

#### **CORPORATE PROFILE**

Mun Siong Engineering has had over 50 years of strong industrial leadership and has been listed on the Singapore Stock Exchange since 2010. We are one of the leading one-stop solution providers for the oil & gas, process, chemical and pharmaceutical industries in the areas of:

- Engineering Design
- Fabrication
- Construction & Projects
- Tankage
- Electrical & Instrumentation
- Maintenance
- Specialised Services
- Rotating Equipment
- · Scaffolding, Insulation & Painting

#### **HEADQUARTERS**



Singapore

#### **INTERNATIONAL** OFFICES



Malaysia



Malaysia



Malaysia



Myanmar



Taiwan

#### OUR VISION

We will become the preferred and most trusted turnkey solution provider to customers, colleagues, investors, business partners, and the communities where we work and live.

#### **OUR MISSION**

We dedicate ourselves to be the preferred engineering service provider that thrives on Safety, Quality and Competitive Solutions to achieve customer satisfaction.

#### **CORE VALUES**

**Safety** To put the safety of everyone above all.

Quality To strive for continuous quality improvement in all that we do.

**Customer Focus** To achieve total customer satisfaction

by flawlessly delivering customer

wants.

**Leadership** To be a world-class leader in every

aspect of our business.

**Teamwork** To encourage cooperative efforts at

every level and across all activities in

our company.



#### **TRAINING**

At the heart of our company's philosophy is the belief in continuous improvement. We maintain a high standard of technical competency by equipping our staff with the requisite industrial technical skills and safety knowledge. We have been a Certified On-the-Job Training Centre (COJTC) under the Institute of Technical Education (ITE) since 1995.

#### QUALITY

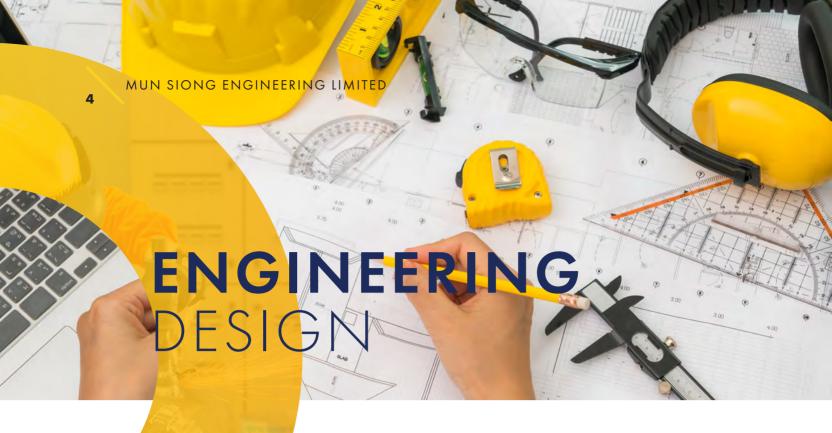
In recognition of our unyielding dedication to safety, quality, environmental responsibility and business continuity, we are proud to be certified with the following:

- ISO 9001
- ISO 14001
- ISO 22301
- OHSAS 18001
- BizSAFE Star
- NBBI NB Mark
- NBBI R Stamp
- ASME U Stamp
- ASME U2 Stamp

#### **QSHE** POLICY

Our Group's commitment to Quality, Safety, Health and Environment (QSHE) practices forms an integral part of our corporate philosophy. We are committed to take due care and interest in the environment, health and safety of our employees, customers, contractors, suppliers and the public. The mission is to ensure that our group meets and maintains the safety standards applicable to the oil and gas industry and promotes awareness of work safety to our employees.

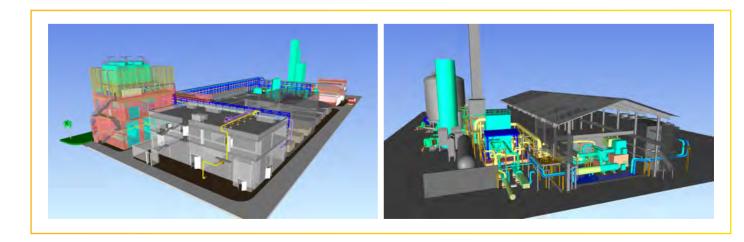
#### **QUALITY OBJECTIVES SHE OBJECTIVES** Flawless Execution Achieve total customer satisfaction Safety Achieve zero incidents Achieve zero NCR Health Identify risks that threatens the health of our employees and Compliance to statutory and ensure that it is kept within regulatory requirements acceptable level **Excellent Quality** Achieve zero rework cases **Environment** Monitor the usage of our On Schedule Delivery Achieve zero backlog cases resources and keep wastage to a minimum



We maintain a strong multi-disciplinary in-house engineering department specialised in Process, Static Equipment, Rotating Equipment, Electrical and Instrumentation, Piping, Tank, Civil and Structure. Our depth of knowledge and expertise empowers us to design, construct and deliver the entire chain of operations with the highest quality and standards. We are familiar with international codes such as ASME, API, NFPA, IEC.

Our Engineering department is complete with the latest engineering softwares, including but not limited to CADWorx Plant Professional, Navisworks Manage, SPOOLGEN, Tekla Structures, STAAD.Pro, CEASAR II, PV Elite and ASMETank.

We hold the ASME U, U2, NB and R Stamps, enabling us to design, fabricate and repair pressure vessels, heat exchangers and static equipment entirely in-house.



# INTEGRATED FABRICATION



As a one-stop solution provider, we are able to undertake fabrication projects and site installations for our clients across South-East Asia.

We are equipped with in-house machinery and equipment including an automated pipe spool fabrication system and orbital welding machines to meet our clients' requirements, we are able to spearhead production planning, material handling with approved drawings, maintain client requirements and ensure quality works that adheres to your timeline.

We can design, purchase materials and fabricate according to international standards such as ASME, TEMA, ASTM, API, NACE for stainless steel, carbon steel, mild steel, alloy, and other exotic materials.

#### **SCOPE OF SERVICES**

- Fabrication of Pressure Vessel/ Heat Exchangers & Air Fin Coolers
- Fabrication & Erection of Steel Structures
- Fabrication & Installation of Piping Works Including Blasting & Painting
- Fabrication of Pre-assembled Modules (PAM), Skids
- Tankage Fabrication
- Blasting & Painting







# **CONSTRUCTION**& PROJECTS

We have the capabilities and expertise to efficiently undertake Greenfield & Brownfield projects ranging from construction of new industrial plants, modification & upgrade of existing plants.

We provide a complete range of construction and project works professionally carried out by our experienced teams. Backed by detailed planning, safety standards, operational reviews, and proper documentation, our teams are ready to manage various types of site conditions and meet your expectations.

#### **PROJECT SERVICES**

- Design, Fabrication and Erection of Steel Structures/ Fixed Equipment
- Design, Prefabrication & Installation of Piping Works
- Installation of Static & Rotating Equipment
- Design, Prefabrication of Pre-Assembled Modules (PAM), Skids
- Construction Management of Plants & Refineries
- Design, Site Installation of Electrical & Instrumentation Works
- Tank Construction



# TANKAGE CONSTRUCTION MAINTENANCE & REHABILITATION







#### **NEW TANK CONSTRUCTION**

We provide the full EPC of new tank on field with strong capabilities to undertake the construction of all types of tanks including spherical tanks & atmospheric tanks (cone roof/dome roof/floating roof tanks) compliant with API 650 & API 620 standards.

In addition to the conventional field erection method, and as part of our unyielding commitment to achieve quality, safety and productivity, Mun Siong implemented mechanisation and automation for our tank fabrication and construction processes.

#### WELDING AUTOMATION EQUIPMENT:

- Automatic Vertical Up Seam Welding Machine
- Automatic Horizontal Girth Seam Welding Machine
- Automatic Butt/Corner Seam Welding Machine
- Hydraulic Lifting System

### TANK REHABILITATION & MAINTENANCE WORKS

We have a strong track record in maintenance, rehabilitation, repair and reconstruction of Tanks, compliant with API 653 standard.

- Demolition & Reconstruction or Conversion of Tank Roof: Internal / External Roof, Cone Roof, Dome Roof
- External/Internal Jack-up for: Tank Bottom or Annular Plate Repair & Replacement
- Installation of Tank Bottom Plate
- Repair & Replacement of Floating Roof Drain System, Rolling Ladder
- Repair or Replacement of Tank Internal Heating Coil, Sparger Pipe System, Water Draw-Off Piping
- Repair & Replacement of Tank Shell/Roof Nozzles, Manways, Venting Systems
- Repair & Replacement of Fire Water/Foam Pipe System
- Other Rectification Works: Tank Shell Buckling
- Hydro-Test and Handover
- Scaffolding

ELECTRICAL & INSTRUMENTATION

ollowing our acquisition of OHM Engineering Pte Ltd as our wholly owned subsidiary in 2000 and integrated as our Electrical and Instrumentation arm in year 2018, we bring more than 30 years of combined experience and trusted partnership with oil majors and global industry partners. We have undertaken major forms of electrical and instrumentation projects ranging from greenfield and brownfield construction projects, routine maintenance, shutdown works and major turnarounds. Our commitment to provide top quality products and services is an integral factor in our ability to carry out long-term contracts for oil majors and other industry partners.



#### **SCOPE OF SERVICES**

- Installation of Cable Trays, Conduits & Cable Ladders
- Installation of Transformers, Switchgears and Lighting
- Trench Excavation, Cable Laying & Termination
- Grounding System & Lightning Protection System
- Analyzer Houses System Integration
- Production Skid Electrical & Instrument Works

- PLC System Solutions
- Electrical, Instrument & Control Circuit Design
- Calibration, Loop Check, Testing & Pre-Commissioning
- Installation of DCS & Auxiliary Panels, CCTV
- Field Instrument & Impulse Line Installation
- Manpower Supply



# MAINTENANCE & TURNAROUND



**B** acked by 50 years of track record and established foundation, we are a recognised brand by the petroleum and petrochemical industries as their reliable and trusted contractor for term maintenance, turnaround and shutdown.

#### **SCOPE** OF **SERVICES**

- Routine Plant Maintenance
- New or Existing Pipeline Work Including "Tie-Ins"
- Structural Modifications & New Erection
- Rotating Equipment Maintenance
- Static Equipment Maintenance (Exchanger, Column, Vessel)
- Furnace Maintenance Works (Includes Re-Coil)
- Electrical & Instrumentation Maintenance
- Total Valve Management, Valves Change-Out Servicing & Certification
- Divestment of Plant Equipment
- Condition Monitoring
- Isolation & Replacement of Parts & Equipment Column/ Vessel/ Heat Exchanger Maintenance
- Storage Tank Maintenance & Rehabilitation
- Plant Turnaround
- De-Bottlenecking & Upgrading

## SPECIALISED SERVICES

We have a strong foundation and proven track record in providing an array of niche services both in our workshop and onsite. We partner with principals to provide the best products and services to maintain and protect your assets to increase their efficiency, reliability and lifespan.



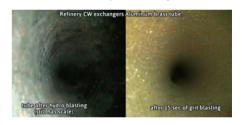
#### **HIGH PRESSURE** WATER JETTING

Hydro Jetting offers a powerful solution for cleaning of heat exchangers, tube bundles and air fin coolers. We can clean and descale foreign deposits with high pressure water of up to 40,000 PSI (2,760 bar). To handle a range of scenarios and problems,

we own a wide selection of Hydro Jetting equipment of different pressure rating and customised nozzles to achieve optimal results. We also have fully automated solutions such as the Shell Side Bundle Blaster and Semi-Automated Rotating Cleaning System.

#### **RETUBING**

Our retubing services include on-site tube cutting, tube removal, tube installation and hydrotesting.



#### MECHANICAL DECOKING

Our mechanical decoking machine removes the toughest coke deposits from the inside of furnace tubes through the use of pressurised high flow water. Mechanical decoking offers a shorter lead time as compared with Steam Air Decoking. Our pigs are designed with excellent elasticity and compression material



and are able to clean through 90° and 180° bends without compromising the surface material of your assets.

#### GRIT BLASTING

We are the exclusive partner of Curran International in Malaysia and Singapore providing grit blasting as an alternative to the conventional Hydro Jetting method. Our specially designed nozzle is able to carry out grit blasting in tubes with ID between 3/4" to 2" allowing us to grit blast surfaces up to NACE 2- near white metal cleanliness to prepare the surface for coating requirements.



# PROTECTIVE COATINGS

In addition to grit blasting, we offer Curran anti-corrosion epoxy coatings. The application of epoxy coatings help to increase heat transfer of the equipment, eliminate corrosion and reduce or eliminate fouling. This energy saving application serves to reduce overall maintenance cost and time, increased flow rate, and prolong your equipment's lifespan. We are the sole distributor for Curran in Singapore.



as bolts, nuts, flanges, valves and wellheads, we offer Oxifree TM198 - a thermoplastic anti-corrosion and anti-contamination coating. It is a non-bonding encapsulation coating which can be applied on live assets and solidifies in 2 to 3 minutes.

TM198 can be easily removed using a penknife or cutter for NDT inspection and is reusable. It provides immediate and complete protection for more than 10 years. We are the sole distributor for Oxifree TM198 in Singapore.



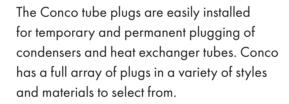




We are the exclusive partner of Conco Systems in Singapore providing tube cleaning services using Trufit<sup>TM</sup> cleaners for a safe, fast and efficient way to clean both straight and U-tubes.

Our technicians are also equipped with the Hydrodrill<sup>TM</sup> system for a safe and effective solution to tube wall cleaning. The Hydrodrill<sup>TM</sup> is a high-torque cleaning system that works through a water flushing and rotary drilling action to to remove the hardest deposits such as microbiological, macrofouling, manganese, iron, and silicon.









Conco Alkaserts polyethylene plastic inserts are designed to assure lasting protection to the inlet ends of new tubes and to greatly prolong the life of worn tubes damaged by erosion and impingement.



#### TRENCHLESS PIPE REHABILITATION

We are the authorised Prime Installer of Primus Line®, a German innovative technology for trenchless rehabilitation of pressurised pipelines for oil, gas and water. The system consists of a flexible Kevlar® reinforced liner and specially developed end fittings. Primus Line offers installation speeds of up to 10 meters per minute and can be done through multiple bends of up to 45°. It requires a minor installation footprint and has a lifespan of more than 50 years.



Following our acquisition of Wing Wah Pte Ltd as our wholly owned subsidiary in 2011 and integrated as our Rotating Equipment arm in year 2015, we bring more than 20 years of combined experience in delivering comprehensive solutions to our clients and helping them to improve the reliability and performance of their rotating equipment.

#### **WORKSHOP** SERVICES

- Retrofitting
- Dynamic Balancing up to G 1.0
- Equipment Upgrading & Modification
- Mechanical Seal Flush Plan Modification
- Single to Double Seal Upgrade
- Overhauling of Rotating Equipment (Pumps: Compressors, Gear Boxes, Blowers, Turbines, Fans, Mixers)
- Failure Analysis with Detailed Inspection, Measurement & Test Reports

#### FIELD SERVICES

- Machinery Removal, Installation & Alignment
- On-site Repair: Bearing Replacement
- Mechanical Seal Replacement
- Fin Fan Overhauling
- Condition Monitoring
- Equipment Maintenance
- Agitator Overhaul
- New Rotating Equipment Installation (Pumps, Fans, Blowers etc.)
- Skid Levelling & Alignment

#### PREVENTIVE MAINTENANCE

Our Rotating Equipment personnel provides early defect prediction to optimize outage processes, minimize downtime and reduce unplanned maintenance cost.

#### 24-HOUR EMERGENCY

We provide round-the-clock support and emergency repair services for any of your pumps, blowers, gearboxes, and air compressors needs.

#### **MANPOWER** SUPPLY

Should you require competent personnel, we are able to provide manpower of various skill levels to satisfy your requirements.

#### STB

### SUPPLY & REPAIR OF MECHANICAL SEALS

We are the sole distributor of STB in Singapore for the supply and repair of mechanical seals as well as provision of full diagnosis, damage reports and quality checks. The quality and reliability of these German manufactured seals are cost effective, and offers shorter lead time as compared with others and is designed to replace existing OEM seals.



### MAINTENANCE & REPAIR OF WATEROUS PUMPS

We are a Factory Trained Service Center (FTSC) of Waterous to maintain and repair various equipments such as vehicle-mounted pumps, CAFsystems, foam systems, portable fire pumps and industrial systems.

# SCAFFOLDING, INSULATION & PAINTING



We provide scaffolding, insulation, and painting services either independently or as part of a multi-disciplined approach.

#### SCAFFOLDING

We are an Approved Scaffold Contractor certified by the Ministry of Manpower. We provide scaffolding erection services and rental of materials along with our skilled and certified scaffold supervisors and erectors. We possess both tubular scaffold and system scaffold for high reach access needs in plant construction, modular fabrication projects and any other maintenance services.

#### INSULATION

We offer both hot and cold insulation to deliver the best advanced protective solutions. Over the years, we have worked with our partners and customers on both term maintenance contract and project work to offer professional support and the technical skills necessary to achieve successful results.

#### **PAINTING**

From surface preparation to painting the finishing coat, painting jobs can be performed as part of a turnkey contract for fabrication and construction or as part of maintenance and repair works.





# DELIVERING HIGH QUALITY SOLUTIONS IN A TIMELY, SAFE AND COMPETITIVE MANNER

HEADQUARTERS

**SINGAPORE** 

INTERNATIONAL OFFICES

JOHOR BAHRU, MALAYSIA
YANGON, MYANMAR
KAOHSIUNG, TAIWAN