public Company Limited	325 MB
UHV Plant Project (IRPC) 72 & 73	SK Engineering & Construction Co., Ltd.	427 MB
TOC GC EO/EG Expansion - II	Samsung Thai Engineering Co., Ltd.	188 MB
Phenol Plant Train II (PTTGC)	Posco Engineering (Thailand) Co., Ltd.	310 MB
UHV Plant Project (IRPC)	GS E&C Corporation	137 MB
PTT PHR - 3 (ESP)	Samsung Engineering Co., Ltd.	93 MB
Bibiyana Expansion (BANGLADESH) / Modules Work	Chevron / FW.	620 MB
B.V. (PTTGC) / Offisite Area Package # 3	PTT GC / PTT ME	405 MB
ZCT 1301 (Main Piping Work, Steel Structure & Equipment Installation)	Shinko Plantech (Thailand) Co., Ltd.	110 MB



## Major Projects YEAR 2012 - 2014

B.V. (PTTGC) / Piping & Steel Structure Work	Toyo-Thai Corporation PLC.	185 MB
Rung Tawan	Toyo-Thai Corporation PLC.	155 MB
EI & PSA-3 Project (Early Mechanical Work)	Thai Oil Public Company Limited	551 MB
Thailand PV Film - Compounding Bldg. / Mechanical Works	Dow Chemical Thailand Ltd.	60 MB
Anaerobic Treatment Project/ Mechanical Works	Purac (Thailand) Ltd.	65 MB
TMP Project - Malaysia / Piping Fabrication Work	Shinko Plantech Japan	48 MB
New TLB Product Tank / Mech+Pipe Installation / NG Underground Pipelines for VDU & Hot Oil Heaters	Thai Lube Base Pcl.	124 MB
IRPC/GHU Technology Revamp / Structure/Piping & Eqm. Install	IRPC Public Company Limited	130 MB
Gas Pipeline Metering & Regulation Station (EPC Contract)	Amata B. Grim Power 3	83 MB



## Major Projects YEAR 2010 - 2012

ESSO Sriracha Clean Fuels / Mechanical Works	Foster Wheeler International (Thailand)/ Exxon Sriracha	172 MB
Windmill-ABT (Viny Thai)/HPPO0-HP (EVCC)	Toyo-Thai Corporation	120 MB
Emerald / Mechanical + Structure	Purac (Thailand)	107 MB
VDU & Hot Oil Heaters Modification and Relocation Tank	Thai Lube Base	122.5 MB
Emerald / Mechanical + Structure	Purac (Thailand)	107 MB
Karratha NRU Module Fabrication/Pluto LNG Plant	Linde AG/Woodside	370 MB
MOC Cracker Project	Samsung Engineering	222 MB
RRC Upgrade Project	SKEC (Thailand)	240 MB
The Ethanolamine (TEA) Project	Thai Ethanolamine (PTT Chemical Group)	190 MB
PTT Ethane Separation Plant	Samsung Engineering (Thailand) Co., Ltd.	830 MB



### Major Projects YEAR 2003 - 2009

NPCX Polyethylene Plant	Samsung Engineering Co., Ltd.	140 MB
TOC EO/EG Plant & Exp 1 Project	Samsung Engineering Co., Ltd.	135 MB
MIGP Air Separation Plant	Air Products / BIG	85 MB
ALCAN G3	ALCAN	480 MB
Motorcycle Tyre Production Plant	Siam Tyre Phra Pradaeng	120 MB
Vincent FPSO Project	Vetco Aibel	55 MB
TPX Revamp Project / Steel Structure Fabrication	Bechtel International, INC	120 MB
C4175 EGTL Nigeria Chevron Module Supply	Air Products PLC (UK)	320 MB
ATC Reformer & Aromatic Complex II	SKEC (Thai)	134 MB
Quienten /Mechanical works	Purac	40 MB





Steel Structure	1,800	Tons
Piping Work	66,000	Di
Scaffolding Work	400,000	m <sup>3</sup>
<b>Equipment Installation Work</b>	1	Lot
Insulation Work	1	Lot

**Contract Amount 17 Million USD (595 MTHB)** 



Steel Structure	5,000	Tons
Piping Work	65,000	Di
Scaffolding Work	650,000	m <sup>3</sup>
Vessel Reactor Assembly(2 Unit)	380	Tons
<b>Equipment Installation Work</b>	500	Tons
Contract Amount 27.8 Million USD (972 MTHB)		

#### **PAST EXPERIENCE PROJECT**













Piping Work	5,000	Di
Painting Work	2,000	m <sup>2</sup>
Steel Structure Work	65	Tons
Skid (4) Transport & Installation Work	218	Tons

E&I Work

**Contract Amount 1.5 Million USD** 















Demolish Work, Steel Structure Work	600	Tons
<b>Equipment Installation Work</b>	350	Tons
Piping Work	40,000	Di
Project Schedule	Sep. 2014	Apr. 2015
Final Contract Amount	352,900,000	Baht



Civil Work including Engineering, Piping Work	30,000	Di
Steel Structure and Equipment Installation Work	700	Tons
Tanks and Pressure Vessels Work	9	Nos
Project Schedule	Nov. 2012	Nov. 2013
Final Contract Amount	405,000,000	Baht







Samsung Engineering Co., Ltd.		
PTT PHR-3 (ESP) Project		
	STATE OF THE PARTY	
	16-3 <mark>12/11/2</mark> 01	3 08:13
Piping Work	14,500	Di

Piping Work 14,500 Di
Equipment Installation Work 1,400 Tons
Piping Tie-in 1 Lot
Project Schedule Mar. 2013 Dec. 2013











Piping Work 540,000 Di

Pipe Support Work 480 Tons

Structural Steel Work 6,000 Tons

Equipment Installation 11,000 Tons









#### **PAST EXPERIENCE PROJECT**

**MOC Cracker Project** 





Piping Work	248,000	Di
Structural Steel Work	1,400	Tons
<b>Equipment Installation</b>	4,965	Tons







PAST EXPERIENCE PROJECT

**Structural Steel Work** 

**Equipment Installation** 



**Tons** 

**Tons** 

**550** 

**600** 

#### **PAST EXPERIENCE**

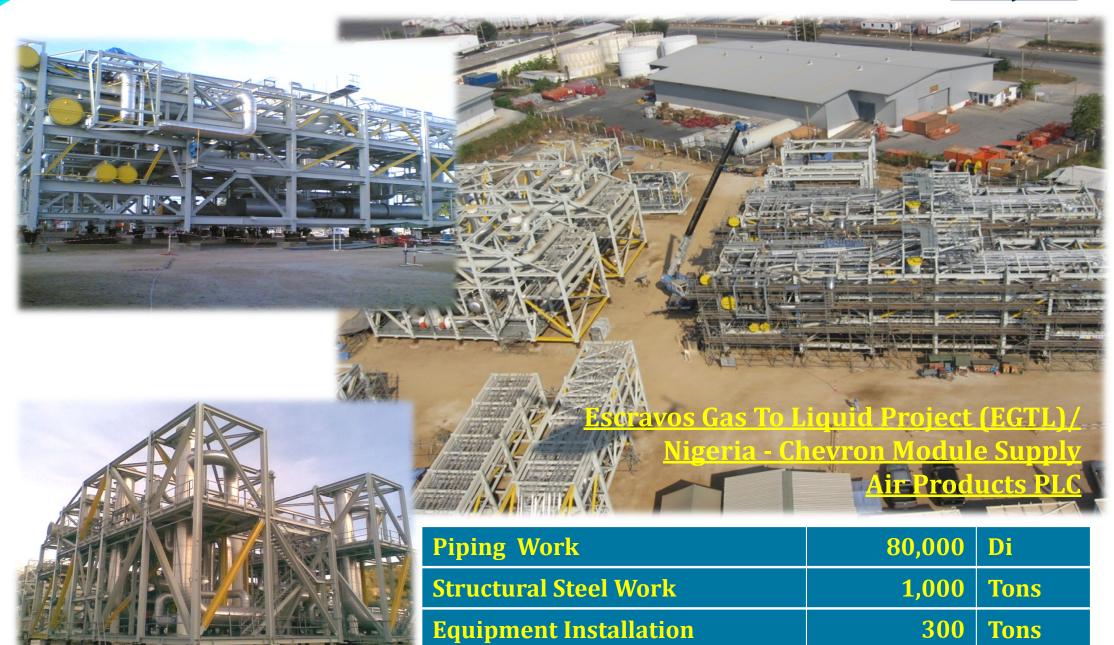
#### **PROJECT**







# PAST EXPERIENCE PROJECT





# PAST EXPERIENCE PROJECT

# Vincent FPSO Project Vetco Aibel

Piping Work	40,000	Di
Structural Steel Work	800	Tons
<b>Equipment Installation</b>	550	Tons



#### **PAST EXPERIENCE**

#### PROJECT









Piping Work	120,000	Di
Structural Steel Work	750	Tons
<b>Equipment Installation</b>	1,400	Tons



# PAST EXPERIENCE







# MIGP Project Air Products UK

Piping Work	50,000	Di
Structural Steel Work	400	Tons
<b>Equipment Installation</b>	650	Tons



### PAST EXPERIENCE

# **PROJECT**





Piping Work	100,000	Di
Structural Steel Work	800	Tons
<b>Equipment Installation</b>	1,500	Tons



# PAST EXPERIENCE PROJECT



Escravos Gas to Liquid (EGT Chevron Small Module Supp Air Products PLC			
Plate Work, Piping, E & I	200	Tons	
Steel Structure	650	Tons	- HIR

# **PAST EXPERIENCE** PROJECT

**Escravos Gas to Liquid (EGTL) Air Products PLC** 

**Piping Fabrication Work** 

40,000













# **ELECTRICAL & INSTRUMENTATION**







**TPN Food Pak Project** 



### **ELECTRICAL & INSTRUMENTATION**





National Starch HVPU and POPIT Project



**Polytype New Factory Project** 



# **ELECTRICAL & INSTUMENTATION**











## **Certificates ISO 9001:2015**



0060

Certificate Number

12725

Date First Registered

28/03/2022

Date Certificate Issued

28/03/2025

Date Certificate Expires

28/03/2028

World Certification Services Ltd. Station Court, Ormskirk Road, Aintree, Liverpool, L9 5AA United Kingdom

with the representative organization of WCS (THAILAND) CO., LTD. Tel: +(6683) 555-8995, +(662) 599-9102 E-mail: isocsthailand@outlook.com





### **CERTIFICATE OF REGISTRATION**

This Certificate has been awarded to:

### Qualitech Engineering and Construction Co., Ltd.

Head Office: 589/149 27th Floor, Central City Tower, Debaratna Road, Bangna nuea, Bangna, Bangkok 10260 Thailand Factory: 10/9 Soi Kee Ree, Sukhumvit Road,T.Huaypong, A.Muang, Rayong 21150 Thailand

> In Recognition of the Organisation's Management System which complies with:

> > ISO 9001:2015

For the Scope of Activities described below:

Fabrication of Steel, Structure, Tank,
Pressure Vessel, Steel Plate Work, Piping Work.

This Certificate has been awarded by

WORLD CERTIFICATION SERVICES LTD.

Issued By:























### **VGOHT RECOVERY PROJECT**

PUBLIC COMPANY LIMITED











### Client/customer

IRPC Public Company Limited

### Client reference

Rangsan Intho, Project Manager

### Location

Rayong, Thailand

#### Dates/timing

Sep.2014 - May.2015

#### Project value

Contract Value Actual Value 189.69 MB. 320.00 MB.

### Project Capacity ( Refinery Plant )

215,000 barrels per day

### Services/scope

Demolition/Modification service repair the refinery Plant (Vacuum Gas Oil Hydrotreating Units) which damage by fire incident Civil work for Repairing the refinery Plant (Vacuum Gas Oil Hydrotreating Unit) which damage by fire incident Remove and Transport the existing column and Replace

the new column and Vessels

Fabrication and Erection the Structural Steel, Plant form

and Ladder

Fabrication and Erection Piping work, Painting work, Insulation work and fire proof work

### Project key highlights

Urgent site Development and Construction of the damaged Plan

Urgent dismantle of damaged items

Heavy Lifting for removal of damaged Column and Drums and installation of new ones

Repairing of the damaged Concrete Columns, Foundations, Pipe Racks, Shelter, Painting, Insulation and fire proof Replacement of damaged Piping, Pumps, Pressure Vessels & Columns, Steel Structure, Painting, Insulation and fire proof

Systems testing and Hand Over

Pre-Commissioning/ Commissioning and Start-Up

Provide the raw materials and delivery on time

Installation the fire proofing concrete

Fabrication and Installation the Fire Fighting System

### QTEC personnel:

Project Manager: Torsak Sorn-Ard Site Manager: Chawalit Asasee

### Project description

The IRPC Public Company Limited would like to recovery the damaged Vacuum Gas Oil Hydrotreating by Fire Case on Jun 09, 2014. IRPC require replacing and repairing the VGOHT Units which damage by fire incident and want them ready for starting plant again by end the of May 2015. Several preparation works has been done by IRPC's maintenance team and require further engineering and consultant service from Amec-Foster Wheeler and Construction by QTEC.

### Project highlights (key service(s) provided)

Urgent Construction and recover the damaged unit by fire case

Fabrication and Erection for fire fighting system for VGOHT Unit

Heavy Lifting for the existing new column and vessels

Construction Management and Supervision

QA/QC Monitoring and Control

Manpower Supply for Pre-Commissioning, Commissioning and Start up

### Project challenges/solutions

Manage the construction with the big OT work was provided to achieve the required schedule

Project Critical Path such as piping, equipment works that management to crash the project schedule / Pay extra money to long lead equipment suppliers to minimize lead time

Crashed the Construction schedule by intensive paying to the direct and indirect manpower

Overlap schedule for construction and precommissioning/commissioning activities to minimize the pre-commissioning, commissioning and start-up schedule.

### Client requirements / restrictions

Recover the damaged unit to normal operation ASAP.

Zero accident, Safety and Environmental issue

Plant Reliability, Availability

#### Benefit statement

Cost/Budget Optimization

2 Months ahead schedule from original plan for Plant Start-Up

Zero Safety Record

No Environmental Issue

Flawless Plant Start Up and Operation.

Improvement of Plant Safety and Reliability

Signed

( RANGSAN INTHO )

VACUUM GAS OIL HYDROTREATING RECOVERY

PROJECT MANAGER

Issue Date : May 30, 2015

Page 1 of 2 Page 2 of 2









ประกาศเกียรติคุณ ด้านโครงการ SAFE WHITE GREEN

### มอบให้เพื่อแสดงว่า



Qualitech Engineering & Construction Co., Ltd.

ได้รับรางวัล บริษัทผู้รับเหมาที่จัดทำระบบ การจัดการตามโครงการ SAFE WHITE GREEN

> ในงาน 2014 TOP Group QSHE Day เมื่อวันที่ 12 พฤศจิกายน 2557



นายอธิคม เติบศิริ ประธานเจ้าหน้าที่บริหารและกรรมการพู้จัดการใหญ่ บริษัท ไทยออยล์ จำกัด (มหาชน)

# Certificates & Safety Awards Year 2013-2014





ประกาศเกียรติคุณ ฉบับนี้เพื่อแสดงว่า

บริษัท ควอลิเทค เอ็นจิเนียริ่ง แอนด์ คอนสตรัคชั่น จำกัด
ได้รับรางวัลชนะเลิศ การแข่งขัน "การติดตั้งนั่งร้านมาตรฐาน B.S."
งานสัปดาห์ความปลอดภัยในการทำงานจังหวัดระยอง
ให้ไว้ ณ วันที่ ๙ พฤษภาคม พ.ศ. ๒๕๕๖

(นายวชิระ ศรีบัวชุม) สวัสดิการและคุ้มครองแรงงานจังหวัดระยอง



### EI & PSA-3 Project

Certificate of Recognition



Special Recognition of Achieving Contractor's Target Milestone of 1,000,000 Safe Man-hours



Sakchai Chuchuenmanakit
FW Construction Manager







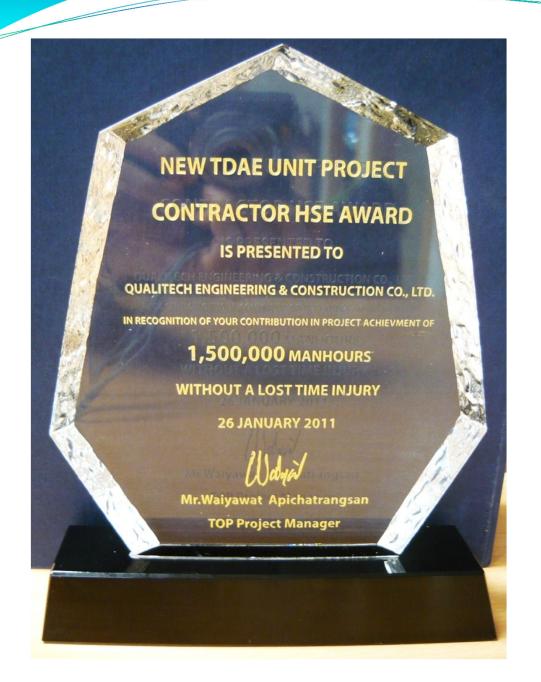






















# Certificates & Sa











### **AWARD IN RECOGNITION FOR SAFETY**

We, the Consortium of SKEC and GS E&C are pleased to award to

### Qualitech Engineering & Construction Co., Ltd.

For Your Commitment and Contribution Towards Safety in Achieving 6,000,000 Safe Man Hours on ATC# 2 Project

> Date of achievement 17th February 2007 Reformer & Aromatics Complex Il Project

Mr. S. I. Lee







ALPAMS G3 Thailand would like to thank QUALITEC ENGINEERING & CONSTRUCTION CO.LTD. and all of their employees over the last Fourteen (14) months for their contribution and assistance in the completion of Alcan Gove Third Stage Expansion Project. Throughout this time QTEC have always displayed an exemplary approach towards safety and quality of service and this combined with their sense of professionalism has been nothing short of impressive.



# **= THANK YOU =**