



**Unimit Engineering PCL.**

# Company Presentation



[www.unimit.com](http://www.unimit.com)

ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018, U, U2, S and R STAMP

**01** *Company Information*

**02** *Location*

**03** *Business Segment*

**04** *Organization, Manpower and Capacity*

**05** *Equipment and Tools*

**06** *Reference and Certificate*

**07** *Client & End User List*



# Company Information



Unimit Engineering Public Company Limited

- ▶ Established: April 21, 1982
- ▶ Capital: THB 143 Million Registered
- ▶ Stock Ticker: "UEC" (MAI\* Market) since Nov 2005

## Headquarter

- ▶ Bangkok Office: Phra Pradaeng, Samut Prakan

## Factory

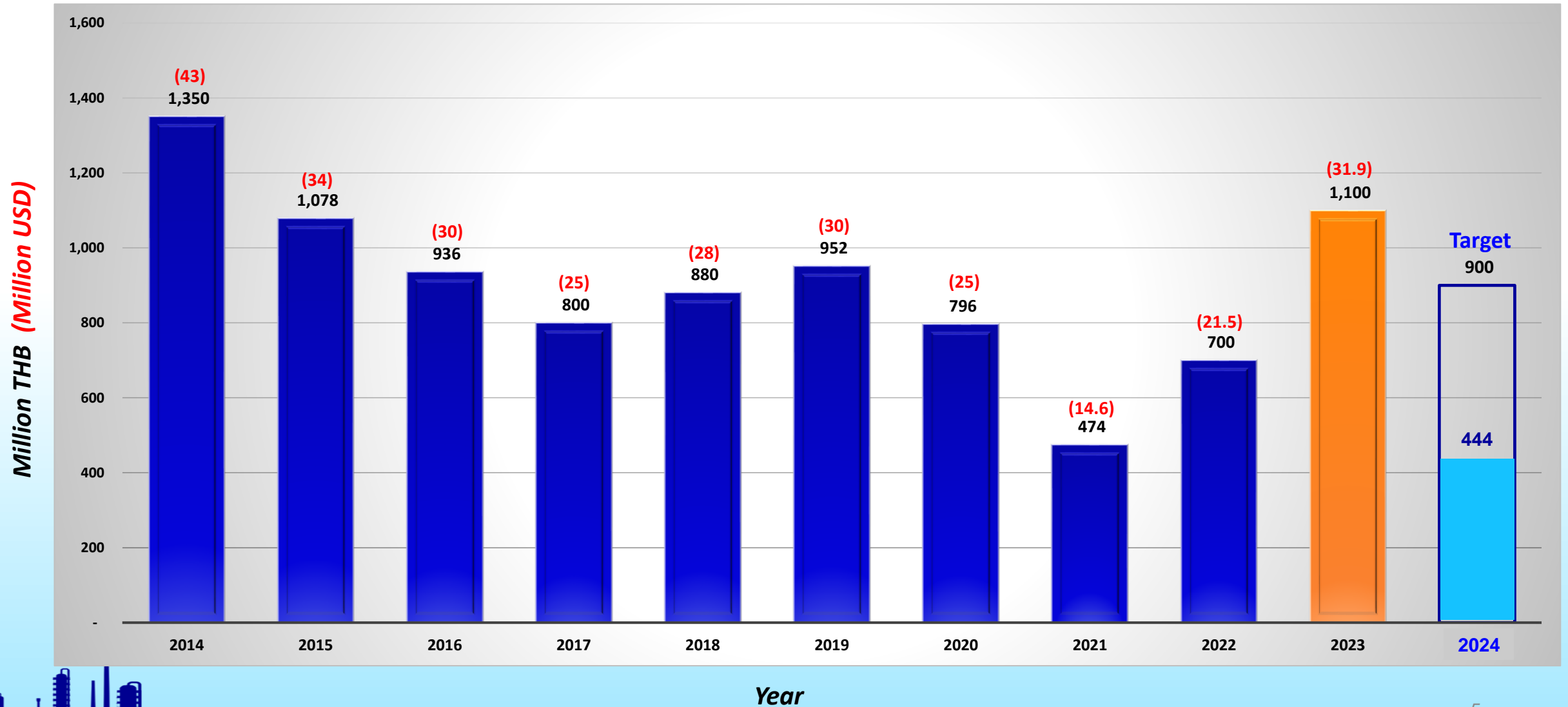
- ▶ Factory I & II: Banbung, Chonburi
- ▶ Factory III: Nikom Pattana, Rayong
  
- ▶ Web site: [www.unimit.com](http://www.unimit.com)



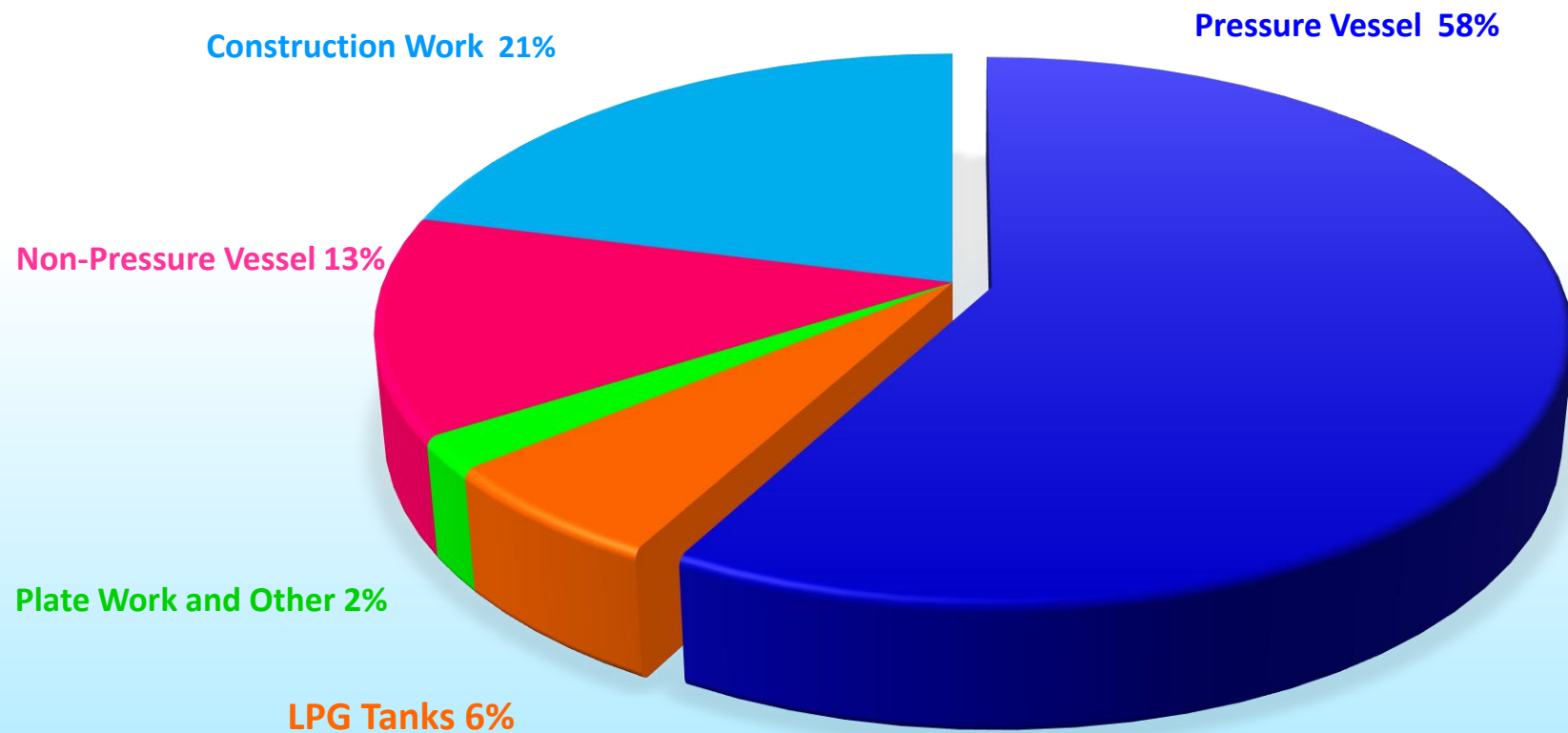
# Timeline



# Revenues



# Revenues Segment



**Revenues 2023**  
**1,191** Million THB.  
**(33 MUSD.)**

**Local : 85 %**  
**Export: 15 %**



**01** *Company Information*

**02** *Location*

**03** *Business Segment*

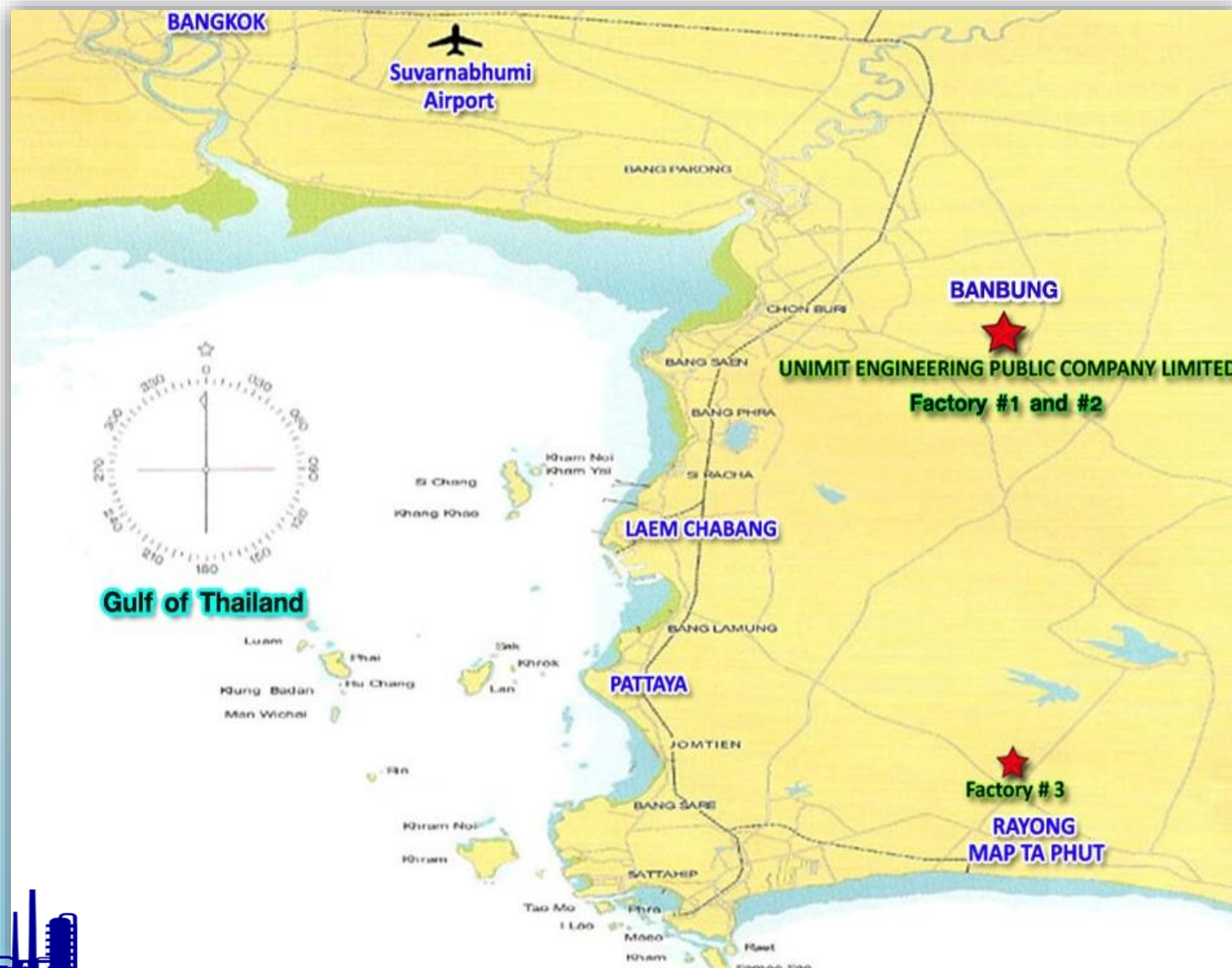
**04** *Organization, Manpower and Capacity*

**05** *Equipment and Tools*

**06** *Reference and Certificate*

**07** *Client & End User List*





## **Distance to Export Port**

**From Factory I, II to**

- ↪ **LCB Port : 60 km.**
- ↪ **Maptaphut Port : 90 km.**
- ↪ **Sattahip Port : 100 km.**

**From Factory III to**

- ↪ **Maptaphut Port : 25 km.**
- ↪ **Sattahip Port : 55 km.**



# Plant Layout Factory 1 and 2



# Factory 1



(Front View)



Description	Factory 1
Total Area	70,400 m <sup>2</sup>
Number of Building	
▪ Office	2
▪ Workshop	5
Shop Floor	25,480 m <sup>2</sup>
Overhead Crane ( Max. )	30 Ton
Max. Height Under Crane Hook in Shop	9 M
Warehouse Space indoor	-

# Factory 2



(Front View)

Description	Factory 2
Total Area	123,216 m2
Number of Building	
▪ Office	2
▪ Workshop	5
Shop Floor	55,987 m2
Overhead Crane ( Max. )	40 Ton
Max. Height Under Crane Hook in Shop	9 M
Warehouse Space indoor	960 M2



# Factory 3



Description	Factory 3
Total Area	38,400 m2
Number of Building	
▪ Office	1
▪ Workshop	1
Shop Floor	2,160 m2
Overhead Crane ( Max. )	15 Tons
Max. Height Under Crane Hook in Shop	12 M



**01** *Company Information*

**02** *Location*

**03** *Business Segment*

**04** *Organization, Manpower and Capacity*

**05** *Equipment and Tools*

**06** *Reference and Certificate*

**07** *Client & End User List*

## Pressure Vessel

### Standard Products

- ▶ **LPG tanks**
- ▶ **Cryogenic tanks**

### Custom Products

- ▶ **Column**
- ▶ **Drum / Reactor**
- ▶ **Shell and Tube Heat Exchanger**
- ▶ **Steam drums**
- ▶ **Deaerator**



## Non-Pressure Vessel

- ▶ **Oil tank**
- ▶ **Water tank**
- ▶ **SILO**
- ▶ **Stack**



## Construction Work

- ▶ **Tank installation**
- ▶ **Equipment installations**
- ▶ **Repair and Modification work**
- ▶ **Shutdown and Maintenance**



## Plate Work and Other

- ▶ **Fan casing**
- ▶ **Wind tunnel**
- ▶ **Stack and Diverters**
- ▶ **Incinerator**
- ▶ **Attrition & Homogenization Drum**
- ▶ **Services**



# Pressure Vessel (LPG)



# Pressure Vessel (Cryogenic)



Vertical tank 3,000 liters



Horizontal Tank

LIN - 310,000 Litres



Vertical Tank

LIN / LOX - 350,000 Litres



# Pressure Vessel (Spherical Tank)



6,000 M<sup>3</sup>

## Scope of work and supply is design :

- Material procurement
- Shop fabrication
- Site erection, Testing and commissioning



## Site location :

- Khon Kaen Terminal
- Surat thani Terminal
- Songkhla [4,000 m<sup>3</sup>]

# Pressure Vessel (Column)



Unimit Engineering Public Company Limited

ID 5,000 mm., 60,100 TL-TL mm., 252.0 ton



End user / EPC: PTT Global Chemical Public Company Limited / Chiyoda (Thailand) Ltd. and Toyo-Thai Corporation PLC.

Project name: Byproduct Valued Added (BV Project) [Year 2011]

# Pressure Vessel (Column)



ID 4,400 mm., 90,740 TL-TL mm.



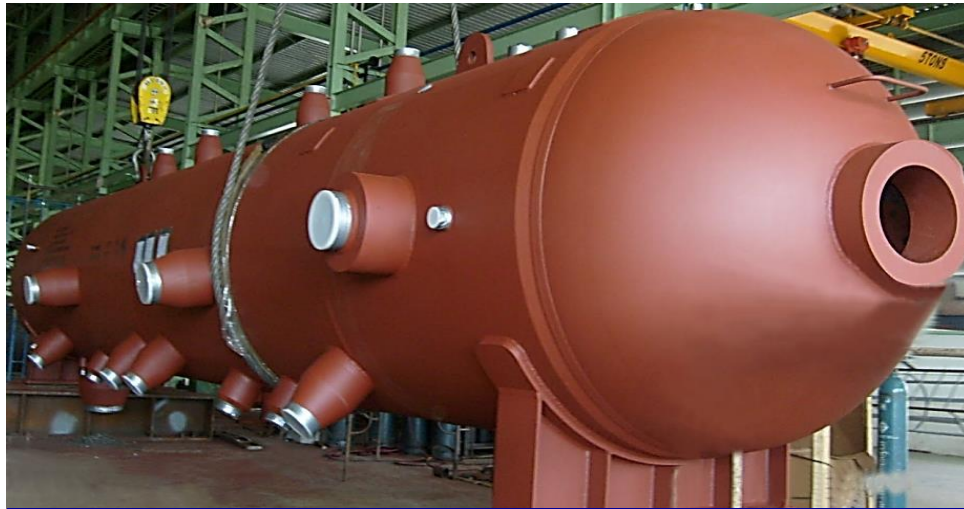
End user: Thai OLEFINS Public Company Limited

Project Name : New Parallel C3 Train

# Pressure Vessel (Power Plant)



## HP Drum



Maximum thickness (experience): 160 mm.  
2,500 ID 11,000 mm TL-TL, 146.53 ton.

## LP Drum



Internal Parts Installation



Blow Down Tank



# Pressure Vessel (Deaerator)



# Pressure Vessel (Heat Exchanger)



**Fixed tube type**



**Tube bundle**



**Waste Gas Pre-Heat**

# Pressure Vessel (Offshore Product)



Unimit Engineering Public Company Limited



## Test separator

OD 3'-6" TL-TL11' Material SA516 Gr.70N

Thickness (Cone/Shell/Head) : 1-31/32" / 1-25/32" / 1-11/16"

(47.9 mm. / 45 mm. / 42.86 mm.)



## Internal Parts Installation

# Pressure Vessel (Reactor)



Reactor



Reactor





## Pressure Vessel

### Standard Products

- ▶ LPG tanks
- ▶ Cryogenic tanks

### Custom Products

- ▶ Column
- ▶ Drum / Reactor
- ▶ Shell and Tube Heat Exchanger
- ▶ Steam drums
- ▶ Deaerator



## Non-Pressure Vessel

- ▶ Oil tank
- ▶ Water tank
- ▶ SILO
- ▶ Stack



## Construction Work

- ▶ Tank installation
- ▶ Equipment installations
- ▶ Repair and Modification work
- ▶ Shutdown and Maintenance



## Plate Work and Other

- ▶ Fan casing
- ▶ Wind tunnel
- ▶ Stack and Diverters
- ▶ Incinerator
- ▶ Attrition & Homogenization Drum
- ▶ Services



# Storage Tanks



**Project :** EO/EG Expansion 1 , Rayong, Thailand  
**Customer :** SAMSUNG / **Owner :** TOCGC , Year 2008

# Storage Tanks



**Project :** Rungtawan II , Rayong , Thailand

**Customer :** Hitachi Plant Technology ( Thailand ) Owner : JSR BST Elastomer Co.,Ltd , Year 2016

# Silo



**Project :** Sakura Project

**Customer :** JGC Corporation Owner : AGC Vinythai Public Company Limited, Year 2023

## Pressure Vessel

### Standard Products

- ▶ LPG tanks
- ▶ Cryogenic tanks

### Custom Products

- ▶ Column
- ▶ Drum / Reactor
- ▶ Shell and Tube Heat Exchanger
- ▶ Steam drums
- ▶ Deaerator



## Non-Pressure Vessel

- ▶ Oil tank
- ▶ Water tank
- ▶ SILO
- ▶ Stack



## Construction Work

- ▶ Tank installation
- ▶ Equipment installations
- ▶ Repair and Modification work
- ▶ Shutdown and Maintenance



## Plate Work and Other

- ▶ Fan casing
- ▶ Wind tunnel
- ▶ Stack and Diverters
- ▶ Incinerator
- ▶ Attrition & Homogenization Drum
- ▶ Services



# Equipment Installation



**Site Assembly and welding in Horizontal position**

**ID 4,880 mm. X TL to TL. 38,350 Weight : 160 Tons**

**Material (Top/Middle/Bottom) : SA516Gr.60+Monel 400 / SA516Gr.60 / SA516Gr.60+SS316L**

**Project : Bangchak Recondition P#3 Project [Year 2014]**

**Purchaser : Bangchak Corporation Public Company Limited**

# Equipment Installation



**Project :** Material Upgrade for Evaporator Unit, Rayong , Thailand

**Owner :** TOCGC / PTTGC., Year 2017



**Project :** Replacement Heat Exchanger 5 units and Piping modify at PTTGC3 , Rayong , Thailand

**Customer :** PTTME

**Owner :** PTTGC., Year 2017

# Repair and modification work





## Pressure Vessel

### Standard Products

- ▶ LPG tanks
- ▶ Cryogenic tanks

### Custom Products

- ▶ Column
- ▶ Drum / Reactor
- ▶ Shell and Tube Heat Exchanger
- ▶ Steam drums
- ▶ Deaerator



## Non-Pressure Vessel

- ▶ Oil tank
- ▶ Water tank
- ▶ SILO
- ▶ Stack



## Construction Work

- ▶ Tank installation
- ▶ Equipment installations
- ▶ Repair and Modification work
- ▶ Shutdown and Maintenance



## Plate Work and Other

- ▶ Fan casing
- ▶ Wind tunnel
- ▶ Stack and Diverters
- ▶ Incinerator
- ▶ Attrition & Homogenization Drum
- ▶ Services



# Plate Work



## Furnace

**PROJECT:** I-PRO CAPL MANUFACTURING  
**OWNER/EPC:** TATA India/ SANKYU 1,023.80 tons Year 2011

**PROJECT:** IRPC Fuel Gas Stack, Thailand  
**Purchaser** Zeeco, Inc. year 2013

# Plate Work



Unimit Engineering Public Company Limited



## Diverters

Project: DEIR ALI II 701 MW., Damascus, Syria

Boiler Fan Casing, Rotors & Static Parts

# Plate Work



Unimit Engineering Public Company Limited

## Wind Tunnel



**PROJECT: BMW AVZ**

**WIND TUNNEL FANS for HOWDEN GERMANY: Year 2006**

## Drum Attrition & Homogenization



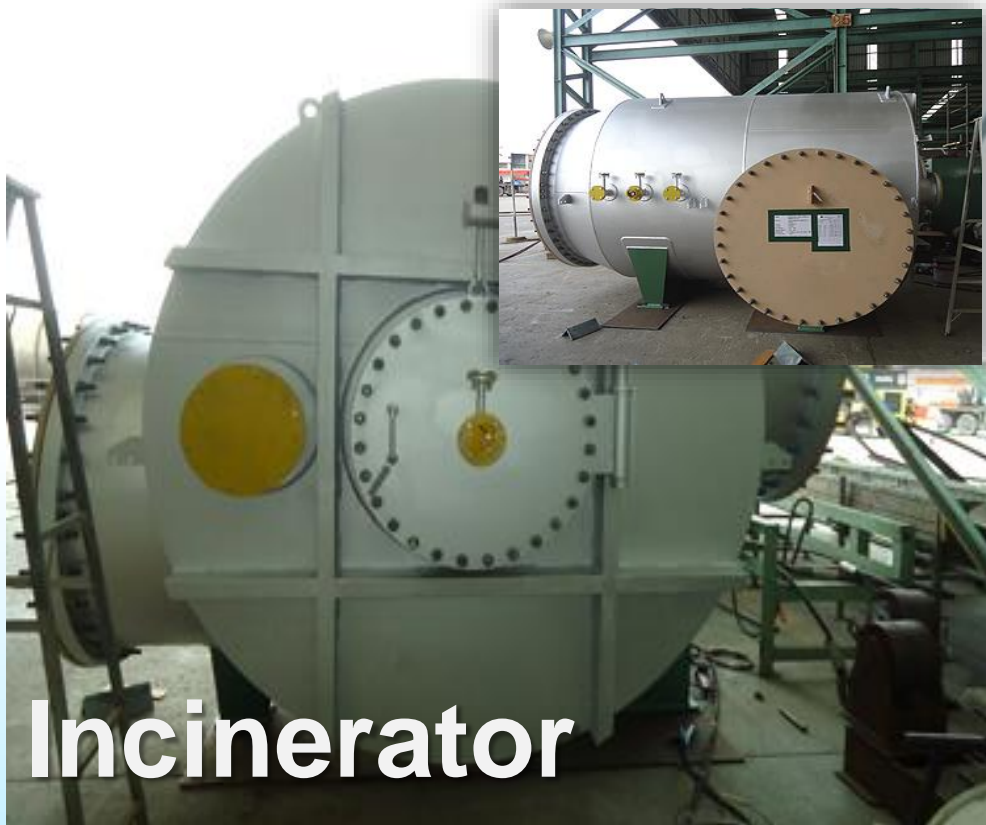
**PROJECT : BMA Composting Plant, ONNUCH Bangkok Thailand**

**Year 2016**

16/11/2016



# Plate Work



## Incinerator

**PROJECT:** VCM 1 Equipment Replacement

**Owner:** Thai Plastic and Chemical PLC.; year 2014



**PROJECT:** TTM New Incinerator Project , Thailand

**Purchaser:** Callidus / TRC., year 2017



# Pipe Spools



## Pipe spools

**PROJECT:** JRU –Malaysia  
**Customer :** Vetco aibel



**Project :**Material Upgrade for Evaporator Unit, Rayong , Thailand  
**Owner :** TOCGC / PTTGC., Year 2017

# Pipe Spools



**PROJECT:** EGAT Bang Pakong CCPP (Units 1-2 Replacement) Project., Bang Pakong District, Chachoengsao Province, Thailand  
**Customer :** B&V , **Owner :** EGAT , **Year** 2018

# Platform & Ladder





**01** *Company Information*

**02** *Location*

**03** *Business Segment*

**04** *Organization, Manpower and Capacity*

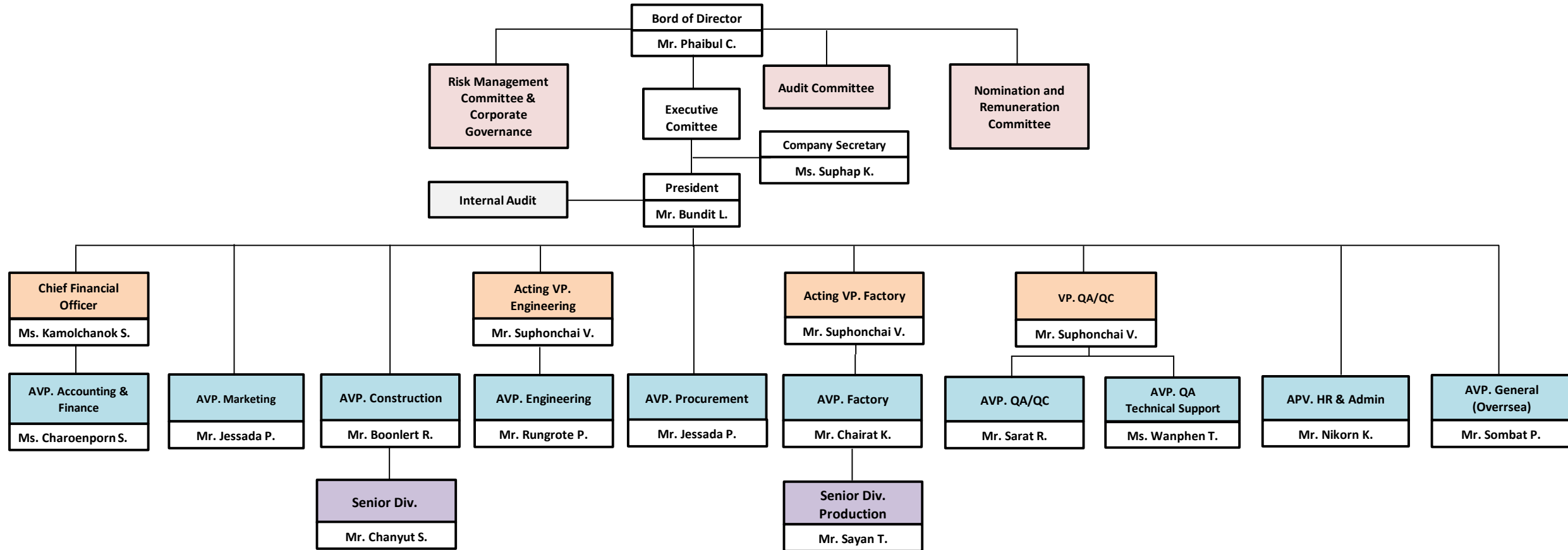
**05** *Equipment and Tools*

**06** *Reference and Certificate*

**07** *Client & End User List*

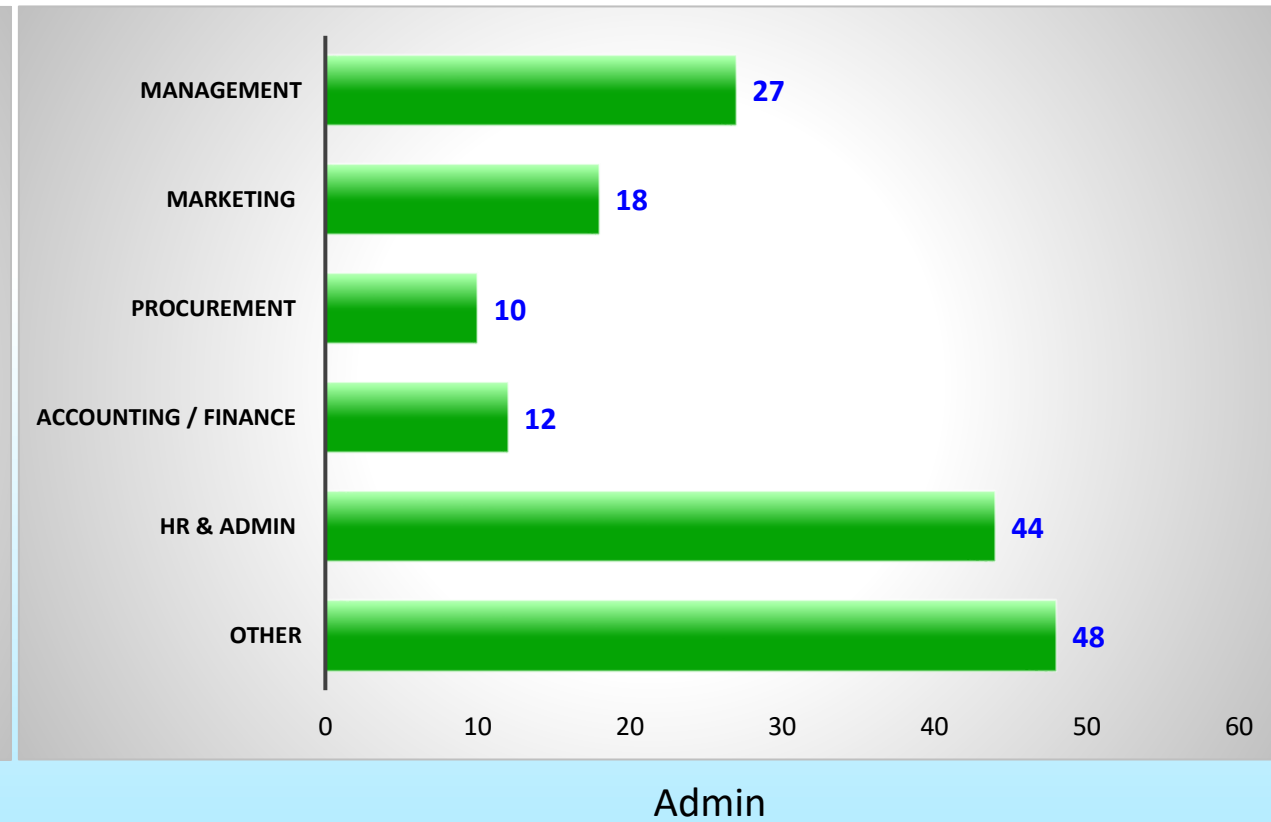
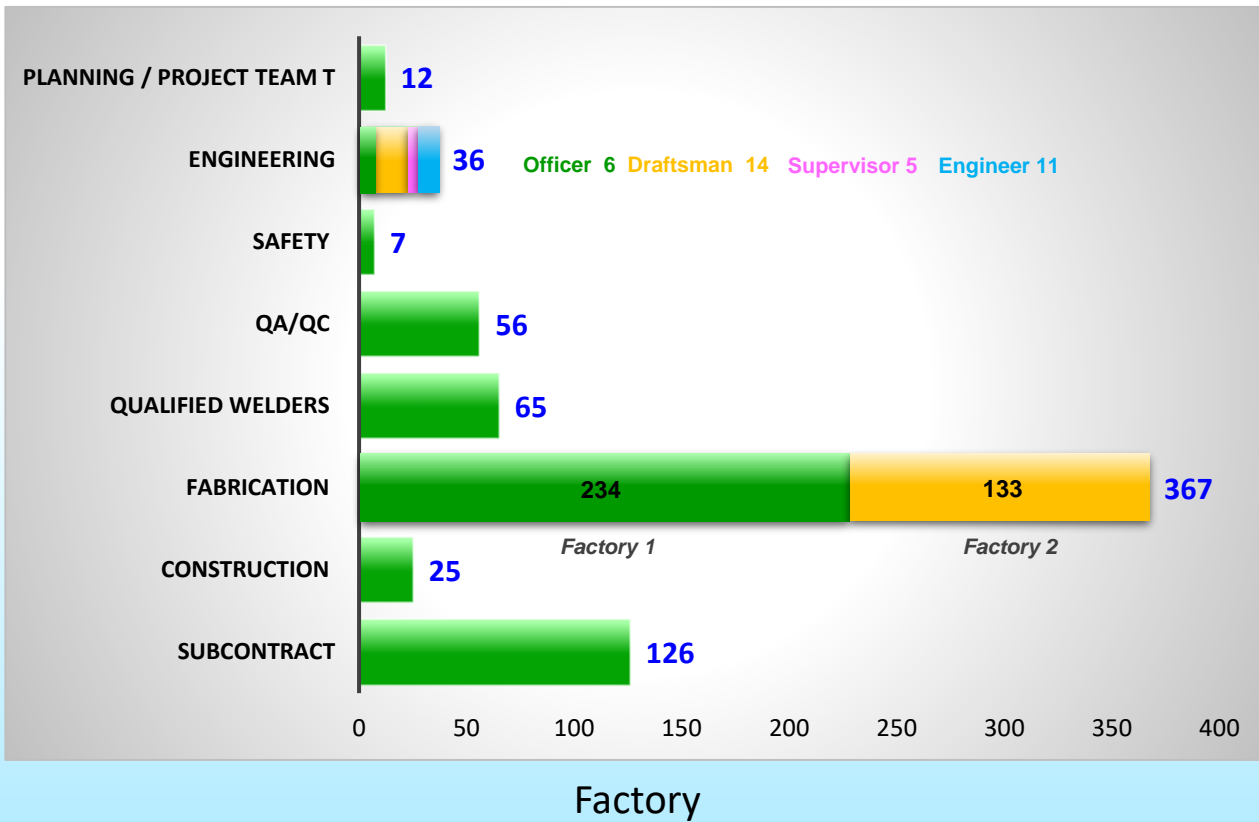


# Organization



## Total Manpower 2024

**Total 727**  
(Update January 31, 2024)



# Production Capability



Shop Fabrication	Rate Per Year
Pressure Vessel / Equipment	8,000 Ton
Structure Support / Plate Work	500 Ton
Piping Fabrication	5,000 DB

Construction / Site Installation	Rate Per Year
Pressure Vessel / Tank Erection	1,000 Ton
Equipment Installation	1,000 Ton
Steel Structure Erection	600 Ton
Piping Installation	15,000 DB



**01** *Company Information*

**02** *Location*

**03** *Business Segment*

**04** *Organization, Manpower and Capacity*

**05** *Equipment and Tools*

**06** *Reference and Certificate*

**07** *Client & End User List*



- **Applicable Design Code**

- ASME Section VIII Div.1 / ASME Section VIII Div.2
- API 620 / API 650 / API 653
- TEMA & PD 5500 / UHX Tube Layout

- **Software Design**

Program Name	Software Publisher	Purpose	Developer / Q'ty
<b>PV-Elite</b>	COADE Inc.	- Design Pressure Vessel: ASME Sec.VIII Div.1&2, - Heat Exchanger : ASME, TEMA & PD5500	PV-Elite / 1
<b>Compress</b>	CODE WARE Inc.	- Design Pressure Vessel: ASME Sec.VIII Div.1&2 - FEA Nozzle Heat Exchanger (TEMA, UHX, Tube Layout)	CoadeWare / 5
<b>AutoCAD LT2008</b>	Autodesk Inc.	Preparation of shop drawing	AutoDESK / 17

## ***Cutting Machine***



**Plasma Cutting: Maximum thickness 38 mm.**  
**Gas Cutting: Maximum thickness 300 mm.**



**Work piece W 3 m. x L 15 m.**

## Hydraulic pressing 900 tons and 1,500 tons



**Pressing Capacity Max. Force 900 Tons**  
**Column Span 6000 mm. (inside)**



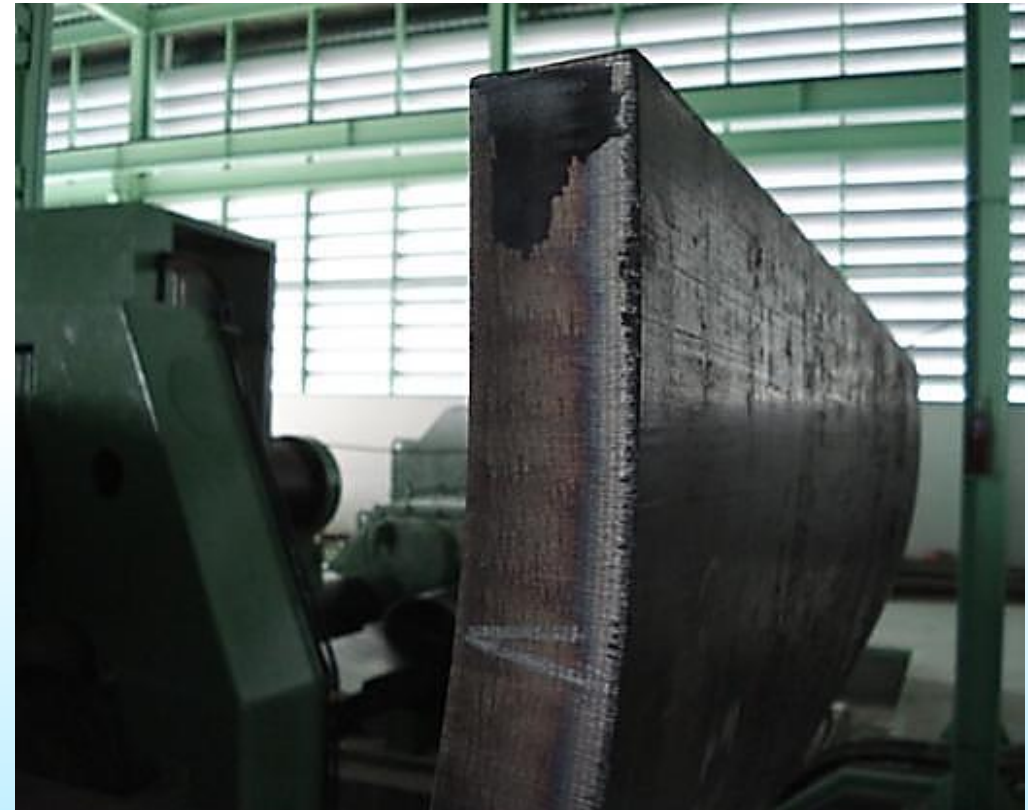
**Max Load 1,500 Tons**  
**Max 6 Meters Span**



## *Plate bending*



**Plate bending:** Capacity: 70 mm (Cold bend) and 125 mm (Hot bend) x 3,675 mm Width.



**Diameter of roller:** 800 mm. (all 3 rollers)

## **Welding**

- *Automatic Submerged*



**Semi-Automatic Longitudinal Welding with Manipulator**



**Self-Alignment Power Rolling Machine**

## *Head forming and spinning machine*



**Cold forming machine:** Max diameter: 6 m.  
Max thickness: 40 mm.



**Cold forming machine:** Max diameter: 3.8 m.  
Max thickness: 22 mm.

## ***CNC machine center***



**Double Column Vertical Boring Machine**



**Specification: 1 M Wide x 3 M Long x 300 mm  
Thickness capability**

## ***Vacuum pump and High Pressure Test Pump***



**High Pressure Test Pump - Output (max) 10,000 psi  
Flow (max) 668 sq. inch**



**Vacuum pump w/ Booster E2M275 EH1200  
Rotary pump speed: 275 m<sup>3</sup>/hr.  
Booster pump speed: 1200m<sup>3</sup>/hr.**

## ***Furnace for PWHT (Post Weld Heat Treatment)***



**Capacity:** 5.3 m.(W) x 5.3 m.(H) x 18.0 m.(L) 100 Tons  
Up to 1,200 C degree (LPG-fired)



**Capacity:** 4.5 m.(W) x 3.5 m.(H) x 6.5 m.(L) 50 – 60 Tons  
Up to 1,200 C degree (LPG-fired)

**01** *Company Information*

**02** *Location*

**03** *Business Segment*

**04** *Organization, Manpower and Capacity*

**05** *Equipment and Tools*

**06** *Reference and Certificate*

**07** *Client & End User List*



# Material Experienced



Material (Plate)	Specifications	Thickness Range (mm)	Sourcing
<b>Carbon Steel</b>	SA516 Gr. 60 / 60N SA516 Gr. 70 / 70N SA516 Gr. 60 / 60N + HIC SA516 Gr. 70 / 70N + HIC	6-125	<b>Thailand :</b> SPM , LPN <b>Japan:</b> NSCC, KOBE, JFE <b>Korea:</b> POSCO, Dongkuk, Hyundai <b>Taiwan:</b> CSC <b>Europe:</b> Industeel, Dillinger, Voestalpine
<b>Stainless Steel (Austenitic &amp; Duplex)</b>	SA 240TP304, 304L SA 240TP316, 316L SA240 S31803 SA240 S32750	5-40	<b>Japan:</b> NSCC, KOBE, NYK <b>Korea:</b> DKC, SM Steel <b>South East Asia :</b> PT Tsingshan (Indonesia), Bahru (Malaysia), Yusco (Taiwan), Yeou Yih Steel (Taiwan) <b>Europe:</b> Outokumpu, Industeel, Aperam
<b>Cr-Mo Alloys</b>	SA387 Gr. 11 CL. II SA387 Gr. 22 CL. II	12-50	<b>Japan:</b> NSSMC, KOBE, JFE <b>Korea:</b> POSCO, Dongkuk <b>Europe:</b> Industeel, Dillinger, Voestalpine
<b>Cladded Steel</b>	SA516 Gr.60/70+SS316/L SA516 Gr.60/70 + SS304L SA516 Gr.60+A240TP405 SA204Gr.B + SS316Ti SA387-11 CL 2 + SS 304 etc..	20-80	<b>Japan:</b> JFE, JSW <b>Europe:</b> DMC, Industeel, Voestalpine
<b>Alloy</b>	Alloy 625 Alloy 825 Monel 400	10-40	<b>Japan:</b> NYK, NSCC <b>Europe:</b> VDM, Bohler <b>USA:</b> Haynes, ATI, Special Metal



## Reference Experience Fabrication

Largest Diameter	Inside Diameter 6,000 mm (Year 2008) High Pressure Blow Down Vessel for SKE&C
Longest Length	120 m including skirt support (Year 2004) Column for Thai Olefins Public Company Limited
Heaviest Shell Thickness - Carbon Steel - Stainless Steel	156 mm HP Steam Drum for Vogt Power (Year 2011) 60 mm Regen Gas KO Drum for JGC (Year 2016)
Heaviest Weight	311.55 Tons (Year 2012) Column for Thai Paraxylene Company Limited
Oversize Transportation	7.03 m (Width) x 6.03 m (Height) x 31.03 m (Length) Weight : 203 Ton (Year 2011) Column for Thai Oil Public Company Limited

# Company Certificates



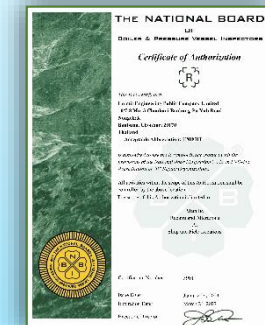
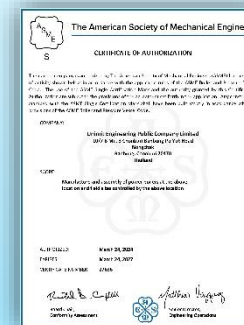
## ISO Certificate

Certificate	Subject	Issued Date	Expired Date	Certificate Number	Issued By
ISO 9001:2015	Quality Management System	22-Nov-22	21-Nov-25	10473310	LRQA Limited
ISO 14001:2015	Environmental Management System	25-Jan-23	24-Jan-26	10489911	LRQA Limited
ISO 45001:2018	Health & Safety Management System	25-Jan-23	24-Jan-26	10489911	LRQA Limited



## NBIC & ASME Certificate

Certificate	Subject	Issued Date	Expired Date	Certificate Number	Issued By
S	Manufacture and assembly of power boilers	24-Mar-24	24-Mar-27	27636	ASME
U	Manufacture of pressure vessels	24-Mar-24	24-Mar-27	27637	ASME
U2	Manufacture of Class 1 and Class 2 pressure vessels	24-Mar-24	24-Mar-27	27638	ASME
NBIC (R)	Repair of Pressure Vessel	12-Jan-24	24-Mar-27	3901	The National Board



**01** *Company Information*

**02** *Location*

**03** *Business Segment*

**04** *Organization, Manpower and Capacity*

**05** *Equipment and Tools*

**06** *Reference and Certificate*

**07** *Client and End User List*



# Client Lists (EPC)



# Client Lists (EPC)

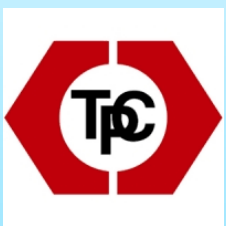


# End User Lists



Unimit Engineering Public Company Limited

## Air-Gas Industry



# End User Lists (continue)



## Oil & Gas and Refinery Industry



## Other Industry



**Thank you**